

# **REVIEW OF 2018 OCEAN SALMON FISHERIES**

Stock Assessment and Fishery Evaluation Document  
for the Pacific Coast Salmon Fishery Management Plan



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# ACKNOWLEDGMENTS

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## LIST OF ACRONYMS AND ABBREVIATIONS

|                  |  |
|------------------|--|
| AABM             | aggregate abundance-based management   |
| ADFG             | Alaska Department of Fish and Game   |
| AEQ              | adult equivalents  |
| CCC              | central California coast (coho)  |
| CDFW             | California Department of Fish and Wildlife   |
| Council          | Pacific Fishery Management Council   |
| CVI              | Central Valley Index   |
| CWT              | coded-wire tag   |
| EEZ              | exclusive economic zone (from 3-200 miles from shore)  |
| EMAP             | Environmental Monitoring and Assessment Program  |
| ESA              | Endangered Species Act   |
| ESU              | evolutionarily significant unit  |
| FEAM             | Fishery Economic Assessment Model  |
| FMP              | fishery management plan  |
| F <sub>MSY</sub> | maximum sustainable yield exploitation rate  |
| FRAM             | Fishery Regulatory Assessment Model  |
| ISBM             | individual stock-based management  |
| KMZ              | Klamath management zone (ocean zone between Humbug Mountain and Horse Mountain where management emphasis is on KRFC) |
| KRFC             | Klamath River Fall Chinook   |
| LCN              | Lower Columbia Natural (coho)  |
| LCR              | Lower Columbia River (natural tule Chinook)  |
| LRH              | Lower Columbia River hatchery (tule fall Chinook returning to hatcheries below Bonneville Dam)                       |
| LRW              | Lower Columbia River wild (bright fall Chinook spawning naturally in tributaries below Bonneville Dam)               |
| MCB              | mid-Columbia River brights (bright hatchery fall Chinook released below McNary Dam)                                  |
| MFMT             | maximum fishery mortality threshold  |
| MOC              | mid-Oregon coast   |
| MSST             | minimum stock size threshold   |
| MSY              | maximum sustainable yield  |
| NA               | not available  |
| NMFS             | National Marine Fisheries Service  |
| NOC              | north Oregon coast   |
| ODFW             | Oregon Department of Fish and Wildlife   |
| OCN              | Oregon coastal natural (coho)  |
| OPI              | Oregon Production Index (coho salmon stock index south of Leadbetter Point)  |
| PacFIN           | Pacific Coast Fisheries Information Network  |



## LIST OF ACRONYMS AND ABBREVIATIONS (continued)

|                  |   |
|------------------|---|
| PSC              | Pacific Salmon Commission   |
| PST              | Pacific Salmon Treaty   |
| RER              | rebuilding exploitation rate  |
| RK               | Rogue/Klamath (coho)  |
| S <sub>ACL</sub> | annual catch limit spawner abundance  |
| SAFE             | stock assessment and fishery evaluation (document)                                    |
| SCH              | Spring Creek Hatchery (tule fall Chinook returning to SCH)                            |
| SDC              | status determination criteria   |
| SEAK             | Southeast Alaska  |
| S <sub>MSY</sub> | MSY spawning escapement   |
| SONCC            | southern Oregon/northern California coastal (coho)                                    |
| SRFC             | Sacramento River fall Chinook   |
| SRFI             | Snake River Fall Index  |
| SRS              | Stratified Random Sampling  |
| SRW              | Snake River Wild (Chinook)  |
| SRWC             | Sacramento River winter Chinook   |
| STEP             | Salmon Trout Enhancement Program  |
| STT              | Salmon Technical Team (formerly the Salmon Plan Development Team)                     |
| SUS              | Southern United States  |
| TAC              | total allowable catch   |
| URB              | Up River Bright (naturally spawning fall Chinook primarily migrating past McNary Dam) |
| USFWS            | U.S. Fish and Wildlife Service  |
| WCVI             | West Coast Vancouver Island   |
| WDFW             | Washington Department of Fish and Wildlife  |

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## INTRODUCTION

The Salmon Technical Team (STT) and staff of the Pacific Fishery Management Council (Council) have prepared this stock assessment and fishery evaluation (SAFE) document as a postseason review of the 2018 ocean salmon fisheries off the coasts of Washington, Oregon, and California to help assess Council salmon fishery management performance, the status of Council-area salmon stocks, and the socioeconomic impacts of salmon fisheries. The STT and Council staff will provide three additional reports prior to the beginning of the ocean salmon season to help guide the Council's selection of annual fishery management measures: Preseason Report I, Preseason Report II, and Preseason Report III. These reports will provide forecasts of stock abundance, determine annual catch limits, and will analyze the biological and economic impacts of the Council's proposed alternatives and adopted fishery management recommendations.

This postseason report will also provide a detailed description of the salmon fishery portions of the affected environment to be incorporated by reference into an Environmental Assessment (EA) to comply with National Environmental Policy Act (NEPA) requirements for the 2019 ocean salmon management measures. Preseason Report I will constitute the first part of the EA for 2019 ocean salmon fishery management measures, and include a statement of the purpose and need, a description of the affected environment, and a description and analysis of the status quo (no action) alternative. Preseason Report II will constitute the second and final part of the EA, and will include a description and analysis of the alternative management measures considered for 2019 ocean salmon fisheries. The alternatives analyzed in Preseason Report II will provide a reasonable range of environmental effects, which will bound those of the final fishery management measures included in Preseason Report III. Together, these two parts of the EA will provide the necessary components to determine if a finding of no significant impact (FONSI) is warranted.

West Coast fisheries in Council-managed waters (ocean fisheries between the U.S./Canada border and the U.S./Mexico border from 3 to 200 nautical miles offshore) are directed toward and harvest primarily Chinook or king salmon, *Oncorhynchus tshawytscha*, and coho or silver salmon, *Oncorhynchus kisutch*. Small numbers of pink salmon, *Oncorhynchus gorbuscha*, also are harvested, especially in odd numbered years. There are no directed fisheries for other Pacific salmon species, which are rarely caught in Council-managed fisheries.

The Council's annual review of ocean salmon fisheries provides a summary of important biological and socioeconomic data from which to assess the status of managed stocks, impacts of past management actions, to determine how well management objectives are being met, and to improve regulations for the future. The Council will formally review this SAFE document at its March meeting prior to the development of management alternatives for the approaching fishing season.

Chapter I summarizes ocean salmon fishery regulations and landings within the Council management area, and management actions and landings under the jurisdiction of the Pacific Salmon Commission (PSC). Appendix A provides historical effort and harvest data by state and by management area. Appendix C summarizes historical ocean fishery regulations.

For Chinook and coho salmon, respectively, Chapters II and III assess, where possible, the achievement of pertinent management objectives by salmon stock (including those listed under the Endangered Species Act [ESA]), outline regulations used to achieve the objectives, and summarize inside fisheries catch and spawner escapement data. Appendix B provides detailed historical spawning escapement and inside fisheries catch information. Detailed information for other salmon species is not included since Council fisheries have minor impacts on pink salmon escapements and no measurable impacts on sockeye or chum salmon or steelhead trout; however, catch and escapement data and objectives for Puget Sound pink salmon are summarized in Appendix B, Table B-43.

In 2011, the Council also adopted status determination criteria (SDC) for overfishing, approaching an overfished condition, overfished, not overfished/rebuilding, and rebuilt under Salmon Fishery Management Plan (FMP) Amendment 16. These criteria, approved and implemented in December 2011, were:

- Overfishing occurs when a single year exploitation rate exceeds the maximum fishing mortality threshold (MFMT), which is based on the maximum sustainable yield exploitation rate ( $F_{MSY}$ );
- Approaching an overfished condition occurs when the geometric mean of the two most recent postseason estimates of spawning escapement, and the current preseason forecast of spawning escapement, is less than the minimum stock size threshold (MSST);
- Overfished status occurs when the most recent 3-year geometric mean spawning escapement is less than the MSST;
- Not overfished/rebuilding status occurs when a stock has been classified as overfished and has not yet been rebuilt, and the most recent 3-year geometric mean spawning escapement is greater than the MSST but less than maximum sustainable yield (MSY) spawning escapement ( $S_{MSY}$ );
- A stock is rebuilt when the most recent 3-year geometric mean spawning escapement exceeds  $S_{MSY}$ .

All SDC rely on the most recent estimates available, which in some cases may be a year or more in the past due to incomplete broods or data availability. The above criteria for rebuilt status are the default criteria provided in the FMP; however, alternative criteria may be developed through a rebuilding plan if warranted by stock specific circumstances. Pertinent stocks are evaluated relative to these SDC as required by the FMP. In addition, new conservation objectives were adopted in 2011 for some stocks based on revised estimates of  $S_{MSY}$  and  $F_{MSY}$ , which are the reference points used to establish stock-specific SDC. Stock specific reference points, and recent year estimates for relevant stocks, are presented in Table II-6 and Table III-6.

Status determinations for overfishing, overfished, not overfished/rebuilding, and rebuilt are reported in this SAFE document; however, because approaching an overfished condition relies on a preseason forecast, that status determination is reported in Preseason Report III. In addition, some status determinations may be updated in Preseason Report I if more recent spawning escapement or exploitation rate estimates become available between the time this SAFE document and Preseason Report I are published.

Socioeconomic impacts of the fisheries are discussed in Chapter IV. Appendix D provides historical fishery-related socioeconomic data.

The annual review of ocean salmon fisheries is drafted as early as analyses of landings and escapement data are available. The most recent entries are noted as preliminary and later updated when the data become final. If updated information or error corrections that could substantially affect the development of management measures for the upcoming season are available, an errata sheet will be included as an appendix in one of the subsequent STT preseason planning documents.

## *COMMON TABLE CONVENTIONS*

All 2018 data provided in this report are preliminary. The following conventions apply to all tables in this report:

1. Due to rounding, the total values may not equal the sum of individual values.
2. A single dash indicates there are no data appropriate for a particular table cell, or in the case of fishing effort or landings, that the season was closed.
3. A double dash indicates no records are available, for example, a fishery may not have been sampled due to low and sporadic effort.
4. “NA” indicates data are not available at the time of publication, but are likely to be available at a future date.

## CHAPTER I

### *COASTWIDE OCEAN FISHING SUMMARY*

Chapter I contains or references tables summarizing the current and historical ocean salmon fishing regulations and harvest data. In addition, this chapter provides a brief summary of the Pacific Fishery Management Council's (Council) regulatory objectives, by management area, for the most recent fishing year, reports on the results of the Council's selective fisheries for marked hatchery Chinook and coho, and bycatch mortality of Chinook and coho salmon. The final section in the chapter provides a brief summary of management information and harvests under the authority of the Pacific Salmon Commission (PSC).

### *COUNCIL-AREA REGULATIONS AND LANDINGS*

Summaries of the 2018 regulations for non-Indian commercial troll, treaty Indian commercial troll, and recreational ocean salmon fishing in both the exclusive economic zone (EEZ) (3 to 200 nautical miles from shore) and state territorial waters (0 to 3 nautical miles from shore) are provided in Tables I-1, I-2, and I-3, respectively. Historical summaries of regulations for each of the three West Coast states and for treaty Indian troll fisheries are provided in Appendix C, Tables C-1 through C-7. Table C-9 provides a summary of inseason regulatory actions and events during the 2018 season.

Catch, quota, and fishing effort statistics are presented in the following series of tables:

Table I-4: Council-area commercial and recreational ocean salmon fishing effort and landings of Chinook, coho, and pink salmon by state of landing.

Table I-5: Council-area commercial and recreational ocean salmon fishing effort and landings of Chinook, coho, and pink salmon by management area.

Table I-6: The coho and Chinook quotas for each fishery compared with actual harvests.

Appendix A, Tables A-1 through A-19: Historical monthly ocean salmon harvest data by state and port area.

Tables A-20 through A-28: Historical monthly ocean salmon harvest data by management area.

Appendix B, Tables B-1 through B-46: Historical inside harvest and escapement data.

Appendix C, Table C-8: Historical record of annual preseason catch quotas for the area north of Cape Falcon, as well as the stocks that were critical for ocean salmon management actions.

### *REGULATORY OBJECTIVES BY MANAGEMENT AREA*

The following sections provide a brief outline of the regulatory objectives that shaped the 2018 ocean salmon fisheries by management area and species. Further details of the conservation and allocation objectives by salmon stock and an assessment of performance are provided in Chapters II and III for Chinook and coho, respectively.

## Horse Mountain to U.S./Mexico Border

### *Chinook Fisheries*

Chinook fisheries management in this area is guided by Fishery Management Plan (FMP) - defined control rules for Sacramento River fall Chinook (SRFC), Klamath River fall Chinook (KRFC), and by National Marine Fisheries Service (NMFS) Endangered Species Act (ESA) consultation standards for Sacramento River winter Chinook (SRWC), California Coastal Chinook, Oregon Coast Natural (OCN) coho, and Southern Oregon/Northern California Coast (SONCC) coho. The Council structured 2018 Chinook salmon fisheries south of Horse Mountain (near Shelter Cove, California) to meet the following objectives (in order of most to least constraining):

1. A SRFC spawner escapement of no less than 151,000 hatchery and natural area adults, which is produced, in expectation, by a total exploitation rate of 34.2 percent.
2. A Klamath basin natural area spawning escapement of no less than 40,700 fall Chinook adults which is produced, in expectation, by a spawner reduction rate of 31.9 percent, along with the allocation objective of 50 percent of the allowable adult harvest for federally-recognized tribal subsistence and commercial fisheries.
3. The SRWC ESA consultation standard requiring:
  - a. A maximum forecast age-3 impact rate for the area south of Point Arena of 14.4 percent.
  - b. Commercial seasons between Point Arena and the U.S./Mexico border shall open no earlier than May 1 and close no later than September 30, with the exception of a permissible October season conducted Monday through Friday between Point Reyes and Point San Pedro, which shall end no later than October 15; the minimum size limit shall be at least 26 inches total length.
  - c. The recreational season between Point Arena and Pigeon Point shall open no earlier than the first Saturday in April and close no later than the second Sunday in November; the recreational season between Pigeon Point and the U.S./Mexico Border shall open no earlier than the first Saturday in April and close no later than the first Sunday in October; the minimum size limit shall be at least 20 inches total length.
4. The California Coastal Chinook ESA consultation standard requiring a forecast KRFC age-4 ocean harvest rate of no greater than 16.0 percent.
5. The OCN coho allowable exploitation rate (marine and freshwater combined) of no greater than 15.0 percent as required by the exploitation rate matrix recommended by the OCN Coho Work Group that was adopted by the Council as expert biological advice in November 2000.
6. The SONCC coho ESA consultation standard requirement of no greater than a 13.0 percent marine exploitation rate on Rogue/Klamath (RK) hatchery coho.

Objective 1 was the constraining factor for 2018 Chinook fisheries management in this area. The adopted regulations (Table I-1 and I-3) resulted in the following projections: a SRFC spawner escapement of 151,009 hatchery and natural area adults, a KRFC spawning escapement of 40,700 natural area adults, a SRWC age-3 impact rate of 8.5 percent for the area south of Point Arena, and a coastwide ocean fishery harvest rate of 11.5 percent on age-4 KRFC.

### *Coho Fisheries*

Coho fishery management for 2018 in this area was guided by the ESA consultation standard for Central California Coast (CCC) coho, which prohibits retention of coho in this area. No projection of non-retention fishery impacts on CCC coho was available; projected non-retention exploitation rates on Lower Columbia Natural (LCN), OCN, and RK coho were 0.0, 0.4, and 0.9 percent, respectively, in this area. Retention of coho has been prohibited south of the Oregon/California border since 1996. Coho are managed as a unit south of Cape Falcon, and details of the Council's management objectives shaping the 2018 fisheries are presented more fully in the Cape Falcon to Humbug Mountain section.

## **Humbug Mountain to Horse Mountain**

### *Chinook Fisheries*

The area between Humbug Mountain (near Port Orford, Oregon) and Horse Mountain (near Shelter Cove, California) is referred to as the Klamath Management Zone (KMZ). Chinook fisheries management in this area is guided by FMP-defined control rules for KRFC, SRFC, and by NMFS ESA consultation standards for California Coastal Chinook, LCN coho, OCN coho, and SONCC coho. The Council structured 2018 Chinook salmon fisheries in the KMZ to meet the following objectives (in order of most to least constraining):

1. A SRFC spawner escapement of no less than 151,000 hatchery and natural area adults, which is produced, in expectation, by a total exploitation rate of 34.2 percent.
2. A Klamath basin natural area spawning escapement of no less than 40,700 fall Chinook adults, which is produced, in expectation, by a spawner reduction rate of 31.9 percent, along with the allocation objective of 50 percent of the allowable adult harvest for federally-recognized tribal subsistence and commercial fisheries.
3. The California Coastal Chinook ESA consultation standard requiring a forecast KRFC age-4 ocean harvest rate of no greater than 16.0 percent.
4. The LCN coho ESA consultation standard requirement of no greater than an 18.0 percent exploitation rate (marine and mainstem Columbia River combined).
5. The OCN coho allowable exploitation rate (marine and freshwater combined) of no greater than 15.0 percent as required by the exploitation rate matrix recommended by the OCN Coho Work Group that was adopted by the Council as expert biological advice in November 2000.
6. The SONCC coho ESA consultation standard requirement of no greater than a 13.0 percent marine exploitation rate on RK hatchery coho.

Objective 1 was the constraining factor for 2018 Chinook fisheries management in the KMZ. The adopted regulations (Table I-1 and I-3) resulted in the following projections: a SRFC spawner escapement of 151,009 hatchery and natural area adults, a KRFC spawning escapement of 40,700 natural area adults, and a coastwide ocean fishery harvest rate of 11.5 percent on age-4 KRFC.

### *Coho Fisheries*

Coho fisheries management in this area is guided by the ESA consultation standards for LCN, OCN, SONCC, and CCC coho, which prohibits retention of coho south of the Oregon/California border. No projection of non-retention fishery impacts on CCC coho was available. Projected exploitation rates on LCN, OCN, and RK coho were 0.2, 1.1, and 3.6 percent, respectively, in this area. Coho are managed as a



unit south of Cape Falcon, and details of the Council's management objectives shaping the 2018 fisheries are presented more fully in the Cape Falcon to Humbug Mountain section.

## **Cape Falcon to Humbug Mountain**

### *Chinook Fisheries*

Chinook fisheries management in this area is guided by FMP-defined control rules for SRFC, KRFC, and by NMFS ESA consultation standards for California Coastal Chinook, Lower Columbia River (LCR) natural tule Chinook, Snake River wild (SRW) Chinook, LCN coho, OCN coho, and SONCC coho. The Council structured 2018 Chinook salmon fisheries in this area to meet the following objectives (in order of most to least constraining):

1. A SRFC spawner escapement of no less than 151,000 hatchery and natural area adults which is produced, in expectation, by a total exploitation rate of 34.2 percent.
2. A Klamath basin natural area spawning escapement of no less than 40,700 fall Chinook adults, which is produced, in expectation, by a spawner reduction rate of 31.9 percent, along with the allocation objective of 50 percent of the allowable adult harvest for federally-recognized tribal subsistence and commercial fisheries.
3. The California Coastal Chinook ESA consultation standard requiring a forecast KRFC age-4 ocean harvest rate of no greater than 16.0 percent.
4. NMFS consultation standards and annual guidance for ESA-listed LCR natural tule Chinook, which required a total exploitation rate not to exceed 38.0 percent in marine and freshwater fisheries combined.
5. The LCN coho ESA consultation standard requirement of no greater than an 18.0 percent exploitation rate (marine and mainstem Columbia River combined).
6. The OCN coho allowable exploitation rate (marine and freshwater combined) of no greater than 15.0 percent as required by the exploitation rate matrix recommended by the OCN coho work group which was accepted by the Council as expert biological advice in November 2000.
7. The SONCC coho ESA consultation standard requirement of no greater than 13.0 percent marine exploitation rate on RK hatchery coho.

Objective 1 was the constraining factor for 2018 Chinook fisheries management in this management area. The adopted regulations (Table I-1 and I-3) resulted in the following projections: a KRFC spawning escapement of 40,700 natural area adults, a SRFC spawner escapement of 151,009 hatchery and natural area adults, and a coastwide ocean fishery harvest rate of 11.5 percent on age-4 KRFC.

### *Coho Fisheries*

Coho fisheries management in this area is guided by NMFS ESA consultation standards for LCN coho, OCN coho, and SONCC coho. The Council structured 2018 coho salmon fisheries in this area to meet the following objectives:

1. The LCN coho ESA consultation standard requirement of no greater than an 18.0 percent exploitation rate (marine and mainstem Columbia River combined).

2. The OCN coho allowable exploitation rate (marine and freshwater combined) of no greater than 15.0 percent as required by the exploitation rate matrix recommended by the OCN coho work group which was accepted by the Council as expert biological advice in November 2000.
3. The SONCC coho ESA consultation standard requirement of no greater than 13.0 percent marine exploitation rate on RK hatchery coho.

Objective 1 was the most constraining factor on 2018 coho fisheries management in this area. The Council adopted seasons in this area with projected impacts of 4.3, 8.1, and 0.6 percent on LCN natural coho, OCN coho, and RK coho, respectively. In all relevant fisheries, projected exploitation rates were 16.2, 12.9, and 5.7 percent, respectively.

## **U.S./Canada Border to Cape Falcon**

### *Chinook Fisheries*

Management objectives for Chinook fisheries in this area were to comply with NMFS ESA consultation standards for LCR natural tule fall Chinook, Lower Columbia River Wild (LRW) fall Chinook, Snake River Wild (SRW) fall Chinook and Puget Sound Chinook; meet treaty Indian sharing obligations, the allocation provisions in the Salmon FMP, and provisions of the Pacific Salmon Treaty (PST); and to the extent possible, provide for viable ocean and in-river fisheries while meeting natural stock escapement objectives and hatchery fall Chinook brood stock needs. Columbia lower river hatchery (LRH) and Spring Creek Hatchery (SCH) fall Chinook have historically been the major contributors to ocean fishery catches in the Council-area north of Cape Falcon.

The Council structured Chinook salmon fisheries between Cape Falcon, Oregon and the U.S./Canada border to meet the following objectives:

1. The LCR natural tule Chinook ESA consultation standard requirement for a combined marine and freshwater exploitation rate of no greater than 38.0 percent.
2. The Snake River fall Chinook ESA consultation standard of at least a 30.0 percent reduction in the total ocean age-3 and age-4 adult-equivalent (AEQ) exploitation rate from the 1988-1993 average.
3. For select Chinook stocks of concern to the PSC, keep the Individual Stock-Based Management (ISBM) index at or below 60.0 percent of the 1979-1982 base period average.

Objective 1 above was the primary constraint for 2018 ocean fisheries in this area. Under the adopted regulations (Tables I-1, I-2, and I-3), fisheries were projected to have a 37.7 percent total AEQ exploitation rate on LCR natural tules (15.4 percent in Council-area fisheries), and be 48.1 percent of the 1988 to 1993 base period AEQ exploitation rate for SRW (a 52 percent reduction).

### *Coho Fisheries*

The Council structured coho salmon fisheries to meet the following objectives:

1. The LCN coho ESA consultation standard requirement for a combined marine and mainstem Columbia River exploitation rate of no greater than 18.0 percent.
2. An exploitation rate on Interior Fraser coho of no more than 10.0 percent in southern U.S. (SUS) fisheries in accordance with the provisions of the southern coho management plan adopted by the PSC in February 2002.

3. The OCN coho allowable exploitation rate (marine and freshwater combined) of no greater than 15.0 percent as required by the exploitation rate matrix recommended by the OCN Coho Work Group that was adopted by the Council as expert biological advice in November 2000.
4. Meet FMP conservation objectives and obligations under the PST Southern Coho Management Plan for stocks originating on the Washington coast, Puget Sound, and British Columbia, and inside/outside and treaty Indian/non-Indian allocation objectives with special attention to low run size predictions for Queets and Grays Harbor natural coho.
5. Meet FMP objectives for allocation of impacts between commercial and recreational ocean fisheries, and among port areas for the recreational fishery.

Objective 4 above was the primary constraint for 2018 ocean fisheries in this area. The adopted regulations (Tables I-1, I-2, and I-3) were projected to have a total exploitation rate on LCN coho of 16.2 percent (9.7 percent in Council-area fisheries), an exploitation rate in SUS fisheries of 7.0 percent on Interior Fraser (Thompson River) coho (2.0 percent in Council-area fisheries), and a total exploitation rate of 12.9 percent on OCN coho (10.6 percent in Council-area fisheries). Per the PST Southern Coho Management Plan, Tribal and Washington Department of Fish and Wildlife (WDFW) co-managers agreed to 2018 spawning escapement objective of 5,639 Queets wild coho and 33,691 Grays Harbor wild coho; the adopted regulations were projected to meet these escapement objectives.

### ***SELECTIVE FISHERIES AND SALMON BYCATCH***

Estimated incidental Chinook and coho mortalities are reported in Tables I-7, I-8, and I-9. Unless otherwise noted, Chinook mortality estimates south of Humbug Mountain, Oregon were based on expansion of dockside sampling data.

The Council assumed hook-and-release mortality rates of 26 percent in commercial troll fisheries coastwide, and 14 percent in recreational fisheries north of Point Arena. In recreational fisheries south of Point Arena, the Council assumed a hook-and-release mortality rate 15 percent based on the proportion of fish caught using mooching versus trolling gear, and the estimated rates of 42.2 and 14 percent for these gear types, respectively. In addition, the Council assumes drop-off mortality for both Chinook and coho equal to 5 percent of total encounters.

#### **Selective Chinook Fisheries**

No recreational fisheries selective for marked Chinook were planned for the four ocean subareas between Cape Falcon, Oregon, and the U.S./Canada border in 2018. Recreational fisheries in the Strait of Juan de Fuca operated under mark-selective retention restrictions for Chinook in Area 5 and the portion of Area 6 west of Port Angeles, from July 1 through August 15, 2018 (Figure I-1). The Area 5 mark-selective fishery was managed to a threshold of total legal-sized encounters for the fishery (5,758) and the Area 6 mark-selective fishery was managed as a season. After August 15, the fishery in Areas 5 and 6 converted to mark-selective for coho until September 30. Catch and release estimates, derived from creel census programs conducted during the mark-selective fishery for Chinook in Area 5 from July 1 through August 15 are presented in Table I-8. No in-season estimate was made for Area 6, which was open from July 1 through August 15 for mark-selective Chinook fishing. The observed Chinook mark rates were lower than predicted preseason. Observed non-retention mortality was slightly higher than anticipated, and the catch was more than expected for Chinook (Table I-8).

Mark-selective Chinook fisheries were also held in Puget Sound Area 7 from July 1 through 31, in Area 9 from July 16 through 29, in Area 10 from July 16 through August 16, in Area 11 from June 1 through August 25, and in Area 12 from July 1 through September 30 (Figure I-1). Winter mark-selective fisheries are scheduled in Area 5 from February 16 through April 30, 2019, in Area 6 from February 1 through April

15, 2019, and in Area 7 from January 1 through April 30, 2019. Winter mark-selective Chinook fisheries are also scheduled in Areas 8-1 and 8-2 from December 1, 2018, through April 30, 2019, in Area 9 from January 1 through April 15, 2019, and in Area 10 from January 1, 2019 through March 30, 2019. Area 11 is scheduled for mark-selective Chinook opportunity from October 1, 2018, through April 30, 2019, Area 12 is scheduled from October 1, 2018, through April 30, 2019, and Area 13 is open for mark-selective Chinook from May 1, 2018 until April 30, 2019.

### **Selective Coho Fisheries**

Commercial troll fisheries selective for marked coho were planned for the area between the U.S./Canada border and Cape Falcon, Oregon. Recreational fisheries selective for marked coho were planned for the area between the U.S./Canada border and Humbug Mountain, Oregon, and the inside fishery at Buoy 10 (Figure I-1). Other inside and freshwater recreational fisheries in Washington and Oregon had mark-selective restrictions for coho. Preseason and postseason assessments of mark rates, catch, number of coho released, and incidental (bycatch) mortality for Council-area and some mixed stock inside fisheries are summarized in Table I-9. Fisheries were sampled by a combination of on-water observers, voluntary trip reports, and dockside interviews. The observed mark rates in all areas in ocean fisheries both north and south of Cape Falcon were lower than what was predicted preseason. Observed non-retention mortality was lower than expected south of Cape Falcon. North of Cape Falcon, the recreational fishery had higher non-retention mortality than predicted and the commercial fishery had lower than expected non-retention mortality due in part to inseason coho quota transfers between the gear types.

### ***PACIFIC SALMON COMMISSION***

The PSC was established to implement the 1985 Pacific Salmon Treaty (PST) between the U.S. and Canada. Because many of the stocks under the jurisdiction of the Council are significantly affected by management actions taken in Canadian and Alaskan waters, considerable interaction between the Council and the PSC occurs at both the policy and technical levels. Actual catches for PSC fisheries of the most relevance to the Council are summarized in Tables I-10 and I-11. Note that these catches result from inseason management of fisheries for compliance with aggregate abundance-based management (AABM; see below) under the PST. They do include incidental mortality associated with regulation of these fisheries, except as noted.

### **Chinook Fisheries**

Northern British Columbia (B.C.) and Southeast Alaska (SEAK) fisheries affect far-north migrating Chinook stocks from Washington, Oregon, and Idaho. These include Washington coastal stocks, Columbia and Snake River bright fall and summer stocks, and far-north migrating Oregon coastal Chinook stocks. The West Coast Vancouver Island (WCVI) troll and Georgia Strait troll and recreational fisheries affect far-north migrating stocks (including LRW) to a lesser degree, but have a major impact on more southerly-distributed Columbia River tule and Puget Sound stocks.

In June 1999, the U.S. and Canada reached agreement on a framework for Chinook fishing regimes for 1999 through 2008. Under this agreement, SEAK (all gear), Northern B.C. (troll and recreational), and WCVI (troll and outside recreational) fisheries were regulated under aggregate AABM regimes. These fishery regimes had catch ceilings derived from indices for total aggregate abundance of stocks contributing to specific components of the fisheries and target fishery harvest rates. For example, the allowable catches for WCVI troll and outside recreational fisheries were determined by the abundance index estimated for the WCVI troll fishery. The allowable catch for the WCVI AABM fisheries was designed to reduce harvest rates for the combined troll and outside recreational fisheries by approximately 35 percent from levels observed during 1985 through 1996. Provisions of a new ten-year agreement took effect January 1, 2009. The 2009 agreement reduced catch ceilings in SEAK and WCVI AABM fisheries by 15 percent and 30 percent respectively, from those in the 1999 agreement. As the 2009 agreement expired at the end of 2018, a new agreement has been negotiated and is expected to go into effect beginning with the 2019 season.

For fisheries not driven by AABM regimes, including Council-area fisheries, the 1999 agreement established conservation obligations to reduce harvest rates on depressed Chinook stocks (those not meeting escapement goals) by 36.5 percent for Canadian fisheries and 40 percent for U.S. fisheries, relative to levels observed during 1979 through 1982. This individual stock-based management (ISBM) obligation was taken into account during Council and inside fisheries preseason management planning processes. However, relative to meeting the provisions of the PST, the ISBM indices are evaluated on a post-season basis only.

As in previous years, AABM fisheries were conducted in accordance with the obligations set forth in the 2009 PST agreement. The PSC reached agreement in 2018 on calibration of the PST Chinook Model that produces the Abundance Index (AI) for the three AABM fisheries. The AI corresponds to a total allowable catch of “Treaty” Chinook per provisions in the PST. Treaty Chinook are those fish that are counted against the AABM catch ceiling; they represent total landed catch minus terminal exclusions (fish taken in terminal net fisheries where escapement goals are achieved) and hatchery add-ons (fish attributed to production from Alaskan hatchery facilities in excess of levels observed prior to the 1985 PST).

The 2018 AI for the SEAK fisheries was 1.07, which corresponds to a catch ceiling of 144,500 Treaty Chinook. The preliminary estimate of total Chinook catch by SEAK fisheries in 2018 was 164,700, of which 127,800 were Treaty Chinook (Table I-10). These catches were lower than the total catch of 211,000 Chinook in 2017, of which 178,300 were Treaty fish. The estimated Treaty Chinook harvest in 2018 was also less than the preseason catch ceiling, as management actions were taken inseason to address concerns for Chinook stocks in SEAK, Northern B.C., and Transboundary Rivers.

The 2018 AI for Northern B.C. was 1.01, corresponding to total allowable catch of 131,300 Chinook. The estimated catch in the Northern B.C. AABM fisheries (Northern B.C. troll plus Haida Gwaii [Queen Charlotte Islands] recreational) in 2018 was 107,000 Chinook (70,300 troll; 36,700 recreational). This was below the preseason catch ceiling and represents a considerable decrease from the previous year’s total catch of 143,300. The Northern B.C. troll fishery in 2018 was conducted under a system of individual transferable quotas that was fully implemented beginning in 2008.

The 2018 AI for WCVI was 0.59, corresponding to a total allowable catch of 88,300 Chinook. In addition to the overall catch ceiling determined by the PST, Canada's principal management objectives for the 2018 WCVI Chinook fisheries were to meet domestic allocation objectives as well as address concerns for Lower Strait of Georgia Chinook, WCVI Chinook stocks, spring run upper Fraser River Chinook, and Interior Fraser (Upper Fraser and Thompson) coho. The estimated 2018 catch in WCVI AABM fisheries was 76,800 Chinook (12,500 First Nations, 19,200 troll, and 45,200 recreational; Table I-11). This was below the preseason catch ceiling and represents a considerable decrease from the previous year’s total AABM catch of 109,500 Chinook.

Since 1999, the WCVI troll fishery has been managed to distribute the catch throughout the year with fisheries in the summer shaped to reduce impacts on coho and WCVI, Lower Strait of Georgia, and early-run Fraser River Chinook stocks. During accounting year 2018 (October 2017 through September 2018), troll fisheries were closed for retention of Chinook in June and July (Table I-12). To protect Interior Fraser coho, the retention of coho was not permitted.

The WCVI outside recreational fishery (the area where non-local stocks predominate) operated under a 45 cm (17.7 inches) total length minimum size limit, but with the additional restriction that Chinook over 77 cm (30.3 inches) could not be retained in the surf zone corridor (within 1 mile of shore) to protect local-origin stocks. The fishery harvested 45,200 fish, slightly less than the 49,200 caught in 2017.

The reported Canadian ISBM Chinook catch for Northern B.C. in 2018 was approximately 24,400 (12,200 First Nations, 5,200 commercial gillnet, 7,000 recreational). These estimates are incomplete, however, and do not include First Nations catches from Areas 6 and 7 of the Central Coast or recreational tidal catches in Northern Areas 3 through 6. Southern B.C. ISBM fisheries in 2018 harvested approximately 222,200 Chinook (90,000 First Nations, 9,700 commercial, 122,600 recreational).

No direct management measures for Chinook salmon within the Council management area were specified under the 2009 PST agreement, except for the ISBM commitment. The Council's ocean fisheries and inside fisheries conducted by the state and tribal managers were designed to minimize impacts on spawning escapements of depressed stocks, and pre-season estimates of impacts were in compliance with terms of the PST agreement. Information necessary to evaluate the post-season impacts of Council-area fisheries was not available.

### **Coho Fisheries**

In 2002, the PSC adopted a management plan for coho salmon originating in Washington and Southern B.C. river systems. The plan is directed at the conservation of key management units, four from Southern B.C. (Interior Fraser, Lower Fraser, Strait of Georgia Mainland, and Strait of Georgia Vancouver Island) and nine from Washington (Skagit, Stillaguamish, Snohomish, Hood Canal, Strait of Juan de Fuca, Quillayute, Hoh, Queets, and Grays Harbor). Under the plan, the U.S. and Canada were required to constrain total fishery exploitation rates to levels associated with the categorical status (low, moderate, and abundant) and target exploitation rates of the key management units as determined by domestic managers. Ceilings on exploitation rates by intercepting fisheries were established through formulas specified in the plan.

The forecast of 2018 abundance indicated that the status of interior Fraser River coho remained depressed, but there are indications in recent years that their condition might be improving. In 2018, Canadian fisheries were managed for an exploitation rate of 3 to 5 percent on interior Fraser River coho, less than the 10 percent ceiling allowed under the PSC coho management plan. The lower Fraser, Georgia Basin, and the Johnstone Strait coho management units were all forecast to be at low or moderate status. The PSC coho status categories of low, moderate, and abundant are analogous to the FMP categories of critical, low, and normal.

In 2018, approximately 176,900 coho were retained in troll fisheries in Northern and Central B.C. Catches in Southern B.C. commercial fisheries were minor, limited by the status of Interior Fraser coho. Coho kept and released by marine commercial fisheries are summarized in Table I-13.

For recreational fisheries, mark-selective coho retention was permitted in mixed stock areas, and barbless hooks were required. Mark-selective fisheries were implemented in most of Southern B.C. (Johnstone Strait, Strait of Georgia, Juan de Fuca Strait, and WCVI). The estimated total retained catch of coho in Southern B.C. marine recreational fisheries in 2018 was 37,000. Coho kept and released by marine recreational fisheries in Southern B.C. are summarized in Table I-14. First Nations fisheries in Southern B.C. harvested 11,700 coho.

TABLE I-1. Summary of actual ocean non-Indian commercial troll salmon fishing regulations for 2018. (Page 1 of 2)

| Area and Season  | Salmon Species  | Actual Quota  |                     | Special Restrictions <sup>a/</sup>   |
|--|-----------------|---|---------------------|--|
|  |                 | Chinook   | Coho                |  |
| U.S./Canada Border to Cape Falcon, OR<br>May 1-June 30   | All except coho | 16,500 <sup>b/</sup><br>with sub-<br>allocation<br>by area  | -                   | Chinook minimum size limit of 28 inches total length. Landing limits were adjusted inseason. Mandatory Yellow eye Rockfish Conservation Area, Cape Flattery and Columbia Control Zones closed. Vessels must land and deliver their fish within 24 hours of any closure of this fishery and landings were generally restricted to area of catch. Refer to complete 2018 ocean salmon regulations for detailed landing and notification requirements.  |
| July 1-Sept. 19  | All salmon      | 12,876 <sup>c/</sup><br>with sub-<br>allocation<br>by area. | 4,600 <sup>d/</sup> | Chinook minimum size limit of 28 inches total length. Coho minimum size limit of 16 inches total length. All coho must be marked with a healed adipose fin clip. No chum retention north of Cape Alava in Aug. and Sept. Days open per week, landing limits, and quotas were adjusted inseason. Mandatory Yellow eye Rockfish Conservation Area, Cape Flattery and Columbia Control Zones, and beginning Aug. 13, Grays Harbor Control Zone Closed. Vessels must land and deliver their fish within 24 hours of any closure of this fishery and landings were generally restricted to area of catch. Refer to complete 2018 ocean salmon regulations for detailed landing and notification requirements. |
| Cape Falcon to Humbug Mt., OR<br>May 4-14, and 19-31<br>June 4-12, and 16-30<br>July 5-12, and 16-31<br>Aug. 3-7, 13-17, and 25-29<br>Sept. 1-Oct. 31                      | All except coho | None  | -                   | Chinook minimum size limit of 28 inches total length. All vessels fishing in the area must land their fish in the State of Oregon. Beginning September 1 no more than 50 Chinook per vessel per landing week (Thurs.-Wed.); and only open shoreward of the 40 fathom regulatory line beginning October 1.  |
| Elk River Ocean Terminal Area<br>Inside of a line from Cape Blanco<br>to Black Rock to Best Rock to<br>42°40'30" N. Lat. 124°29'00" W.<br>Long. to Humbug Mt.<br>Nov. 1-30 | Chinook only    | None  | -                   | Chinook minimum size limit of 26 inches total length. Landing and possession limit of 10 Chinook per vessel per day. Landings restricted to Port Orford.   |
| Humbug Mt. to OR/CA Border<br>(Oregon KMZ)<br>May 4-14, and 19-31<br>June 4-12<br>July 5-12, and 16-31<br>Aug. 3-7, 13-17, and 25-29                                       | All except coho | -<br>None<br>1,500<br>1,975<br>1,430                        | <sup>e/</sup><br>-  | Chinook minimum size limit of 28 inches total length. Landing limits and quotas in effect beginning in June. Landing limits and quotas were adjusted inseason. Prior to June 1, fish caught in this area must be landed in Oregon. June - August: all vessels must land and deliver all salmon within this area, or into Port Orford within 24-hours. Refer to complete 2018 ocean salmon regulations for detailed landing and notification requirements.  |
| Chetco River Terminal Area<br>Two in Rocks to OR/CA Border<br>inside 3 nm<br>Oct. 8-12, 15-23  | Chinook only    | -   | -                   | Chinook minimum size limit of 28 inches total length. Landing and possession limit of 5 Chinook per vessel per day. Landings restricted to Brookings.  |

TABLE I-1. Summary of actual ocean non-Indian commercial troll salmon fishing regulations for 2018. (Page 2 of 2)

| Area and Season  | Salmon Species  | Actual Quota |      | Special Restrictions <sup>a/</sup>  |
|--|-----------------|--------------|------|---|
|  |                 | Chinook      | Coho |   |
| OR/CA Border to Humboldt South Jetty<br>(California KMZ)                   | All except coho |              | -    | Open five days per week (Fri-Tu). Chinook minimum size limit of 26 inches total length. Quotas, and daily landing and possession limits adjusted inseason. All salmon caught in this area (CA KMZ) must be landed within the area and within 24 hours of any closure of the fishery and prior to fishing outside the area.  |
| May 1-29   |                 | 3,600        | f/   |   |
| June 1-30  |                 | 6,650        | f/   |   |
| July 1-31  |                 | 6,612        | f/   |   |
| Aug. 3-31  |                 | 9,423        | f/   |   |
| Humboldt South Jetty to Horse Mt.<br>Closed                                | -               | -            | -    |   |
| Horse Mt. to Pt. Arena<br>(Ft. Bragg Area)                                 | All except coho | None         | -    | Chinook minimum size limit of 26 inches total length. All fish must be landed in California. All salmon caught prior to September 1 must be landed and offloaded no later than 11:59 p.m., August 30. When the CA KMZ fishery is open, all fish caught in the area must be landed south of Horse Mountain until the CA KMZ fishery has been closed for at least 24 hours. During September, all fish must be landed north of Point Arena. |
| July 26-31,<br>Aug. 3-29,<br>Sept. 1-30                                    |                 |              |      |   |
| Pt. Arena to Pigeon Pt.<br>(San Francisco Area)                            | All except coho | None         | -    | Chinook minimum size limit of 26 inches total length. All fish must be landed in California. All salmon caught prior to September 1 must be landed and offloaded no later than 11:59 p.m., August 30. When the CA KMZ fishery is open, all fish caught in the area must be landed south of Horse Mountain until the CA KMZ fishery has been closed for at least 24 hours. During September, all fish must be landed south of Point Arena. |
| July 26-31,<br>Aug. 3-29,<br>Sept. 1-30                                    |                 |              |      |   |
| Fall Area Target Zone<br>Pt. Reyes to Pt. San Pedro<br>Oct. 1-5, 8-12      | All except coho | None         | -    | Chinook minimum size limit of 26 inches total length. All salmon caught in this area must be landed between Point Arena and Pigeon Point.   |
| Pigeon Pt. to U.S./Mexico Border<br>(Monterey Area)<br>May 1-7, June 19-30 | All except coho | None         | -    | Chinook minimum size limit of 26 inches total length. All fish must be landed in California. All salmon must be landed and offloaded no later than 11:59 p.m., July 15. When the CA KMZ fishery is open, all fish caught in the area must be landed south of Horse Mountain until the CA KMZ fishery has been closed for at least 24 hours.   |

a/ Single-point, single-shank barbless hooks required in all open areas coastwide. Limited to no more than 4 spreads per wire for all seasons between Cape Falcon and the OR/CA border and no more than 6 spreads per wire from the OR/CA border south to the U.S./Mexico border. From May 1- Dec. 31, 2018 and from Apr. 1-30, 2019, license holders may land or possess no more than one Pacific halibut per each two Chinook, except one Pacific halibut may be possessed or landed without meeting the ratio, and no more than 25 halibut may be possessed or landed per trip, unless modified by inseason action (inseason action: July 14 - closed for retention. July 26 - open for retention, with reduced ratio (1 halibut per each three Chinook) and trip limit (10 halibut); Aug. 8 - closed retention of halibut for the remainder of 2018). See Appendix Tables C.1, C.3, C.5, and C.9 for additional details and inseason adjustments.

b/ No more than 5,200 from U.S./Canada border to Queets R. and 4,600 between Leadbetter Pt. and Cape Falcon. In-season actions included changes to weekly landing limits.

c/ Increased from 11,000 after impact-neutral roll over quota remaining from Neah Bay sport fishery; no more than 6,476 of which may be caught in the area between the U.S./ Canada border and the Queets River, and no more than 1,300 may be caught between Leadbetter Point and Cape Falcon. In-season actions included changes to weekly landing limits.

d/ Decreased from 5,600 by an impact-neutral transfer to sport fishery.

e/ Preseason quotas includes 1,500 in June, 2,000 in July, and 500 in August. Preseason weekly landing limit was 50 Chinook per vessel per landing week (Thurs.-Wed.).

f/ Preseason quotas include 3,600 in May, 4,000 in June, 4,000 in July, and 4,000 in August. Preseason daily landing limit was 20 Chinook per vessel per day.



TABLE I-2. Summary of actual treaty Indian commercial ocean and Area 4B troll salmon seasons for 2018.

| Tribe and Area      | Seasons <sup>a/</sup> |                  |      | Minimum Size Limit<br>(Inches) |      | Special Restrictions         |
|---------------------|-----------------------|------------------|------|--------------------------------|------|------------------------------|
|                     | Salmon<br>Species     | Dates            | Days | Chinook                        | Coho |                              |
|                     |                       |                  |      |                                |      |                              |
| <b>Quinault</b>     |                       |                  |      |                                |      |                              |
| Areas 2-3           | All except coho       | May 1-June 30    | 61   | 24                             | -    |                              |
|                     | All                   | July 1- Sept. 15 | 77   | 24                             | 16   |                              |
| <b>Hoh</b>          |                       |                  |      |                                |      |                              |
| Areas 2-3           | All except coho       | May 1-June 30    | 61   | 24                             | -    |                              |
|                     | All                   | July 1- Sept. 15 | 77   | 24                             | 16   |                              |
| <b>Quileute</b>     |                       |                  |      |                                |      |                              |
| Area 3              | All except coho       | May 1-June 30    | 61   | 24                             | -    |                              |
|                     | All                   | July 1- Sept. 15 | 77   | 24                             | 16   |                              |
| <b>Makah</b>        |                       |                  |      |                                |      |                              |
| Areas 3N, 4, and 4A | All except coho       | May 1-June 30    | 61   | 24                             | -    |                              |
|                     | All <sup>b/</sup>     | July 1- Aug. 14  | 45   | 24                             | 16   |                              |
|                     | All <sup>b/</sup>     | Aug. 15-21       | 7    | 24                             | 16   | 100 coho per vessel per week |
|                     | All <sup>b/</sup>     | Aug. 22-26       | 5    | 24                             | 16   | 250 coho per vessel per week |
|                     | All <sup>b/</sup>     | Aug. 27-Sept. 2  | 7    | 24                             | 16   | 300 coho per vessel per week |
|                     | All <sup>b/</sup>     | Sept. 3          | 1    | 24                             | 16   |                              |
|                     | All <sup>b/</sup>     | Sept. 4-8        | 5    | 24                             | 16   | 100 coho per vessel per week |
|                     | All <sup>b/</sup>     | Sept. 9-15       | 5    | 24                             | 16   | 200 coho per vessel per week |
|                     | All <sup>b/</sup>     | Jan. 1-Apr. 15   | 105  | 22                             | 16   |                              |
| Area 4B             | All except coho       | May 1-June 30    | 61   | 24                             | -    |                              |
|                     | All <sup>b/</sup>     | July 1- Aug. 14  | 45   | 24                             | 16   |                              |
|                     | All <sup>b/</sup>     | Aug. 15-21       | 7    | 24                             | 16   | 100 coho per vessel per week |
|                     | All <sup>b/</sup>     | Aug. 22-31       | 5    | 24                             | 16   | 250 coho per vessel per week |
|                     | All <sup>b/</sup>     | Sept. 1-8        | 7    | 24                             | 16   | 300 coho per vessel per week |
|                     | All <sup>b/</sup>     | Sept. 9-10       | 1    | 24                             | 16   |                              |
|                     | All <sup>b/</sup>     | Sept. 11-14      | 5    | 24                             | 16   | 100 coho per vessel per week |
|                     | All <sup>b/</sup>     | Nov. 1-Dec. 31   | 5    | 24                             | 16   | 200 coho per vessel per week |
|                     | All <sup>b/</sup>     | Jan. 1-Apr. 15   | 105  | 22                             | 16   |                              |
| <b>S'Klallam</b>    |                       |                  |      |                                |      |                              |
| Area 4B             | All <sup>b/</sup>     | Jan. 1-Apr. 15   | 105  | 22                             | 16   |                              |
|                     | All except coho       | May 1-June 30    | 61   | 24                             | -    |                              |
|                     | All <sup>b/</sup>     | July 1- Sept. 15 | 77   | 24                             | 16   |                              |
|                     | All <sup>b/</sup>     | Nov. 1-Dec. 31   | 61   | 22                             | 16   |                              |

a/ The overall quotas for these fisheries during the May 1-Sept. 15 ocean salmon management period were 40,000 Chinook and 12,500 coho. These quotas include troll catches by the S'Klallam and Makah tribes in Washington State Statistical Area 4B from May 1-Sept. 15. The overall Chinook quota was divided preseason to provide 16,000 Chinook for the May 1-June 30 Chinook-directed season and 24,000 Chinook for the July 1-Sept. 15 all-salmon season. The Quileute C&S fishery (September-October) did not operate in 2018. Single point, single shank barbless hooks were required in all ocean fisheries.

b/ Retention of steelhead prohibited; retention of chum prohibited beginning August 1.

TABLE I-3. Summary of actual ocean recreational salmon fishing regulations for 2018. (Page 1 of 2)

| Area and Season   | Salmon Species  | Actual Quota         |                     | Daily Limit and Special Restrictions <sup>b/</sup>   |
|---|-----------------|----------------------|---------------------|--|
|   |                 | Chinook              | Coho <sup>a/</sup>  |  |
| U.S./Canada Border to Cape Falcon, OR   |                 |                      |                     |  |
| U.S./Canada Border to Cape Alava, WA<br>(Neah Bay subarea)<br>June 23-Aug. 12   | All salmon      | 3,024 <sup>c/</sup>  | 5,370 <sup>d/</sup> | Two salmon daily, daily limit includes only one Chinook through July 13. No chum retention beginning Aug. 1. Chinook non-retention east of the Bonilla-Tatoosh line during Council managed ocean fishery beginning Aug. 1.   |
| Cape Alava to Queets R., WA<br>(La Push subarea)<br>June 23-Sept. 3   | All salmon      | 1,500 <sup>c/</sup>  | 1,090               | Two salmon daily.  |
| Queets R. to Leadbetter Pt., WA<br>(Westport subarea)<br>July 1-Sept. 3   | All salmon      | 13,100 <sup>c/</sup> | 15,540              | Open five days per week (Sun.-Thurs.), through Aug. 23, then seven days per week thereafter. Two salmon daily, daily limit includes only one Chinook through Aug. 23. Grays Harbor Control Zone closed beginning Aug. 13.    |
| Leadbetter Pt., WA to Cape Falcon, OR<br>(Columbia River subarea)<br>June 23-Aug. 12, Sept. 2-3   | All salmon      | 8,000 <sup>c/</sup>  | 21,000              | Two salmon daily, only one may be a Chinook through Aug. 12; then two Chinook allowed Sept. 2-3. Columbia River Control Zone closed.   |
| Cape Falcon to Humbug Mt.   |                 |                      |                     |  |
| Mar. 15-June 29, Sept. 4-6, 9-13, 16-20, 22-30, Oct. 1-31   | All except coho | -                    | -                   | Two salmon daily. In October, the fishery is only open shoreward of the 40 fathom regulatory line.   |
| June 30-Sept. 3   | All salmon      | -                    | 35,000              | Two salmon daily, all coho must be marked with a healed adipose fin clip. Fishing in the Stonewall Bank groundfish conservation area restricted to trolling only on days the all depth recreational halibut fishery is open. |
| Sept. 7-8, 14-15, 21  | All salmon      | -                    | 7,600 <sup>d/</sup> | Two salmon daily. Non-mark selective for coho.   |
| Elk River Ocean Terminal Area<br>Inside of a line from Cape Blanco to Black Rock to Best Rock to 42°40'30" N. Lat. 124°29'00" W. Long. to Humbug Mt.<br>Nov. 1-30 | Chinook only    | -                    | -                   | Two Chinook daily, one of which can be unmarked; no more than 10 unmarked per season in aggregate with Elk R., Sixes R., Floras Ck., and New R.  |
| Humbug Mt. to OR/CA Border (Oregon KMZ)<br>May 19-Aug. 26   | Chinook only    | -                    | -                   | Two salmon daily.  |
| Chetco River Terminal Area<br>Tw in Rocks to OR/CA border inside 3 nm<br>Oct. 6-7, 13-14  | Chinook only    | -                    | -                   | One Chinook daily. Chinook min. size limit of 28 inches total length.  |

TABLE I-3. Summary of actual ocean recreational salmon fishing regulations for 2018. (Page 2 of 2)

| Area and Season  | Salmon Species  | Actual Quota |                    | Daily Limit and Special Restrictions <sup>b/</sup>                   |
|--|-----------------|--------------|--------------------|--|
|  |                 | Chinook      | Coho <sup>a/</sup> |  |
| OR/CA Border to Horse Mt. (California KMZ)<br>June 1-Sept. 3 | All except coho | None         | -                  | Two salmon daily. Chinook min. size limit of 20 inches total length. |
| Horse Mt. to Pt. Arena (Fort Bragg)<br>June 17-Oct. 31       | All except coho | None         | -                  | Two salmon daily. Chinook min. size limit of 20 inches total length. |
| Pt. Arena to Pigeon Pt. (San Francisco)<br>June 17-Oct. 31   | All except coho | None         | -                  | Two salmon daily. Chinook min. size limit of 20 inches total length. |
| Pigeon Pt. to U.S./Mexico Border (Monterey)<br>Apr. 7-July 2 | All except coho | None         | -                  | Two salmon daily.  |

a/ All coho fisheries and quotas are mark-selective for coho with a healed adipose fin clip unless otherwise noted. Total coho quota for the North of Falcon area is 42,000 fish.

b/ Unless otherwise noted, minimum size limits are 24 inches for Chinook and 16 inches for coho. Seasons open 7 days per week. For a complete description of gear restrictions, see the annual ocean salmon regulations or the annual Preseason Report III, Table 2.

c/ Total preseason recreational Chinook quota for the North of Falcon area is 27,500 fish. Numbers presented for recreational Chinook are sub area guidelines (not quotas). Preseason Chinook guidelines for North of Falcon subareas included 4,900 for Neah Bay.

d/ Preseason coho quotas for North of Falcon subareas included 4,370 for Neah Bay. South of Cape Falcon, the preseason quota for the non-mark selective fishery was 3,500 total coho.

TABLE I-4. Council area commercial and recreational ocean salmon fishing effort and landings by state. Data are provisional, pending further review of data compilation methods. A double dash ("-") indicates no records are available. Fewer than 500 pounds may be shown as zero. (Page 1 of 4)

| Year or Average                | COMMERCIAL TROLL          |         |         |         |                                      |       |      | RECREATIONAL                 |                         |         |        |         | Per Angler Trip |
|--------------------------------|---------------------------|---------|---------|---------|--------------------------------------|-------|------|------------------------------|-------------------------|---------|--------|---------|-----------------|
|                                | Effort (boat days fished) | Catch   |         |         | Thousands of Pounds (Dressed Weight) |       |      | Effort (salmon angler trips) | Catch (numbers of fish) |         |        | Total   |                 |
|                                |                           | Chinook | Coho    | Pink    | Chinook                              | Coho  | Pink |                              | Chinook                 | Coho    | Pink   |         |                 |
| <b>WASHINGTON<sup>a/</sup></b> |                           |         |         |         |                                      |       |      |                              |                         |         |        |         |                 |
| 1966-70                        | - -                       | 172,500 | 717,200 | 96,200  | 1,810                                | 4,557 | 432  | 401,900                      | 152,600                 | 427,700 | 14,600 | 594,900 | 1.5             |
| 1971-75                        | 56,200                    | 275,400 | 870,300 | 31,600  | 2,926                                | 4,801 | 147  | 482,900                      | 210,400                 | 567,400 | 6,100  | 783,900 | 1.6             |
| 1976-80                        | 43,787                    | 188,610 | 717,302 | 412,880 | 2,364                                | 3,675 | 789  | 397,637                      | 114,092                 | 511,827 | 23,544 | 649,463 | 1.6             |
| 1981-85 <sup>b/</sup>          | 12,782                    | 71,326  | 217,754 | 149,974 | 944                                  | 744   | 358  | 163,344                      | 54,662                  | 172,399 | 5,915  | 232,976 | 1.4             |
| 1986-90                        | 6,078                     | 71,534  | 137,942 | 33,565  | 847                                  | 259   | 117  | 119,412                      | 26,075                  | 165,058 | 1,919  | 193,051 | 1.6             |
| 1991-95                        | 4,156                     | 42,477  | 76,334  | 32,072  | 453                                  | 111   | 112  | 104,949                      | 11,156                  | 131,364 | 2,484  | 145,003 | 1.4             |
| 1996-00                        | 660                       | 25,267  | 28,492  | 1,682   | 286                                  | 24    | 9    | 38,459                       | 4,940                   | 41,445  | 1,799  | 48,184  | 1.3             |
| 2001-05                        | 1,721                     | 79,452  | 41,007  | 1,122   | 1,123                                | 41    | 4    | 109,947                      | 35,251                  | 109,200 | 6,862  | 151,312 | 1.4             |
| 2006                           | 2,243                     | 47,314  | 33,203  | 0       | 634                                  | 432   | 0    | 65,263                       | 10,667                  | 36,087  | 0      | 46,754  | 0.7             |
| 2007                           | 1,864                     | 37,211  | 45,924  | 731     | 526                                  | 550   | 3    | 72,683                       | 8,944                   | 83,788  | 4,670  | 97,402  | 1.3             |
| 2008                           | 1,803                     | 29,543  | 15,970  | 0       | 352                                  | 180   | 0    | 37,610                       | 14,635                  | 18,870  | 0      | 33,505  | 0.9             |
| 2009                           | 2,818                     | 24,542  | 80,718  | 1,209   | 316                                  | 899   | 3    | 101,560                      | 12,351                  | 138,493 | 7,627  | 158,471 | 1.6             |
| 2010                           | 3,293                     | 77,475  | 13,565  | 0       | 928                                  | 151   | 0    | 80,955                       | 36,874                  | 36,278  | 0      | 73,152  | 0.9             |
| 2011                           | 2,664                     | 58,726  | 16,617  | 1,289   | 740                                  | 180   | 5    | 73,596                       | 29,203                  | 39,582  | 10,828 | 79,613  | 1.1             |
| 2012                           | 3,020                     | 91,644  | 40,798  | 0       | 1,100                                | 461   | 0    | 77,659                       | 33,729                  | 31,434  | 0      | 65,163  | 0.8             |
| 2013                           | 3,904                     | 91,250  | 54,309  | 350     | 1,049                                | 571   | 1    | 80,014                       | 28,918                  | 46,140  | 7,668  | 82,726  | 1.0             |
| 2014                           | 3,549                     | 100,468 | 71,442  | 0       | 1,245                                | 758   | 0    | 119,617                      | 40,025                  | 123,057 | 0      | 163,082 | 1.4             |
| 2015                           | 4,103                     | 114,252 | 6,882   | 190     | 1,328                                | 61    | 1    | 97,114                       | 39,431                  | 74,737  | 8,631  | 122,799 | 1.3             |
| 2016                           | 2,298                     | 40,445  | 44      | 0       | 474                                  | 1     | 0    | 51,437                       | 16,907                  | 16,059  | 0      | 32,966  | 0.6             |
| 2017 <sup>c/</sup>             | 3,336                     | 57,347  | 14,718  | 208     | 596                                  | 144   | 0    | 61,453                       | 20,037                  | 36,087  | 732    | 56,856  | 0.9             |
| 2018 <sup>c/</sup>             | 3,030                     | 47,459  | 13,094  | 0       | 522                                  | 136   | 0    | 47,968                       | 9,913                   | 34,710  | 0      | 44,623  | 0.9             |

TABLE I-4. Council area commercial and recreational ocean salmon fishing effort and landings by state. Data are provisional, pending further review of data compilation methods. A double dash ("-") indicates no records are available. Fewer than 500 pounds may be shown as zero. (Page 2 of 4)

| Year or<br>Average         | COMMERCIAL TROLL                |                 |         |       |   |       |      | RECREATIONAL                          |                         |         |       |         | Per<br>Angler<br>Trip |
|----------------------------|---------------------------------|-----------------|---------|-------|---|-------|------|---------------------------------------|-------------------------|---------|-------|---------|-----------------------|
|                            | Effort<br>(boat days<br>fished) | Catch           |         |       |   |       |      | Effort<br>(salmon<br>angler<br>trips) | Catch (numbers of fish) |         |       |         |                       |
|                            |                                 | Numbers of Fish |         |       | Thousands of Pounds<br>(Dressed Weight) |       |      |                                       | Chinook                 | Coho    | Pink  | Total   |                       |
|                            |                                 | Chinook         | Coho    | Pink  | Chinook                                 | Coho  | Pink |                                       |                         |         |       |         |                       |
| <b>OREGON<sup>d/</sup></b> |                                 |                 |         |       |   |       |      |                                       |                         |         |       |         |                       |
| 1966-70                    | --                              | 122,000         | 804,500 | --    | 1,159                                   | 5,358 | --   | --                                    | --                      | --      | --    | --      | --                    |
| 1971-75                    | 47,400                          | 208,500         | 979,000 | --    | 2,128                                   | 6,015 | --   | --                                    | --                      | --      | --    | --      | --                    |
| 1976-80                    | 55,885                          | 232,632         | 10,998  | --    | 2,427                                   | 4,252 | 139  | 387,743                               | 39,974                  | 289,189 | --    | 329,163 | 0.8                   |
| 1981-85                    | 10,117                          | 145,503         | 301,499 | 2,100 | 1,432                                   | 1,537 | 117  | 233,544                               | 33,085                  | 165,393 | 2,700 | 201,178 | 0.9                   |
| 1986-90                    | 38,154                          | 394,927         | 397,243 | 4,300 | 3,731                                   | 1,957 | 21   | 241,161                               | 35,713                  | 218,637 | 500   | 254,849 | 1.1                   |
| 1991-95                    | 9,016                           | 100,945         | 119,367 | 380   | 940                                     | 325   | 2    | 99,547                                | 9,234                   | 103,001 | 60    | 112,296 | 1.1                   |
| 1996-00                    | 7,187                           | 129,523         | 6,133   | 380   | 1,414                                   | 14    | 2    | 45,609                                | 11,231                  | 12,459  | 60    | 23,750  | 0.5                   |
| 2001-05                    | 12,019                          | 282,567         | 5,749   | 124   | 3,109                                   | 39    | 0    | 118,845                               | 39,942                  | 66,017  | 0     | 105,959 | 0.9                   |
| 2006                       | 4,502                           | 34,857          | 1,414   | 0     | 486                                     | 13    | 0    | 62,321                                | 11,588                  | 15,577  | 0     | 27,165  | 0.4                   |
| 2007                       | 5,217                           | 35,487          | 17,109  | 80    | 464                                     | 101   | 0    | 88,264                                | 6,941                   | 60,653  | 0     | 67,594  | 0.8                   |
| 2008                       | 803                             | 5,954           | 434     | 0     | 66                                      | 4     | 0    | 30,418                                | 1,578                   | 12,085  | 2     | 13,665  | 0.4                   |
| 2009                       | 1,234                           | 1,149           | 21,962  | 18    | 15                                      | 131   | 0    | 84,518                                | 1,585                   | 89,606  | 0     | 91,191  | 1.1                   |
| 2010                       | 4,296                           | 39,433          | 1,040   | 0     | 506                                     | 7     | 0    | 53,319                                | 4,967                   | 18,295  | 0     | 23,262  | 0.4                   |
| 2011                       | 3,752                           | 32,081          | 464     | 49    | 402                                     | 3     | 0    | 48,756                                | 5,164                   | 18,832  | 0     | 23,996  | 0.5                   |
| 2012                       | 6,256                           | 73,101          | 624     | 0     | 741                                     | 4     | 0    | 67,308                                | 18,794                  | 16,079  | 0     | 34,873  | 0.5                   |
| 2013                       | 8,986                           | 112,757         | 452     | 0     | 1,291                                   | 2     | 0    | 85,535                                | 30,234                  | 14,536  | 0     | 44,770  | 0.5                   |
| 2014                       | 10,703                          | 208,096         | 10,998  | 0     | 2,571                                   | 67    | 0    | 121,506                               | 18,480                  | 99,507  | 0     | 117,987 | 1.0                   |
| 2015                       | 8,729                           | 104,259         | 2,213   | 0     | 1,189                                   | 11    | 0    | 66,039                                | 9,442                   | 28,282  | 0     | 37,724  | 0.6                   |
| 2016                       | 4,392                           | 42,347          | -       | 0     | 518                                     | 0     | 0    | 38,864                                | 4,095                   | 8,410   | 0     | 12,505  | 0.3                   |
| 2017                       | 2,052                           | 21,845          | 470     | 0     | 265                                     | 2     | 0    | 42,309                                | 4,594                   | 21,235  | 2     | 25,831  | 0.6                   |
| 2018 <sup>e/</sup>         | 2,568                           | 24,418          | 92      | 0     | 288                                     | 0     | 0    | 63,829                                | 4,991                   | 25,670  | 0     | 30,661  | 0.5                   |

TABLE I-4. Council area commercial and recreational ocean salmon fishing effort and landings by state. Data are provisional, pending further review of data compilation methods. A double dash (“-”) indicates no records are available. Fewer than 500 pounds may be shown as zero. (Page 3 of 4)

| Year or<br>Average             | COMMERCIAL TROLL                |                 |         |       |   |       |      | RECREATIONAL                          |                         |        |      |         | Per<br>Angler<br>Trip |
|--------------------------------|---------------------------------|-----------------|---------|-------|---|-------|------|---------------------------------------|-------------------------|--------|------|---------|-----------------------|
|                                | Effort<br>(boat days<br>fished) | Catch           |         |       |   |       |      | Effort<br>(salmon<br>angler<br>trips) | Catch (numbers of fish) |        |      |         |                       |
|                                |                                 | Numbers of Fish |         |       | Thousands of Pounds<br>(Dressed Weight) |       |      |                                       | Chinook                 | Coho   | Pink | Total   |                       |
|                                |                                 | Chinook         | Coho    | Pink  | Chinook                                 | Coho  | Pink |                                       |                         |        |      |         |                       |
| <b>CALIFORNIA<sup>e/</sup></b> |                                 |                 |         |       |   |       |      |                                       |                         |        |      |         |                       |
| 1966-70                        | - -                             | 486,300         | 319,700 | 7,400 | 4,925                                   | 2,352 | 37   | 189,800                               | 120,800                 | 33,200 | 0    | 154,000 | 0.8                   |
| 1971-75                        | 45,200                          | 562,700         | 361,800 | 4,700 | 5,743                                   | 5,743 | 22   | 247,400                               | 169,600                 | 48,300 | 0    | 217,900 | 0.9                   |
| 1976-80                        | 95,003                          | 618,637         | 210,303 | 500   | 5,867                                   | 1,184 | 3    | 163,469                               | 95,422                  | 31,158 | 0    | 126,580 | 0.8                   |
| 1981-85                        | 59,765                          | 462,652         | 58,726  | 2,400 | 4,454                                   | 345   | 14   | 146,950                               | 109,097                 | 19,866 | 0    | 128,963 | 0.9                   |
| 1986-90                        | 58,511                          | 794,703         | 46,780  | 300   | 8,097                                   | 262   | 2    | 240,667                               | 166,395                 | 40,388 | 0    | 206,783 | 0.9                   |
| 1991-95                        | 25,700                          | 341,928         | 42,475  | 0     | 3,429                                   | 94    | 0    | 215,996                               | 170,296                 | 22,399 | 0    | 192,695 | 0.9                   |
| 1996-00                        | 18,299                          | 368,001         | -       | 0     | 4,037                                   | -     | 0    | 194,586                               | 157,742                 | 452    | 0    | 158,194 | 0.8                   |
| 2001-05                        | 17,187                          | 383,921         | -       | 0     | 4,877                                   | -     | 0    | 180,127                               | 147,974                 | 979    | 0    | 148,953 | 0.8                   |
| 2006                           | 8,259                           | 69,728          | -       | 0     | 1,043                                   | -     | 0    | 126,506                               | 96,292                  | 1,626  | 0    | 97,918  | 0.8                   |
| 2007                           | 10,671                          | 114,141         | -       | 0     | 1,525                                   | -     | 0    | 105,889                               | 47,704                  | 746    | 0    | 48,450  | 0.5                   |
| 2008                           | -                               | -               | -       | -     | -                                       | -     | -    | 391                                   | 6                       | -      | 0    | 6       | 0.0                   |
| 2009                           | -                               | -               | -       | -     | -                                       | -     | -    | 5,359                                 | 672                     | 8      | 0    | 680     | 0.1                   |
| 2010                           | 1,975                           | 15,088          | -       | 0     | 228                                     | -     | 0    | 48,667                                | 14,809                  | 175    | 0    | 14,984  | 0.3                   |
| 2011                           | 6,973                           | 70,028          | -       | 0     | 992                                     | -     | 0    | 91,676                                | 49,822                  | 316    | 0    | 50,138  | 0.5                   |
| 2012                           | 14,522                          | 215,585         | -       | 0     | 2,530                                   | -     | 0    | 148,007                               | 123,926                 | 101    | 0    | 124,027 | 0.8                   |
| 2013                           | 17,293                          | 297,627         | -       | 0     | 3,793                                   | -     | 0    | 147,296                               | 116,074                 | 361    | 0    | 116,435 | 0.8                   |
| 2014                           | 14,394                          | 168,283         | -       | 0     | 2,253                                   | -     | 0    | 120,307                               | 74,840                  | 479    | 0    | 75,319  | 0.6                   |
| 2015                           | 13,011                          | 110,507         | -       | 0     | 1,188                                   | -     | 0    | 81,778                                | 37,480                  | 41     | 0    | 37,521  | 0.5                   |
| 2016                           | 7,198                           | 55,185          | -       | 0     | 615                                     | -     | 0    | 70,099                                | 38,012                  | 70     | 0    | 38,082  | 0.5                   |
| 2017                           | 6,725                           | 42,326          | -       | 0     | 497                                     | -     | 0    | 73,974                                | 62,197                  | 465    | 0    | 62,662  | 0.8                   |
| 2018 <sup>cf</sup>             | 7,524                           | 78,486          | -       | 0     | 929                                     | -     | 0    | 96,426                                | 87,042                  | 195    | 0    | 87,237  | 0.9                   |

TABLE I-4. Council area commercial and recreational ocean salmon fishing effort and landings by state. Data are provisional, pending further review of data compilation methods. A double dash ("-") indicates no records are available. Fewer than 500 pounds may be shown as zero. (Page 4 of 4)

| Year or Average                      | COMMERCIAL TROLL          |                 |           |         |                                      |        |      | RECREATIONAL                 |                         |         |        |           | Per Angler Trip |
|--------------------------------------|---------------------------|-----------------|-----------|---------|--------------------------------------|--------|------|------------------------------|-------------------------|---------|--------|-----------|-----------------|
|                                      | Effort (boat days fished) | Catch           |           |         |                                      |        |      | Effort (salmon angler trips) | Catch (numbers of fish) |         |        |           |                 |
|                                      |                           | Numbers of Fish |           |         | Thousands of Pounds (Dressed Weight) |        |      |                              | Chinook                 | Coho    | Pink   | Total     |                 |
|                                      |                           | Chinook         | Coho      | Pink    | Chinook                              | Coho   | Pink |                              |                         |         |        |           |                 |
| <b>COUNCIL AREA<sup>a/d/e/</sup></b> |                           |                 |           |         |                                      |        |      |                              |                         |         |        |           |                 |
| 1966-70                              | --                        | 780,800         | 1,841,400 | 103,600 | 7,893                                | 12,267 | 468  | 591,700                      | 273,400                 | 460,900 | 14,600 | 748,900   | 1.3             |
| 1971-75                              | 148,800                   | 1,046,600       | 2,211,100 | 36,300  | 10,796                               | 16,559 | 170  | 730,300                      | 380,000                 | 615,700 | 6,100  | 1,001,800 | 1.4             |
| 1976-80                              | 194,675                   | 1,039,879       | 938,603   | 413,380 | 10,658                               | 9,111  | 930  | 948,849                      | 249,488                 | 832,174 | 23,544 | 1,105,206 | 1.2             |
| 1981-85 <sup>b/</sup>                | 82,664                    | 679,481         | 577,980   | 154,474 | 6,830                                | 2,626  | 489  | 543,838                      | 196,845                 | 357,658 | 8,615  | 563,117   | 1.0             |
| 1986-90                              | 102,743                   | 1,261,163       | 581,965   | 38,165  | 12,675                               | 2,478  | 140  | 601,240                      | 228,183                 | 424,082 | 2,419  | 654,684   | 1.1             |
| 1991-95                              | 38,873                    | 485,349         | 238,176   | 32,452  | 4,821                                | 530    | 114  | 420,491                      | 190,686                 | 256,764 | 2,544  | 449,993   | 1.1             |
| 1996-00                              | 26,146                    | 522,792         | 34,625    | 2,062   | 5,736                                | 38     | 11   | 278,654                      | 173,912                 | 54,356  | 1,859  | 230,128   | 0.8             |
| 2001-05                              | 30,927                    | 745,940         | 46,757    | 1,246   | 9,109                                | 80     | 4    | 408,920                      | 223,168                 | 176,195 | 6,862  | 406,224   | 1.0             |
| 2006                                 | 15,004                    | 151,899         | 34,617    | 0       | 2,163                                | 445    | 0    | 254,090                      | 118,547                 | 53,290  | 0      | 171,837   | 0.7             |
| 2007                                 | 17,752                    | 186,839         | 63,033    | 811     | 2,516                                | 651    | 3    | 266,836                      | 63,589                  | 145,187 | 4,670  | 213,446   | 0.8             |
| 2008                                 | 2,606                     | 35,497          | 16,404    | 0       | 419                                  | 183    | 0    | 68,419                       | 16,219                  | 30,955  | 2      | 47,176    | 0.7             |
| 2009                                 | 4,052                     | 25,691          | 102,680   | 1,227   | 331                                  | 1,030  | 3    | 191,437                      | 14,608                  | 228,107 | 7,627  | 250,342   | 1.3             |
| 2010                                 | 9,564                     | 131,996         | 14,605    | 0       | 1,662                                | 158    | 0    | 182,941                      | 56,650                  | 54,748  | 0      | 111,398   | 0.6             |
| 2011                                 | 13,389                    | 160,835         | 17,081    | 1,338   | 2,133                                | 183    | 5    | 214,028                      | 84,189                  | 58,730  | 10,828 | 153,747   | 0.7             |
| 2012                                 | 23,798                    | 380,330         | 41,422    | 0       | 4,371                                | 464    | 0    | 292,974                      | 176,449                 | 47,614  | 0      | 224,063   | 0.8             |
| 2013                                 | 30,183                    | 501,634         | 54,761    | 350     | 6,134                                | 573    | 1    | 312,845                      | 175,226                 | 61,037  | 7,668  | 243,931   | 0.8             |
| 2014                                 | 28,646                    | 476,847         | 82,440    | 0       | 6,070                                | 826    | 0    | 361,430                      | 133,345                 | 223,043 | 0      | 356,388   | 1.0             |
| 2015                                 | 25,843                    | 329,018         | 9,095     | 190     | 3,705                                | 72     | 1    | 244,931                      | 86,353                  | 103,060 | 8,631  | 198,044   | 0.8             |
| 2016                                 | 13,888                    | 137,977         | 44        | 0       | 1,607                                | 1      | 0    | 160,400                      | 59,014                  | 24,539  | 0      | 83,553    | 0.5             |
| 2017                                 | 12,113                    | 121,518         | 15,188    | 208     | 1,358                                | 146    | 0    | 177,736                      | 86,828                  | 57,787  | 734    | 145,349   | 0.8             |
| 2018 <sup>c/</sup>                   | 13,122                    | 150,363         | 13,186    | 0       | 1,739                                | 136    | 0    | 208,223                      | 101,946                 | 60,575  | 0      | 162,521   | 0.8             |

a/ For Washington, commercial effort and landings include: (1) treaty Indian fisheries (ocean and Area 4B only from May 1-Sept. 30) beginning in 1972; (2) prior to 1978, catch off British Columbia landed in Washington; (3) catch off Alaska landed in Washington; and (4) catch off Oregon and California beginning in 1976. Treaty Indian effort is in deliveries. Beginning in 1989, recreational angler trips and catch include state-managed, late-season Area 4B fishery when open (see Table IV-15).

b/ Recreational effort and catch includes WA-based effort and catch from OR state waters (July 26-Aug. 1) and Strait of Juan de Fuca after WDFW and NMFS ocean closures in 1982.

c/ Preliminary.

d/ OR commercial troll landings include small numbers of salmon caught in Alaska (prior to 1990), WA, and CA. Oregon recreational effort data are total angler trips prior to 1979 and salmon trips beginning in 1979. Significantly reduced salmon per angler trip in 1994-1998 reflects regulations requiring nonretention of coho in the recreational fishery south of Cape Falcon.

e/ California commercial effort and landings include salmon caught off Oregon and landed in California prior to 2005, which were relatively minor in all years except 2004 when 25,655 Chinook were landed and 227 days fished in Oregon waters.

TABLE I-5. Council area commercial and recreational ocean salmon fishing effort and landings by management area.

| Year  | COMMERCIAL TROLL                         |                         |        |       | RECREATIONAL                       |                         |        |        |        |                           |
|---|--|-------------------------|--------|-------|------------------------------------|-------------------------|--------|--------|--------|---------------------------|
|   | Effort <sup>a/</sup><br>(days<br>fished) | Catch (numbers of fish) |        |       | Effort<br>(salmon<br>angler trips) | Catch (numbers of fish) |        |        | Total  | Salmon Per<br>Angler Trip |
|   |  | Chinook                 | Coho   | Pink  |                                    | Chinook                 | Coho   | Pink   |        |                           |
| ----- U.S./CANADA BORDER TO CAPE FALCON -----                               |  |                         |        |       |                                    |                         |        |        |        |                           |
| <b>Treaty Indian (U.S./Canada Border to Leadbetter Point)<sup>b/</sup>:</b> |  |                         |        |       |                                    |                         |        |        |        |                           |
| 2010  | 857                                      | 32,376                  | 11,461 | 0     | -                                  | -                       | -      | -      | -      | -                         |
| 2011  | 600                                      | 31,824                  | 13,564 | 1,074 | -                                  | -                       | -      | -      | -      | -                         |
| 2012  | 960                                      | 54,789                  | 37,530 | 0     | -                                  | -                       | -      | -      | -      | -                         |
| 2013  | 1,596                                    | 51,160                  | 48,268 | 209   | -                                  | -                       | -      | -      | -      | -                         |
| 2014  | 1,527                                    | 61,761                  | 56,035 | 0     | -                                  | -                       | -      | -      | -      | -                         |
| 2015  | 1,458                                    | 58,939                  | 4,010  | 122   | -                                  | -                       | -      | -      | -      | -                         |
| 2016  | 670                                      | 23,101                  | 44     | 0     | -                                  | -                       | -      | -      | -      | -                         |
| 2017  | 963                                      | 24,414                  | 13,350 | 195   | -                                  | -                       | -      | -      | -      | -                         |
| 2018 <sup>c/</sup>  | 881                                      | 23,903                  | 11,802 | 0     | -                                  | -                       | -      | -      | -      | -                         |
| <b>Non-Indian:</b>  |  |                         |        |       |                                    |                         |        |        |        |                           |
| 2010  | 3,068                                    | 56,219                  | 3,144  | 0     | 53,813                             | 31,465                  | 17,473 | 0      | 48,938 | 0.9                       |
| 2011  | 2,353                                    | 29,738                  | 3,517  | 141   | 48,852                             | 23,607                  | 18,947 | 10,828 | 53,382 | 1.1                       |
| 2012  | 2,476                                    | 45,299                  | 3,892  | 0     | 54,689                             | 26,315                  | 21,715 | 0      | 48,030 | 0.9                       |
| 2013  | 2,595                                    | 42,035                  | 6,493  | 68    | 55,518                             | 22,289                  | 29,681 | 7,668  | 59,638 | 1.1                       |
| 2014  | 2,838                                    | 54,889                  | 23,109 | 0     | 75,349                             | 30,984                  | 64,725 | 0      | 95,709 | 1.3                       |
| 2015  | 3,463                                    | 66,195                  | 5,085  | 0     | 63,725                             | 30,017                  | 39,027 | 8,631  | 77,675 | 1.2                       |
| 2016  | 1,853                                    | 19,402                  | -      | 0     | 27,183                             | 11,951                  | 101    | 0      | 12,052 | 0.4                       |
| 2017  | 2,715                                    | 35,560                  | 1,838  | 0     | 38,688                             | 14,374                  | 21,032 | 732    | 36,138 | 0.9                       |
| 2018 <sup>c/</sup>  | 2,247                                    | 23,889                  | 1,384  | 0     | 33,084                             | 8,344                   | 21,262 | 0      | 29,607 | 0.9                       |
| ----- CAPE FALCON TO HUMBURG MOUNTAIN -----                                 |  |                         |        |       |                                    |                         |        |        |        |                           |
| 2010  | 3,483                                    | 27,444                  | -      | 0     | 37,115                             | 2,331                   | 12,127 | 0      | 14,458 | 0.4                       |
| 2011  | 3,174                                    | 27,919                  | -      | 0     | 35,113                             | 2,609                   | 12,758 | 0      | 15,367 | 0.4                       |
| 2012  | 5,458                                    | 59,213                  | -      | 0     | 43,649                             | 7,767                   | 14,198 | 0      | 21,965 | 0.5                       |
| 2013  | 7,992                                    | 103,996                 | -      | 0     | 59,291                             | 17,867                  | 10,084 | 0      | 27,951 | 0.5                       |
| 2014  | 9,117                                    | 175,768                 | 3,296  | 0     | 92,183                             | 9,355                   | 82,200 | 0      | 91,555 | 1.0                       |
| 2015  | 7,391                                    | 89,154                  | -      | 0     | 48,455                             | 5,501                   | 19,304 | 0      | 24,805 | 0.5                       |
| 2016  | 4,040                                    | 39,891                  | -      | 0     | 30,344                             | 2,552                   | 5,704  | 0      | 8,256  | 0.3                       |
| 2017  | 1,601                                    | 18,889                  | -      | 0     | 31,729                             | 2,180                   | 14,665 | 0      | 16,845 | 0.5                       |
| 2018 <sup>c/</sup>  | 1,992                                    | 20,187                  | -      | 0     | 49,130                             | 2,709                   | 18,524 | 0      | 21,233 | 0.4                       |
| ----- HUMBURG MOUNTAIN TO HORSE MOUNTAIN (KMZ) -----                        |  |                         |        |       |                                    |                         |        |        |        |                           |
| 2010  | 181                                      | 869                     | -      | 0     | 10,179                             | 1,544                   | 110    | 0      | 1,654  | 0.2                       |
| 2011  | 490                                      | 3,717                   | -      | 0     | 21,209                             | 10,923                  | 126    | 0      | 11,049 | 0.5                       |
| 2012  | 687                                      | 10,675                  | -      | 0     | 50,203                             | 48,767                  | 276    | 0      | 49,043 | 1.0                       |
| 2013  | 1,368                                    | 16,994                  | -      | 0     | 49,936                             | 44,430                  | 676    | 0      | 45,106 | 0.9                       |
| 2014  | 869                                      | 16,766                  | -      | 0     | 37,702                             | 22,646                  | 849    | 0      | 23,495 | 0.6                       |
| 2015  | 552                                      | 4,269                   | -      | 0     | 17,894                             | 4,874                   | 150    | 0      | 5,024  | 0.3                       |
| 2016  | 186                                      | 594                     | -      | 0     | 13,141                             | 5,503                   | 79     | 0      | 5,582  | 0.4                       |
| 2017  | 109                                      | 329                     | -      | 0     | 2,012                              | 506                     | -      | 0      | 506    | 0.3                       |
| 2018 <sup>c/</sup>  | 1,175                                    | 12,864                  | -      | 0     | 14,375                             | 5,331                   | 120    | 0      | 5,451  | 0.4                       |
| ----- HORSE MOUNTAIN TO U.S./MEXICO BORDER -----                            |  |                         |        |       |                                    |                         |        |        |        |                           |
| 2010  | 1,975                                    | 15,088                  | -      | 0     | 44,438                             | 14,089                  | 125    | 0      | 14,214 | 0.3                       |
| 2011  | 6,772                                    | 67,637                  | -      | 0     | 76,727                             | 39,835                  | 218    | 0      | 40,053 | 0.5                       |
| 2012  | 14,217                                   | 210,354                 | -      | 0     | 116,625                            | 84,482                  | 34     | 0      | 84,516 | 0.7                       |
| 2013  | 16,632                                   | 287,449                 | -      | 0     | 117,468                            | 82,093                  | 124    | 0      | 82,217 | 0.7                       |
| 2014  | 14,295                                   | 167,663                 | -      | 0     | 99,673                             | 59,013                  | 197    | 0      | 59,210 | 0.6                       |
| 2015  | 12,979                                   | 110,461                 | -      | 0     | 72,839                             | 33,790                  | 29     | 0      | 33,819 | 0.5                       |
| 2016  | 7,139                                    | 54,989                  | -      | 0     | 61,146                             | 33,012                  | 43     | 0      | 33,055 | 0.5                       |
| 2017  | 6,725                                    | 42,326                  | -      | 0     | 73,974                             | 62,197                  | 465    | 0      | 62,662 | 0.8                       |
| 2018 <sup>c/</sup>  | 6,827                                    | 69,520                  | -      | 0     | 89,051                             | 83,304                  | 93     | 0      | 83,397 | 0.9                       |

a/ Treaty Indian troll effort in number of deliveries.

b/ May through September only.

c/ Preliminary.



TABLE I-6. Coho and Chinook harvest quotas and guidelines (\*) for 2018 Council managed fisheries compared with actual harvest by management area and fishery.

| Fishery Governed by Quota or Guideline            | Chinook                          |               |             | Coho                         |               |             |
|---|----------------------------------|---------------|-------------|------------------------------|---------------|-------------|
|   | Quota or Guideline <sup>a/</sup> | Catch         | Catch/Quota | Quota                        | Catch         | Catch/Quota |
| <b>NORTH OF CAPE FALCON</b>                       |                                  |               |             |                              |               |             |
| <b>TREATY INDIAN COMMERCIAL TROLL</b>             |                                  |               |             |                              |               |             |
| May-June, All salmon except coho                  | 16,000                           | 12,938        | 0.81        | -                            | -             | -           |
| July-September, All salmon                        | 24,000                           | 10,742        | 0.45        | 12,500                       | 11,301        | 0.90        |
| Subtotal Treaty Indian Commercial Troll           | 40,000                           | 23,680        | 0.59        | 12,500                       | 11,301        | 0.90        |
| <b>NON-INDIAN COMMERCIAL TROLL</b>                |                                  |               |             |                              |               |             |
| May-June, All salmon except coho                  | 16,500 *                         | 15,968        | 0.97        | -                            | -             | -           |
| July-September, All salmon                        | 12,876 <sup>ab/</sup>            | 7,921         | 0.62        | 4,600 <sup>b/</sup>          | 1,384         | 0.30        |
| Subtotal Non-Indian Commercial Troll              | 29,376                           | 23,889        | 0.81        | 4,600                        | 1,384         | 0.30        |
| <b>RECREATIONAL</b>                               |                                  |               |             |                              |               |             |
| U.S./Canada Border to Cape Alava                  |                                  |               |             |                              |               |             |
| June 23-Sept. 3, All salmon, coho mark-selective  | 3,024 <sup>ab/</sup>             | 3,041         | 1.01        | 5,370 <sup>b/</sup>          | 4,939         | 0.92        |
| Cape Alava to Queets River                        |                                  |               |             |                              |               |             |
| June 23-Sept. 3, All salmon, coho mark-selective  | 1,500 *                          | 427           | 0.28        | 1,090                        | 954           | 0.88        |
| Queets River to Leadbetter Pt.                    |                                  |               |             |                              |               |             |
| July 1-Sept. 3, All salmon, coho mark-selective   | 13,100 *                         | 4,877         | 0.37        | 15,540                       | 15,370        | 0.99        |
| Leadbetter Pt. to Cape Falcon                     |                                  |               |             |                              |               |             |
| June 23-Sept. 3, All salmon, coho mark-selective  | 8,000 *                          | 2,258         | 0.28        | 21,000                       | 20,575        | 0.98        |
| Subtotal Recreational                             | 25,624                           | 10,603        | 0.41        | 43,000                       | 41,838        | 0.97        |
| <b>TOTAL NORTH OF CAPE FALCON</b>                 | <b>95,000</b>                    | <b>58,172</b> | <b>0.61</b> | <b>60,100</b>                | <b>54,523</b> | <b>0.91</b> |
| <b>SOUTH OF CAPE FALCON</b>                       |                                  |               |             |                              |               |             |
| <b>COMMERCIAL TROLL (all except coho)</b>         |                                  |               |             |                              |               |             |
| Humbug Mt. to OR/CA Border (June)                 | 1,500                            | 1,528         | 1.02        | -                            | -             | -           |
| Humbug Mt. to OR/CA Border (July)                 | 1,975 <sup>b/</sup>              | 1,168         | 0.59        | -                            | -             | -           |
| Humbug Mt. to OR/CA Border (August)               | 1,430 <sup>b/</sup>              | 614           | 0.43        | -                            | -             | -           |
| OR/CA Border to Humboldt South Jetty (May)        | 3,600                            | 938           | 0.26        | -                            | -             | -           |
| OR/CA Border to Humboldt South Jetty (June)       | 6,650 <sup>b/</sup>              | 2,477         | 0.37        | -                            | -             | -           |
| OR/CA Border to Humboldt South Jetty (July)       | 6,612 <sup>b/</sup>              | 1,774         | 0.27        | -                            | -             | -           |
| OR/CA Border to Humboldt South Jetty (August)     | 9,423 <sup>b/</sup>              | 3,777         | 0.40        | -                            | -             | -           |
| Subtotal Troll                                    | 31,190                           | 12,276        | 0.39        | -                            | -             | -           |
| <b>RECREATIONAL</b>                               |                                  |               |             |                              |               |             |
| Cape Falcon to Humbug Mt. coho mark-selective     | -                                | -             | -           | 35,000                       | 11,601        | 0.33        |
| June 30-Sept. 3                                   |                                  |               |             |                              |               |             |
| Cape Falcon to Humbug Mt. coho non-mark-selective | -                                | -             | -           | 7,600 <sup>b/</sup>          | 6,898         | 0.91        |
| September 7-29                                    |                                  |               |             |                              |               |             |
| <b>TOTAL SOUTH OF CAPE FALCON</b>                 | <b>31,190</b>                    | <b>12,276</b> | <b>0.39</b> | <b>42,600 <sup>b/</sup></b>  | <b>18,499</b> | <b>0.43</b> |
| <b>GRAND TOTAL COUNCIL AREA</b>                   | <b>126,190 <sup>b/</sup></b>     | <b>70,448</b> | <b>0.56</b> | <b>102,700 <sup>b/</sup></b> | <b>73,022</b> | <b>0.71</b> |

a/ Guidelines for Chinook fisheries are marked with an asterisk (\*).

b/ Quotas do not match preseason quota/guidelines because inseason actions (i.e., trades, transferring quotas on an impact neutral basis, and converting to non-mark-selective fishery equivalence) resulted in increases or decreases to the overall quota. See Tables I-1, I-2, I-3, or Appendix Table C-9 for specifics of inseason adjustments.

TABLE I-7. Estimated incidental mortality of Chinook and coho in 2018 ocean salmon fisheries. Observed incidental mortality was calculated by scaling pre-season projections of incidental mortality by the ratio of observed to projected catch.

| Area and Fishery                         | 2018                | 2018 Bycatch                          | 2018                                | Observed in 2018 |                                    |
|--|---------------------|---------------------------------------|-------------------------------------|------------------|------------------------------------|
|  | Catch<br>Projection | Mortality <sup>a/</sup><br>Projection | Bycatch<br>Projection <sup>b/</sup> | Catch            | Bycatch<br>Mortality <sup>a/</sup> |
| <b>CHINOOK (thousands of fish)</b>       |                     |                                       |                                     |                  |                                    |
| <u>OCEAN FISHERIES:</u>                  |                     |                                       |                                     |                  |                                    |
| NORTH OF CAPE FALCON                     |                     |                                       |                                     |                  |                                    |
| Treaty Indian Ocean Troll                | 40.0                | 4.2                                   | 10.6                                | 23.7             | 2.5                                |
| Non-Indian Commercial Troll              | 27.5                | 13.5                                  | 49.0                                | 23.9             | 11.8                               |
| Recreational                             | 27.5                | 4.6                                   | 24.5                                | 10.6             | 1.8                                |
| CAPE FALCON TO HUMBUG MT. <sup>c/</sup>  |                     |                                       |                                     |                  |                                    |
| Commercial Troll                         | 46.9                | 19.1                                  | 59.0                                | 20.2             | 8.2                                |
| Recreational                             | 9.9                 | 0.8                                   | 2.2                                 | 2.7              | 0.2                                |
| HUMBUG MT. TO OR/CA BORDER <sup>c/</sup> |                     |                                       |                                     |                  |                                    |
| Commercial Troll                         | 4.9                 | 2.0                                   | 6.2                                 | 3.9              | 1.9 <sup>e/</sup>                  |
| Recreational                             | 4.4                 | 0.4                                   | 1.0                                 | 1.6              | 0.5 <sup>e/</sup>                  |
| OR/CA BORDER TO HORSE MT. <sup>d/</sup>  |                     |                                       |                                     |                  |                                    |
| Commercial Troll                         | 15.6                | 6.3                                   | 19.6                                | 9.0              | 4.4 <sup>e/</sup>                  |
| Recreational                             | 8.4                 | 0.7                                   | 1.9                                 | 3.7              | 1.2 <sup>e/</sup>                  |
| HORSE MT. TO PT. ARENA                   |                     |                                       |                                     |                  |                                    |
| Commercial Troll                         | 20.9                | 8.5                                   | 26.3                                | 10.6             | 4.9 <sup>e/</sup>                  |
| Recreational                             | 4.7                 | 0.4                                   | 1.0                                 | 5.6              | 1.0 <sup>e/</sup>                  |
| PT. ARENA TO PIGEON PT.                  |                     |                                       |                                     |                  |                                    |
| Commercial Troll                         | 21.9                | 8.9                                   | 27.6                                | 39.5             | 15.5 <sup>e/</sup>                 |
| Recreational                             | 21.5                | 1.7                                   | 4.6                                 | 72.0             | 10.8 <sup>e/</sup>                 |
| SOUTH OF PIGEON PT.                      |                     |                                       |                                     |                  |                                    |
| Commercial Troll                         | 7.1                 | 2.9                                   | 9.0                                 | 19.4             | 1.8 <sup>e/</sup>                  |
| Recreational                             | 5.4                 | 0.4                                   | 1.1                                 | 5.7              | 0.6 <sup>e/</sup>                  |
| TOTAL OCEAN FISHERIES                    |                     |                                       |                                     |                  |                                    |
| Commercial Troll                         | 184.8               | 65.4                                  | 207.3                               | 150.2            | 51.0                               |
| Recreational                             | 81.7                | 9.0                                   | 36.3                                | 101.9            | 16.1                               |
| <u>INSIDE FISHERIES:</u>                 |                     |                                       |                                     |                  |                                    |
| Area 4B                                  | -                   | -                                     | -                                   | -                | -                                  |
| Buoy 10                                  | 13.1                | 0.2                                   | 1.2                                 | 11.6             | 5.0 <sup>e/</sup>                  |
| <b>COHO (thousands of fish)</b>          |                     |                                       |                                     |                  |                                    |
| <u>OCEAN FISHERIES:</u>                  |                     |                                       |                                     |                  |                                    |
| NORTH OF CAPE FALCON                     |                     |                                       |                                     |                  |                                    |
| Treaty Indian Ocean Troll                | 12.5                | 0.7                                   | 1.0                                 | 11.3             | 0.7                                |
| Non-Indian Commercial Troll              | 5.6                 | 4.2                                   | 14.6                                | 1.4              | 0.4                                |
| Recreational                             | 42.0                | 6.6                                   | 27.2                                | 41.8             | 11.3                               |
| SOUTH OF CAPE FALCON                     |                     |                                       |                                     |                  |                                    |
| Commercial Troll                         | -                   | 3.5                                   | 13.6                                | -                | 1.9                                |
| Recreational                             | 38.5                | 9.2                                   | 42.8                                | 18.5             | 9.4                                |
| TOTAL OCEAN FISHERIES                    |                     |                                       |                                     |                  |                                    |
| Commercial Troll                         | 18.1                | 8.4                                   | 29.2                                | 12.7             | 3.0                                |
| Recreational                             | 80.5                | 15.8                                  | 70.0                                | 60.3             | 20.7                               |
| <u>INSIDE FISHERIES:</u>                 |                     |                                       |                                     |                  |                                    |
| Area 4B                                  | -                   | -                                     | -                                   | -                | -                                  |
| Buoy 10                                  | 25.0                | 4.3                                   | 16.1                                | 6.8              | 1.5 <sup>e/</sup>                  |

a/ The bycatch mortality reported in this table consists of drop-off mortality (includes predation on hooked fish) plus hook-and-release mortality of Chinook and coho salmon in Council-area fisheries. Drop-off mortality for both Chinook and coho is assumed to be equal to 5% of total encounters. The hook-and-release mortality (HRM) rates used for both Chinook and coho are: Commercial: 26%, recreational north of Pt. Arena: 14%, recreational, south of Pt. Arena: 15% (based on the proportion of fish caught using mooching versus trolling gear, and the HRM rates of 42.2% and 14% for these gear types, respectively).

b/ Bycatch calculated as drop-off mortality plus fish released.

c/ Includes Oregon territorial water, late season Chinook fisheries.

d/ The commercial fishery in this area is closed between Humboldt South Jetty and Horse Mountain.

e/ Based on reported released Chinook or coho. Reported releases in California fisheries are used as a surrogate in Oregon fisheries.

TABLE I-8. Summary of 2018 recreational fisheries selective for marked hatchery Chinook (preliminary data).

| Area  | Anticipated<br>Mark Rate | Observed<br>Mark Rate | Preseason<br>Quota  | Anticipated<br>Nonretention<br>Mortality <sup>a/</sup> | Landed Chinook Catch |        |          | Legal sized<br>Chinook<br>Released <sup>b/</sup> | Sub-legal<br>Sized<br>Chinook<br>Released <sup>b/</sup> | Estimated<br>Nonretention<br>Mortality <sup>a/</sup> | Effort <sup>c/</sup> |
|---|--------------------------|-----------------------|---------------------|--|----------------------|--------|----------|--|---|--|----------------------|
|   |                          |                       |                     |  | Total                | Marked | Unmarked |  |   |  |                      |
| <b>Recreational</b>                                   |                          |                       |                     |  |                      |        |          |  |   |  |                      |
| Ocean Fisheries (no mark-selective fisheries in 2018) |                          |                       |                     |  |                      |        |          |  |   |  |                      |
| Neah Bay/La Push                                      | -                        | -                     | -                   | -  | -                    | -      | -        | -  | -   | -  | -                    |
| Westport  | -                        | -                     | -                   | -  | -                    | -      | -        | -  | -   | -  | -                    |
| Columbia River  | -                        | -                     | -                   | -  | -                    | -      | -        | -  | -   | -  | -                    |
| North of Cape Falcon Total                            | -                        | -                     | -                   | -  | -                    | -      | -        | -  | -   | -  | -                    |
| Inside Fisheries                                      |                          |                       |                     |  |                      |        |          |  |   |  |                      |
| Strait of Juan de Fuca <sup>d/</sup>                  | 71%                      | 67%                   | 3,527 <sup>e/</sup> | 2,912  | 3,839                | 3,839  | 0        | 3,104  | 13,701  | 3,206  | 13,967               |
| <b>Grand Total</b>                                    | -                        | -                     | 3,527               | 2,912  | 3,839                | 3,839  | 0        | 3,104  | 13,701  | 3,206  | 13,967               |

a/ Hook-and-release plus drop-off mortality of marked plus unmarked fish; computation of estimated nonretention mortality differs from 2010 and prior years.

b/ Calculated from dockside sampling.

c/ Recreational effort measured in angler trips.

d/ Includes Area 5 (July 1 - Aug. 15) selective fishery only. Data are preliminary.

e/ Expected catch; not a quota.

TABLE I-9. Summary of 2018 recreational and commercial fisheries selective for marked hatchery coho (preliminary data).

| Area                                 | Anticipated<br>Mark Rate | Observed<br>Mark Rate | Preseason<br>Quota   | Anticipated<br>Nonretention<br>Mortality <sup>a/</sup> | Landed Coho Catch |        |          | Unmarked<br>Coho<br>Released <sup>b/</sup> | Estimated<br>Nonretention<br>Mortality <sup>a/</sup> | Effort <sup>c/</sup> |
|--------------------------------------|--------------------------|-----------------------|----------------------|--|-------------------|--------|----------|--|--|----------------------|
|                                      |                          |                       |                      |  | Total             | Marked | Unmarked |  |  |                      |
| <b>Recreational</b>                  |                          |                       |                      |  |                   |        |          |  |  |                      |
| Ocean Fisheries                      |                          |                       |                      |  |                   |        |          |  |  |                      |
| Neah Bay                             | 55%                      | 49%                   | 4,370                | 965  | 4,939             | 4,844  | 95       | 5,145                                      | 1,308  | 8,657                |
| La Push                              | 61%                      | 35%                   | 1,090                | 206  | 954               | 945    | 9        | 1,830                                      | 398  | 1,908                |
| Westport                             | 66%                      | 46%                   | 15,540               | 2,566  | 15,370            | 15,311 | 59       | 19,201                                     | 4,447  | 22,519               |
| Columbia River                       | 73%                      | 53%                   | 21,000               | 2,910  | 20,575            | 20,530 | 45       | 21,136                                     | 5,117  | 22,583               |
| North of Cape Falcon Total           | -                        | -                     | 42,000               | 6,647  | 41,838            | 41,630 | 208      | 47,312                                     | 11,269   | 55,667               |
| Cape Falcon to OR/CA Border          | 58%                      | 27%                   | 35,000               | 7,690  | 11,601            | 11,527 | 74       | 31,003                                     | 6,471  | 32,722               |
| Ocean Fisheries Total                | -                        | -                     | 35,000               | 7,690  | 11,601            | 11,527 | 74       | 31,003                                     | 6,471  | 32,722               |
| Inside Fisheries                     |                          |                       |                      |  |                   |        |          |  |  |                      |
| 4B Add-on                            | -                        | -                     | -                    | -  | -                 | -      | -        | -  | -  | -                    |
| Strait of Juan de Fuca <sup>d/</sup> | 52%                      | 38%                   | 18,486               | 1,555  | 14,303            | 14,258 | 45       | 27,228                                     | 6,807  | 29,690               |
| Buoy 10                              | 66%                      | 57%                   | 25,000 <sup>e/</sup> | 4,290  | 6,761             | 6,661  | 100      | 5,890                                      | 1,457  | 67,318               |
| Inside Fisheries Total               | -                        | -                     | 43,486               | 5,845  | 21,064            | 20,919 | 145      | 33,118                                     | 8,264  | 97,008               |
| <b>Commercial</b>                    |                          |                       |                      |  |                   |        |          |  |  |                      |
| Neah Bay                             | 55%                      | -                     | -                    | 95   | 405               | 402    | 3        | 371  | 135  | 186                  |
| La Push                              | 56%                      | -                     | -                    | 592  | 488               | 488    | 0        | 438  | 160  | 186                  |
| Westport                             | 61%                      | -                     | -                    | 1,441  | 366               | 356    | 10       | 263  | 100  | 308                  |
| Columbia River                       | 66%                      | -                     | -                    | 2,022  | 125               | 125    | 0        | 75   | 30   | 56                   |
| Commercial Total                     | -                        | -                     | 5,600                | 4,150  | 1,384             | 1,371  | 13       | 1,147                                      | 425  | 736                  |
| <b>Grand Total</b>                   | -                        | -                     | 126,086              | 24,332   | 75,887            | 75,447 | 440      | 112,579                                    | 26,428   | -                    |

a/ Hook-and-release plus drop-off mortality of marked plus unmarked fish; computation of estimated nonretention mortality differs from 2010 and prior years; computation of North of Falcon recreational fisheries estimated nonretention mortality differs from 2011 and prior years.

b/ Calculated from observed mark rates where available; where unavailable, anticipated mark rates are used. Cape Falcon-OR/CA border and Buoy 10 recreational fishery observed mark rates based on dockside sampling.

c/ Recreational effort measured in angler trips, commercial effort measured in days fished; includes effort from coho mark-selective fisheries only.

d/ Includes Area 5 selective fishery only (July 1-September 30, 2018).

e/ Expected catch; not a quota.

TABLE I-10. Chinook catch by Southeast Alaska marine fisheries in thousands of fish.

| Year               | Total Catches |      |       | Treaty Chinook |      |       | Additional Catch                 |                               |
|--------------------|---------------|------|-------|----------------|------|-------|----------------------------------|-------------------------------|
|                    | Troll         | Net  | Sport | Troll          | Net  | Sport | Terminal Exclusion <sup>a/</sup> | Hatchery Add-On <sup>b/</sup> |
| 1985               | 215.8         | 33.9 | 24.9  | 211.9          | 33.3 | 23.0  | 0.0                              | 6.2                           |
| 1986               | 237.7         | 22.1 | 22.6  | 231.6          | 20.6 | 19.0  | 0.0                              | 11.1                          |
| 1987               | 242.6         | 15.5 | 24.3  | 231.1          | 14.0 | 20.3  | 0.0                              | 17.1                          |
| 1988               | 231.4         | 21.8 | 26.2  | 217.1          | 17.4 | 22.3  | 0.0                              | 22.5                          |
| 1989               | 235.7         | 24.2 | 31.1  | 224.2          | 18.5 | 26.8  | 0.0                              | 21.5                          |
| 1990               | 287.9         | 27.7 | 51.2  | 263.5          | 16.1 | 41.4  | 0.0                              | 45.9                          |
| 1991               | 264.1         | 34.9 | 60.5  | 231.8          | 21.0 | 45.1  | 0.0                              | 61.5                          |
| 1992               | 183.8         | 32.1 | 42.9  | 162.6          | 24.0 | 35.3  | 0.0                              | 36.8                          |
| 1993               | 226.9         | 28.0 | 49.2  | 212.3          | 16.2 | 42.7  | 0.0                              | 32.9                          |
| 1994               | 186.3         | 35.7 | 42.4  | 177.1          | 22.6 | 35.5  | 0.0                              | 29.2                          |
| 1995               | 138.1         | 48.0 | 49.7  | 115.1          | 26.4 | 35.5  | 0.0                              | 58.8                          |
| 1996               | 141.5         | 37.3 | 57.5  | 107.6          | 8.4  | 39.0  | 8.7                              | 72.6                          |
| 1997               | 246.4         | 25.1 | 71.5  | 221.9          | 11.4 | 53.3  | 9.8                              | 46.5                          |
| 1998               | 192.1         | 23.5 | 55.0  | 183.5          | 13.4 | 46.3  | 2.4                              | 25.0                          |
| 1999               | 146.2         | 32.7 | 72.1  | 132.7          | 12.9 | 53.2  | 4.5                              | 47.7                          |
| 2000               | 158.7         | 41.4 | 63.2  | 134.0          | 11.1 | 41.4  | 2.5                              | 74.3                          |
| 2001               | 153.3         | 40.2 | 72.3  | 128.7          | 13.5 | 44.7  | 1.5                              | 77.3                          |
| 2002               | 325.3         | 31.7 | 69.5  | 298.1          | 13.5 | 45.5  | 1.2                              | 68.2                          |
| 2003               | 330.7         | 39.4 | 69.4  | 307.4          | 23.5 | 49.2  | 2.1                              | 57.2                          |
| 2004               | 354.7         | 64.0 | 80.6  | 321.9          | 39.7 | 55.4  | 6.3                              | 76.0                          |
| 2005               | 338.5         | 68.2 | 86.6  | 304.9          | 20.4 | 63.3  | 40.2                             | 64.4                          |
| 2006               | 282.3         | 67.4 | 85.8  | 264.0          | 26.7 | 69.4  | 27.0                             | 48.4                          |
| 2007               | 268.1         | 53.7 | 82.8  | 240.5          | 25.5 | 62.3  | 8.1                              | 68.4                          |
| 2008               | 151.9         | 43.1 | 49.3  | 126.4          | 14.0 | 32.6  | 5.3                              | 66.1                          |
| 2009               | 175.6         | 48.4 | 69.6  | 159.1          | 20.7 | 48.1  | 3.7                              | 62.0                          |
| 2010               | 195.6         | 30.6 | 58.5  | 178.0          | 8.3  | 44.3  | 0.5                              | 53.6                          |
| 2011               | 242.6         | 48.2 | 66.6  | 220.8          | 16.4 | 54.0  | 0.7                              | 65.5                          |
| 2012               | 209.1         | 39.7 | 46.5  | 191.6          | 13.5 | 37.7  | 1.1                              | 51.4                          |
| 2013               | 149.5         | 51.3 | 56.4  | 134.6          | 13.5 | 43.3  | 0.3                              | 65.6                          |
| 2014               | 355.6         | 50.0 | 86.9  | 340.0          | 21.2 | 74.0  | 0.7                              | 56.6                          |
| 2015               | 269.9         | 53.7 | 79.8  | 251.1          | 18.8 | 65.2  | 0.2                              | 68.1                          |
| 2016               | 276.4         | 42.3 | 68.3  | 266.0          | 25.2 | 59.4  | 0.7                              | 35.7                          |
| 2017               | 129.6         | 25.0 | 56.4  | 123.4          | 7.5  | 47.5  | 0.0                              | 32.7                          |
| 2018 <sup>c/</sup> | 107.6         | 30.8 | 26.4  | 101.5          | 5.1  | 21.2  | 0.0                              | 37.0                          |

a/ Catch in terminal net fisheries. These catches are not subject to PST limitations.

b/ Catch of increased production of Alaska hatchery fish. These catches are not subject to PST limitations.

c/ Preliminary.

TABLE I-11. Chinook and coho catches by Canadian marine fisheries in thousands of fish.

| Year or Avg.       | Northern B.C. |       | Central B.C. |       | North-Central B.C. Sport | WCVI     |          |      | Strait of Georgia |       |                   |                     |       | Juan de Fuca |       |       |
|--------------------|---------------|-------|--------------|-------|--------------------------|----------|----------|------|-------------------|-------|-------------------|---------------------|-------|--------------|-------|-------|
|                    | Troll         | Net   | Troll        | Net   |                          | NW Troll | SW Troll | Net  | Outside Sport     | Troll | Net <sup>a/</sup> | North <sup>b/</sup> | South | Troll        | Net   | Sport |
| <b>CHINOOK</b>     |               |       |              |       |                          |          |          |      |                   |       |                   |                     |       |              |       |       |
| 1986-1990          | 168.9         | 28.1  | 41.6         | 14.1  | 17.8                     | 110.3    | 215.9    | 17.8 | 28.6              | 39.1  | 35.8              | 68.1                | 34.7  | 0.1          | 11.5  | 30.6  |
| 1991-1995          | 143.9         | 30.1  | 25.2         | 14.0  | 30.9                     | 111.8    | 98.5     | 20.4 | 45.7              | 25.3  | 22.2              | 62.5                | 17.7  | 0.0          | 6.2   | 16.6  |
| 1996-2000          | 51.5          | 17.8  | 3.3          | 4.7   | 35.6                     | 16.6     | 19.8     | 0.6  | 18.9              | 0.8   | 11.2              | 28.9                | 8.8   | 0.2          | 0.2   | 14.3  |
| 2001-2005          | 119.2         | 15.9  | 0.1          | 5.3   | 72.1                     | 64.1     | 73.1     | 9.1  | 38.5              | 0.5   | 9.0               | 29.9                | 6.2   | 0.0          | 0.1   | 29.1  |
| 2006               | 151.5         | 13.7  | 0.0          | 5.2   | 81.9                     | 53.9     | 55.3     | 20.3 | 37.9              | 0.0   | 3.6               | 20.3                | 2.4   | 0.0          | 0.2   | 26.4  |
| 2007               | 83.2          | 11.4  | 0.0          | 5.5   | 75.1                     | 28.4     | 58.8     | 26.9 | 46.2              | 0.0   | 2.7               | 22.3                | 2.1   | 0.0          | 0.1   | 26.5  |
| 2008               | 52.1          | 7.4   | 0.0          | 1.1   | 58.4                     | 15.3     | 74.4     | 8.3  | 50.6              | 0.0   | 4.2               | 10.9                | 2.5   | 0.0          | 0.2   | 22.3  |
| 2009               | 75.5          | 4.3   | 0.0          | 3.1   | 46.4                     | 17.2     | 31.8     | 9.8  | 68.9              | 0.0   | 4.8               | 23.9                | 5.5   | 0.0          | 0.4   | 25.6  |
| 2010               | 90.2          | 3.1   | -            | 1.5   | 58.0                     | 34.7     | 44.5     | 1.7  | 54.9              | 0.0   | 9.6               | 21.5                | 4.0   | -            | 0.2   | 15.6  |
| 2011               | 74.7          | 4.6   | -            | 4.8   | 70.1                     | 70.0     | 54.0     | 21.8 | 78.4              | 0.0   | 0.5               | 27.4                | 6.1   | -            | 0.0   | 13.6  |
| 2012               | 80.2          | 1.4   | 0.0          | 3.6   | 52.9                     | 32.3     | 23.2     | 10.2 | 65.4              | 0.0   | 1.9               | 26.9                | 3.4   | 0.0          | 0.3   | 22.1  |
| 2013               | 69.3          | 2.7   | 0.0          | 5.3   | 61.4                     | 8.2      | 26.9     | 8.7  | 60.6              | 0.0   | 0.4               | 28.2                | 4.1   | 0.0          | 0.0   | 34.2  |
| 2014               | 172.0         | 2.6   | 0.0          | 2.3   | 69.6                     | 90.8     | 19.0     | 19.0 | 48.3              | 0.0   | 6.8               | 42.4                | 3.8   | 0.0          | 0.0   | 21.1  |
| 2015               | 106.7         | 3.2   | 0.0          | 5.3   | 75.6                     | 40.0     | 14.3     | 10.0 | 48.2              | 0.0   | 0.2               | 47.0                | 4.5   | 0.0          | 0.0   | 41.3  |
| 2016               | 147.4         | 1.6   | 0.0          | 3.2   | 58.6                     | 45.3     | 3.8      | 5.1  | 38.8              | 0.0   | 2.3               | 41.2                | 11.1  | 0.0          | 0.0   | 22.9  |
| 2017               | 97.7          | 2.0   | 0.0          | 3.1   | 62.3                     | 42.7     | 4.8      | 30.5 | 49.2              | 0.0   | 2.1               | 61.7                | 11.4  | 0.0          | 0.0   | 28.4  |
| 2018 <sup>c/</sup> | 70.3          | 0.0   | 0.0          | 5.2   | 43.7 <sup>d/</sup>       | 17.3     | 1.8      | 21.7 | 45.2              | 0.0   | 1.0               | 51.9                | -     | 0.0          | 0.0   | 25.5  |
| <b>COHO</b>        |               |       |              |       |                          |          |          |      |                   |       |                   |                     |       |              |       |       |
| 1986-1990          | 716.3         | 139.9 | 275.2        | 132.2 | 28.0                     | 600.0    | 1,277.9  | 14.2 | 19.1              | 178.4 | 109.2             | 512.9               | 106.0 | 0.7          | 194.4 | 66.2  |
| 1991-1995          | 574.2         | 147.7 | 98.5         | 55.0  | 42.2                     | 501.3    | 921.2    | 4.9  | 31.7              | 95.1  | 56.2              | 221.0               | 67.6  | 0.0          | 92.1  | 105.9 |
| 1996-2000          | 116.7         | 30.5  | 4.1          | 8.5   | 24.1                     | 47.2     | 110.5    | 0.2  | 11.1              | 0.0   | 2.3               | 6.2                 | 2.9   | 0.1          | 0.9   | 38.9  |
| 2001-2005          | 160.2         | 18.1  | 21.7         | 21.2  | 38.2                     | 0.1      | 0.3      | 2.9  | 11.4              | 0.0   | 0.0               | 3.1                 | 2.6   | 0.0          | 0.0   | 7.1   |
| 2006               | 125.7         | 1.1   | 12.7         | 5.0   | 62.0                     | 2.0      | 0.6      | 2.2  | 33.7              | 0.0   | 0.0               | 2.7                 | 0.9   | 0.0          | 0.0   | 2.9   |
| 2007               | 153.1         | 61.7  | 28.9         | 18.9  | 53.2                     | 0.0      | 1.4      | 4.8  | 25.3              | 0.0   | 0.0               | 6.5                 | 2.0   | 0.0          | 0.0   | 6.7   |
| 2008               | 62.8          | 0.0   | 13.9         | 0.0   | NA                       | 0.0      | 0.3      | 5.0  | 27.7              | 0.0   | 0.0               | 1.2                 | 0.3   | 0.0          | 0.0   | 1.2   |
| 2009               | 61.0          | 0.1   | 0.0          | 15.9  | 48.0                     | 0.0      | 0.0      | 0.9  | 50.0              | 0.0   | 0.0               | 2.6                 | 0.6   | 0.0          | 0.0   | 9.5   |
| 2010               | 138.3         | 0.1   | -            | 0.4   | 78.7 <sup>e/</sup>       | 0.1      | 0.4      | 0.8  | 15.1              | 0.2   | 0.6               | 1.2                 | 1.1   | -            | 0.0   | 0.7   |
| 2011               | 280.7         | 11.2  | 15.9         | 0.0   | 97.5 <sup>f/</sup>       | 0.0      | 0.0      | 1.0  | 54.0              | 0.0   | 0.3               | 0.6                 | 0.6   | 0.0          | 15.6  | 10.2  |
| 2012               | 215.5         | 0.0   | 0.0          | 0.5   | 6.0 <sup>e/</sup>        | 0.4      | 1.7      | 0.4  | 46.2              | 0.0   | 0.0               | 1.2                 | 2.5   | 0.0          | 0.0   | 16.6  |
| 2013               | 378.2         | 21.0  | 21.1         | 24.5  | NA                       | 5.3      | 0.8      | 1.1  | 72.3              | 0.0   | 2.6               | 19.7 <sup>g/</sup>  | 4.6   | 0.0          | 0.0   | 19.7  |
| 2014               | 177.5         | 26.7  | 0.0          | 11.6  | NA                       | 2.2      | 32.8     | 0.6  | 23.4              | 0.0   | 1.9               | 13.0 <sup>g/</sup>  | 1.2   | 0.0          | 0.0   | 21.1  |
| 2015               | 255.7         | 20.2  | 0.0          | 1.0   | 96.7                     | 3.1      | 3.1      | 0.3  | 29.3              | 0.0   | 0.0               | 0.8                 | 1.9   | 0.0          | 0.0   | 10.7  |
| 2016               | 210.7         | 37.7  | 4.3          | 0.2   | 69.2                     | 0.1      | 0.1      | 0.8  | 20.1              | 0.0   | 0.2               | 14.8                | 2.5   | 0.0          | 0.0   | 7.6   |
| 2017               | 333.2         | 13.4  | 6.5          | 0.0   | 93.8                     | 0.9      | 6.4      | 1.5  | 15.1              | 0.0   | 0.3               | 6.6                 | 3.3   | 0.0          | 0.0   | 8.2   |
| 2018 <sup>c/</sup> | 176.5         | 0.7   | 0.4          | 0.0   | 60.8                     | 0.0      | 0.0      | 4.1  | 12.0              | 0.0   | 1.7               | 14.5                | 2.0   | 0.0          | 0.0   | 8.4   |

a/ Includes Johnstone Strait nets, net fisheries in Strait of Georgia, and Fraser seine.

b/ Includes Johnstone Strait sport (Chinook). North catch in 2018 includes south catch (Chinook).

c/ Preliminary.

d/ Does not include catch from Northern Areas 3 through 6.

e/ Does not include catch from Areas 5, 6, and 10.

f/ Does not include catch from Area 6.

g/ Does not include areas 15 (North) and 16 (South).

TABLE I-12. West Coast Vancouver Island aggregate abundance based management troll Chinook salmon catch by month.

| Season                    | Oct.   | Nov.  | Dec.  | Jan.  | Feb.  | Mar.  | Apr.   | May    | June   | July   | Aug. <sup>a/</sup> | Sept.  | Total   |
|---------------------------|--------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------------------|--------|---------|
| 2005-2006                 | 12,198 | 2,156 | 1,689 | 1,468 | 5,154 | 7,883 | 20,561 | 7,078  | 20,807 | -      | 886                | 24,098 | 103,978 |
| 2006-2007                 | 16,000 | 1,200 | 800   | 5,500 | 2,600 | 2,300 | 5,200  | 23,500 | 25,000 | -      | -                  | 6,000  | 88,100  |
| 2007-2008                 | 3,137  | -     | -     | 1,634 | 1,911 | -     | 1,717  | 11,105 | 15,944 | -      | 9,099              | 45,157 | 89,704  |
| 2008-2009                 | 1,882  | 1,209 | 1,107 | 3,394 | 1,540 | 586   | 3,616  | 18,062 | 12,165 | -      | 9,630              | -      | 53,191  |
| 2009-2010                 | -      | -     | -     | -     | -     | -     | 8,553  | 31,296 | 23,652 | -      | 11,642             | 3,980  | 79,123  |
| 2010-2011                 | -      | -     | -     | -     | 1,849 | 875   | 8,670  | 41,239 | 34,394 | 15,619 | 21,284             | -      | 123,930 |
| 2011-2012                 | -      | -     | 245   | 129   | 542   | 243   | 10,493 | 22,334 | -      | -      | 4,280              | 17,264 | 55,530  |
| 2012-2013                 | 3,344  | 230   | 312   | 1,018 | 358   | 501   | 1,374  | 25,737 | -      | -      | -                  | 2,519  | 35,393  |
| 2013-2014                 | 2,358  | 28    | 25    | 49    | 586   | 1,422 | 13,345 | 40,336 | -      | 26,494 | 10,002             | 15,360 | 110,005 |
| 2014-2015                 | 213    | 56    | -     | 186   | 612   | 731   | 3,841  | 27,405 | -      | -      | 13,953             | 7,341  | 54,338  |
| 2015-2016 <sup>b/</sup>   | 178    | 13    | 1     | 51    | 342   | 315   | 6,456  | 31,799 | -      | -      | 7,574              | 2,390  | 49,119  |
| 2016-2017 <sup>b/</sup>   | -      | -     | -     | 72    | 276   | 358   | 4,065  | 23,557 | -      | 8,169  | 6,758              | 4,279  | 47,534  |
| 2017-2018 <sup>b/c/</sup> | -      | -     | -     | 74    | 141   | 297   | -      | 11,009 | -      | -      | 5,063              | 2,572  | 19,156  |

a/ Fishery restricted to plugs only.

b/ Includes commercial troll only.

c/ Preliminary.

TABLE I-13. Summary of 2018 coho catch and release in British Columbia commercial fisheries.

| Gear/Area                         | Coho Kept | Coho Released |
|-----------------------------------|-----------|---------------|
| Northern Troll                    | 176,547   | 148           |
| Northern Net                      | 728       | 1,525         |
| North Central Troll               | 6,815     | 0             |
| South Central Troll               | 0         | 0             |
| Central Net                       | 0         | 7,161         |
| Johnstone Strait Troll            | 0         | 126           |
| Johnstone Strait Net              | 3         | 5,770         |
| Strait of Georgia Net             | 0         | 90            |
| Strait of Georgia Troll           | 0         | 0             |
| Fraser Gill Net                   | 0         | 77            |
| Northw est Vancouver Island Troll | 0         | 3,758         |
| Southw est Vancouver Island Troll | 2,373     | 1,017         |
| Northw est Vancouver Island Net   | 3,678     | 1,787         |
| Southw est Vancouver Island Net   | 4,053     | 165           |

TABLE I-14. Summary of 2018 coho catch and release in British Columbia recreational fisheries.

| Area                | Kept   | Released |
|---------------------|--------|----------|
| Juan de Fuca Strait | 8,471  | 22,295   |
| Strait of Georgia   | 6,222  | 23,858   |
| Johnstone Strait    | 10,298 | 38,170   |
| WCVI <sup>a/</sup>  | 11,998 | 6,393    |
| Total               | 36,989 | 90,716   |

a/ Includes impacts of mark-selective fisheries and inside fisheries.





## CHAPTER II

### CHINOOK SALMON MANAGEMENT

#### CENTRAL VALLEY CHINOOK STOCKS

Central Valley Chinook stocks include fall, late-fall, winter, and spring stocks of the Sacramento and San Joaquin rivers and their tributaries. Two of these stocks are listed under the ESA: (1) Sacramento River winter Chinook, listed as endangered in January 1994; and (2) Central Valley spring Chinook, listed as threatened in September 1999.

#### *Management Objectives*

The following objectives guided Council management of Central Valley Chinook salmon stocks in the 2018 fisheries: (1) for SRFC, which met the criteria for overfished status in 2018, the Council provided guidance to target an escapement greater than  $S_{MSY}$ , specifically a minimum of 151,000 hatchery and natural area adults; and (2) for SRWC, a new harvest control rule was utilized in 2018 specifying a maximum allowable age-3 ocean impact rate of 14.4 percent in fisheries south of Point Arena, in addition to the ESA consultation standard restrictions concerning the duration, timing, and minimum size limits in the same ocean area. Harvest impacts on Central Valley Chinook were a primary management concern in fisheries south of Cape Falcon.

#### **Regulations to Achieve Objectives**

In 2018, fishing opportunity south of Cape Falcon was primarily constrained by the Council guidance for SRFC to target an escapement of at least 151,000 hatchery and natural area adults. Season and size limit details are presented in Tables I-1 and I-3.

#### *Commercial*

The fishery south of Pigeon Point was open for the first seven days of May and the last twelve days of June. The area between Point Arena and Pigeon Point was open for the last six days of July, most of August, and all of September. An October 1-12 fishery was open Monday through Friday between Point Reyes and Point San Pedro. The area between Horse Mountain and Point Arena had the same season structure as the area between Point Arena and Pigeon Point, with the exception of the October fishery.

The California portion of the KMZ had monthly quotas May through August. The fishery was open five days per week with daily landing and possession limits. The Oregon portion of the KMZ was open without a quota for most of May, followed by monthly quotas June through August with weekly landing and possession limits. Quotas and landing/possession limits were adjusted in-season (see table C-9). There was also an Oregon state-water-only fishery near the Chetco River during October.

Oregon fisheries between Cape Falcon and Humbug Mountain were open for various blocks of time during May, June, July, and August, and for the entire months of September and October. During October, fisheries were conducted inshore of the 40 fathom regulatory line. There was also a state-water-only fishery near the Elk River during November.

Commercial fisheries in California had a 26-inch minimum size limit throughout the season. Commercial fisheries in Oregon had a 28-inch minimum size limit in all times and areas except the state-water-only fishery near the Elk River, which had a 26-inch minimum size limit.

### *Recreational*

The Monterey management area was open from early April through early July. The San Francisco and Fort Bragg management areas had the same season structure, extending from mid-June through the end of October.

In the KMZ, the California portion was open June through the Labor Day weekend, and the Oregon portion was open mid-May through late August. There was also an Oregon state-water-only fishery near the Chetco River that occurred over two weekends in October.

The Chinook fishery between Cape Falcon and Humbug Mountain extended from mid-March through the end of October. There was also a state-water-only fishery near the Elk River in November.

Recreational fisheries in California had a 20-inch minimum size limit, except in the Monterey management area which operated under a 24-inch size limit. The size limit in this area was higher to reduce impacts on SRWC. Recreational fisheries in Oregon had a 24-inch minimum size limit, except the state-water-only fishery near the Chetco River which operated under a 28-inch size limit.

### *Inside Harvest*

Recreational angling for salmon in the Sacramento River and its tributaries was expected to result in a catch of 11,765 adult SRFC. Actual harvest of SRFC in 2018 totaled 16,088 adults and 8,618 jacks.

Since 1990, regulations have closed the mainstem Sacramento River to retention of salmon from January 15 through July 15, a period when SRWC adults are thought to be most abundant. Beginning in 2004, the retention closure was enacted earlier, on January 1 from the Carquinez Bridge to Red Bluff, in response to the recovery of SRWC coded-wire tags (CWTs) in the sport fishery. To further protect SRWC spawners, an additional closure was implemented beginning in 2017 from April 1 through July 31. This closure prohibits all fishing in the uppermost six miles of the Sacramento River from the Highway 44 Bridge to Keswick Dam.

In March 2018, a section of the lower American River, extending from Nimbus Dam to about one-half mile downriver, was closed permanently to all fishing as part of a project to reconstruct the Nimbus Fish Hatchery fish ladder. This section of river, known as Nimbus Basin, has typically comprised a sizable portion of SRFC harvest. These fish that would have otherwise been harvested in Nimbus Basin now contribute to American River natural area escapement

Owing to low Chinook escapement to the Stanislaus, Tuolumne, and Merced rivers, the majority of the San Joaquin River Basin has been closed to recreational salmon fishing. However, beginning in 2012, recreational angling opportunity was reintroduced on the Mokelumne River, the first such opportunity since 2007. Harvest in the Mokelumne River fishery totaled 648 Chinook (adults and jacks) in 2018.

### *Escapement and Management Performance*

Commercial harvest in areas south of Cape Falcon were generally below preseason expectations, with the exception of the San Francisco and Monterey management areas which greatly exceeded expectations (Table I-7). The only KMZ quota fishery in which the quota was attained was in the Oregon portion during June (Table I-6). Recreational harvest in the San Francisco management area substantially exceeded the preseason expectation, while other areas had catches close to or below expected levels (Table I-7).

## **Sacramento River Fall Chinook**

Under the 2018 regulations, the projected spawning escapement in the Sacramento River Basin was 151,009 hatchery and natural area fall Chinook adults. A total of 105,739 hatchery and natural area adult spawners were estimated to have returned to the Sacramento River Basin in 2018 (Table II-1, Figure II-1).

Fall Chinook returns to Sacramento River hatcheries in 2018 totaled 33,815 adults, and escapement to natural areas was 71,924 adults. Table II-1 and Figure II-1 display historical natural area and hatchery fall spawner escapement estimates. For a more detailed breakdown of the historical escapement see Appendix B, Table B-1. It is important to note that available data indicate that hatchery-origin fish generally constitute a large portion of the Sacramento River naturally spawning fall Chinook population.

As mentioned above, SRFC met the criteria for overfished status in 2018. Under the terms of Amendment 16 to the salmon FMP, SRFC are considered to be rebuilt when the 3-year geometric mean spawning escapement exceeds the level associated with MSY ( $S_{MSY}$ ) of 122,000 hatchery and natural area adults. The geometric mean of adult spawning escapement for years 2016-2018 is 73,994 and therefore SRFC remain overfished.

SRFC are considered to have been subject to overfishing if the estimated exploitation rate exceeds their maximum fishing mortality threshold (MFMT) of 0.78. An estimate of the 2018 SRFC exploitation rate is not yet available. However, fisheries in 2017 resulted in an exploitation rate of 0.68, which is below the MFMT. Therefore, overfishing did not occur in 2017 (Table II-6).

## **Sacramento River Winter and Spring Chinook**

Spawner escapement of endangered SRWC in 2018 was estimated to be 1,884 adults and 754 jacks. This estimate was derived from a carcass survey conducted on the upper Sacramento River and includes SRWC captured in the Keswick trap, which provides brood stock to Livingston Stone National Fish Hatchery.

SRWC spawner escapement estimates derived from Red Bluff Diversion Dam counts began in 1967, and from 1987 to 2008 the estimates were derived by expanding counts made during the period of dam operation (which overlaps with approximately 15 percent of the SRWC migration period). Escapement estimates from the carcass survey are considered to be a better representation of SRWC spawner escapement due to the small proportion of the SRWC migration sampled during the Red Bluff Diversion Dam operation period. Red Bluff Diversion Dam gates were permanently removed in 2012, and escapement estimates based on dam passage are no longer available.

Escapement of spring Chinook to the Sacramento River system in 2018 totaled 5,240 fish (jacks and adults), most of which (an estimated 3,130 fish) returned to upper Sacramento River tributaries; the remaining 2,110 fish returned to the Feather River Hatchery. Estimates of spring Chinook escapement to the upper mainstem Sacramento River are no longer made due to the permanent removal of the Red Bluff Diversion Dam gates in 2012. The method used to estimate the spring Chinook return to the Feather River Hatchery was modified in 2005. In previous years, the estimate was equal to the number of Chinook that entered the hatchery during the early period of Chinook spawning. Since 2005, prior to the spring run spawning period, fish that entered the hatchery are tagged and returned to the river; the number of tagged fish that re-entered the hatchery during the spring run spawning period are used as the estimate of spring Chinook escapement in the Feather River. The fish that are tagged at the hatchery and returned to the river but did not re-enter the hatchery during the spawning period are counted in the natural fall run survey and reported as Feather River fall Chinook. The natural area spawner surveys in the Feather River are not currently capable of separating the spring and fall runs.

Historical spawner escapements for SRWC and spring Chinook salmon are presented in Appendix B, Table B-3.

### **Sacramento River Late-Fall Chinook**

Late-fall Chinook spawning escapement in 2018 was estimated to be 2,032 adults and 3,199 jacks. These Chinook returned primarily to the Coleman National Fish Hatchery and the upper Sacramento River. These numbers also include late-fall Chinook that returned to upper Sacramento River tributaries and those captured in the Keswick trap for use as broodstock at Coleman National Fish Hatchery (Appendix B, Table B-3 provides historical spawner escapement).

### **San Joaquin River Fall Chinook**

San Joaquin River spawning areas are used primarily by fall Chinook. The estimated San Joaquin River fall Chinook spawning escapement in 2018 totaled 15,428 jacks and adults in natural areas, and 8,084 jacks and adults to hatcheries (Appendix B, Table B-2 provides historical spawner escapements). Salmon production in the San Joaquin River is determined largely by spring outflows three years earlier. In most years since 1986, spawner returns to the San Joaquin River have constituted less than 10 percent of the total Central Valley escapement for fall run Chinook. The percentage was slightly higher in 2018, as returns to the San Joaquin River made up 14 percent of the total fall run escapement to the Central Valley.

## **NORTHERN CALIFORNIA COAST CHINOOK STOCKS**

Northern California stocks include fall and spring stocks north of the entrance to San Francisco Bay. Primary river systems in this area are (from north to south) the Smith, Klamath, Mad, Eel, Mattole, and Russian rivers. Coastal Chinook stocks south of the Klamath River were listed as threatened under the ESA in September 1999.

### *Management Objectives*

KRFC were managed in accordance with their control rule, which in 2018 specified a maximum exploitation rate of 31.9 percent, resulting in an expected spawner escapement of 40,700 adults in natural areas. The available harvest of KRFC was shared equally between non-tribal and Klamath River tribal fisheries (tribes with federally-recognized fishing rights). The NMFS ESA consultation standard for California Coastal Chinook limited the ocean harvest rate on age-4 KRFC to a maximum of 16 percent.

### **Regulations to Achieve Objectives**

To achieve the management objectives for KRFC and California Coastal Chinook, the adopted regulations were designed to result in: (1) a Klamath River run of 91,873 fall Chinook adults, resulting in a spawner escapement of 40,700 adults to natural areas, taking into account projected river fishery impacts of 23,259 adults and returns to basin hatcheries; (2) 50 percent (18,122) of the allowable adult harvest for tribal subsistence and commercial fisheries; (3) 19.3 percent (3,490) of the non-tribal harvest to the Klamath River recreational fishery; and (4) 12.4 percent (1,809) of the ocean harvest to the KMZ recreational fishery. The age-4 ocean harvest rate resulting from the above configuration was forecast to be 11.5 percent. Season and size limit details are presented in Tables I-1 and I-3.

The primary constraint to commercial and recreational fisheries south of Cape Falcon in 2018 was Council guidance to plan fisheries resulting in an expected escapement of at least 151,000 hatchery and natural area adult SRFC.

### *Commercial*

The region between Cape Falcon and Humbug Mountain was open to commercial fishing for portions of May through August, and the entire months of September and October. The Oregon KMZ had non-quota

fishing opportunity for part of May, and monthly quotas from June through August. The California KMZ had monthly quotas from May through August. The Fort Bragg area was open for approximately a week in late July, most of August, and all of September (Table I-1).

### *Recreational*

The Chinook fishery between Cape Falcon and Humbug Mountain was open from March 15 through October 31, plus a state waters only fishery near the Elk River in November. The Oregon portion of the KMZ was open from late May through late August while the California portion of the KMZ was open from June 1 through early September. The Fort Bragg area was open from mid-June through the end of October (Table I-3).

### *Inside Harvest*

Yurok and Hoopa Valley tribes shared a federally-reserved right of 50 percent (18,122) of the available harvest surplus of adult Klamath fall Chinook. Tribal adult harvest was 14,769 (Yurok: 12,444 adults; Hoopa Valley: 2,325 adults), which was 81 percent of the tribal allocation (Appendix B, Tables B-4 and B-5). An estimated 4,075 fall Chinook adults were harvested in the Klamath Basin river recreational fishery in 2018. Harvest estimates for streams outside the Klamath River Basin were not available.

### *Escapement and Management Performance*

The KRFC natural area spawner escapement of 53,624 adults exceeded the preseason expectation of 40,700 adults.

Commercial catches in areas south of Cape Falcon were generally below preseason expectations, with the exception of the San Francisco and Monterey management areas (Table I-7). Catches in the KMZ were below quota levels, except for the June quota fishery in the Oregon KMZ (Table I-6). Recreational catches above Point Arena were lower than preseason expectations (Table I-7).

## **Threatened California Coastal Chinook**

Historical indices of spawner abundance, or actual spawning escapement estimates, for Chinook salmon in California coastal streams outside of the Klamath River Basin are limited. Cursory, nonsystematic surveys have been conducted on Tomki Creek, a tributary of the Eel River. Video counts of Chinook passage at Mirabel Dam on the Russian River began in 2000. Additional Chinook escapement estimates for Redwood Creek, the Mad River, and the Mattole River were made available this year and will be included annually. These streams are considered to be important spawning habitat for California Coastal Chinook. Historical spawning stock surveys for these northern California coastal rivers are presented in Appendix B, Table B-7.

## **Klamath River Fall Chinook**

The 2018 preliminary postseason river run size estimate for KRFC was 92,293 adults compared to the preseason-predicted ocean escapement (river run size) of 91,873. The escapement to natural spawning areas was 53,624 adults, which was 132 percent of the preseason prediction of 40,700 adults. The estimated hatchery return was 18,564 adults. Jack returns to the Klamath Basin totaled 11,114 including 7,937 that escaped to natural spawning areas. Table II-2, Figure II-2, and Appendix B, Table B-4 present historical harvest and escapement estimates for KRFC.

Spawning escapement to the upper Klamath River tributaries (Salmon, Scott, and Shasta Rivers), where spawning was only minimally affected by hatchery strays, totaled 21,109 adults. The Shasta River has historically been the most important Chinook salmon spawning stream in the upper Klamath River, supporting a spawning escapement of 27,600 adults as recently as 2012 and 63,700 in 1935. The

escapement in 2018 to the Shasta River was 18,673 adults. Escapement to the Salmon and Scott Rivers was 1,228 and 1,208 adults, respectively (Appendix B, Table B-6).

As mentioned above, KRFC met the criteria for overfished status in 2018. Under the terms of Amendment 16 to the salmon FMP, KRFC are considered to be rebuilt when the 3-year geometric mean spawning escapement falls exceeds the level associated with MSY ( $S_{MSY}$ ) of 40,700 natural area adult spawners. The geometric mean of adult spawning escapement in natural areas for years 2015-2017 is 24,594, therefore KRFC remain overfished (Table II-6).

KRFC are considered to have been subject to overfishing if the estimated exploitation rate exceeds their maximum fishing mortality threshold (MFMT) of 0.71. An estimate of the 2018 KRFC exploitation rate is not yet available. However, fisheries in 2017 resulted in an exploitation rate of 0.09, which is lower than the MFMT. Therefore, overfishing did not occur in 2017 (Table II-6).

## **OREGON COAST CHINOOK STOCKS**

Oregon Coast Chinook stocks include all fall and spring stocks from Oregon streams south of the Columbia River. These stocks are categorized into two major subgroups based on ocean migration patterns. Although ocean harvest distributions overlap somewhat, they are categorized as either north or south/local migrating. North migrating Chinook stocks include stocks from the Elk River north, with the exception of Umpqua River spring Chinook. South/local migrating Chinook stocks include Rogue River spring and fall Chinook, Umpqua River spring Chinook, and fall Chinook from smaller rivers south of the Elk River.

Based on CWT analysis, the populations from 10 major north Oregon Coast (NOC) river systems from the Nehalem through the Siuslaw Rivers are harvested primarily in PSC ocean fisheries off B.C., SEAK and Oregon terminal area fisheries. NOC stocks are harvested to a much lesser degree in Council-area fisheries off Washington and Oregon. Analysis of CWTs indicates the populations from five major mid-Oregon Coast (MOC) systems between the Coos and the Elk rivers are harvested primarily in ocean fisheries off B.C., Washington, Oregon, and in terminal area fisheries. Minor catches occur in California fisheries and variable catches in SEAK troll fisheries. South/local stocks are important contributors to ocean fisheries off Oregon and northern California. Another central Oregon stock, Umpqua River spring Chinook, contributes primarily to ocean fisheries off Oregon and California, and to a lesser degree, off Washington, B.C., and SEAK.

### *Management Objectives*

The conservation objective for the northern and central Oregon Coast Chinook stock complexes was an aggregate of 150,000 to 200,000 natural adult spawners, as indicated by peak spawner counts of 60 to 90 fish per mile in standard index surveys. These stocks have been abundant historically; therefore, preseason abundance estimates were not developed and it has not been a critical management concern. Council-area Chinook fisheries have minor impacts on most of the stocks originating from these areas, which have a northerly marine distribution pattern. For the southern Oregon Coast Chinook stock complex, the conservation objective is assessed using the escapement estimate at Huntley Park on the Rogue River. ESA consultation standards for OCN coho, LCN coho, and California Coastal Chinook, and KRFC management objectives generally result in reduced Council-area ocean fishery impacts on Oregon south/local migrating Chinook stocks.

### **Regulations to Achieve Objectives**

The areas of primary management concern for ocean fisheries impacting Oregon Coast Chinook vary between the north and south/local migrating stocks, although there is some overlap. Preseason abundance estimates were not available for Oregon Coast Chinook; however, based on postseason abundance

indicators, impacts on these stocks from Council-area fisheries have not significantly affected achievement of management objectives in recent years.

Oregon State waters terminal area fisheries in 2018 were adopted to provide additional harvest on robust hatchery or naturally produced fall Chinook. Special regulations for each of these seasons were implemented to maintain fishery impacts within conservation objectives. These regulations included season quotas, daily and weekly landing limits in commercial fisheries, and reduced daily and season bag limits and partial mark-selective restrictions in some recreational fisheries. Season and size limit details are presented in Tables I-1 and I-3.

### *Inside Harvest*

Inside recreational harvest of fall and spring Chinook occurred in most Oregon coastal estuaries and rivers. For the 2018 fisheries, regulations were adopted with the intention of reducing impacts on some of these stocks. Complete estimates of the 2018 recreational Chinook harvest in freshwater areas were not available.

Historical estimates of the recreational harvest of fall and spring Chinook, derived from Oregon Department of Fish and Wildlife (ODFW) salmon and steelhead angler catch record cards, are reported in Table II-3.

### *Escapement and Management Performance*

The 2018 catch estimate for the two fall terminal area commercial fisheries was 1,060 Chinook.

Under the 2018 regulations, the Salmon Technical Team (STT) expected the aggregate conservation objectives for these stocks would be met with the constraints required for California Coastal Chinook, KRFC, and LCN coho. Actual escapement was not estimated for the northern and central Oregon Coast Chinook stock aggregate; achievement of the aggregate 150,000 to 200,000 naturally spawning adults was assessed through peak spawner index counts of 60 to 90 adults per mile in nine index streams and included both spring and fall Chinook. Peak spawner index counts were based on traditional non-random surveys (e.g., stream surveys, dam counts, etc.). The aggregate northern and central Oregon Coast goal was likely met in 2018. ODFW is developing alternate methodologies for establishing escapement goals for these Oregon coastal Chinook stocks, including fall Chinook PSC indicator stocks. The aggregate southern Oregon Coast Chinook goal of at least 34,992 naturally produced fall Chinook adults passing Huntley Park in the Rogue River was met in 2018.

### **North Migrating Chinook**

Index counts of adult spawners (peak count per index mile) were conducted for seven of the nine standard streams and used to measure natural spawner escapement trends for north-migrating fall Chinook in 2018. Data have been collected since about 1950 for most systems. Overall peak Chinook adult index spawner counts in 2018 were preliminarily estimated at 92 adults per mile, higher than the maximum sustainable yield (MSY) spawner escapement level of 60 adults per mile.

The geometric mean of north-migrating Oregon Coast Chinook adult escapement in 2016, 2017, and 2018 was 107 fish per mile, which exceeded both the MSST (30) and the MSY spawner escapement level. Estimates of exploitation rates were not available for 2016, 2017 or 2018, but earlier fisheries resulted in exploitation rates that were lower than the MFMT (0.78). Therefore, north-migrating Oregon Coast Chinook should not be considered overfished or subject to overfishing (Table II-6).

### **South/Local Migrating Chinook**

Standard fall Chinook spawning index escapement data for the smaller southern Oregon coastal rivers (south of the Elk River) were available for the Winchuck, Chetco, and Pistol rivers (Appendix B, Table B-8). The 2018 preliminary estimate was reported at 14 adults per mile. The escapement goal prior to 2015 was assessed using this methodology.

Two trend indicators of escapement for naturally produced spring Chinook are utilized: (1) Rogue River counts at Gold Ray Dam, and (2) Umpqua River counts at Winchester Dam (Table II-4). Gold Ray Dam was removed in October 2010. For recent years, an estimate of natural spring Chinook escapement above the Gold Ray Dam site was made using the relationship of 2004-10 spawning ground surveys to the Gold Ray Dam passage (Figures II-3 and II-4).

Rogue River carcass counts were used as an indicator of trends in escapement for naturally produced fall Chinook, but these surveys have not been conducted since 2004 (Table II-4). Passage estimates of naturally produced fall Chinook at Huntley Park in the lower Rogue River are presented in Table B-10.

The geometric mean of south/local migrating Oregon Coast Chinook adult escapement in 2016, 2017, and 2018 was 46,276, which exceeded the MSST (20,500); therefore, south/local-migrating Oregon Coast Chinook should not be considered overfished. Estimates of exploitation rates were not available, so an assessment of overfishing status was not possible, but based on exploitation rates for KRFC, it is unlikely that south/local-migrating Oregon Coast Chinook were subject to overfishing (Table II-6).

## **COLUMBIA RIVER BASIN CHINOOK STOCKS**

Columbia River Basin Chinook salmon stocks include fall, summer, and spring stocks. NMFS has listed five Chinook evolutionarily significant units (ESUs) within the Columbia Basin under the ESA: (1) SRW fall Chinook listed as threatened in April 1992; (2) Snake River spring/summer listed as threatened in April 1992; (3) upper Columbia River spring listed as endangered in March 1999; (4) LCR Chinook listed as threatened in March 1999; and (5) upper Willamette River spring listed as threatened in March 1999.

The assessment below focuses on the five major stock groups of Columbia Basin fall Chinook: lower river hatchery (LRH) tule stock and lower river wild (LRW) bright stock, both of which are part of the ESA-listed LCR Chinook ESU; Spring Creek Hatchery (SCH) tule stock; upriver bright (URB) stock, which includes the ESA-listed SRW Chinook ESU; and mid-Columbia bright (MCB) hatchery stock. A brief assessment of upper Columbia summer Chinook is also included. Management details for Columbia River spring Chinook stocks are not discussed. Council-managed ocean salmon fisheries have very limited impacts on these stocks (less than a 2 percent exploitation rate in base-period fisheries); as a result, mid-Columbia spring stocks were removed from the FMP under Amendment 16 in December 2011. Appendix B, Tables B-12 through B-19, contain historical harvest and escapement data for fall, summer, and spring stocks. Appendix B, Table B-20 summarizes catch information for all three Chinook runs in the Columbia Basin. Additional information on these stocks and inriver fisheries can be found in the *Joint Staff Report: stock status and fisheries for spring Chinook, summer Chinook, sockeye, steelhead, and other species* and the *Joint Staff Report: stock status and fisheries for fall Chinook salmon, coho salmon, chum salmon, summer steelhead, and white sturgeon* published annually by the joint staffs of ODFW and WDFW.

### ***Management Objectives***

Council-area fisheries north of Cape Falcon in 2018 were managed to access SCH and LRH stocks while meeting the NMFS ESA consultation standards for the ESA-listed LCR Chinook ESU (both LCR natural tules and LRW) and SRW fall Chinook ESU. The standard for ESA-listed LCR natural tules was a total (ocean plus inriver) AEQ exploitation rate of no more than 38.0 percent. For preseason modeling, the estimated total exploitation rate on a composite of Washougal, Kalama, Cowlitz, and Big Creek hatchery tules was used as a surrogate for LCR natural tules. The NMFS ESA consultation standard for LRW was a North Lewis River fall Chinook spawning escapement of 5,700 (equivalent to 6,900 ocean escapement); the preseason forecast was for an ocean escapement of 7,600. The standard for the SRW ESU was no less than a 30.0 percent reduction in the Snake River Fall Index (SRFI) from the 1988 through 1993 base period AEQ exploitation rate for all ocean fisheries combined.



The NMFS ESA consultation standard for the threatened LCR natural tle Chinook was a key consideration for management of Council-area Chinook fisheries north of Cape Falcon. However, the impacts on LCR natural tle Chinook did not limit, by itself, the fisheries north of Cape Falcon in 2018. Although the impacts on Puget Sound Chinook in Council-area fisheries are minor, these impacts were influential in terms of shaping ocean and inside fisheries for this ESU.

### **Regulations to Achieve Objective**

Fisheries north of Cape Falcon are managed with quotas to help ensure impacts to stocks do not exceed allowable limits and to ensure allocation objectives are met. The 2018 forecast for the combined abundance of Chinook stocks contributing to AABM fisheries was lower than in 2017 and lower than the most recent ten year average. The impacts of northern fisheries on Columbia River stocks are included in the modeling of Council-area fisheries

The 2018 overall non-Indian Chinook total allowable catch (TAC) for North of Cape Falcon was 55,000. This compares to a 2017 non-Indian TAC of 90,000. The 2018 overall TAC was divided into 27,500 commercial and 27,500 recreational. The treaty Indian ocean troll TAC was 40,000 Chinook, and is applicable to the May-September period. This compares to a 2017 treaty Indian TAC of 40,000. Season and size limit details are presented in Tables I-1, I-2, and I-3.

#### *Commercial*

Non-Indian commercial fisheries north of Cape Falcon included a Chinook-directed fishery in May and June with landing and possession limits of 50 Chinook per vessel per landing week (Thursday-Wednesday) in the area between the U.S./Canada border and the Queets River, or 100 Chinook per vessel per landing week in the area between the Queets River and Leadbetter Point, or 50 Chinook per vessel per landing week in the area between the Queets River and Cape Falcon. These fisheries had a preseason quota of 16,500 Chinook, no more than 5,200 of which may be caught in the area between the U.S./Canada border and the Queets River, and no more than 4,600 of which may be caught in the area between Leadbetter Pt. and Cape Falcon.

The July through September 19 non-Indian commercial all-salmon fishery had a preseason quota of 11,000 Chinook with landing and possession limits of 50 Chinook per vessel per landing week in the area between the U.S./Canada border and the Queets River, or 50 Chinook per vessel per landing week in the area between the Queets River and Cape Falcon. The fishery was open seven days per week; no more than 4,600 Chinook could be caught in the area between the U.S./Canada border and the Queets River, and no more than 1,300 Chinook could be caught in the area between Leadbetter Pt. and Cape Falcon.

#### *Recreational*

In the area between the U.S./Canada Border and Cape Falcon, the coastwide quota was 27,500 Chinook. Starting and ending dates were similar among subareas, opening on June 23 and closing September 3 in all areas except the Westport subarea which opened July 1.

#### *Treaty Indian Ocean Harvest*

The adopted management measures were generally similar in structure to recent years. The Tribal troll ocean fishery (also known as the Treaty troll fishery) quotas were defined by conservation concerns for ESA-listed Chinook and coho stocks. For Chinook salmon quotas, Lower Columbia River tle Chinook salmon, Mid-Hood Canal Chinook salmon, and South Puget Sound Chinook salmon were the stocks that established the Chinook quota at 40,000. The Tribal troll fishery takes place in Washington ocean areas 2, 3, 4 and 4B. The Treaty Indian troll fishery opened on May 1 with a Chinook only fishery and continued

through June 30 with a 16,000 sub-quota. The all-salmon fishery was open July 1 through September 15 with a sub-quota of 24,000 Chinook.

### *Inside Harvest*

Since the Columbia River Fishery Management Plan expired on December 31, 1998, fall Chinook in Columbia River fisheries were managed through 2007 under the guidance of annual management agreements among the *U.S. v. Oregon* parties. In 2008, a 10-year management agreement was negotiated through the *U.S. v. Oregon* process, which included revisions to some inriver objectives. In particular, the "2008-2017 *U.S. v. Oregon Management Agreement*" (2008-2017 MA) specified that with run sizes of at least 200,000 URB, including at least 8,000 SRW fall Chinook, the allowable URB impact rate would be 45.0 percent. NMFS used the URB impact rate as a proxy in the SRW consultation standard. A new 10-year *U.S. v. Oregon* management agreement for 2018-2027 was finalized, and NMFS issued a new Biological Opinion in February 2018.

In 2018, the fall fisheries were managed to achieve the NMFS ESA consultation standards for threatened LCR natural tule and SRW Chinook, and the 2018 URB and SRW preseason forecast run sizes were both large enough to allow a 45.0 percent harvest rate in inriver fisheries.

Within the ESA limitations there were harvestable numbers of salmon available for all major stocks in 2018. The postseason fall Chinook run reconstruction was not completed in time for this report, so estimates included here are considered very preliminary for fall Chinook. The preliminary catch estimates (adults) for the non-Indian commercial net fisheries were 18,409 spring and 24 summer, and 14,900 fall Chinook, which included 17,598 spring, 24 summer, and 6,500 fall Chinook in Select Area (terminal) fisheries. The preliminary catch estimate (adults) for the recreational fisheries included 13,000 fall Chinook in the Buoy 10 fishery, and 7,468 spring, 1,140 summer, and 10,060 fall Chinook in mainstem fisheries below Bonneville Dam, 1,345 spring Chinook in mainstem fisheries above Bonneville Dam, and 6,100 fall Chinook above Bonneville Dam which include the Hanford Reach fishery above McNary Dam (Appendix B, Table B-20).

### *Escapement and Management Performance*

Upper Columbia summer Chinook met the escapement objective, and Columbia River fall Chinook are expected to also meet the escapement objectives (Table II-5). Preliminary estimates of river mouth returns were 63,910 LRH; 7,860 LRW; 37,900 SCH; 140,500 URB; and 24,800 MCB. The estimated 2018 total ocean escapement of the five fall stocks was 274,970 fall Chinook (Appendix B, Table B-20; Figure II-5). The preliminary estimated natural area escapement (Hanford Reach, Yakima River, and above Priest Rapids Dam) for URB Chinook in 2018 was 61,369, exceeding the MSY spawner escapement level of 39,625 adults established under FMP Amendment 16. The 2018 upper Columbia summer Chinook return totaled 42,120 adults. The estimated escapement (Rock Island Dam count) for summer Chinook in 2017 was 38,816, exceeding the MSY spawner escapement objective of 12,143 adults established under FMP Amendment 16.

The preliminary 2018 URB inriver harvest rate estimate was 31 percent. The total adult SRW, hatchery, and supplementation fall Chinook count at Lower Granite Dam in 2018 was 16,904, less than the count of 26,431 in 2017. The estimated number of SRW fall Chinook at Lower Granite Dam in 2018 was 6,133 adults.

Table II-7 provides conservation objective and fishery impacts for Lower Columbia River (LCR) Natural tule fall Chinook, recent year estimates are preliminary. Postseason estimates of the exploitation rate on SRW fall Chinook in ocean fisheries were unavailable.

The geometric mean of upper Columbia summer Chinook adult escapement in 2016, 2017, and 2018 was 55,730, which exceeded the MSST threshold (6,072); therefore, upper Columbia summer Chinook should not be considered overfished (Table II-6). Estimates of combined ocean and inriver exploitation rates were not available for 2017 or 2018, but the 2016 exploitation rate of 0.63 was below the MFMT (0.75); therefore, upper Columbia summer Chinook did not experienced overfishing in 2016 (Table II-6).

The geometric mean of Columbia URB fall Chinook adult escapement in 2016, 2017, and 2018 was 76,383 which exceeded the MSST threshold (19,182); therefore, Columbia URB fall Chinook should not be considered overfished (Table II-6). Estimates of combined ocean and inriver exploitation rates were not available for 2017 or 2018, but the 2016 exploitation rate of 0.51 was below the MFMT (0.86); therefore, Columbia URB fall Chinook did not experience overfishing in 2016 (Table II-6).

## **WASHINGTON COASTAL CHINOOK STOCKS**

Washington coastal Chinook stocks include all fall, summer, and spring stocks from coastal streams north of the Columbia River through the western Strait of Juan de Fuca (west of the Elwha River, inclusive). This complex consists of several natural stocks, generally of small to medium-sized populations, and some hatchery production (primarily Willapa Bay and Quinault River). Coastal stocks are not impacted significantly by Council-area ocean fisheries.

### *Management Objectives*

Willapa Bay natural fall Chinook did not have a defined conservation objective in the Salmon FMP during the preseason process, although WDFW has a spawning escapement objective of 4,350 natural Chinook, which is based on peak density estimates and watershed area. Amendment 16 to the Salmon FMP, adopted in December 2011, included a MSY spawning escapement objective of 3,393, which was based on the WDFW objective.

Spawning escapement goals for natural stocks managed within this complex north of Willapa Bay, established in U.S. District Court by WDFW and the treaty Indian tribes, were recognized in the Council's FMP conservation objectives. Objectives for Grays Harbor and the North Coast river systems were established pursuant to the U.S. District Court order in *Hoh v. Baldrige*. However, annual natural spawning escapement targets may vary from the FMP conservation objectives if agreed to by WDFW and the treaty Indian tribes under the provisions of *Hoh v. Baldrige* and subsequent U.S. District Court orders. After agreement is reached on the annual targets, ocean fishery escapement objectives are established for each river, or region of origin, which include provisions for treaty Indian allocation and inside non-Indian fishery needs. As provided for in Amendment 14, and pursuant to rules and procedures established under *U.S. v. Washington*, WDFW and the Quinault Indian Nation (QIN) presented new management objectives for Grays Harbor fall Chinook salmon. These objectives were reviewed by the Chinook Technical Committee of the Pacific Salmon Commission in February, 2014, and adopted in November, 2014. The new objectives are based on spawner-recruit relationships using estimates of production resulting from naturally spawning fish in the Chehalis and Humptulips river basins from brood years 1986 through 2005. It is the intent of WDFW and QIN to use for management purposes an aggregate natural spawning escapement goal of 13,500 for Grays Harbor fall Chinook salmon. No agreements on annual spawning targets for Washington coastal Chinook, other than those in the FMP, were made in 2018.

### **Regulations to Achieve Objectives**

Preseason abundance forecasts for some Washington coastal Chinook stocks were available for the first time in 2008 for the Council preseason management process. Because Council area fishery impacts to Washington coastal Chinook stocks are negligible, ocean regulations are not generally used to manage these stocks. Season and size limit details are presented in Tables I-1, I-2, and I-3.

## *Willapa Bay Chinook*

### **Inside Harvest**

Run size, harvest, and escapement data for Willapa Bay fall Chinook are presented in Appendix B, Table B-23.

No Chinook directed non-Indian gillnet fishery was conducted during July and August 2018. Beginning in 2015, the Willapa Bay Salmon Management Policy (C-3622) prohibits Chinook directed non-Indian gillnet fisheries until after Labor Day.

The 2018 preseason forecast of Chinook returning to Willapa Bay was 44,095 fish (3,838 natural and 40,257 hatchery). There were 24 12-hour Chinook and coho directed non-Indian gillnet fishery openings from September 4 through October 10, 2018. Retention of unmarked Chinook was prohibited. Total Chinook harvest in the non-Indian gillnet fisheries during 2018 was 1,534 fish, based on preliminary data. Non-directed openings were scheduled November 1 through November 30, 2018.

Recreational fisheries in the marine waters of Willapa Bay were open from July 1 through July 31, 2018 concurrent with the Ocean Marine Area 2 (ocean rules applied). From August 1, 2018 through January 31, 2019, Willapa Bay was open to recreational fishing with a daily-bag-limit of 6 salmon, no more than 3 adults allowed to be harvested daily; only one may be a coho and anglers were required to release unmarked Chinook.

Beginning September 22, 2018, a bay wide (commercial, marine and freshwater) closure to salmon fishing was enacted. Beginning September 27, 2018, Willapa Bay Marine Area 2.1 and the Willapa Bay Control Zone reopened. The daily bag limit was reduced to 2 adult salmon and anglers were required to release all Chinook (marked and unmarked). Barbless hooks were required when fishing for salmon. Anglers were allowed to fish with two poles if they had a Two-Pole Endorsement.

Recreational salmon fisheries in tributaries to Willapa Bay varied in duration but were generally open as early as August 1, 2018, through January 31, 2019. Retention of unmarked Chinook was prohibited. Single-point, barbless hooks were required in all areas except Naselle, South Fork Willapa, and Bear rivers where only barbless hooks were required. Beginning October 1, 2018, freshwater tributaries were re-opened and regulations were modified via emergency regulation to a total of 2 adult salmon and no more than 1 adult may be a wild coho for all systems except Naselle River, which remained closed. Retention of all Chinook (marked and unmarked) was prohibited. Naselle River re-opened October 16, 2018 under the same modified rules. Recreational harvest estimates for 2018 were not available.

### **Escapement and Management Performance**

During 2017, hatchery-origin Chinook returning to the Willapa Bay watershed totaled 19,700 fish. Based on current hatchery production, this return was sufficient to achieve the goal of 9,800 total Chinook escapement to Willapa Bay hatchery facilities. An escapement estimate was unavailable for 2018.

The 2017 natural escapement was 3,078 Chinook, below the FMP objective of 3,393. An escapement estimate was unavailable for 2018.

The geometric mean of Willapa fall Chinook adult escapement in 2015, 2016, and 2017 was 2,541, which exceeded the MSST (1,696); therefore, Willapa Bay fall Chinook should not be considered overfished (Table II-6). Exploitation rate estimates were not available for 2017 and 2018. Estimates of exploitation rates for all Washington Coast fall Chinook are based on Queets River fall Chinook CWT analyses, and while ocean impacts for these fall stocks may be assumed to be similar, inside impacts may vary

substantially. The MFMT for Willapa Bay fall Chinook is 0.78. In 2014, 2015, and 2016, the Willapa Bay fall Chinook exploitation rates, using Queets stock as a surrogate, were 0.57, 0.47, and 0.59 respectively; therefore, Willapa Bay fall Chinook were not subject to overfishing during the most recent three years of available data (Table II-6). The MFMT for Willapa Bay fall Chinook is also based on a proxy derived from an average value of other Chinook stocks; therefore, overfishing status based on total exploitation rates for Willapa Bay fall Chinook are less certain than for some other Washington Coast Chinook stocks

## *Grays Harbor Chinook*

### **Inside Harvest**

Run size, harvest, and escapement data for Grays Harbor Chinook are presented in Appendix B, Table B-25.

The Quinault Indian Nation conducted a spring/summer commercial gillnet fishery on the Chehalis River and in Grays Harbor commercial fishing Areas 2A, 2A-1, C, and D in 2017. No spring Chinook were reported in the harvest during these fisheries.

There were no non-Indian recreational fisheries allowing the retention of spring Chinook in the Chehalis River during the spring Chinook management period. Preliminary data indicate that 0 Chinook were harvested during this fishery scheduled in 2017 and 7 harvested in 2018. The 2018 report on harvest of spring Chinook by the Chehalis Tribe fishery was 26 fish. No summer non-Indian gillnet fishery directed at non-local Chinook stocks occurred in 2018

The Quinault Indian Nation conducted a 2018 fall gillnet fishery harvesting a total of 2,608 fall Chinook in two separately scheduled areas: the first in the lower Humptulips River and adjacent Area 2C of Grays Harbor, and the second in the lower Chehalis River and adjacent areas of Grays Harbor, Areas 2D, 2A, and 2A-1. Fishing was restricted to east of Stearns Bluff and excluded the area known as the “South Channel” in the Chehalis River, and Areas 2D, 2A, and 2A-1 to limit catch of Chinook, which tend to concentrate in deep areas off the mouths of the Johns and Elk rivers. The 2018 fishery was scheduled on the Chehalis side to run from week 39 to week 40, during the week of September 23 and the week of September 30 then closing weeks 41, 42 and 43, then opening week 44 beginning October 28, and week 45 beginning November 4, then the final week beginning November 18. The weekly schedules were 2 days for week 39, 2 days for week 40, closed weeks 41 to 43, then opened 2 days for week 44 and 3 days for week 45, and finally 3 days for week 47 with a 6 ½-inch maximum mesh size restriction. The Chehalis side fall fishery then remained closed until steelhead season, scheduled to begin on November 25. The Chehalis area treaty Indian fishery caught 2,274 Chinook, which was 757 fish more than predicted. The Humptulips area treaty Indian fishery schedule was also set with a 6½-inch maximum mesh restriction through the fall period. It was scheduled for weeks 41 to 44 and then week 47, at weekly schedules of 2, 3, 3, 3 through week 44, then closed weeks 45 and 46, then reopened week 47 for 3 days. The Humptulips reported harvest was 334 Chinook, 848 fish and 72 percent less than the predicted 1,182. The combined Grays Harbor treaty Indian Chinook catch was 3 percent less than predicted.

The 2018 non-Indian gillnet fishery in Humptulips commercial Area 2-C was scheduled for four 12-hour days from late October to early November. Timing of this fishery was designed to avoid Chinook and concentrate effort when coho and chum are more abundant. Retention of all fall Chinook, coho, and chum was allowed. Total catch of Chinook in Area 2C was 15 fish, 5 percent of predicted. The non-Indian gillnet fishery in the Chehalis River commercial Areas 2A and 2D was scheduled for eight 12-hour days from late October through mid-November. During these fisheries, all areas of 2D were open. Timing of this fishery was designed to avoid Chinook and concentrated effort when coho and chum are more abundant. During all fisheries live boxes were required, and wild Chinook could not be retained. A total of 16 hatchery-origin

Chinook were harvested during this fishery, 27 percent less than predicted. There were 71 estimated wild Chinook mortalities associated with release requirements during the non-Indian gillnet fishery.

A 2018 recreational mark-selective fishery in the northern portion of Marine Area 2-2 and Commercial Area 2C was open from August 1 through September 15. During this time, 2 adult salmon could be retained, however, wild Chinook and wild coho must be released. The portion of Marine Area 2-2 east of a line from the mouth of Johns River to Brackenridge Bluff Tripod was scheduled from September 16 through November 30 for the retention of two adult salmon per day. During this time wild Chinook were required to be released and only one wild coho per day could be retained.

A recreational mark-selective Chinook fishery was scheduled on the mainstem Humptulips River from the mouth to the confluence of the East and West forks that opened September 1 through October 31. The daily limit was 2 adults. After October 15, only one hatchery Chinook could be retained. 2018 recreational harvest estimates were not available.

### **Escapement and Management Performance**

Chehalis River spring Chinook are of natural origin and managed for an escapement goal of 1,400 adults. The 2017 terminal run forecast for spring Chinook was 1,391 adult fish. The final 2017 escapement estimate was 1,384 and a terminal run of 1,391. The 2018 terminal run forecast for spring Chinook was 1,748. The 2018 preliminary natural spawning escapement estimate is 493 which is well below the goal. The geometric mean of natural spawning escapement estimates in 2016, 2017, and 2018 is 858.

Grays Harbor fall Chinook were managed for a natural spawning escapement goal of 13,326 adults. The 2017 Grays Harbor fall Chinook run size forecast was for 16,192 natural and 5,632 hatchery adults. The total 2017 Grays Harbor fall Chinook run size was 14,866 natural and 7,909 hatchery. The 2017 natural spawning escapement estimate was 17,145. The combined components were about 4% above the forecast.

The 2018 Grays Harbor fall Chinook run size forecast was 16,399 natural and 4,818 hatchery adults. The return of hatchery-origin fall Chinook to Grays Harbor hatchery programs are unknown but expected to be sufficient to provide for 2018 fall Chinook production goals. The preliminary natural spawning escapement estimate for 2018 was not available. The final 2018 spawning ground escapement estimate for the Grays Harbor is in development by QIN and WDFW.

### *Quinault River Chinook*

#### **Inside Harvest**

Historical terminal gillnet harvest data for Quinault River Chinook stocks are presented in Appendix B, Table B-27.

A run of natural spawning spring/summer Chinook enters the river from April through July. The spring/summer Chinook run is typically small and any harvest is taken incidentally during fisheries directed at sockeye and steelhead. In 2018, the tribal fishery harvested 1 spring/summer Chinook during the late summer fishery, which occurred after the normal timing of the sockeye fishery. There was an early closure of the sockeye fishery to allow sockeye escapement to Lake Quinault. Subsequent commercial salmon fisheries were closed until the fall fishing period.

The treaty Indian gillnet fishery harvested 4,420 fall Chinook. The commercial schedule in 2018 was similar to the 2017 schedule, providing harvest opportunity in the months of August through November. The Quinault River Fall gillnet fishery is designed to maximize harvest opportunity during hatchery coho

and Chinook entry while reducing the scheduled fishing days later in the season during primarily wild Chinook and wild coho entry

### **Escapement and Management Performance**

Quinault fall Chinook were managed for hatchery production. The 2018 fall Chinook spawning escapement estimate was not available. Hatchery fall Chinook egg-take goals for the Quinault River were attained at the Lake Quinault tribal hatchery.

#### *Queets River Chinook*

### **Inside Harvest**

Historical terminal run size, catch, and escapement data for Queets River spring/summer and fall Chinook are presented in Appendix B, Tables B-29 and B-30, respectively.

The 2018 treaty Indian gillnet harvest of spring/summer Chinook remained closed through the summer months until late-August, when the treaty commercial fishery was opened to target early entering hatchery coho. There were 25 Chinook and 165 coho taken in the Queets treaty commercial August opening during 3-day openings in week 35. The non-Indian in-river recreational fishery was restricted to open only during the month of September to minimize impacts on wild coho. Anglers in the Clearwater River were allowed one salmon and were required to release all wild coho. Anglers in the Queets could retain two adult salmon, but required to release wild Chinook and wild coho. In the Salmon River, anglers could keep 2 adult salmon, of which only 1 could be a Chinook, and were required to release wild coho.

Fall Chinook were harvested in the 2018 treaty gillnet fishery from Week 35 opening for 3 days (beginning August 26), when 19 Chinook within that week's total were determined to be fall fish. The fishery then continued through Week 40 (the week of September 30 to October 5), set at 5, 5, 5 days from weeks 36 through 38, 3 days in week 39, and then 3 days during week 40 with a 6 ½-inch maximum mesh size. The fishery then switched to large 9 inch minimum mesh size during the next period on a fishing schedule of 1 day during week 44 and 2 days during week 45 after being closed during weeks 42 and 43. The fishery was closed following the week 45 fishing schedule until the beginning of the winter season scheduled to begin on November 25. The fishery was directed at harvesting available Chinook with hatchery coho, while avoiding wild coho. The treaty Indian gillnet fishery harvested 852 fall Chinook during this schedule compared to a preseason expected catch of 771. The Chinook catch peaked during week 38, the week beginning September 16. Catch estimates for 2018 recreational salmon fisheries are not yet available.

### **Escapement and Management Performance**

The 2017 and 2018 escapement estimates for Queets River spring/summer Chinook are not available yet. The geometric mean of Queets River spring/summer Chinook adult spawning escapement in 2014, 2015, and 2016 is 521, which is above the MSST (350), therefore, Queets River spring/summer Chinook should not be considered overfished (Table II-6).

The 2018 Queets River fall Chinook spawner survey estimate is not available. The indicator Chinook originate from wild brood stock taken each year in the river. The 2017 spawning escapement estimate for Queets River fall Chinook was 2,702 wild plus indicator returns with an additional 111 broodstock including nine indicator Chinook taken for broodstock. Indicator broodstock, wild or a small number of indicator returns, are included as part of the respective terminal run sizes but not within the natural escapement.

The geometric mean of Queets River fall Chinook adult spawning escapement in 2015, 2016, and 2017 was 3,472, which exceeded the MSST (1,250); therefore, Queets River fall Chinook should not be considered overfished (Table II-6).

### *Hoh River Chinook*

#### **Inside Harvest**

Historical terminal run size, catch, and escapement data for Hoh River spring/summer and fall Chinook are presented in Appendix B, Tables B-32 and B-33, respectively.

The 2018 Hoh River spring/summer Chinook terminal abundance forecast was 1,092 fish. The treaty Indian gillnet fishery was open one day per week during weeks 18 through 27. The Indian gillnet fishery was closed week 28 through week 37 as a response to chronically low-abundance as per an agreement with WDFW co-managers. The Hoh treaty commercial fishery caught approximately 34 spring/summer Chinook.

The non-Indian recreational salmon fishery was closed from April 16 to May 31. With the additional fish forecasted it was agreed that the sport fishery would operate in June for summer steelhead and hatchery spring Chinook. The fishery was closed to retention of wild salmon. The sport fishery also closed for salmon July 1 through September 15 to protect wild spring/summer Chinook.

Hoh River fisheries for fall Chinook were based on an expected terminal run size of 2,590 adults, allowing for a terminal harvest rate of 40 percent. The spawning escapement was expected to be 1,703 adults. The treaty Indian fishery targeted 26.3 percent of the terminal run. The treaty Indian gillnet fishery was closed during weeks 36 and 37, open one day per week during weeks 38, 39 and 40, two days per week during weeks 41 through 45, and one day per week during weeks 46 through 49. The Hoh treaty commercial fishery caught approximately 139 Chinook.

The non-Indian recreational fishery opened on September 16 with the river below Willoughby Creek open and a daily-bag-limit of 6 salmon, only 1 of which could be an adult.

#### **Escapement and Management Performance**

The 2018 preliminary spawning escapement for Hoh River spring/summer Chinook is not available. The geometric mean of Hoh River spring/summer Chinook spawner escapement in 2015, 2016, and 2017 was 1,186, which exceeded the MSST (450); therefore, Hoh River summer Chinook should not be considered overfished (Table II-6). Estimates of exploitation rates were not available for Washington coastal spring/summer Chinook stocks, but based on the limited in river harvest rate and lack of ocean harvest data, it is difficult to assess the extent to which Hoh River spring/summer Chinook were subject to overfishing in SUS fisheries in recent years (Table II-6).

The preliminary 2018 spawning escapement estimate for Hoh River fall Chinook is not available. The geometric mean of Hoh River fall Chinook adult spawning escapement in 2015, 2016, and 2017 was 2,094, which exceeded the MSST (600); therefore, Hoh River fall Chinook should not be considered overfished (Table II-6). Estimates of exploitation rates were not available for Hoh River fall Chinook, but Queets River fall Chinook can be used as a proxy. Exploitation rate estimates were not available for 2018 but earlier estimates were below the MFMT (0.90); given these assumptions, Hoh River fall Chinook should not be considered subject to overfishing (Table II-6).



## *Quillayute River Chinook*

### **Inside Harvest**

Historical terminal run size, catch, and escapement data for Quillayute River spring, summer, and fall Chinook are presented in Appendix B, Tables B-35 and B-36 respectively. Spring and summer Chinook are currently managed separately, but data for both are combined in Table B-35. All hatchery-origin fish are considered to be spring Chinook, and all natural spawners and tribal brood stock collections are considered to be summer Chinook. The management of these stocks is currently under review by the WDFW and Quileute Tribal co-managers.

The recreational and tribal fisheries for spring/summer Chinook were established by a preseason management agreement between WDFW and the Quileute Tribe. The total Indian gill net (IGN) catch for 2018 was 1,213 hatchery and 213 natural spring/summer Chinook. Only one ceremonial and subsistence fishery occurred in 2018 during week 21 and those 10 fish were accounted for in that week's IGN catch. WDFW required the release of unmarked (adipose fin intact) Chinook from February through August to reduce impacts of the recreational fishery on the natural spring/summer Chinook stock. The 2018 recreational spring/summer Chinook harvest is estimated at 666 hatchery Chinook.

The total 2018 Quileute IGN harvest of fall (wild) Chinook was 2,027. Catch of stray fall hatchery Chinook was 15. Catch for ceremonial and subsistence use is included in the Indian gillnet harvest numbers. The 2018 recreational catch is estimated at 580 wild fish.

Both the treaty and non-treaty fall fisheries were reduced from previous years for conservation reasons. The fall recreational fishery in the Quillayute system's Bogachiel, Calawah, and Dickey rivers allowed for the harvest of one adult and 3 jacks per day, and required the release of wild coho everywhere but in the lower Bogachiel, where the one adult limit could be a wild coho. The daily limit in the Quillayute and Sol Duc rivers also required release of wild coho, but allowed up to 3 adults, only one of which could be a Chinook, because of the availability of hatchery coho returning to the Sol Duc hatchery. An estimate of the 2018 recreational fall Chinook catch was 580, and the wild fall coho catch is estimated at 677. The Quileute Tribe greatly reduced their fall IGN fishery, restricting it to only a half day a week, and only one set net per fisher not to exceed 25 meters (83 feet) in length, and no smaller than 7 3/4" monofilament mesh from October 1 through November 12.

### **Escapement and Management Performance**

The 2018 management agreement called for an escapement goal of 200 hatchery spring Chinook. The actual hatchery rack return was 602 plus 82 jacks, which exceeded hatchery requirements

The summer Chinook run was managed to achieve an MSY spawner escapement of 1,200 adults, jacks, and brood stock collection combined. The 2018 preliminary natural spawning summer Chinook escapement estimate was 1,185, which includes 47 brood stock fish.

The geometric mean of Quillayute River summer Chinook spawner escapement in 2016, 2017, and 2018 is 1,067, which exceeded the MSST threshold (600); therefore, Quillayute River summer Chinook should not be considered overfished (Table II-6). Estimates of exploitation rates were not available for Washington coastal spring/summer Chinook stocks, but based on the limited in-river harvest rate and ocean harvest rates of Queets fall Chinook, it is unlikely that Quillayute River summer Chinook were subject to overfishing in recent years (Table II-6).

Terminal area fisheries on fall Chinook are managed for a target 40 percent in-river harvest rate, equating to an escapement of 60 percent of the terminal return or 3,000 adults, whichever is greater. The preliminary

2018 escapement estimate of 4,031 fall Chinook was over the escapement floor and above the targeted escapement of 60 percent of the return (60 percent of the estimated preliminary return of fall Chinook is about 3,985).

The geometric mean of the Quillayute River fall Chinook adult spawning escapement in 2016, 2017 and 2018 was 3,758, which exceeded the MSST threshold (1,500); therefore, Quillayute River fall Chinook should not be considered overfished (Table II-6). Estimates of exploitation rates were not available for Quillayute fall Chinook, but Queets River fall Chinook was used as a proxy. Exploitation rate estimates were not available for 2018, but earlier estimates were below the MFMT (0.87); therefore, Quillayute River fall Chinook should not be considered subject to overfishing (Table II-6).

### *Hoko River Chinook*

#### **Inside Harvest**

Hoko River Chinook are primarily harvested in fisheries in southeast Alaska and northern British Columbia with minimal harvest in Council area and inside waters. There have been no tribal or recreational fisheries in the Hoko River for Chinook salmon since the early 1980s, although some catch is occasionally reported by anglers on WDFW Catch Record Cards.

#### **Escapement and Management Performance**

The 2018 escapement estimate for Hoko Chinook is 1,943 spawning in the river (natural origin and hatchery strays combined) and 236 spawned at the hatchery for a terminal runsize of 2,179. (Appendix B, Table B-38).

The geometric mean of Hoko River summer/fall Chinook spawner escapement from 2016 through 2018 is 1,508 which exceeds the MSST threshold (425); therefore, Hoko River summer/fall Chinook should not be considered overfished (Table II-6). Estimates of exploitation rates are not yet available for 2017 and 2018, but estimates from 2013 through 2016 were all well below the MFMT (0.78); therefore, Hoko River summer/fall Chinook should not be considered subject to overfishing (Table II-6).

### **PUGET SOUND CHINOOK STOCKS**

Puget Sound Chinook stocks include all fall, summer, and spring stocks originating from U.S. tributaries in Puget Sound and the eastern Strait of Juan de Fuca (east of Salt Creek, inclusive). This stock complex consists of numerous natural Chinook stocks of small to medium-sized populations and significant hatchery production. The Puget Sound ESU was listed under the ESA as threatened in March 1999.

#### *Management Objectives*

Puget Sound Chinook stocks are listed under the ESA and were managed pursuant to the provisions of a WDFW/Tribal management plan approved under an ESA Section 4(d) rule promulgated by NMFS. This plan contains exploitation rate ceilings for ESA-listed Puget Sound stocks expressed in terms of constraints on total fishery rebuilding exploitation rates (RER) or of exploitation rates on fisheries south of the Canadian border for those stocks without RERs. The Council's annual management objectives for ESA-listed stocks are to meet the ESA consultation standards set forth by NMFS.

#### **Regulations to Achieve Objectives**

Puget Sound stocks contribute to fisheries off B.C., are present to a lesser degree off SEAK, and are impacted to a minor degree by Council-area ocean fisheries. Because Council-area fishery impacts to Puget Sound Chinook stocks are negligible, ocean regulations are not generally used to manage these stocks. The

only Council-area regulations affecting any of these stocks was closing the Cape Flattery Control Zone for the non-Indian commercial troll fishery and holding the non-Indian commercial troll fishery to impacts in Area 3 and Area 4 not to exceed those modeled pre-season. Season and size limit details are presented in Tables I-1, I-2, and I-3.

### *Inside Harvest*

Commercial inside fishery harvest of Puget Sound Chinook was managed on the basis of six regional stock management units or, in some cases, component stocks within management units: Strait of Juan de Fuca, Nooksack-Samish, Skagit, Stillaguamish-Snohomish, South Puget Sound, and Hood Canal. Harvest was regulated according to the natural spawning escapement goal or hatchery program escapement goal for that unit. Commercial net and troll harvest (treaty Indian and non-Indian) is presented in Appendix B, Table B-39. These catches included some fish of non-Puget Sound origin. The total commercial harvest in Puget Sound in 2018 was 118,389 Chinook, compared to 148,764 Chinook caught in 2017. The 2018 non-Indian net catch was 13,700 Chinook, compared to 12,065 Chinook caught in 2017. The 2018 treaty Indian net and troll harvest was 104,689 Chinook, compared to 136,699 Chinook caught in 2017.

Chinook catches in the Puget Sound recreational fishery for years beginning in 1971 are presented in Appendix B, Table B-40. Catch estimates for the 2018 Puget Sound recreational fishery were unavailable.

### *Escapement and Management Performance*

Puget Sound Chinook management goals for fishery planning processes in 2018 were compared to predicted exploitation rates to assess compliance with ESA consultation standards (Table II-5). Information to evaluate performance against these constraints was unavailable.

Historical hatchery and natural run component escapements and net catches for summer/fall Chinook for each Puget Sound region of origin are presented in Appendix B, Tables B-41. Recreational salmon catch estimates are summarized in Appendix B, Table B-40. Historical spring Chinook escapement data are presented in Appendix B, Table B-44. Preliminary data suggest most Puget Sound hatcheries met their summer/fall Chinook goals.

Naturally spawning Puget Sound spring and summer/fall Chinook remained depressed in 2018. Preliminary data suggest no Puget Sound spring Chinook natural stocks met their escapement goals. Preliminary information on 2018 natural spawning escapements for summer/fall Chinook stocks indicate escapement goals were met in some areas, but not in many others. Escapement estimates for 2018 were not available for most runs. In many natural spawning areas, hatchery-origin Chinook comprise a large component of the natural spawning population.

## **COASTWIDE GOAL ASSESSMENT SUMMARY**

Spawning escapements was below FMP objectives in 2018 for Sacramento River fall Chinook. Information to assess compliance with FMP conservation objectives and ESA consultation standards in 2018 was unavailable for LCR natural tule Chinook, SRW fall Chinook, several Washington coast Chinook stocks, and all Puget Sound natural Chinook stocks.

### *Stock Status Determinations*

In 2011, the Council adopted SDC for overfishing, overfished, not overfished/rebuilding, and rebuilt under FMP Amendment 16. These criteria, approved and implemented since December 2011, are:

- Overfishing occurs when a single year exploitation rate exceeds the MFMT ( $F_{MSY}$ );

- Overfished status occurs when a 3-year geometric mean spawning escapement is less than the MSST;
- Not overfished/rebuilding status occurs when the most recent 3-year geometric mean spawning escapement is greater than the MSST but less than  $S_{MSY}$ ;
- A stock is rebuilt when the most recent 3-year geometric mean spawning escapement exceeds  $S_{MSY}$ .

All criteria rely on the most recent estimates available, which in some cases may be a year or more in the past because of incomplete broods or data availability. The above criteria for rebuilt status are the default criteria provided in the FMP; however, alternative criteria may be developed through a rebuilding plan if warranted by stock specific circumstances. Stock specific reference points and recent year estimates for relevant stocks are presented in Table II-6.

Based on these SDCs, both Sacramento River fall Chinook and Klamath River fall Chinook continue to meet the criteria for overfished status (using data from 2016-18). In June 2018, NMFS' published an overfished designation for these two Chinook stocks based on the geometric mean of escapement in 2015-17. The development of a rebuilding plan for each of these Chinook stocks is currently underway. Based on the most recent year exploitation rate estimates available, no stocks were subject to overfishing.

In 2018, upper Columbia summer Chinook were reported to have met the criteria for subject to overfishing in 2015, which was the most recent year with data available at that time. Exploitation rates have since been updated and now show the stock below MFMT during 2013- 2016.

TABLE II-1. Sacramento River natural area and hatchery adult fall Chinook escapement in numbers of fish.

| Year or Average    | Upper River <sup>a/</sup> |                       |          | Lower River |                       |          | Total    |                       | Grand Total |
|--------------------|---------------------------|-----------------------|----------|-------------|-----------------------|----------|----------|-----------------------|-------------|
|                    | Hatchery                  | Natural <sup>b/</sup> | Subtotal | Hatchery    | Natural <sup>b/</sup> | Subtotal | Hatchery | Natural <sup>b/</sup> |             |
| 1981-85            | 11,557                    | 57,913                | 69,470   | 16,917      | 81,880                | 98,797   | 28,475   | 139,793               | 168,268     |
| 1986-90            | 11,507                    | 87,396                | 98,903   | 11,521      | 73,633                | 85,154   | 23,028   | 161,029               | 184,057     |
| 1991-95            | 11,948                    | 60,151                | 72,099   | 16,951      | 70,691                | 87,642   | 28,899   | 130,842               | 159,741     |
| 1996-00            | 29,965                    | 153,777               | 183,742  | 21,137      | 137,071               | 158,207  | 51,102   | 290,848               | 341,949     |
| 2001-05            | 72,122                    | 197,215 <sup>c/</sup> | 269,337  | 30,520      | 214,652               | 245,172  | 102,643  | 411,867               | 514,510     |
| 2006               | 56,819                    | 89,933                | 146,752  | 21,722      | 106,556               | 128,278  | 78,541   | 196,489               | 275,030     |
| 2007               | 11,543                    | 36,079                | 47,622   | 9,759       | 33,993                | 43,752   | 21,302   | 70,072                | 91,374      |
| 2008               | 10,181                    | 36,274                | 46,455   | 7,867       | 11,042                | 18,909   | 18,048   | 47,316                | 65,364      |
| 2009               | 5,433                     | 12,277                | 17,710   | 10,492      | 12,671                | 23,163   | 15,925   | 24,948                | 40,873      |
| 2010               | 8,666                     | 25,688                | 34,354   | 24,484      | 65,438                | 89,922   | 33,150   | 91,126                | 124,276     |
| 2011               | 19,312                    | 20,466                | 39,778   | 22,176      | 57,388                | 79,564   | 41,488   | 77,854                | 119,342     |
| 2012               | 77,318                    | 67,190                | 144,508  | 41,878      | 99,043                | 140,921  | 119,196  | 166,233               | 285,429     |
| 2013               | 67,758                    | 90,119                | 157,877  | 33,453      | 215,516               | 248,969  | 101,211  | 305,635               | 406,846     |
| 2014               | 18,280                    | 80,056                | 98,336   | 25,872      | 88,260                | 114,132  | 44,152   | 168,316               | 212,468     |
| 2015               | 13,819                    | 40,687                | 54,506   | 25,484      | 34,095                | 59,579   | 39,303   | 74,782                | 114,085     |
| 2016               | 8,306                     | 10,563                | 18,869   | 25,096      | 45,734                | 70,830   | 33,402   | 56,297                | 89,699      |
| 2017               | 1,316                     | 1,526                 | 2,842    | 23,437      | 16,435                | 39,872   | 24,753   | 17,961                | 42,714      |
| 2018 <sup>d/</sup> | 8,780                     | 17,824                | 26,604   | 25,035      | 54,100                | 79,135   | 33,815   | 71,924                | 105,739     |
| Goal <sup>e/</sup> |                           |                       |          |             |                       |          |          |                       | 122,000     |

a/ Above the Feather River; 1971-1985 estimates include Tehama-Colusa Spawning Channel.

b/ Fish spawning in natural areas are the result of hatchery and natural production; estimates generally based on carcass surveys.

c/ Estimation methodology for 2002 was changed due to an extremely high Battle Creek escapement.

d/ Preliminary.

e/ Sacramento River fall Chinook  $S_{MSY}$ .

TABLE II-2. Klamath River adult inriver fall Chinook run size, spawning escapement, recreational catch, Indian gillnet harvest, and non-landed fishing mortalities in numbers of fish and percent of the total inriver run size.

| Year or Average       | Spawning Escapement     |         |         |         | Inriver Recreational Catch |         | Indian Net Catch |         | Non-landed Fishing Mortality |         | Inriver Run Size      |
|-----------------------|-------------------------|---------|---------|---------|----------------------------|---------|------------------|---------|------------------------------|---------|-----------------------|
|                       | Hatchery                | Natural | Total   | Percent | Numbers                    | Percent | Numbers          | Percent | Numbers                      | Percent | Numbers               |
| 1981-85               | 11,746                  | 27,667  | 39,413  | 63%     | 5,096                      | 8%      | 17,128           | 27%     | 1,593                        | 2%      | 63,230                |
| 1986-90               | 25,106                  | 70,785  | 95,891  | 63%     | 15,145                     | 10%     | 36,669           | 25%     | 3,498                        | 2%      | 151,203               |
| 1991-95               | 18,084                  | 47,932  | 66,016  | 74%     | 3,094                      | 5%      | 10,574           | 19%     | 983                          | 2%      | 80,666                |
| 1996-00               | 35,970                  | 54,229  | 90,199  | 72%     | 6,817                      | 6%      | 24,565           | 20%     | 2,275                        | 2%      | 123,856               |
| 2001-05 <sup>a/</sup> | 38,952                  | 56,346  | 95,298  | 70%     | 7,659                      | 5%      | 25,414           | 19%     | 2,366                        | 2%      | 136,848               |
| 2006                  | 19,522                  | 30,163  | 49,685  | 81%     | 62                         | 0%      | 10,283           | 17%     | 1,344                        | 2%      | 61,374                |
| 2007                  | 35,050                  | 60,670  | 95,720  | 72%     | 6,312                      | 5%      | 27,573           | 21%     | 2,526                        | 2%      | 132,131               |
| 2008                  | 13,552                  | 30,850  | 44,402  | 63%     | 1,919                      | 3%      | 22,259           | 32%     | 1,974                        | 3%      | 70,554                |
| 2009                  | 19,614                  | 44,409  | 64,023  | 64%     | 5,651                      | 6%      | 28,387           | 28%     | 2,583                        | 3%      | 100,644               |
| 2010                  | 18,052                  | 37,225  | 55,277  | 61%     | 3,035                      | 3%      | 29,887           | 33%     | 2,661                        | 3%      | 90,860                |
| 2011                  | 22,337                  | 46,763  | 69,100  | 68%     | 4,147                      | 4%      | 26,353           | 26%     | 2,377                        | 2%      | 101,977               |
| 2012                  | 55,939                  | 121,543 | 177,482 | 60%     | 13,876                     | 5%      | 95,386           | 32%     | 8,578                        | 3%      | 295,322               |
| 2013                  | 17,148                  | 59,156  | 76,304  | 46%     | 19,800                     | 12%     | 63,036           | 38%     | 5,885                        | 4%      | 165,025               |
| 2014                  | 31,276                  | 95,104  | 126,380 | 79%     | 5,386                      | 3%      | 25,967           | 16%     | 2,392                        | 1%      | 160,396 <sup>b/</sup> |
| 2015                  | 11,085                  | 28,112  | 39,197  | 50%     | 7,842                      | 10%     | 28,048           | 36%     | 2,611                        | 3%      | 77,821 <sup>b/</sup>  |
| 2016                  | 3,578                   | 13,937  | 17,515  | 71%     | 1,310                      | 5%      | 5,160            | 21%     | 486                          | 2%      | 24,582 <sup>b/</sup>  |
| 2017                  | 11,213                  | 19,904  | 31,117  | 94%     | 71                         | 0%      | 1,880            | 6%      | 164                          | 0%      | 33,232                |
| 2018 <sup>c/</sup>    | 18,564                  | 53,624  | 72,188  | 78%     | 4,075                      | 4%      | 14,769           | 16%     | 1,261                        | 1%      | 92,293                |
| Goal                  | ≥40,700 <sup>d/e/</sup> |         |         |         |                            |         |                  |         |                              |         |                       |

a/ Inriver run size includes a USFWS estimate of 30,550 fish (19% of the run) that died prior to spawning in September 2002.

b/ Total inriver run includes fish collected from the Klamath and Trinity rivers by the Yurok and Hoopa Valley tribes, respectively, to test for the presence of the parasite *Ichthyophthirius multifiliis* during the following years: 2014 - 272 adults; 2015 - 123 adults; 2016 - 111 adults.

c/ Preliminary.

d/ In December 2011, Amendment 16 to the Salmon Fishery Management Plan was approved, which replaced the 35,000 spawning escapement floor with a  $S_{MSY}$  management objective of 40,700 natural area adult spawners. The 35,000 spawner floor was in effect from 1989-2007 and in 2011. In 2008-2010, fisheries were managed for a natural area spawning escapement of 40,700 adults under requirements of a rebuilding plan.

e/ Annual escapement goals may be more or less than  $S_{MSY}$  in some years due to meeting  $S_{ACL}$  requirements and de minimis fishing provisions.

TABLE II-3. Oregon coastal spring and fall Chinook hatchery return and harvest in estuary and freshwater fisheries.

| Year or Average             | Return to Facilities          |      |         | Estuary and Freshwater Harvest <sup>b/</sup> |       |
|-----------------------------|-------------------------------|------|---------|--|-------|
|                             | Public Hatchery <sup>a/</sup> |      | Private | Spring                                       | Fall  |
|                             | Spring                        | Fall | All     |  |       |
| <b>THOUSANDS OF CHINOOK</b> |                               |      |         |  |       |
| 1976-80                     | 4.9                           | 2.0  | 1.9     | 13.7   | 31.1  |
| 1981-85                     | 5.0                           | 3.0  | 12.8    | 8.2  | 26.8  |
| 1986-90                     | 22.9                          | 5.4  | 31.4    | 21.1   | 49.3  |
| 1991-95                     | 15.7                          | 3.3  | 4.1     | 15.2   | 49.6  |
| 1996                        | 26.7                          | 3.6  | -       | 25.6   | 51.0  |
| 1997                        | 29.1                          | 2.0  | -       | 14.7   | 37.0  |
| 1998                        | 11.0                          | 2.6  | -       | 8.2  | 31.5  |
| 1999                        | 18.1                          | 3.3  | -       | 8.2  | 29.3  |
| 2000                        | 24.5                          | 3.1  | -       | 11.4   | 37.4  |
| 2001                        | 26.8                          | 5.7  | -       | 18.6   | 53.3  |
| 2002                        | 24.7                          | 2.9  | -       | 30.9   | 58.8  |
| 2003                        | 17.2                          | 3.9  | -       | 33.1   | 72.3  |
| 2004                        | 20.1                          | 2.9  | -       | 19.4   | 78.4  |
| 2005                        | 11.7                          | 2.6  | -       | 14.6   | 51.6  |
| 2006                        | 7.5                           | 2.7  | -       | 7.1  | 47.7  |
| 2007                        | 6.3                           | 2.1  | -       | 5.7  | 29.0  |
| 2008                        | 6.1                           | 2.7  | -       | 5.8  | 18.3  |
| 2009                        | 7.2                           | 4.2  | -       | 9.2  | 26.1  |
| 2010                        | 10.9                          | 5.0  | -       | 15.6   | 44.1  |
| 2011                        | 7.8                           | 4.0  | -       | 16.1   | 63.0  |
| 2012                        | 13.5                          | 6.0  | -       | 18.7   | 51.4  |
| 2013                        | 13.1                          | 7.2  | -       | 16.3   | 83.3  |
| 2014                        | 11.5                          | 7.9  | -       | 16.1   | 75.0  |
| 2015                        | 10.7                          | 9.6  | -       | 18.3   | 117.3 |
| 2016                        | 4.2                           | 5.8  | -       | 10.1   | 54.9  |
| 2017                        | 5.1                           | 3.1  | -       | 9.4  | 53.9  |
| 2018 <sup>c/</sup>          | 5.2                           | 1.4  | -       | NA   | NA    |

a/ Adults only.

b/ Freshwater harvests are derived from ODFW salmon/steelhead angler catch record card information and represent fish larger than 24 inches (i.e., adults). Includes both hatchery and natural fish.

c/ Preliminary.

TABLE II-4. Spawner indices for naturally produced Oregon coastal fall Chinook and south migrating/localized spring Chinook.<sup>a/</sup>

| Year or Average    | Fall Chinook Spawner Indices               |  | South/local Migrating Spring Chinook Spawner Indices (1000's of fish) |                                    |
|--------------------|--|--|---|------------------------------------|
|                    | North Migrating Peak Count Adults Per Mile | Rogue River                                  | Rogue River   |                                    |
|                    |  | (South/local migrating) Adult Carcass Counts | Gold Ray Dam Counts <sup>b/</sup>                                     | Umpqua River Winchester Dam Counts |
| 1976-80            | 72   | 5,256  | 26  | 6                                  |
| 1981-85            | 89   | 3,906  | 16  | 5                                  |
| 1986-90            | 141  | 16,797                                       | 29  | 8                                  |
| 1991-95            | 116  | 4,387  | 10  | 4                                  |
| 1996               | 147  | 2,448  | 10  | 4                                  |
| 1997               | 105  | 1,643  | 10  | 3                                  |
| 1998               | 99   | 3,601  | 4   | 4                                  |
| 1999               | 124  | 2,493  | 6   | 3                                  |
| 2000               | 85   | 3,366  | 3   | 3                                  |
| 2001               | 203  | 6,380  | 9   | 6                                  |
| 2002               | 269  | 11,836                                       | 7   | 7                                  |
| 2003               | 279  | 14,620                                       | 19  | 8                                  |
| 2004               | 198  | 5,326 <sup>c/</sup>                          | 13  | 5                                  |
| 2005               | 118  | d/   | 6   | 4                                  |
| 2006               | 76   | d/   | 5   | 3                                  |
| 2007               | 42   | d/   | 3   | 2                                  |
| 2008               | 40   | d/   | 4   | 3                                  |
| 2009               | 61   | d/   | 5   | 5                                  |
| 2010               | 87   | d/   | 10  | 6                                  |
| 2011               | 109  | d/   | 10  | 9                                  |
| 2012               | 146  | d/   | 14  | 8                                  |
| 2013               | 189  | d/   | 12  | 7                                  |
| 2014               | 157  | d/   | 6   | 6                                  |
| 2015               | 247  | d/   | 15  | 5                                  |
| 2016               | 118  | d/   | 10  | 4                                  |
| 2017               | 114  | d/   | 10  | 4                                  |
| 2018 <sup>e/</sup> | 92   | d/   | 10  | 3                                  |
| Goal               | 60-90                                      |  |   |                                    |

a/ North migrating peak counts are taken on nine miles of standard index surveys over nine river systems (see Appendix B, Table B-11 for individual system counts). Complete carcass counts are listed in Appendix B, Table B-10. Complete counts for Gold Ray and Winchester dams are listed in Appendix B, Table B-9.

b/ Gold Ray Dam removed October, 2010. Natural estimates after 2010 derived using relationship of 2004-2010 spawning ground surveys to Gold Ray Dam passage. Estimate includes an unknown number of jacks.

c/ In 2004 one of the standard survey sections was not sampled. In the previous two years this section accounted for 33% of the total adult carcass counts.

d/ Surveys were not conducted.

e/ Preliminary.



TABLE II-5. Performance of Chinook salmon stocks in relation to 2018 preseason conservation objectives (preliminary data). (Page 1 of 2)

| System and Stock  | 2018 Conservation/Management Objective(s)  | Achievement   |
|---|--|---|
| <b>Sacramento River Chinook</b>   |  |   |
| Fall  | Minimum escapement of 151,000 natural area and hatchery adults.  | Preliminary estimate of 105,739 natural and hatchery adult fall Chinook is below 2018 management objective. |
| Winter (Endangered)   | Age-3 impact rate for the area south of Point Arena, CA no greater than 14.4% (NMFS ESA consultation standard).                                      | Preseason projection of 8.5%; no postseason estimate was available at time of printing.                     |
| Spring (Threatened)   | No management objective  | No management objective   |
| <b>California North Coast Chinook</b>   |  |   |
| Klamath River Fall  | Minimum escapement of 40,700 natural area adult spaw ners.   | Preliminary estimate of 53,624 is above the 2018 management objective.                                      |
| California Coastal (Threatened)   | No greater than 16.0% ocean harvest rate on age-4 Klamath River fall Chinook.  | Preseason projection of 11.5%; no postseason estimate was available at time of printing.                    |
| <b>Oregon Coast Chinook</b>   |  |   |
| North Migrating Stocks  | 150,000-200,000 natural adult spaw ners (equivalent to peak spaw ner index counts of 60-90 adults per mile).   | 92 natural adult spaw ners per mile, above the upper bound of the aggregate stock index range.              |
| South/Local Migrating Stocks  | 34,992 natural adult passage estimate at Huntley Park in the low er Rogue River.   | 39,497 natural adult passage estimate at Huntley Park, above the conservation objective.                    |
| <b>Columbia River Basin Fall Chinook</b>                                      |  |   |
| LRW (Component of threatened low er Columbia River Chinook ESU)               | MSY objective of 5,700 natural North Lewis River adult spaw ners.  | Preliminary estimate of 5,203, below the conservation objective.  |
| LCR natural tules (Component of threatened low er Columbia River Chinook ESU) | Total (ocean plus inriver) AEQ exploitation rate on ESA-listed natural tules of no more than 38.0%.  | Preseason projection of 37.7%. No postseason estimate was available.  |
| LRH   | 12,600 adult hatchery spaw ners.   | 21,037 adult hatchery spaw ners, above the goal.  |
| SCH   | 7,000 adult hatchery spaw ners.  | 10,397 adult hatchery spaw ners, above the goal.  |
| MCB   | No FMP objective; target of 7,750 hatchery adults.   | 4,122 adult hatchery spaw ners, below the target.   |
| URB   | 40-45,000 natural and hatchery adults above McNary Dam, plus meet treaty Indian obligations. <i>U.S. v. Oregon</i> parties agreed to 60,000 in 2011. | 100,801 natural and hatchery adults over McNary Dam, well over the MSY target in FMP.                       |

TABLE II-5. Performance of Chinook salmon stocks in relation to 2018 preseason conservation objectives (preliminary data).  
(Page 2 of 2)

| System and Stock   | 2018 Conservation/Management Objective(s)   | Achievement   |
|--|---|---|
| <b>Columbia River Basin Fall Chinook (continued)</b>       |   |   |
| Snake River Fall Chinook<br>(Threatened; component of URB) | SRFI $\leq$ 0.700 for all ocean fisheries combined (i.e., no less than a 30.0% reduction from the 1988-1993 base period exploitation rate).                           | Preseason SRFI projection of 0.481. Postseason estimate was not available.  |
| <b>Washington Coastal Chinook</b>                          |   |   |
| Fall   | Natural spawner escapement objectives as provided in state-tribal agreements; meet hatchery egg-take goals and meet treaty Indian obligations.                        | Based on preliminary estimates where available, goals were met.   |
| Spring/Summer  | Natural spawner escapement objectives as provided in state-tribal agreements; meet hatchery egg-take goals and meet treaty Indian obligations.                        | Preliminary estimates were above the objective for Quillayute and below the objective for Grays Harbor. Estimates for other spring stocks were not available. |
| <b>Puget Sound Chinook</b>                                 |   |   |
| (Threatened)   | Minor part of Washington ocean harvest; Council ocean management not directed at these stocks. Adult equivalent exploitation rate standard developed for some stocks: | Postseason estimates were not available. Preseason predictions of adult equivalent exploitation rates and spawner objectives were:                            |
|  | <u>Exploitation Rate</u> <u>Spawner Esc.</u> <u>ISBM</u>  | <u>Exploitation Rate</u> <u>Spawner Esc.</u> <u>ISBM</u>  |
| · Nooksack spring  | 10.5% SUS   - $\leq$ 60%  | 10.5%   -   37%   |
| · Skagit summer/fall                                       | 45% Total   - $\leq$ 60%  | 37.2%   -   69%   |
| · Skagit spring  | 28.4% Total   - $\leq$ 60%  | 28.4%   -   -   |
| Upper Sauk River   | -   1,110   -   | -   1,110   -   |
| Upper Cascade River  | -   261   -   | -   261   -   |
| Suiattle River   | -   596   -   | -   596   -   |
| · Stillaguamish summer/fall                                | 24% Total, 13% SUS   - $\leq$ 60%   | 20.8% Total, 12.2% SU:   -   29%  |
| · Snohomish summer/fall                                    | 19.1% Total   - $\leq$ 60%  | 19.10%   -   -  |
| Skykomish River  | -   2,635   -   | -   2,635   -   |
| Snoqualmie River   | -   747   -   | -   747   -   |
| · Lake Wash. summer/fall                                   | 19.9% SUS   - $\leq$ 60%  | 19.9%   -   46%   |
| Cedar River  | -   1,250   -   | -   1,250   -   |
| · White River spring                                       | 22% Total   -   -   | 18.9%   -   -   |
| · Green River summer/fall                                  | -   1,200 $\leq$ 60%  | -   1,200   73%   |
| · Puyallup summer/fall                                     | 50% Total   -   -   | 49.9%   -   -   |
| · Nisqually summer/fall                                    | 47% Total   -   -   | 47.0%   -   -   |
| · Skokomish summer/fall                                    | 48% Total   -   -   | 47.9%   -   -   |
| · Mid-Hood Canal fall                                      | 12% pre-term SUS   -   -  | 12.0%   -   -   |
| · Dungeness spring   | 10% SUS   -   -   | 3.6%   -   -  |
| · Elwha summer/fall  | 10% SUS   -   -   | 4.0%   -   -  |

TABLE II-6. Chinook stock status relative to overfished and overfishing criteria. A stock is overfished if the 3-year geometric mean spawning escapement is less than the minimum stock size threshold (MSST); a stock experiences overfishing if the total annual exploitation rate exceeds the maximum fishing mortality threshold (MFMT).

| Chinook Stock                           | Spawning Escapement |         |         |         |        |         |               |              |           | Exploitation rates |      |      |      |      |      |      |
|---|---------------------|---------|---------|---------|--------|---------|---------------|--------------|-----------|--------------------|------|------|------|------|------|------|
|   | 2013                | 2014    | 2015    | 2016    | 2017   | 2018    | 3-yr Geo      |              | $S_{MSY}$ | 2013               | 2014 | 2015 | 2016 | 2017 | 2018 | MFMT |
|   |                     |         |         |         |        |         | Mean          | MSST         |           |                    |      |      |      |      |      |      |
| Sacramento Fall                         | 406,846             | 212,468 | 114,085 | 89,699  | 42,714 | 105,739 | <b>73,994</b> | 91,500       | 122,000   | 0.53               | 0.61 | 0.56 | 0.56 | 0.68 | NA   | 0.78 |
| Klamath River Fall                      | 59,156              | 95,104  | 28,112  | 13,937  | 19,904 | 53,624  | <b>24,594</b> | 30,525       | 40,700    | 0.64               | 0.36 | 0.59 | 0.37 | 0.09 | NA   | 0.71 |
| Southern Oregon                         | 81,655              | 53,546  | 30,462  | 27,278  | 91,977 | 39,497  | 46,276        | 20,500       | 34,992    | NA                 | NA   | NA   | NA   | NA   | NA   | 0.78 |
| Central and Northern OR <sup>a/</sup>   | 189                 | 157     | 247     | 118     | 114    | 92      | 107           | 30 fish/mile | 150k-200k | 0.46               | 0.43 | 0.42 | 0.47 | NA   | NA   | 0.78 |
| Upper River Bright - Fall <sup>a/</sup> | 305,445             | 233,934 | 323,276 | 151,373 | 97,789 | 30,105  | 76,383        | 19,182       | 39,625    | 0.52               | 0.53 | 0.40 | 0.51 | NA   | NA   | 0.86 |
| Upper River - Summer <sup>a/</sup>      | 68,380              | 77,982  | 88,691  | 79,253  | 56,265 | 38,816  | 55,730        | 6,072        | 12,143    | 0.59               | 0.69 | 0.67 | 0.63 | NA   | NA   | 0.75 |
| Willapa Bay - Fall <sup>b/</sup>        | 1,904               | 2,075   | 2,824   | 1,887   | 3,078  | NA      | 2,541         | 1,696        | 3,393     | 0.71               | 0.57 | 0.47 | 0.59 | NA   | NA   | 0.78 |
| Grays Harbor Fall <sup>b/</sup>         | 12,503              | 11,893  | 17,305  | 11,248  | 17,145 | NA      | 13,887        | 5,694        | 13,326    | 0.71               | 0.57 | 0.47 | 0.59 | NA   | NA   | 0.78 |
| Grays Harbor Spring                     | 2,459               | 1,583   | 1,841   | 926     | 1,384  | 493     | 858           | 546          | 1,400     | NA                 | NA   | NA   | NA   | NA   | NA   | 0.78 |
| Queets - Fall <sup>a/</sup>             | 2,582               | 3,820   | 5,313   | 2,915   | 2,702  | NA      | 3,472         | 1,250        | 2,500     | 0.71               | 0.57 | 0.47 | 0.59 | NA   | NA   | 0.87 |
| Queets - Sp/Su                          | 520                 | 377     | 532     | 704     | NA     | NA      | 521           | 350          | 700       | NA                 | NA   | NA   | NA   | NA   | NA   | 0.78 |
| Hoh - Fall <sup>b/</sup>                | 1,269               | 1,933   | 1,795   | 2,831   | 1,808  | NA      | 2,094         | 600          | 1,200     | 0.71               | 0.57 | 0.47 | 0.59 | NA   | NA   | 0.90 |
| Hoh Sp/Su                               | 750                 | 744     | 1,070   | 1,144   | 1,364  | NA      | 1,186         | 450          | 900       | NA                 | NA   | NA   | NA   | NA   | NA   | 0.78 |
| Quillayute - Fall <sup>b/</sup>         | 3,901               | 2,782   | 3,440   | 3,654   | 3,604  | 4,031   | 3,758         | 1,500        | 3,000     | 0.71               | 0.57 | 0.47 | 0.59 | NA   | NA   | 0.87 |
| Quillayute - Sp/Su                      | 957                 | 608     | 794     | 900     | 1,097  | 1,232   | 1,067         | 600          | 1,200     | NA                 | NA   | NA   | NA   | NA   | NA   | 0.78 |
| Hoko -Su/Fa <sup>a/</sup>               | 1,406               | 1,760   | 2,877   | 1,324   | 1,188  | 2,179   | 1,508         | 425          | 850       | 0.23               | 0.42 | 0.30 | 0.30 | NA   | NA   | 0.78 |

a/ CWT based exploitation rates from PSC-CTC 2018 Exploitation Rate Analysis and Model Calibration.

b/ Queets River fall Chinook coded-wire-tag (CWT) exploitation rates used as a proxy. Exploitation rates in the terminal fisheries will differ from those calculated for Queets fall CWTs.

TABLE II-7. Conservation objective and fishery impacts for Lower Columbia River Natural Tule Chinook.

| LCR Natural Tule Fishery Impact (Total Marine and Freshwater Exploitation Rate) |                        |                      |                                   |
|---|------------------------|----------------------|-----------------------------------|
| Year  | Conservation Objective | Preseason Projection | Postseason Estimate <sup>a/</sup> |
| 2002  | ≤0.49                  | 0.45                 | -                                 |
| 2003  | ≤0.49                  | 0.47                 | 0.39                              |
| 2004  | ≤0.49                  | 0.46                 | 0.44                              |
| 2005  | ≤0.49                  | 0.44                 | 0.52                              |
| 2006  | ≤0.49                  | 0.47                 | 0.45                              |
| 2007  | ≤0.42                  | 0.42                 | 0.48                              |
| 2008  | ≤0.41                  | 0.36                 | 0.38                              |
| 2009  | ≤0.38                  | 0.38                 | 0.39                              |
| 2010  | ≤0.38                  | 0.38                 | 0.36                              |
| 2011  | ≤0.37                  | 0.37                 | 0.42                              |
| 2012  | ≤0.41                  | 0.41                 | 0.43                              |
| 2013  | ≤0.41                  | 0.41                 | 0.33                              |
| 2014  | ≤0.41                  | 0.41                 | 0.45                              |
| 2015  | ≤0.41                  | 0.40                 | 0.36                              |
| 2016  | ≤0.41                  | 0.38                 | 0.38                              |
| 2017 <sup>b/</sup>  | ≤0.41                  | 0.37                 | 0.36                              |
| 2018  | ≤0.38                  | 0.38                 | NA                                |

a/ Post season estimates for 2003-16 are from FRAM validation runs completed in Oct 2018.

b/ Postseason estimates preliminary.

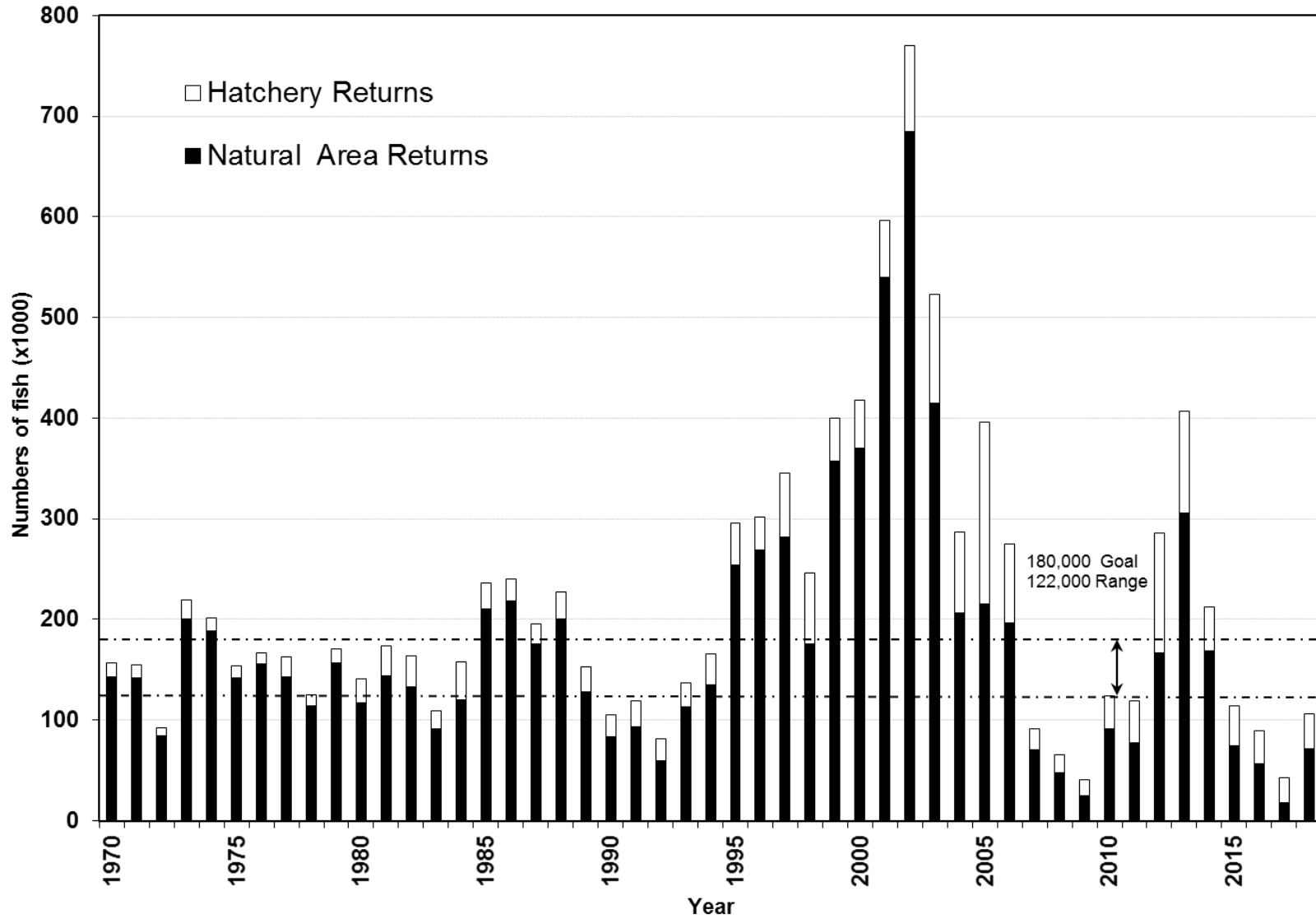


Figure II-1. Sacramento River adult fall Chinook spawning escapement, 1970-2018.

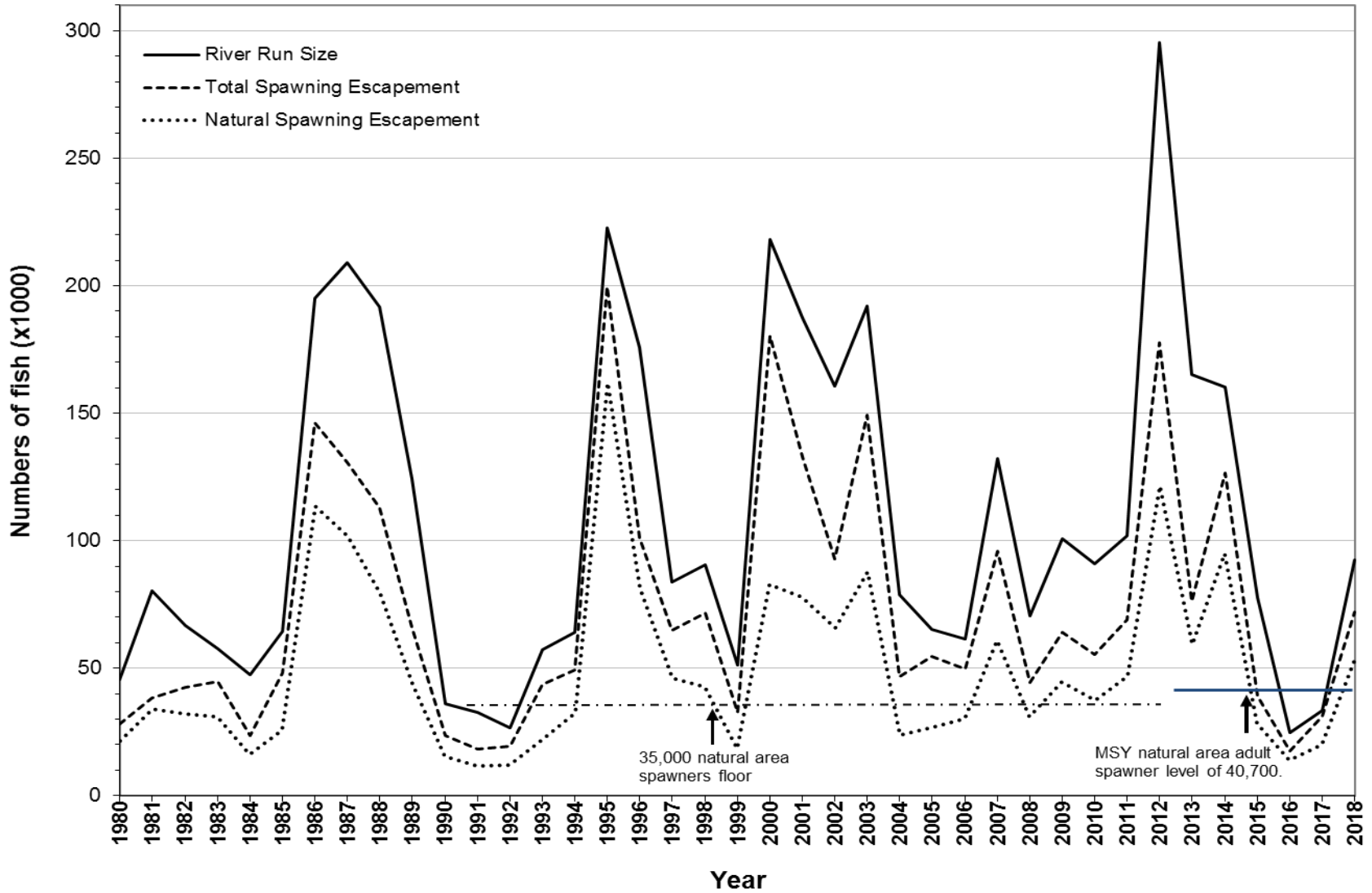


Figure II-2. Klamath River adult fall Chinook returns and spawning escapement, 1978-2018.

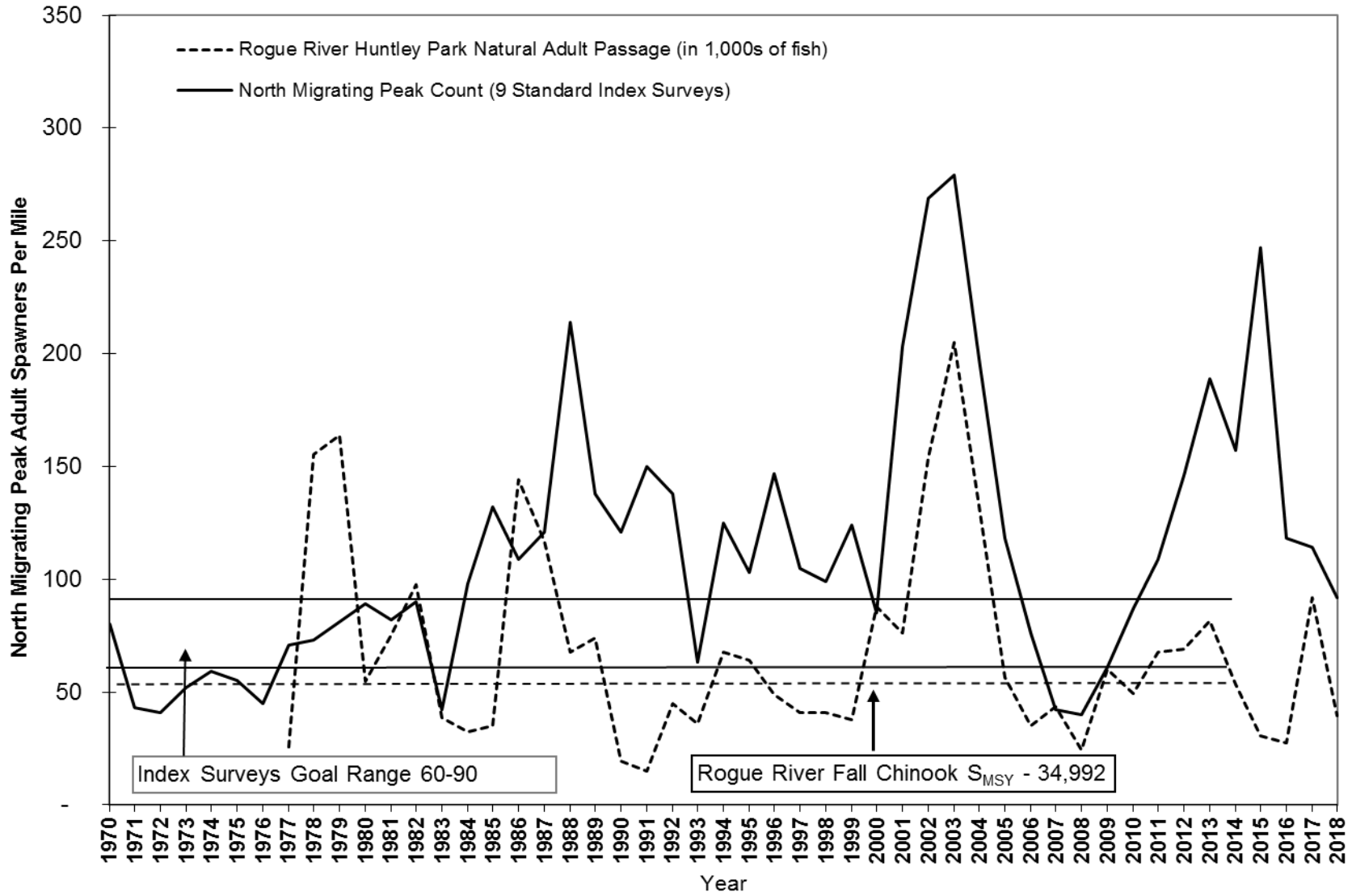


Figure II-3. Spawner indices for naturally produced Oregon coastal fall Chinook, 1961-2018.

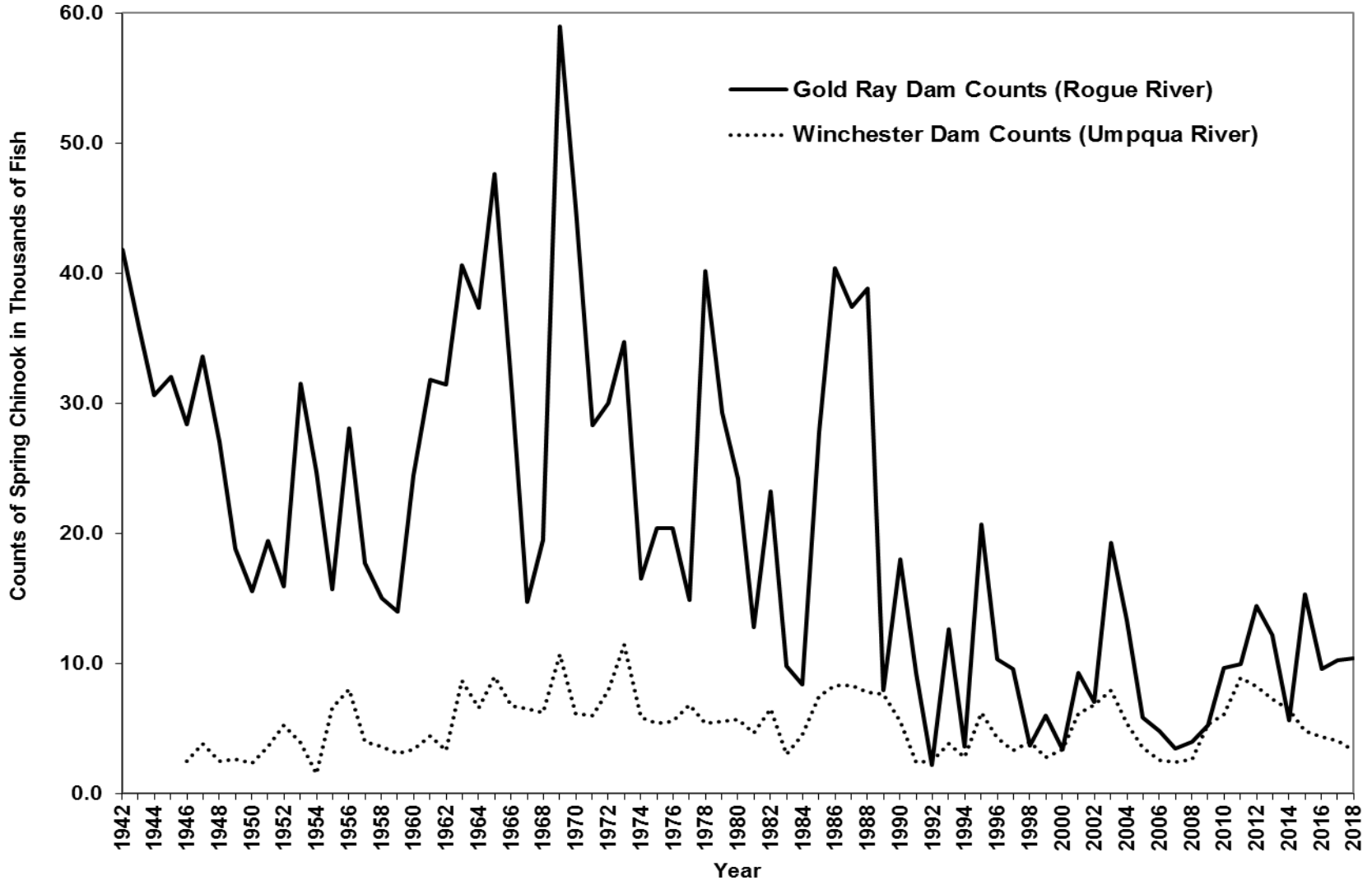


Figure II-4. Escapement indices for naturally produced Oregon coastal south/local migrating spring Chinook, 1942-2018.



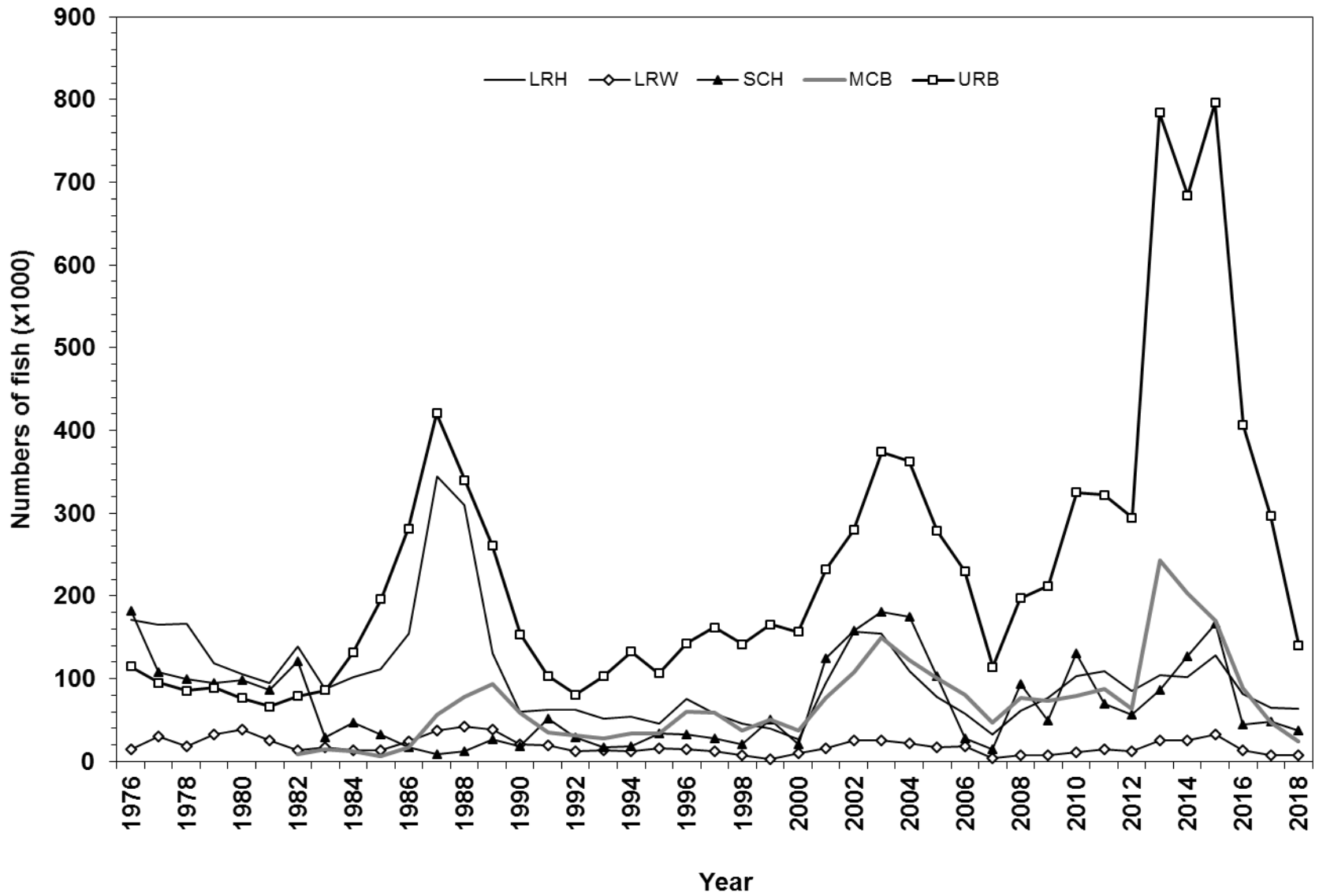


Figure II-5. Columbia River mouth adult returns of the five major fall Chinook stock groups, 1976-2018.

## CHAPTER III

### COHO SALMON MANAGEMENT

#### OREGON PRODUCTION INDEX AREA COHO STOCKS

Oregon Production Index (OPI) area coho stocks include all Washington, Oregon, and California natural and hatchery stocks from streams south of Leadbetter Point, Washington, although stocks produced north of Leadbetter Point are also intercepted in the OPI area. The largest naturally produced coho stock is OCN coho, which includes coho produced from Oregon river and lake systems south of the Columbia River. OCN coho are managed as a stock aggregate with four identified components. Prior to 2000, NMFS listed three coho ESUs within the OPI area as threatened: CCC coho listed October 1996, SONCC coho listed May 1997, and OCN coho listed August 1998. In 2002, NMFS began an update of all its listing determinations and in January 2006 concluded that the OCN ESU did not warrant listing under the ESA. That determination was overruled by a U.S. Court decision in 2007, and subsequently relisted by NMFS as threatened in February 2008. Lower Columbia River natural (LCN) coho were listed as endangered under the Oregon State ESA in 2002, and as threatened under the Federal ESA on June 28, 2005. The primary OPI hatchery stocks include a south migrating Columbia River (early) stock, a north migrating Columbia River (late) stock, public hatchery coho from the Oregon and northern California Coast, and formerly a small cooperative program along the southern Oregon Coast known as the Salmon Trout Enhancement Program (STEP), which was discontinued after the 2004 brood releases.

#### *Management Objectives*

In establishing ocean salmon fisheries that impact OPI area coho stocks, the Council was guided by the reasonable and prudent alternatives of NMFS 1999 Supplemental Biological Opinion and Incidental Take Statement for CCC and SONCC coho, and the March 2018 NMFS ESA guidance letter for LCN and OCN coho, which required:

1. No directed coho fisheries or retention of coho in all commercial and recreational fisheries off California to protect endangered CCC coho.
2. Marine fishery impacts on endangered CCC and threatened SONCC coho must be no more than 13.0 percent as indicated by projected impacts on RK hatchery coho.
3. Fishery impacts on threatened LCN coho must not exceed a coastwide marine and mainstem Columbia River exploitation rate of 18.0 percent.
4. Fishery impacts on threatened OCN coho must not exceed a coastwide marine and freshwater exploitation rate of 15.0 percent.

Based on parent escapement levels and the marine survival, the total allowable OCN coho exploitation rate for 2018 fisheries was no greater than 15.0 percent under the Salmon FMP (Amendment 13) and no greater than 15.0 percent under the matrix developed by the OCN Coho Work Group during their review of Amendment 13. The work group recommendation was accepted by the Council as expert biological advice in November 2000. A modification to the marine survival index in the matrix was adopted by the Council in 2013.

The Council was also guided by a treaty Indian/non-Indian sharing agreement for Columbia upriver coho stocks, which required passage of 50 percent of the run destined for areas above Bonneville Dam.

## **Regulations to Achieve Objectives**

Historically, OPI area coho stocks contributed primarily to ocean fisheries off Oregon and northern California and, to a lesser degree, Washington and B.C. The Council has prohibited retention of coho in all fisheries south of the Oregon/California border since 1996. For the adopted seasons, the STT projected exploitation rates of 5.5 percent for RK coho in marine fisheries, 12.9 percent for OCN coho in marine and freshwater fisheries combined, and 16.2 percent for LCN coho in marine and freshwater fisheries combined.

Total allowable harvest set preseason for the north of Cape Falcon recreational fisheries for coho in 2018 was 42,000, the same as the quota in 2017. For the non-Indian commercial and treaty Indian fisheries the allowable harvest set preseason was 5,600 and 12,500, respectively, the same as 2017. Season and size limit details are presented in Tables I-1, I-2, and I-3.

### *Commercial Troll*

Commercial troll fisheries have been closed to coho retention south of Cape Falcon since 1993 with the exception of limited fisheries in 2007, 2009, and 2014.

Non-Indian commercial troll fisheries from Cape Falcon to the U.S./Canada border in 2018 had an overall quota of 4,600 coho, adjusted from the preseason quota of 5,600 following an in-season quota transfer to the recreational fishery (Table I-1). The fisheries were restricted to mark-selective retention of coho.

All species treaty Indian fisheries north of Cape Falcon were not restricted to mark-selective retention of coho, and operated on an overall quota of 12,500 coho (Table I-2).

### *Recreational*

From 1994 through 1998, coho retention was prohibited in Oregon recreational fisheries south of Cape Falcon. Retention of coho has been prohibited off California since 1996 to protect ESA-listed CCC coho. Mark-selective coho directed ocean recreational fisheries have been implemented in the OPI area since 1998. Limited non-mark-selective recreational ocean coho fisheries have occurred in recent years; 2004 between Leadbetter Point and the Queets River and since 2011 between Cape Falcon and Humbug Mountain. In 2012, 2013, and 2015 non-mark-selective fisheries occurred between the Queets River and Cape Falcon, and in 2014, non-mark-selective fisheries occurred in all areas from the U.S.-Canada border to Humbug Mountain. Adequate abundance of marked coho in the OPI area has resulted in allowable harvests of marked coho in Oregon and Washington within constraints for OCN and LCN coho.

In 2018, the recreational coho fisheries north of Cape Falcon operated with a quota of 43,000 (Table I-3) adjusted from the preseason quota of 42,000 following an in-season quota transfer from the non-Indian commercial troll fishery (Table I-3). The recreational fishery between Cape Falcon and Humbug Mountain operated with a mark-selective quota of 38,500. After inseason adjustments, a non-mark-selective fishery with a quota of 7,600 occurred in September between Cape Falcon and Humbug Mountain (Table I-3).

### *Inside Harvest*

Coho retention in all California fisheries was prohibited.

The 2018 inside recreational harvest of coho in Oregon coastal basins, as in recent years, was very restricted and generally limited to areas where abundant naturally-produced or hatchery coho returns were expected. Estimates of the 2018 inriver recreational coho harvest for most areas were not available. Historical estimates of the recreational harvest of adult coho in Oregon coastal estuaries and rivers, derived from ODFW salmon and steelhead angler catch record cards, are reported in Table III-1.

Limited recreational fisheries for naturally-produced coho (non-mark-selective) were approved in three lake systems in 2018. The preliminary total catch estimate for these fisheries was 70 coho.

The 2018 Columbia River non-Indian commercial net fishery harvested 11,400 adult coho. Select Area fisheries in both Oregon and Washington accounted for 11,100 of the total 2018 Columbia River commercial coho catch. The Columbia River treaty Indian mainstem commercial gillnet coho catch was approximately 3,600. Columbia River commercial coho fisheries were non-mark-selective in 2018. Coho harvest information for Columbia River commercial and recreational fisheries are presented in Appendix B, Table B-21.

The Buoy 10 and mainstem recreational fisheries below Bonneville Dam harvested 6,800 adult coho compared to 18,800 adult coho in 2017. All Columbia River recreational fisheries in 2018 were mark-selective for coho. In 2018, Columbia River managers opened the Buoy 10 fishery August 1 for marked coho, with a one fish daily-bag-limit. From August 25 through September 12 the daily-bag-limit was two fish, Chinook retention prohibited. Beginning September 13 coho retention was prohibited. Barbless hooks were required in these fisheries. The upriver boundary for the fishery was at the Tongue Point, Oregon to Rocky Point, Washington line. The 2018 Buoy 10 effort totaled 67,318 angler trips (Table III-2). Historical Buoy 10 catch and effort data are provided in Appendix B, Table B-22. Recreational coho harvest estimates for Columbia River tributaries downstream of Bonneville Dam are included with mainstem harvest in Appendix B, Table B-21.

### *Escapement and Management Performance*

The overall abundance estimate for OPI area stocks in 2018 was 232,400 compared to 355,400 in 2017, and to the recent ten-year average of 735,300 (Table III-3; Figure III-1). All Council area coho fisheries and quota limits are included in Table I-6.

### **Central California Coast and Northern California Coho**

For CCC coho, redd counts have been made for the Lagunitas Creek basin since 1995. In 2018, 267 redds were counted and are reported in Table B-7. However, the spawning season for this watershed may not be complete and the final redd count will likely change. Estimates were available for escapement to Klamath River Basin hatcheries, but not for coho spawning in natural areas. In 2018, a total of 546 adult coho returned to Trinity River Hatchery and 136 adult coho returned to Iron Gate Hatchery.

### **Oregon Coast Natural Coho**

The preliminary estimate of natural spawner escapement in 2018 to Oregon coastal river and lake systems from the Sixes River north (Oregon Coast ESU) was 71,100 adult coho. This compares to 61,400 adults in 2017. Historical spawner escapement estimates of naturally produced coho are reported in Table III-1.

Preliminary information indicates the total natural spawning population on the Oregon Coast was the third lowest since 1999. The total estimate of the natural spawning population in 2018 was 79,400, including estimates from the Rogue River, which is part of the SONCC ESU (Table III-4, Figure III-2).

Preliminary postseason estimates of combined marine and freshwater exploitation on OCN coho is 12.7 percent, which is slightly lower than the preseason projection of 12.9 percent, and less than the 15.0 percent maximum allowed under the OCN work group matrix.

Preliminary postseason estimates of marine exploitation on RK coho is 3.0 percent, which is lower than the preseason projection of 5.5 percent, and less than the 13.0 percent maximum ESA consultation standard.

## Oregon Coastal Hatchery Coho

The preliminary estimate of total coho returns to Oregon coastal public hatcheries was 1,100 adults (Table III-1).

## Columbia River Coho

The 2018 ocean escapement of adult early and late Columbia River coho stocks was 138,400 fish, compared to 235,600 adults in 2017 (Appendix B, Table B-21).

Preliminary postseason estimates of marine exploitation on LCN coho was 9.4 percent, which is less than the preseason projected 9.9 percent. The total exploitation rate (marine and freshwater), was estimated at 14.6 percent, well within the 18.0 percent allowed (Table III-5).

## WASHINGTON COASTAL COHO STOCKS

Washington coastal coho stocks include all natural and hatchery stocks originating in Washington coastal streams north of the Columbia River to the western Strait of Juan de Fuca (west of the Sekiu River). The stocks in this group most pertinent to ocean salmon fishery management were Willapa Bay (hatchery), Grays Harbor, Quinalt (hatchery), Queets, Hoh, and Quillayute coho. Those stocks contribute primarily to ocean fisheries off Washington and B.C.

### *Management Objectives*

Preseason Management goals in 2018 for Grays Harbor and Olympic Peninsula coho stocks included achieving natural spawning escapement objectives and treaty Indian allocation requirements. The Council's preseason conservation objectives for stocks managed for natural production were based on maximum sustainable yield (MSY) spawner escapements established pursuant to the U.S. District Court order in *Hoh v. Baldrige*. The conservation objectives for the Queets, Hoh, and Quillayute rivers were developed as ranges intended to bracket estimates of MSY escapement. The range reflected the inherent uncertainty by using the high estimate of recruits-per-spawner and the low estimate of carrying capacity for the lower bound, and the low estimate of recruits-per-spawner and the high estimate of smolt carrying capacity for the upper end of the range. The ranges were further adjusted upward by 26 to 184 percent for risk aversion and habitat considerations. Annual targets for natural spawning escapement and total escapement were established by WDFW and treaty Indian tribes under the provisions of *U.S. v. Washington* and subsequent U.S. District Court orders. After an annual agreement was reached, ocean fishery escapement objectives were established for each river or region of origin. Agreements included provisions for treaty Indian allocation requirements and inside non-Indian fishery needs. In 2018, the co-managers agreed to spawning escapement objectives of 5,629 Queets River wild coho and 33,691 Grays Harbor wild coho. No other agreements on annual spawning targets for Washington coastal coho other than those in the FMP in place during the preseason process were made in 2018.

In December 2011, Amendment 16 to the FMP was approved, which established new conservation objectives and SDC for Washington coastal coho based on either  $S_{MSY}$  estimates derived from FRAM run reconstruction programs or existing conservation objectives.

### **Regulations to Achieve Objectives**

Washington coastal coho stocks played a primary role in 2018 Council-area ocean fishery management, particularly north of Cape Falcon, due to low run size predictions. Overall harvest quotas were limited to levels well below those of the late 1980s and early 1990s. All ocean coho fisheries both north and south of Cape Falcon were mark-selective except for a September recreational coho fishery south of Cape Falcon. Season and size limit details are presented in Tables I-1, I-2, and I-3.

## *Willapa Bay Coho*

### **Inside Harvest**

Historical terminal run size, harvest, and escapement data for Willapa Bay coho are presented in Appendix B, Table B-24. The 2018 gillnet coho harvest in Willapa Bay totaled 7,253 fish. Based on the preseason forecast for a terminal run of 53,987 fish, the scheduled commercial fisheries were expected to harvest approximately 6,951 total coho. There were 24 12-hour Chinook and coho directed non-Indian gillnet fishery openings September 4 through October 10, 2018. Retention of both marked and unmarked coho was allowed. Unmarked Chinook retention was prohibited. Non-directed openings were scheduled November 1 through November 30, 2018.

From July 1, 2018, through July 31, 2018, Willapa Bay (Marine Area 2-1) was open for recreational fishing concurrent with the Ocean Marine Area 2 (ocean rules applied). From August 1, 2018 through January 31, 2019, Willapa Bay was open to recreational fishing with a daily-bag-limit of 6 salmon, no more than 3 adults allowed to be harvested each day; only one may be a coho and anglers were required to release unmarked Chinook.

Beginning September 22, 2018, a bay wide (commercial, marine, and freshwater) closure to salmon fishing was enacted. Beginning September 27, 2018, Willapa Bay Marine Area 2.1 and the Willapa Bay Control Zone reopened. The daily bag limit was reduced to 2 adult salmon and anglers were required to release all Chinook (marked and unmarked). Barbless hooks were required when fishing for salmon. Anglers were allowed to fish with two poles if they had a Two-Pole Endorsement. Expected harvest in all recreational fisheries based on preseason forecast abundance was 5,073 hatchery and wild coho. Marine and freshwater recreational harvest estimates were unavailable for 2018, but for 2017, Marine Area 2-1 and freshwater recreational harvest estimates totaled 3,203 fish.

Freshwater recreational fisheries in the Willapa Bay watersheds varied in duration, but were generally open for salmon fishing as early as August 1, 2018, through January 31, 2019 with a daily-bag-limit of 6 salmon and no more than 4 adults. Beginning September 22, 2018, a bay wide (commercial, marine, and freshwater) closure to salmon fishing was enacted. Beginning October 1, 2018, freshwater tributaries were re-opened and regulations were modified via emergency regulation to a total of 2 adult salmon and no more than 1 adult may be a wild Coho for all systems except Naselle River, which remained closed. Retention of all Chinook (marked or unmarked) was prohibited. Naselle River re-opened October 16, 2018 under the same modified rules. Single-point barbless hooks were required in all areas except Naselle, South Fork Willapa, and Bear rivers, where only barbless hooks were required

### **Escapement and Management Performance**

Willapa Bay coho were managed primarily for natural production. Estimates of natural spawning escapement for 2018 were unavailable. The most recent but still preliminary natural escapement estimate available was 9,091 in 2017, which did not meet the FMP escapement objective of 17,200 natural spawners. Escapement to Willapa Bay hatcheries in 2017 was estimated at 10,006 coho, which met the WDFW escapement objective of 6,100 spawners.

The geometric mean of Willapa Bay coho natural spawning escapements in 2015, 2016, and 2017 is 13,537 which was above the MSST of 8,600; therefore, Willapa Bay coho should not be considered overfished. Estimates of Willapa Bay coho exploitation rates were not available for 2017 or 2018; however, fisheries in earlier years resulted in exploitation rates well below the MFMT (0.74); therefore, Willapa Bay coho should not be considered subject to overfishing (Table III-7).

## *Grays Harbor Coho*

### **Inside Harvest**

Historical terminal run size, harvest, and escapement data for Grays Harbor coho are presented in Appendix B, Table B-26. The 2017 terminal run size estimates for Grays Harbor coho, after execution of the ocean fishery, are 36,260 for natural origin fish and 36,646 for hatchery origin fish. Treaty Indian gillnet and non-Treaty fisheries (gillnet and sport) reported a harvest of 9,768 coho (natural, hatchery, and net-pen origin) in 2018. The Chehalis Tribe fisheries are still on going and are not available at this time. 2018 pre-terminal and Grays Harbor terminal fisheries were conducted with regulations designed to restrict coho harvest impacts.

The Quinault Indian Nation operated two separately scheduled gillnet fisheries for Chinook, coho, and chum in the area of the Lower Humptulips and in the area of the Lower Chehalis, as described in Chapter II under the section labeled Grays Harbor Chinook. The preseason expected coho fishery impacts were limited by the expected abundance and harvest of coho in the Lower Chehalis side of the fishery. The combined Grays Harbor Treaty coho harvest was 8,969.

The non-Indian gillnet fishery in Humptulips commercial Area 2C was scheduled to open for three 12-hour days in late October. Retention of all fall Chinook, coho, and chum was allowed. Total catch of coho in Area 2C was 19 fish, 10 percent of the expected harvest. The non-Indian gillnet fishery in the Chehalis River, commercial Areas 2A and 2D, was scheduled to open for five 12-hour days in late October and early November. During these fisheries, all areas of 2D were open. During all fisheries, live boxes were required and wild Chinook could not be retained. Total catch for areas 2A and 2D is 799 coho, 65 percent of the predicted harvest estimate.

Chehalis Tribe Chehalis River upper mainstem fisheries occurred in the fall of 2018. Harvest data are not available at this time.

Estimates of catch in recreational fisheries for 2018 were unavailable; however, fisheries were conducted in three general areas: Marine Area 2.2, the Chehalis River and its tributaries, and the Humptulips River.

A recreational fishery in the northern portion of Marine Area 2-2, Commercial Area 2C, was open from August 1 through September 15. During this time, 2 adult salmon could be retained, and wild coho must be released. From October 1 through November 30, the portion of Marine Area 2-2 east of a line from the mouth of Johns River to Brackenridge Bluff Tripod was open for the retention of 1 adult salmon per day. During this time wild Chinook must be released.

The Chehalis River and its tributaries were scheduled to open for coho fishing on the following dates and areas:

- Chehalis River mainstem downstream of the Hwy 107 Bridge: August 1 through September 15, 2018 with a daily limit of 6 and all adults must be released. October 1 through November 30: adult daily limit of one, and all Chinook must be released.
- Upstream of the Hwy 107 Bridge to the high bridge on Weyerhaeuser 1000 line approximately 400 yards downstream from Roger Creek and tributaries: October 1 through November 30, 2018 with a daily limit of 2 adults may be retained, Chinook and wild coho must be released.

The Humptulips River recreational fishery was scheduled to open for coho fishing on the following dates and areas, with a bag limit of 2 adult salmon daily.

- From the mouth to the confluence of the East and West forks: September 1 through November 30: a daily limit of 2 adults may be retained; wild Chinook and wild coho must be released.

### **Escapement and Management Performance**

Grays Harbor coho are managed by the co-managers for natural production with a spawning escapement goal of 35,400; which is above the FMP  $S_{MSY}$  of 24,426. A preliminary escapement estimate for 2017 natural spawning coho is 26,907. An estimate for 2018 Grays Harbor coho is not available. The preliminary 2017 terminal runsizes are estimated at 36,260 natural-origin coho and 36,646 hatchery-origin coho. The returns of hatchery-origin coho to Grays Harbor hatchery programs were sufficient to provide for 2018 coho production goals. The 2018 escapement has not been determined, but 436 natural origin fish were taken for hatchery broodstock.

The geometric mean of Grays Harbor coho natural spawning escapements in 2015, 2016, and 2017 is 28,061, which is above the MSST of 18,320; therefore, Grays Harbor coho should not be considered overfished. Estimates of Grays Harbor coho exploitation rates were not available for 2017 or 2018; however, fisheries in earlier years resulted in exploitation rates well below the MFMT (0.65); therefore, Grays Harbor coho should not be considered subject to overfishing (Table III-7).

### *Quinault River Coho*

#### **Inside Harvest**

Historical terminal run size, harvest, and escapement for Quinault River coho are presented in Appendix B, Table B-28. The treaty Indian gillnet fishery targeted hatchery Chinook and coho from early September through mid-November. A total of 12,051 coho were harvested by the gillnet fishery during the 2018 season.

### **Escapement and Management Performance**

Quinault River coho were managed for hatchery production. Escapement estimates for Quinault River coho in 2018 were unavailable. The Quinault National Fish Hatchery egg take objectives for 2017 were achieved.

### *Queets River Coho*

#### **Inside Harvest**

Historical terminal run size, harvest, and escapement for Queets River coho are presented in Appendix B, Table B-31. Queets River fisheries were managed according to preseason abundance estimates and planned Council ocean fisheries. The 2018 fishery was structured to target returning hatchery coho while limiting incidental impacts on natural coho, which were also limiting to marine harvest coast-wide, and limiting total freshwater Chinook harvest to a maximum rate of 40 percent. The schedule and mesh size restrictions fished in 2018 are depicted in the discussion of the Chinook directed fishery. The total harvest of coho in the Treaty Indian gillnet fishery was 3,308 commercially-landed fish, which was less than the preseason modeled catch of 5,501. The gillnet harvest was comprised of a mix of early-timed hatchery fish and normal/late-timed natural fish. A final estimate of the hatchery/natural mix in the catch is currently unavailable.

The recreational fishery within the Quinault Reservation was conducted from August 26 through December 1 with a restriction on the harvest of unmarked coho. Only coho with an adipose clip were permitted to be retained in the Queets and Salmon River fisheries on the Reservation.



Recreational fisheries outside of reservation lands were restricted. The Queets, Clearwater, and Salmon rivers outside the Quinault reservation were open only in September for salmon fishing to focus the fishery on early timed hatchery coho. Anglers were required to release wild coho.

### **Escapement and Management Performance**

A preliminary 2018 spawning escapement estimate for coho in the Queets River is not available. The preseason expected natural coho escapement in 2018 was 5,629. Actual escapement is anticipated to be below the preseason expectation. For 2018, the comanagers agreed to a spawning escapement objective of 5,629 which is below the range of 5,800-14,500 natural adult spawners in the FMP. For the most recent year available, the 2017 natural escapement estimate was 5,232. The Quinault Indian Nation closed their fisheries as planned during weeks 42 and 43 as well as weeks 46 and 47 of the 2018 fishery, and established large mesh restriction during weeks 41, 44 and 45 due to the low expected return of wild coho. Off reservation non-treaty sport fisheries were limited to only take place in September as planned, due to the low expected return of wild coho.

Estimates of Queets River coho exploitation rates were not available for 2017 or 2018; however, fisheries in earlier years resulted in exploitation rates well below the MFMT (0.65); therefore, Queets River coho should not be considered subject to overfishing. The geometric mean of Queets River coho escapement in 2015, 2016, and 2017 was 3,796, which was below the MSST of 4,350. In June 2018, NMFS' published an overfished designation for Queets River coho based on the geometric mean of escapement in 2014-16 of 4,291. The development of a rebuilding plan is underway, therefore no additional action is warranted. (Table III-7).

### *Hoh River Coho*

#### **Inside Harvest**

Historical terminal run size, catch, and escapement data for Hoh River coho are presented in Appendix B, Table B-34. The 2018 terminal run size of Hoh River natural coho was projected to be 5,158. The tribal fishery targeted 33.8 percent of the terminal run. The treaty Indian gillnet fishery occurred from the week of September 10 to the week of December 31 (which included Stat Weeks 49-52 of steelhead management), as described in Chapter II under the section labeled Hoh River Chinook. The Tribal commercial fishery harvested total was 560 wild coho. The non-Indian recreational fishery was open September 16 with a daily-bag-limit of 6 salmon, only 1 of which could be an adult. A catch estimate for the 2018 recreational fishery of wild coho was not available.

### **Escapement and Management Performance**

The preliminary 2018 spawning escapement estimate for coho in the Hoh River is not available. The escapement goal range established for this stock is 2,000 to 5,000.

The geometric mean of Hoh River coho escapement in 2015, 2016, and 2017 was 3,427, which was above the MSST of 1,890, therefore Hoh River coho should not be considered overfished. Estimates of Hoh River coho exploitation rates were not available for 2017 or 2018. However, fisheries in 2016 resulted in an exploitation rate well below the MFMT (0.65), therefore, Hoh River coho should not be considered subject to overfishing (Table III-7).

### *Quillayute River Coho*

#### **Inside Harvest**

Historical terminal run size, catch, and escapement data for Quillayute River summer and fall coho are presented in Appendix B, Table B-37. The recreational and tribal fisheries for coho were established by

preseason agreement between WDFW and the Quileute Tribe. A total of 1,721 summer coho were harvested in the Quileute Tribe's commercial, ceremonial, and subsistence fisheries (hatchery = 933, wild = 788). An estimated 91 hatchery summer coho were caught in the 2018 recreational fishery.

Both the treaty and non-treaty fall fisheries were reduced from previous years for conservation reasons. The Quileute Tribe greatly reduced their fall IGN fishery, restricting it from October 1 through November 12 to only half a day per week, only one set net per fisher, and that net not to exceed 25 meters in length, and strung with no smaller than 7 3/4" monofilament mesh. Tribal harvest of fall coho in 2018 was 3,831 (hatchery = 1,871, wild = 1,960). Fall coho taken in the ceremonial and subsistence fishery are included in the IGN catch. The fall recreational fishery in the Quillayute system's Bogachiel, Calawah, and Dickey rivers allowed for the harvest of one adult salmon and 3 jacks per day, and required the release of wild coho everywhere but in the lower Bogachiel, where the one adult salmon limit could be a wild coho. The daily limit in the Quillayute and Sol Duc rivers required the release of wild coho, but allowed up to 3 adult salmon, only one of which could be a Chinook, because of the availability of hatchery coho returning to the Sol Duc hatchery. The recreational catch is estimated at 677 wild fall coho and 1,295 hatchery fall coho.

### **Escapement and Management Performance**

The summer coho run in the Quillayute is managed primarily for its hatchery component, which returns in August and September. The 2018 summer coho hatchery rack return was 624, above the goal of 300. The 2018 wild summer coho escapement estimate was 250.

The geometric mean of natural Quillayute fall coho escapement in 2016, 2017 and 2018 was 7,187, which was above the MSST of 6,300; therefore Quillayute fall coho should not be considered overfished. Sol Duc Hatchery rack return for fall coho was 9,762 adults and 1,604 jacks. Estimates of Quillayute fall coho exploitation rates were not available for 2017 or 2018; however, fisheries in 2014, 2015 and 2016 resulted in exploitation rates of 0.58, 0.48 and 0.18, respectively, compared to the MFMT of 0.59; therefore, Quillayute Fall coho were not subject to overfishing in 2016 (Table III-7).

### **PUGET SOUND COHO STOCKS**

Puget Sound coho salmon stocks include natural and hatchery stocks originating from U.S. tributaries in Puget Sound and the Strait of Juan de Fuca. The primary stocks in this group that are most pertinent to ocean salmon fishery management were Strait of Juan de Fuca, Hood Canal, Skagit, Stillaguamish, Snohomish, and South Puget Sound (hatchery) coho. Those stocks contribute primarily to ocean fisheries off Washington and B.C.

#### *Management Objectives*

The Council's previous conservation objectives were based on the Puget Sound Salmon Management Plan, which defined management objectives and long-term goals for these stocks as developed by representatives from Federal, state, and tribal agencies. Conservation objectives for specific stocks were based on either maximum sustainable production for stocks managed primarily for natural production or on hatchery escapement needs for stocks managed for artificial production. The original conservation objectives were developed by a State/Tribal Management Plan Development Team following the Boldt Decision with the goal for natural spawning stocks defined as "the adult spawning population that will, on the average, maximize biomass of juvenile outmigrants subsequent to incubation and freshwater rearing under average environmental conditions." The methodology used to develop the objectives was based on assessment of the quantity and quality of rearing habitat and the number of adult spawners required to fully seed the habitat. Some objectives were subsequently modified by the U.S. District Court Fisheries Advisory Board and later determinations of the WDFW/Tribal Technical Committee. However, annual natural management objectives may vary from the FMP conservation objectives if agreed to by WDFW and the treaty Indian

tribes under the provisions of *U.S. v. Washington* and subsequent U.S. District Court orders (see "Memorandum Adopting Salmon Management Plan"; *U.S. v. Washington*, 626 F. Supp. 1405 [1985]).

The PSC adopted a management plan for coho salmon originating in Washington and southern B.C. river systems in 2002. The plan was directed at the conservation of key management units, four from Southern B.C. (Interior Fraser, Lower Fraser, Strait of Georgia Mainland, Strait of Georgia Vancouver Island) and nine from Washington (Skagit, Stillaguamish, Snohomish, Hood Canal, Strait of Juan de Fuca, Quillayute, Hoh, Queets, and Grays Harbor). Under the plan, the U.S. and Canada were required to constrain total fishery exploitation rates to levels associated with the categorical status and target exploitation rates of the key management units as determined by domestic managers. Ceilings on exploitation rates by intercepting fisheries were established through formulas specified in the plan. Categorical status was employed by the PST under the 2002 coho Agreement to indicate general ranges of allowable total exploitation rates for U.S. and Canadian coho management units in 2018. Three categories were employed: low (total exploitation rate <20 percent), moderate (total exploitation rate 20-40 percent), and abundant (total exploitation rate >40 percent).

In 2014, the Council adopted management objectives for Puget Sound coho as recommended by WDFW and tribal co-managers under provisions of *U.S. v. Washington*. The annual objectives were based on the Comprehensive Coho Agreement categorical status and associated maximum exploitation rate limits. The Council formally adopted exploitation rate management objectives for Puget Sound coho in November 2009, which were generally consistent with PSC objectives, and replaced the longstanding FMP spawning escapement objectives in 2010. For 2018, the objectives and categorical status under the PST Southern Coho Management Plan were as follows:

- Strait of Juan de Fuca (East and West): Low status 20 percent maximum exploitation rate
- Hood Canal: Abundant status 65 percent maximum exploitation rate
- Skagit: Moderate status 35 percent maximum exploitation rate
- Stillaguamish: Moderate status 35 percent maximum exploitation rate
- Snohomish: Moderate status 40 percent maximum exploitation rate

### **Regulations to Achieve Objectives**

Puget Sound coho stocks did not play a primary role in 2018 ocean fishery management considerations, since management of impacts to Washington coastal natural coho and LCN coho were more constraining. Inside fisheries, primarily in Puget Sound, were constrained to meet objectives for Puget Sound coho. The mark-selective regulations in ocean and Puget Sound recreational fisheries served to increase harvest of marked hatchery fish while minimizing impacts on natural Washington Coast coho, Puget Sound coho, LCN coho, OCN coho, and Interior Fraser coho. Season and size limit details are presented in Tables I-1, I-2, and I-3.

#### *Inside Harvest*

Inside harvest of Puget Sound coho was managed on the basis of the six regional management units. Harvest of coho for each management unit is regulated according to the natural spawning escapement or hatchery program escapement goal for that unit. Commercial net and troll harvest (treaty Indian and non-Indian) for all coho stocks combined is presented in Appendix B, Table B-39. The 2018 total Puget Sound commercial catch of coho was 250,402 fish, compared to a catch of 203,241 coho in 2017. Non-Indian harvest was 9,645 coho, compared to 11,763 coho in 2017. Treaty Indian net and troll fisheries harvested 240,757 coho, compared to 191,478 coho in 2017.

Historical coho catches in the Puget Sound recreational fishery beginning in 1971 are listed in Appendix B, Table B-40. Catch estimates for the 2018 Puget Sound recreational fishery were unavailable.

### *Escapement and Management Performance*

Puget Sound FMP conservation objectives were updated to reflect exploitation rate management objectives adopted by the Council in 2009. No 2018 postseason estimates were available for SUS harvest impacts on Puget Sound coho stocks; therefore, the 2018 preseason exploitation rate objectives could not be evaluated, although none of the Puget Sound coho management units have exceeded their annual exploitation rate limits in recent years. Preliminary 2018 escapement information was not available for natural Puget Sound coho.

The geometric mean of Strait of Juan de Fuca coho escapement (combined Western and Eastern; the current stock designation) in 2015, 2016, and 2017 was 5,646, which was below the MSST of 7,000 identified in FMP Amendment 16 and below the  $S_{MSY}$  estimate of 11,000. In June 2018, NMFS' published an overfished designation for Strait of Juan de Fuca coho based on the geometric mean of escapement in 2014-16 of 6,842. The development of a rebuilding plan is underway, therefore no additional action is warranted. Estimates of Strait of Juan de Fuca coho exploitation rates were not available for 2017 or 2018; however, fisheries in earlier years resulted in exploitation rates well below the MFMT (0.60); therefore, Strait of Juan de Fuca coho should not be considered subject to overfishing (Table III-7).

The geometric mean of Hood Canal coho escapement in 2015, 2016, and 2017 was 24,520, which was above the MSST of 10,750; therefore, Hood Canal coho should not be considered overfished. Estimates of Hood Canal coho exploitation rates were not available for 2017 or 2018; however, fisheries in 2014 resulted in an exploitation rate above the MFMT (0.65); and below the MFMT in 2015 and 2016; therefore, Hood Canal coho were subject to overfishing in 2014 (Table III-7).

The geometric mean of Skagit coho escapement in 2015, 2016, and 2017 was 16,121, which was above the MSST of 14,875; therefore, Skagit coho should not be considered overfished. Estimates of Skagit coho exploitation rates were not available for 2017 or 2018; however, fisheries in 2015 resulted in exploitation rates above the MFMT (0.60), and below the MFMT in 2014 and 2016; therefore, Skagit coho were subject to overfishing in 2016 (Table III-7).

The geometric mean of Stillaguamish coho escapement in 2015, 2016, and 2017 was 6,144, which was above the MSST of 6,100; therefore, Stillaguamish coho should not be considered overfished. Estimates of Stillaguamish coho exploitation rates were not available for 2017 or 2018; however, fisheries in earlier years resulted in exploitation rates below the MFMT (0.50); therefore, Stillaguamish coho should not be considered subject to overfishing (Table III-7).

The geometric mean of Snohomish coho escapement in 2015, 2016 and 2017 was 21,746, which was below the MSST of 31,000. In June 2018, NMFS' published an overfished designation for Snohomish coho based on the geometric mean of escapement in 2014-16 of 29,677. The development of a rebuilding plan is underway, therefore no additional action is warranted. Estimates of Snohomish coho exploitation rates were not available for 2017 or 2018; however, fisheries in earlier years resulted in exploitation rates below the MFMT (0.60); therefore, Snohomish coho should not be considered subject to overfishing (Table III-7).

## **BRITISH COLUMBIA COHO STOCKS**

### *Management Objectives*

B.C. coho stocks were managed under the PSC management plan as described in the previous section on Puget Sound coho.

## Regulations to Achieve Objectives

In the 2018 management process, Interior Fraser coho were designated to be in the “low” status category, which required the total exploitation rate in SUS fisheries not to exceed 10.0 percent. This requirement was not a constraint for Council area and inside fisheries. The preseason expectation was that the total SUS fishery exploitation rate on Interior Fraser coho would not exceed 10.0 percent (2.0 percent in Council area fisheries). The mark-selective regulations in ocean and Puget Sound recreational fisheries served to increase harvest of marked hatchery fish while minimizing impacts on natural Interior Fraser coho

### *Inside Harvest*

Harvest of coho in inside waters affecting B.C. coho stocks occurred in Puget Sound fisheries, which were described in the previous section of this chapter.

### *Escapement and Management Performance*

Postseason estimates of SUS inside harvest impacts on coho stocks subject to the PSC coho management plan were unavailable.

## COASTWIDE GOAL ASSESSMENT SUMMARY

Preliminary assessment indicates that ESA consultation standards and FMP conservation objectives for Council managed coho stocks in effect during the preseason planning process of 2018 were met for Rogue/Klamath, OCN, and LCN coho stocks (Table III-6). The preliminary 2018 postseason escapement estimate for Quillayute fall coho is below the FMP conservation objective. 2018 data needed to assess compliance with FMP conservation objectives and ESA consultation standards for most other Washington coastal, and Puget Sound coho stocks was unavailable.

### *Stock Status Determinations*

The Council adopted SDC for overfishing, overfished, not overfished/rebuilding, and rebuilt under FMP Amendment 16. These criteria, approved and implemented in December 2011, were:

- Overfishing occurs when a single year exploitation rate exceeds the MFMT ( $F_{MSY}$ );
- Overfished status occurs when a 3-year geometric mean spawning escapement is less than the MSST;
- Not overfished/rebuilding status occurs when the most recent 3-year geometric mean spawning escapement is greater than the MSST but less than  $S_{MSY}$ ;
- A stock is rebuilt when the most recent 3-year geometric mean spawning escapement exceeds  $S_{MSY}$ .

All criteria rely on the most recent estimates available, which in some cases may be a year or more in the past because of incomplete broods or data availability. The above criteria for rebuilt status are the default criteria provided in the FMP; however, alternative criteria may be developed through a rebuilding plan if warranted by stock specific circumstances. All relevant stocks were evaluated relative to these new SDC as required by the FMP. Stock specific reference points and recent year estimates for relevant stocks are presented in Table III-7.

Based on these SDC, Queets coho, Strait of Juan de Fuca coho, and Snohomish coho continue to meet the criteria for overfished status (using the most recent data for these stocks from 2015, 2016, and 2017). In June 2018, NMFS published an overfished designation for these three coho stocks based on the geometric mean of escapement in 2014-16. The development of a rebuilding plan for each of these coho stocks is currently underway. Exploitation rate estimates for these stocks are not available for 2018. The most recent year where exploitation rates are available is 2016, and no stocks were subject to overfishing.

TABLE III-1. Estimated returns to Oregon coastal streams and lakes in thousands of adult coho.

| Year               | Returns to Hatcheries |        |                    | Winchester Dam                        | Number of OCN Spawners <sup>a/</sup> |        |       | Inside                           | Ocean                                       |
|--------------------|-----------------------|--------|--------------------|---------------------------------------|--------------------------------------|--------|-------|----------------------------------|---|
|                    | Private               | Public | STEP <sup>b/</sup> | Count <sup>c/</sup><br>(North Umpqua) | Lakes                                | Rivers | Total | Harvest<br>Impacts <sup>d/</sup> | Escapement to<br>Oregon Coast <sup>a/</sup> |
| 1970-75            | -                     | -      | -                  | -                                     | -                                    | -      | -     | -                                | -   |
| 1976-80            | 26.1                  | 19.0   | -                  | 0.4                                   | 4.0                                  | 26.6   | 30.6  | 9.1                              | 79.9  |
| 1981-85            | 176.8                 | 18.0   | -                  | 2.2                                   | 7.2                                  | 46.1   | 53.3  | 12.9                             | 263.2                                       |
| 1986-90            | 154.3                 | 26.9   | 1.3                | 3.6                                   | 6.2                                  | 37.1   | 43.3  | 15.2                             | 244.6                                       |
| 1991               | 35.1                  | 39.6   | 4.9                | 3.9                                   | 7.1                                  | 33.8   | 40.9  | 31.5                             | 155.8                                       |
| 1992               | -                     | 23.3   | 0.6                | 5.0                                   | 2.0                                  | 44.7   | 46.6  | 18.7                             | 94.3  |
| 1993               | -                     | 20.2   | 2.0                | 2.3                                   | 10.1                                 | 49.2   | 59.2  | 13.3                             | 97.1  |
| 1994               | -                     | 23.4   | 1.8                | 2.0                                   | 5.7                                  | 41.7   | 47.4  | 2.5                              | 77.1  |
| 1995               | -                     | 25.2   | 0.4                | 2.7                                   | 11.1                                 | 50.1   | 61.2  | 3.7                              | 93.2  |
| 1996               | -                     | 23.4   | 1.0                | 5.1                                   | 13.4                                 | 69.2   | 82.7  | 4.1                              | 116.4                                       |
| 1997               | -                     | 17.7   | 0.2                | 3.1                                   | 8.6                                  | 15.2   | 23.8  | 4.3                              | 49.2  |
| 1998               | -                     | 15.3   | 0.2                | 6.3                                   | 11.1                                 | 21.5   | 32.6  | 5.2                              | 59.7  |
| 1999               | -                     | 13.3   | 0.4                | 4.1                                   | 12.5                                 | 34.7   | 47.2  | 2.8                              | 67.9  |
| 2000               | -                     | 15.0   | 0.5                | 13.4                                  | 12.7                                 | 61.0   | 73.8  | 4.4                              | 107.1                                       |
| 2001               | -                     | 37.4   | 1.4                | 16.0                                  | 19.6                                 | 143.1  | 162.7 | 10.0                             | 227.6                                       |
| 2002               | -                     | 30.9   | 2.6                | 7.4                                   | 22.0                                 | 236.4  | 258.4 | 8.0                              | 307.3                                       |
| 2003               | -                     | 15.9   | 3.6                | 10.4                                  | 16.1                                 | 213.3  | 229.4 | 6.8                              | 266.2                                       |
| 2004               | -                     | 13.2   | 0.8                | 7.2                                   | 18.6                                 | 154.1  | 172.8 | 6.3                              | 200.3                                       |
| 2005               | -                     | 10.0   | 0.3                | 8.9                                   | 14.7                                 | 139.9  | 154.6 | 6.1                              | 179.9                                       |
| 2006               | -                     | 9.8    | 0.1                | 7.0                                   | 24.1                                 | 104.7  | 128.8 | 2.6                              | 148.4                                       |
| 2007               | -                     | 3.6    | 0.0                | 2.7                                   | 9.0                                  | 57.3   | 66.3  | 1.3                              | 73.9  |
| 2008               | -                     | 7.0    | 0.0                | 0.2                                   | 23.6                                 | 156.1  | 179.7 | 3.0                              | 189.9                                       |
| 2009               | -                     | 6.1    | 0.0                | 0.6                                   | 17.3                                 | 245.4  | 262.7 | 7.3                              | 276.8                                       |
| 2010               | -                     | 7.9    | 0.0                | 0.7                                   | 38.7                                 | 244.7  | 283.4 | 5.7                              | 297.6                                       |
| 2011               | -                     | 4.6    | 0.0                | 0.2                                   | 20.3                                 | 336.0  | 356.2 | 12.8                             | 373.8                                       |
| 2012               | -                     | 2.2    | 0.0                | 0.7                                   | 18.9                                 | 80.2   | 99.2  | 8.1                              | 110.1                                       |
| 2013               | -                     | 6.5    | 0.0                | 0.6                                   | 13.7                                 | 110.8  | 124.4 | 12.0                             | 143.5                                       |
| 2014               | -                     | 16.0   | 0.0                | 0.1                                   | 22.0                                 | 337.6  | 359.6 | 23.5                             | 399.2                                       |
| 2015               | -                     | 4.7    | 0.0                | 0.2                                   | 4.7                                  | 52.4   | 57.1  | 4.2                              | 66.2  |
| 2016               | -                     | 8.9    | 0.0                | 0.1                                   | 8.0                                  | 67.9   | 75.9  | 1.8                              | 86.7  |
| 2017               | -                     | 2.3    | 0.0                | 0.2                                   | 1.3                                  | 60.1   | 61.4  | 1.0                              | 64.9  |
| 2018 <sup>e/</sup> | -                     | 1.1    | 0.0                | 0.2                                   | 6.7                                  | 64.4   | 71.1  | 1.0                              | 73.5  |

a/ Does not include estimates for the Rogue River (SONCC ESU). Spawner escapements to rivers prior to 1990 were estimated by a nonrandom standard index of streams north of the Rogue River. A total coastwide spawner escapement methodology based on stratified random sampling (SRS) was initiated in 1990 and used through 1997 and was implemented concurrently with the standard index methodology. The SRS methodology indicated that actual escapements were less than estimated by the standard rivers index. The spawner index data for years prior to 1990 have been recalibrated in this table to be comparable with the SRS estimates. Since 1998 a random site selection procedure based on the EPA's Environmental Monitoring and Assessment Program (EMAP) has been used.

b/ Oregon coastal Salmon Trout Enhancement Program (STEP) production from hatchery smolt rearing sites only.

c/ Natural and hatchery fish prior to 1990, marked fish only thereafter.

d/ Freshwater sport catch from ODFW salmon/steelhead angler catch record card information and represents only those coho greater than 24 inches total length through 1993, and those coho with a total length greater than 20 inches from 1994 on. Includes estimated mortality from hook-and-release.

e/ Preliminary.

TABLE III-2. Estimated weekly effort (in angler trips) and catches of Chinook and coho in the 2018 Buoy 10 recreational fisheries (all data are preliminary).<sup>a/</sup>

| Week Number | Ending Date of Period | Angler Trips | Catch <sup>b/</sup> |       | Catch Per Trip |
|-------------|-----------------------|--------------|---------------------|-------|----------------|
|             |                       |              | Chinook             | Coho  |                |
| 31          | Aug.-5                | 3,567        | 601                 | 20    | 0.17           |
| 32          | Aug.-12               | 9,152        | 1,303               | 93    | 0.15           |
| 33          | Aug.-19               | 21,515       | 7,220               | 921   | 0.38           |
| 34          | Aug.-26               | 20,477       | 2,491               | 2,558 | 0.25           |
| 35          | Sept.-2               | 8,782        | 3                   | 2,567 | 0.29           |
| 36          | Sept.-9               | 3,433        | 2                   | 550   | 0.16           |
| 37          | Sept.-16              | 392          | 0                   | 52    | 0.13           |
| Total       |                       | 67,318       | 11,620              | 6,761 | 0.27           |

a/ Includes boat-based and shore-based fisheries from the upstream boundary at the Tongue Point/Rocky Point line (2000), downstream to the Buoy 10 line including Clatsop Spit, the South Jetty of the Columbia River. The North Jetty of the Columbia River was closed to access due to construction. Youngs Bay bubble closure in effect August 1 through September 15. Fishery opened August 1 for Chinook and marked coho, with a one fish daily-bag-limit. From August 25 through September 12 the daily-bag-limit was two fish, Chinook retention prohibited. Beginning September 13 coho retention prohibited.

b/ Includes adults and jacks as determined by CWT analysis.

TABLE III-3. Oregon production index (OPI) area coho harvest impacts, spawning, abundance, and exploitation rate estimates in thousands of fish.<sup>a/</sup>

| Year or<br>Avg.    | Oregon and California Coastal Returns |       |                                     |                               |                       |                           | Ocean Exploitation<br>Rate Based on OPI |                         |
|--------------------|---------------------------------------|-------|-------------------------------------|-------------------------------|-----------------------|---------------------------|---|-------------------------|
|                    | Ocean Fisheries <sup>b/</sup>         |       | Hatcheries and                      |                               |                       | Columbia River<br>Returns | Abundance <sup>e/</sup>                 | Abundance <sup>f/</sup> |
|                    | Troll                                 | Sport | Freshwater<br>Harvest <sup>c/</sup> | OCN<br>Spawners <sup>d/</sup> | Private<br>Hatcheries |                           |   |                         |
| 1970-1975          | 1,629.6                               | 558.4 | 45.8                                | 55.2                          | -                     | 460.4                     | 2,749.3                                 | 0.80                    |
| 1976-1980          | 1,253.6                               | 555.0 | 31.2                                | 31.1                          | 26.1                  | 263.3                     | 2,154.2                                 | 0.85                    |
| 1981-1985          | 451.2                                 | 274.0 | 37.2                                | 56.0                          | 176.8                 | 305.3                     | 1,328.6                                 | 0.63                    |
| 1986-1990          | 574.6                                 | 339.3 | 55.1                                | 45.5                          | 154.3                 | 705.0                     | 1,602.2                                 | 0.70                    |
| 1991-1995          | 107.4                                 | 182.7 | 46.6                                | 53.2                          | 35.1                  | 315.1                     | 668.4                                   | 0.35                    |
| 1996               | 7.0                                   | 31.8  | 45.8                                | 87.5                          | -                     | 117.1                     | 260.3                                   | 0.15                    |
| 1997               | 5.5                                   | 22.4  | 27.9                                | 31.6                          | -                     | 156.4                     | 230.5                                   | 0.12                    |
| 1998               | 3.5                                   | 12.8  | 31.2                                | 34.9                          | -                     | 175.9                     | 270.8                                   | 0.06                    |
| 1999               | 3.6                                   | 36.5  | 23.4                                | 48.6                          | -                     | 289.1                     | 432.0                                   | 0.09                    |
| 2000               | 25.2                                  | 74.6  | 37.0                                | 84.8                          | -                     | 558.3                     | 762.4                                   | 0.13                    |
| 2001               | 38.1                                  | 216.8 | 75.7                                | 174.7                         | -                     | 1,128.3                   | 1,673.2                                 | 0.15                    |
| 2002               | 15.0                                  | 118.7 | 53.9                                | 266.9                         | -                     | 535.8                     | 972.2                                   | 0.14                    |
| 2003               | 28.8                                  | 252.4 | 44.9                                | 236.2                         | -                     | 713.2                     | 1,266.9                                 | 0.22                    |
| 2004               | 26.2                                  | 159.3 | 38.1                                | 197.3                         | -                     | 463.5                     | 904.5                                   | 0.21                    |
| 2005               | 10.5                                  | 58.2  | 42.7                                | 164.6                         | -                     | 354.7                     | 629.9                                   | 0.11                    |
| 2006               | 4.5                                   | 47.5  | 29.5                                | 132.7                         | -                     | 409.7                     | 674.1                                   | 0.08                    |
| 2007               | 26.2                                  | 128.5 | 10.9                                | 71.4                          | -                     | 349.0                     | 631.3                                   | 0.25                    |
| 2008               | 0.6                                   | 26.4  | 16.0                                | 180.1                         | -                     | 520.8                     | 769.8                                   | 0.04                    |
| 2009               | 27.7                                  | 201.2 | 16.5                                | 265.3                         | -                     | 760.2                     | 1,341.3                                 | 0.17                    |
| 2010               | 5.8                                   | 48.8  | 18.5                                | 287.1                         | -                     | 466.5                     | 848.4                                   | 0.06                    |
| 2011               | 4.2                                   | 54.7  | 20.0                                | 360.8                         | -                     | 378.1                     | 836.4                                   | 0.07                    |
| 2012               | 4.7                                   | 45.5  | 18.5                                | 104.6                         | -                     | 152.4                     | 311.3                                   | 0.16                    |
| 2013               | 8.4                                   | 48.3  | 26.5                                | 135.6                         | -                     | 252.8                     | 494.1                                   | 0.11                    |
| 2014               | 35.6                                  | 197.4 | 42.0                                | 362.1                         | -                     | 1,019.5                   | 1,724.8                                 | 0.14                    |
| 2015               | 11.7                                  | 84.4  | 11.8                                | 61.2                          | -                     | 169.5                     | 336.3                                   | 0.29                    |
| 2016               | 2.8                                   | 31.7  | 11.4                                | 82.2                          | -                     | 205.0                     | 334.8                                   | 0.10                    |
| 2017               | 2.1                                   | 50.0  | 3.9                                 | 65.9                          | -                     | 236.3                     | 355.4                                   | 0.15                    |
| 2018 <sup>g/</sup> | 1.5                                   | 53.8  | 3.0                                 | 79.4                          | -                     | 138.4                     | 232.4                                   | 0.24                    |

a/ The OPI area includes ocean and inside harvest impacts and escapement to streams and lakes south of Leadbetter Pt., Washington.

b/ Incl. est. nonretention mort.: troll: release mort.(1982-present) and drop-off mort.(all yrs.); sport --release mort.(1994-present) and drop-off mort.(all yrs.).

c/ Includes STEP smolt releases through the 2007 return year, after which the program was terminated.

d/ Includes Rogue River.

e/ FRAM post season runs used after 1985 and includes OPI origin stock catches in all fisheries.

f/ Private hatchery stocks are excluded in calculating the OPI area stock aggregate ocean exploitation rate index.

g/ Preliminary.



TABLE III-4. Oregon Coast Natural (OCN) adult coho salmon spawner escapement.

| Year               | Adjusted SRS Adult Spawner Population Estimates in<br>Thousands of Spawners by Stock Component <sup>a/</sup> |                                |                                |                        |            | Adult Coho Spawners Per Spawner Habitat Mile |                                |                                |                        |                    |
|--------------------|--|--------------------------------|--------------------------------|------------------------|------------|--|--------------------------------|--------------------------------|------------------------|--------------------|
|                    | Northern <sup>b/</sup>   | North<br>Central <sup>c/</sup> | South<br>Central <sup>d/</sup> | Southern <sup>e/</sup> | Coast-wide | Northern <sup>b/</sup>                       | North<br>Central <sup>c/</sup> | South<br>Central <sup>d/</sup> | Southern <sup>e/</sup> | Coast-wide<br>ave. |
|                    | 1990   | 2.2                            | 5.6                            | 13.5                   | 1.2        | 22.5   | 2                              | 5                              | 8                      | 3                  |
| 1991               | 9.3  | 6.7                            | 21.6                           | 0.5                    | 38.1       | 10   | 6                              | 13                             | 1                      | 9                  |
| 1992               | 2.4  | 15.4                           | 24.4                           | 2.0                    | 44.2       | 3  | 13                             | 15                             | 5                      | 11                 |
| 1993               | 4.5  | 7.8                            | 43.1                           | 0.8 <sup>f/</sup>      | 55.7       | 5  | 7                              | 27                             | 1 <sup>f/</sup>        | 14                 |
| 1994               | 3.5  | 9.8                            | 30.9                           | 4.3                    | 48.5       | 4  | 8                              | 19                             | 11                     | 12                 |
| 1995               | 3.9  | 13.6                           | 36.5                           | 3.4                    | 57.3       | 4  | 12                             | 22                             | 8                      | 14                 |
| 1996               | 3.3  | 18.1                           | 52.6                           | 5.2                    | 79.3       | 4  | 16                             | 32                             | 13                     | 19                 |
| 1997               | 2.1  | 2.8                            | 18.4                           | 8.2                    | 31.6       | 2  | 2                              | 11                             | 20                     | 8                  |
| 1998               | 2.6  | 3.3                            | 26.1                           | 2.3                    | 34.3       | 3  | 3                              | 16                             | 6                      | 8                  |
| 1999               | 8.9  | 11.8                           | 29.2                           | 1.4                    | 51.2       | 10   | 10                             | 18                             | 3                      | 13                 |
| 2000               | 17.9   | 14.3                           | 37.9                           | 11.0                   | 81.1       | 20   | 12                             | 23                             | 27                     | 20                 |
| 2001               | 33.5   | 25.2                           | 113.9                          | 12.0                   | 184.6      | 37   | 22                             | 70                             | 29                     | 45                 |
| 2002               | 52.5   | 104.0                          | 104.1                          | 8.5                    | 269.0      | 58   | 89                             | 64                             | 21                     | 66                 |
| 2003               | 59.6   | 68.9                           | 100.1                          | 6.8                    | 235.4      | 66   | 59                             | 62                             | 17                     | 57                 |
| 2004               | 28.8   | 42.1                           | 101.9                          | 24.5                   | 197.3      | 32   | 36                             | 63                             | 60                     | 48                 |
| 2005               | 16.5   | 51.4                           | 86.7                           | 10.0                   | 164.6      | 18   | 44                             | 53                             | 24                     | 40                 |
| 2006               | 24.1   | 21.2                           | 83.5                           | 3.9                    | 132.7      | 27   | 18                             | 51                             | 10                     | 32                 |
| 2007               | 17.5   | 12.3                           | 36.5                           | 5.1                    | 71.4       | 19   | 11                             | 22                             | 13                     | 17                 |
| 2008               | 25.6   | 68.1                           | 86.0                           | 0.4                    | 180.1      | 28   | 59                             | 53                             | 1                      | 44                 |
| 2009               | 48.1   | 86.4                           | 128.2                          | 2.6                    | 265.3      | 54   | 74                             | 79                             | 6                      | 65                 |
| 2010               | 55.0   | 56.5                           | 171.9                          | 3.7                    | 287.1      | 61   | 49                             | 106                            | 9                      | 70                 |
| 2011               | 45.9   | 119.1                          | 191.3                          | 4.5                    | 360.8      | 51   | 102                            | 118                            | 11                     | 88                 |
| 2012               | 7.5  | 33.8                           | 57.8                           | 5.5                    | 104.6      | 8  | 29                             | 36                             | 13                     | 26                 |
| 2013               | 11.0   | 39.7                           | 73.7                           | 11.2                   | 135.6      | 12   | 34                             | 45                             | 27                     | 33                 |
| 2014               | 67.4   | 122.0                          | 170.4                          | 2.4                    | 362.1      | 75   | 105                            | 105                            | 6                      | 88                 |
| 2015               | 6.7  | 22.7                           | 27.7                           | 4.1                    | 61.2       | 7  | 19                             | 17                             | 10                     | 15                 |
| 2016               | 18.7   | 26.5                           | 30.7                           | 6.3                    | 82.2       | 21   | 23                             | 19                             | 15                     | 20                 |
| 2017               | 13.6   | 22.8                           | 24.9                           | 4.5                    | 65.9       | 15   | 20                             | 15                             | 11                     | 16                 |
| 2018 <sup>g/</sup> | 7.7  | 22.1                           | 41.3                           | 8.3                    | 79.4       | 9  | 19                             | 25                             | 20                     | 19                 |

a/ A spawner escapement methodology study based on SRS had been in effect from 1990 to 1997 in which coho salmon population estimates have been made for Oregon coastal river systems from the Sixes River and north. Since 1998 a random site selection procedure based on the EPA's Environmental Monitoring and Assessment Program (EMAP) has been used. Spawner population estimates include an adjustment for observation error.

b/ Estimate based on 899 miles of spawner habitat within Nehalem, Tillamook, and Nestucca Rivers and other direct ocean tributaries from Necanicum River through Neskowin Creek.

c/ Estimate based on 1,163 miles of spawner habitat within Siletz, Yaquina, Alsea, and Siuslaw Rivers and other direct ocean tributaries from the Salmon through Siuslaw Rivers.

d/ Estimate based on 1,622 miles of spawner habitat within Umpqua, Coos, and Coquille Rivers. Also includes spawners using tributaries to Siltcoos, Tahkenitch, and Tenmile Lakes.

e/ Estimate based on a mark-recapture methodology and 410 miles of spawner habitat within the Rogue River.

f/ Unreliable estimate.

g/ Preliminary.

TABLE III-5. Oregon Coastal Natural and Lower Columbia Natural adult coho salmon cons. objective and fishery impacts.

| Year               | OCN Fishery Impact (Total Marine and Freshwater Exploitation Rate) |                      |                                   | LCN Fishery Impact (Total Marine and Freshwater Exploitation Rate) |                      |                                   |
|--------------------|--|----------------------|-----------------------------------|--|----------------------|-----------------------------------|
|                    | Conservation Objective <sup>a/</sup>                               | Preseason Projection | Postseason Estimate <sup>b/</sup> | Conservation Objective <sup>c/</sup>                               | Preseason Projection | Postseason Estimate <sup>b/</sup> |
|                    | 1990   | -                    | -                                 | -  | -                    | -                                 |
| 1991               | -  | 0.460                | 0.639                             | -  | -                    | -                                 |
| 1992               | -  | 0.420                | 0.626                             | -  | -                    | -                                 |
| 1993               | -  | 0.260                | 0.396                             | -  | -                    | -                                 |
| 1994               | ≤0.20  | 0.111                | 0.064                             | -  | -                    | -                                 |
| 1995               | ≤0.20  | 0.118                | 0.106                             | -  | -                    | -                                 |
| 1996               | ≤0.20  | 0.125                | 0.062                             | -  | -                    | -                                 |
| 1997               | ≤0.20  | 0.110                | 0.091                             | -  | -                    | -                                 |
| 1998               | ≤0.13  | 0.119                | 0.076                             | -  | -                    | -                                 |
| 1999               | ≤0.15  | 0.087                | 0.073                             | -  | -                    | -                                 |
| 2000               | ≤0.15  | 0.082                | 0.042                             | -  | -                    | -                                 |
| 2001               | ≤0.08  | 0.074                | 0.035                             | -  | -                    | -                                 |
| 2002               | ≤0.15  | 0.123                | 0.049                             | -  | -                    | -                                 |
| 2003               | ≤0.15  | 0.144                | 0.080                             | -  | -                    | -                                 |
| 2004               | ≤0.15  | 0.147                | 0.077                             | -  | -                    | -                                 |
| 2005               | ≤0.15  | 0.111                | 0.044                             | ≤0.15  | 0.10 <sup>d/</sup>   | 0.179                             |
| 2006               | ≤0.15  | 0.096                | 0.076                             | ≤0.15  | 0.10 <sup>d/</sup>   | 0.146                             |
| 2007               | ≤0.20  | 0.113                | 0.118                             | ≤0.20  | 0.13 <sup>d/</sup>   | 0.208                             |
| 2008               | ≤0.08  | 0.069                | 0.019                             | ≤0.08  | 0.08                 | 0.073                             |
| 2009               | ≤0.15  | 0.130                | 0.067                             | ≤0.20  | 0.20                 | 0.187                             |
| 2010               | ≤0.15  | 0.112                | 0.045                             | ≤0.15  | 0.15                 | 0.107                             |
| 2011               | ≤0.15  | 0.132                | 0.059                             | ≤0.15  | 0.15                 | 0.111                             |
| 2012               | ≤0.15  | 0.150                | 0.183                             | ≤0.15  | 0.15                 | 0.140                             |
| 2013               | ≤0.30  | 0.231                | 0.149                             | ≤0.15  | 0.15                 | 0.143                             |
| 2014               | ≤0.30  | 0.253                | 0.141                             | ≤0.225   | 0.225                | 0.164                             |
| 2015               | ≤0.15  | 0.149                | 0.198                             | ≤0.23  | 0.23                 | 0.244                             |
| 2016               | ≤0.20  | 0.131                | 0.087                             | ≤0.18  | 0.13                 | 0.089                             |
| 2017               | ≤0.30  | 0.093                | 0.116                             | ≤0.18  | 0.114                | 0.108                             |
| 2018 <sup>e/</sup> | ≤0.15  | 0.129                | 0.127                             | ≤0.18  | 0.162                | 0.146                             |

a/ Prior to 1994, the conservation objective was expressed in terms of the total escapement of OCN spawners in index numbers rather than as an exploitation rate. The index escapement objectives from 1981 through 1993 are provided in Table III-2 of the Review of 1998 Ocean Salmon Fisheries and Table 1 of Amendment 11. From 1994 through 1997, Amendment 11 specified that at low stock sizes, only incidental harvest of OCN coho could occur and that impacts could not exceed 20%. Beginning in 1998, the OCN conservation objective has been as specified in Amendment 13 which is also the basis for the NMFS jeopardy standards under the Endangered Species Act listing.

b/ From the coho FRAM.

c/ In 2005, the NMFS conservation objective was in terms of marine area fisheries. In 2006, the NMFS conservation objective was in terms of Council area and mainstem Columbia River fisheries; thereafter in terms of all marine area and mainstem Columbia.

d/ The preseason projection was in terms of a marine exploitation rate.

e/ Preliminary.

TABLE III-6. Performance of coho salmon stocks in relation to 2018 preseason conservation objectives (preliminary data).  
(Page 1 of 2)

| System and Stock  | 2018 FMP Conservation/Management Objectives  | Achievement   |
|---|--|---|
| <b>OPI Area Coho</b>  |  |   |
| (Columbia River and coastal stocks south of Leadbetter Point) | Natural spawner escapement objectives as provided below; meet hatchery egg-take goals; meet treaty Indian obligations.                                 | Hatchery egg-take goals achieved. Treaty obligations met..  |
| Northern California (Threatened) and CCC (Endangered)         | No directed coho fisheries or retention of coho south of the OR/CA border. Marine exploitation rate $\leq 13.0\%$ as indicated by R/K hatchery stocks. | No coho retention south of the California/Oregon border. Preliminary postseason estimate of 2.8%.           |
| OCN   | Combined marine and freshwater exploitation rate $\leq 15.0\%$ .   | Preliminary postseason estimate of 12.7%.   |
| LCN-Columbia River Natural (Threatened)                       | Combined marine and mainstem Columbia River exploitation rate $\leq 18.0\%$ .  | Preliminary postseason estimate of 14.6% exploitation rate in marine and mainstem Columbia River fisheries. |
| <b>Washington Coast Coho</b>                                  |  |   |
|   | Natural spawner escapement objectives as provided below and in state/tribal agreements; meet hatchery egg-take goals; meet treaty Indian obligations.  | Hatchery egg-take goals achieved. No information available on catch allocation.                             |
| Willapa   | 17,200 natural adult spawners.   | Escapement estimate was unavailable; preseason projection was 19,000 ocean escapement.                      |
| Grays Harbor  | 35,400 adult spawners.   | Escapement estimate was unavailable; preseason projection was 40,500 ocean escapement.                      |
| Queets  | 5,800 comanager adult spawner agreement.   | Escapement estimate was unavailable; preseason projection was 6,100 ocean escapement.                       |
| Hoh   | 2,000 adult spawners.  | Escapement estimate was unavailable; preseason projection was 5,200 ocean escapement.                       |
| Quillayute Fall   | 6,300 adult spawners.  | Preliminary postseason escapement estimate was 5,157.   |

| System and Stock        | 2018 FMP Conservation/Management Objectives  | Achievement   |
|-------------------------|--|---|
| <b>Puget Sound Coho</b> | Stepped exploitation rate objectives; meet hatchery egg-take goals; meet treaty Indian obligations and inside non-Indian fishery needs for six management units. | Data not available for 2018 natural spawner escapements. Hatchery egg-take goals will be met. |
| Strait of Juan de Fuca  | ≤20% total exploitation rate.  | Preseason expectation of a 6.7% total exploitation rate; postseason estimate unavailable.     |
| Hood Canal              | ≤65% total exploitation rate.  | Preseason expectation of a 42.5% total exploitation rate; postseason estimate unavailable.    |
| Skagit                  | ≤35% total exploitation rate.  | Preseason expectation of a 31.3% total exploitation rate; postseason estimate unavailable.    |
| Stillaguamish           | ≤35% total exploitation rate.  | Preseason expectation of a 34.5% total exploitation rate; postseason estimate unavailable.    |
| Snohomish               | ≤40% total exploitation rate.  | Preseason expectation of a 33.5% total exploitation rate; postseason estimate unavailable.    |

TABLE III-7. Coho stock status relative to overfished and overfishing criteria. A stock is overfished if the 3-year geometric mean spawning escapement is less than the minimum stock size threshold (MSST); a stock experiences overfishing if the total annual exploitation rate exceeds the maximum fishing mortality threshold (MFMT).

| Coho Stock      | Spawning Escapement |         |        |        |        |       |                  | Exploitation Rate |                  |             |             |             |      |      |      |      |
|-----------------|---------------------|---------|--------|--------|--------|-------|------------------|-------------------|------------------|-------------|-------------|-------------|------|------|------|------|
|                 | 2013                | 2014    | 2015   | 2016   | 2017   | 2018  | 3-yr Geo<br>Mean | MSST              | S <sub>MSY</sub> | 2013        | 2014        | 2015        | 2016 | 2017 | 2018 | MFMT |
| Willapa Bay     | 22,834              | 47,154  | 10,790 | 25,290 | 9,091  | NA    | 13,537           | 8,600             | 17,200           | 0.39        | 0.51        | 0.44        | 0.38 | NA   | NA   | 0.74 |
| Grays Harbor    | 56,785              | 105,039 | 21,278 | 38,595 | 26,907 | NA    | 28,061           | 18,320            | 24,426           | 0.45        | 0.45        | 0.49        | 0.11 | NA   | NA   | 0.65 |
| Queets          | 5,684               | 7,558   | 2,028  | 5,156  | 5,232  | NA    | <b>3,796</b>     | 4,350             | 5,800            | 0.43        | 0.41        | 0.26        | 0.15 | NA   | NA   | 0.65 |
| Hoh             | 2,899               | 4,565   | 1,794  | 5,009  | 4,478  | NA    | 3,427            | 1,890             | 2,520            | <b>0.70</b> | 0.52        | 0.39        | 0.07 | NA   | NA   | 0.65 |
| Quillayute Fall | 7,072               | 7,425   | 2,571  | 9,630  | 7,474  | 5,157 | 7,187            | 4,725             | 6,300            | 0.56        | 0.58        | 0.48        | 0.18 | NA   | NA   | 0.59 |
| Juan de Fuca    | 8,458               | 11,488  | 3,859  | 8,435  | 5,530  | NA    | <b>5,646</b>     | 7,000             | 11,000           | 0.14        | 0.17        | 0.18        | 0.03 | NA   | NA   | 0.60 |
| Hood Canal      | 16,064              | 26,787  | 26,926 | 24,313 | 22,519 | NA    | 24,520           | 10,750            | 14,350           | 0.58        | <b>0.68</b> | 0.59        | 0.40 | NA   | NA   | 0.65 |
| Skagit          | 85,751              | 24,820  | 5,794  | 35,822 | 20,184 | NA    | 16,121           | 14,875            | 25,000           | 0.43        | 0.52        | <b>0.63</b> | 0.20 | NA   | NA   | 0.60 |
| Stillaguamish   | 60,387              | 35,829  | 2,914  | 13,048 | 6,099  | NA    | 6,144            | 6,100             | 10,000           | 0.23        | 0.27        | 0.48        | 0.16 | NA   | NA   | 0.50 |
| Snohomish       | 125,870             | 46,244  | 12,804 | 44,141 | 18,195 | NA    | <b>21,746</b>    | 31,000            | 50,000           | 0.28        | 0.31        | 0.55        | 0.18 | NA   | NA   | 0.60 |

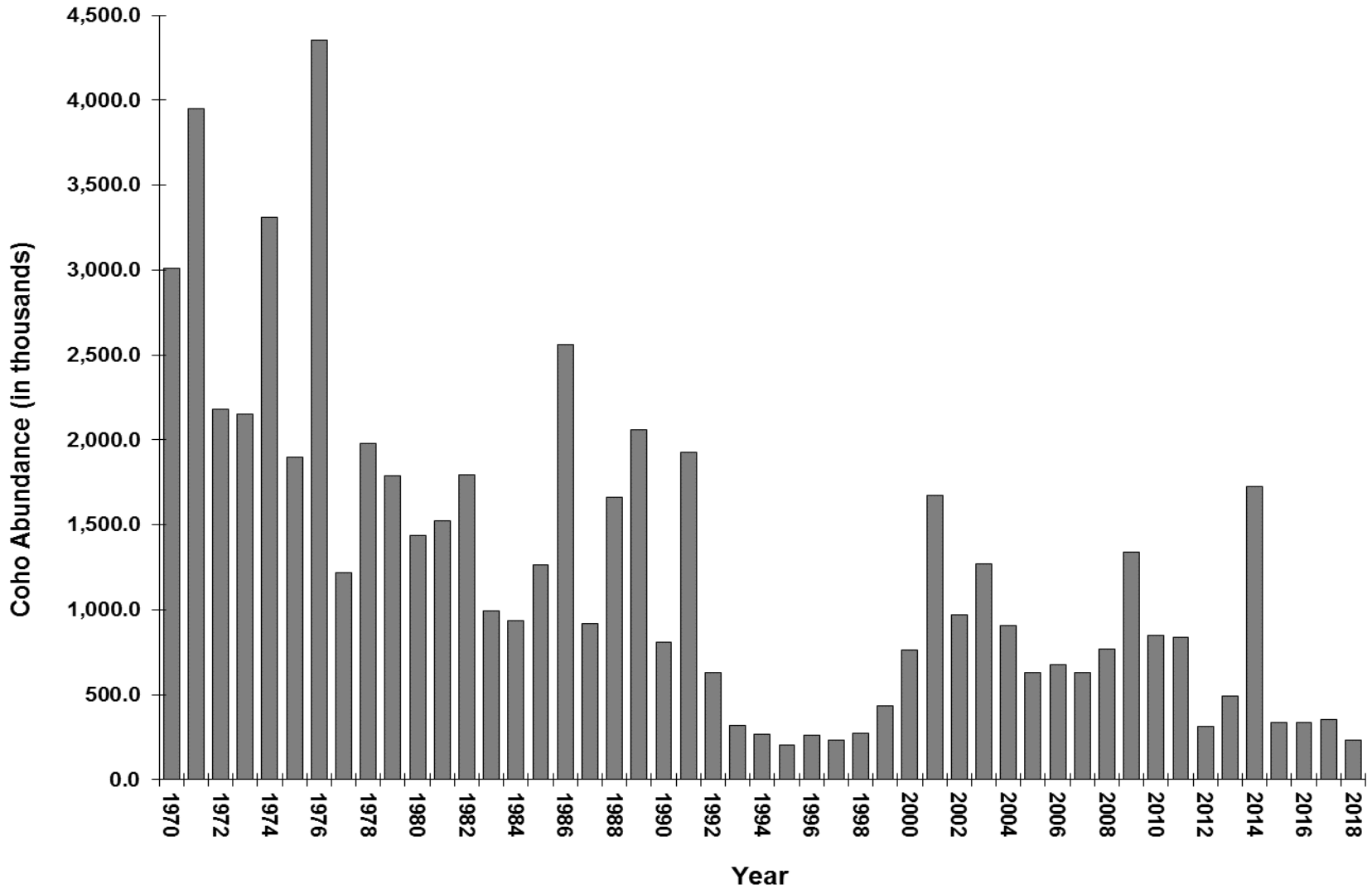


Figure III-1. Oregon Production Index (OPI) area coho abundance estimates by stratified random surveys (SRS) accounting methods, 1970-2018.

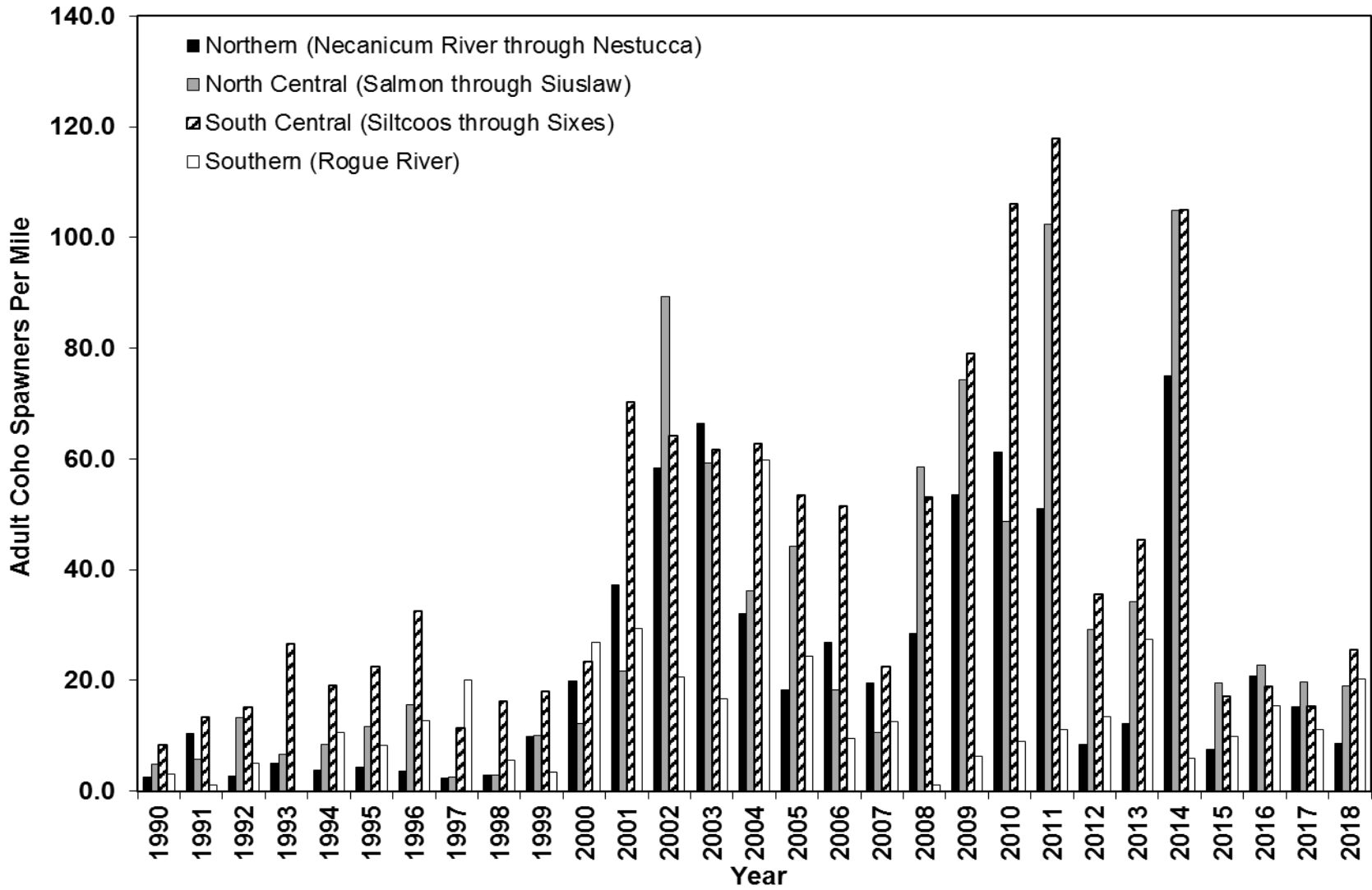


Figure III-2. Oregon coastal natural (OCN) adult coho spawners per habitat mile by coastal region based on SRS accounting methods, 1990-2018.

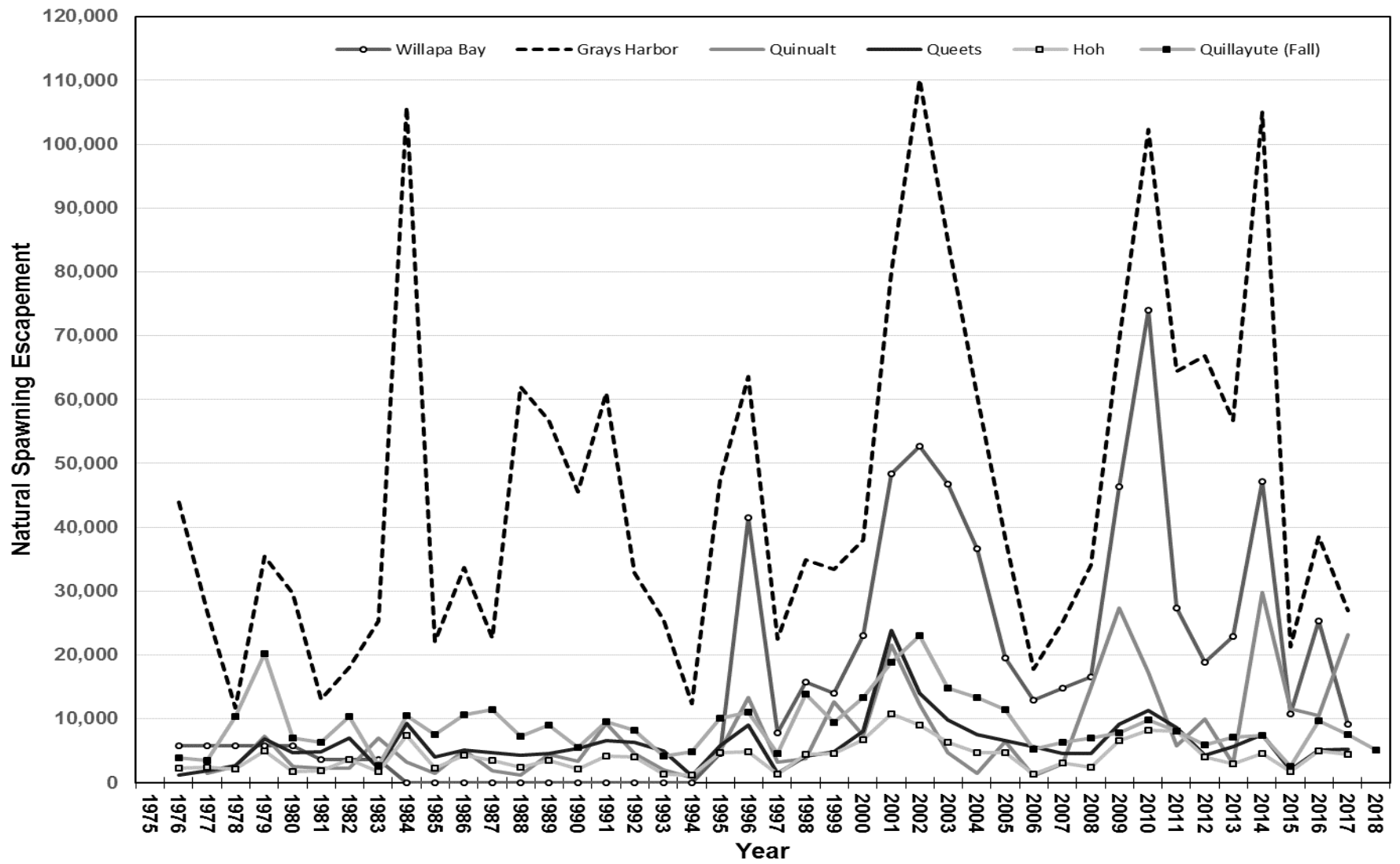


Figure III-3. Washington Coast adult coho natural spawning escapement, 1976-2018.



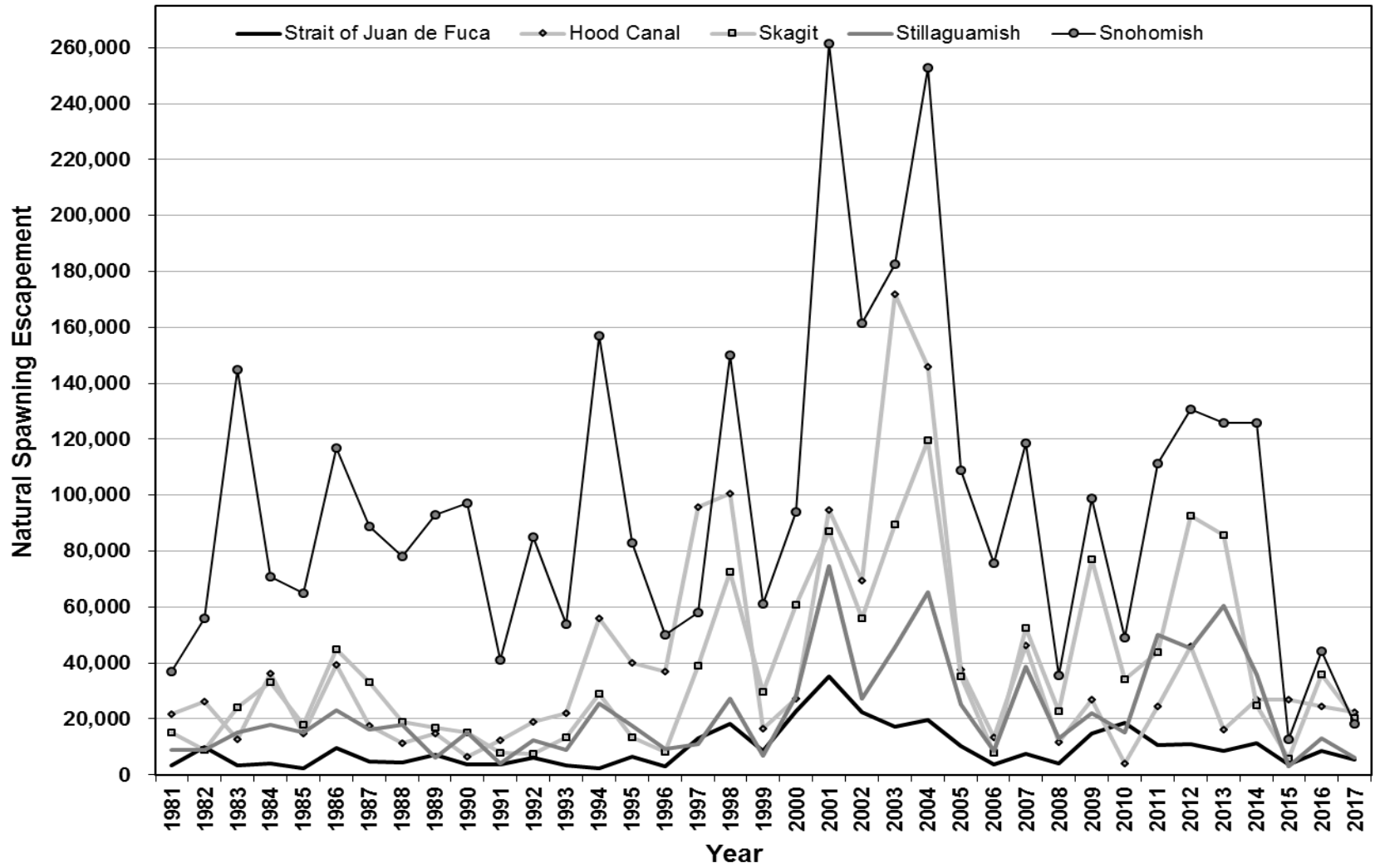


Figure III-4. Puget Sound adult coho natural spawning escapement, 1981-2017.

## CHAPTER IV

### SOCIOECONOMIC ASSESSMENT OF THE 2018 OCEAN SALMON FISHERIES

**SUMMARY:** Total 2018 exvessel value of the Council-managed non-Indian troll commercial salmon fishery was \$12.6 million. This was 23 percent above last year's inflation-adjusted \$10.2 million and eight percent above the inflation-adjusted total of \$11.7 million in 2016. The exvessel value of the coastwide commercial fishery in 2018 was 43 percent below the 2013-2017 inflation-adjusted average of \$22.2 million, and 79 percent below the 1979-1990 inflation-adjusted average of \$58.9 million. The coastwide average exvessel price for Chinook in 2018 was \$8.54 per pound, eight percent below last year's inflation-adjusted average of \$9.28 and two percent below the 2016 inflation-adjusted average of \$8.74. More than 99 percent of total coastwide exvessel value of non-Indian commercial troll salmon landed in 2018 was from Chinook. Approximately \$26,200 exvessel value of coho were landed in the ocean commercial troll fishery in 2018 compared with inflation-adjusted total of \$32,400 in 2017 and no commercial coho landings in 2016. The coastwide average exvessel price for coho in 2018 was \$2.87, the highest in inflation-adjusted terms since \$3.00 in 2008.

The preliminary number of vessel-based ocean salmon recreational angler trips taken on the West Coast in 2018 was 208,200, an increase of 19 percent from last year and 33 percent above the number of angler trips taken in 2016, but 16 percent below the 2013-2017 average of 247,300, and 65 percent below the 1979-1990 average of 599,700 angler-trips per year.

Total West Coast income impacts associated with commercial and recreational ocean salmon fisheries in 2018 for Washington, Oregon, and California combined were an estimated \$61.8 million, 19 percent above last year's inflation-adjusted total of \$51.8 million, 25 percent above the 2016 inflation-adjusted total of \$49.6 million, but 27 percent below the 2013-2017 inflation-adjusted average of \$84.2 million.<sup>1</sup>

#### ALLOCATION OF THE SALMON RESOURCE

Salmon management by the Council involves numerous allocation issues including:

- Determining the amount of salmon available for ocean harvest after considering expected abundances, harvests by inside fisheries, and spawning escapement goals.
- Allocating harvest among broad management areas and among port areas within the management areas.
- Allocating harvest between Indian and non-Indian harvesters.
- Allocating the non-Indian portion between commercial and recreational harvesters.

The amount of salmon available for harvest in Council management areas depends, in part, on harvest in Canada and Alaska. Allocation of harvest between the West Coast, Canada, and Alaska is determined within the constraints of the PST.

In general, the recreational fishery has tended to have a somewhat less volatile harvest level than the commercial fishery (in both absolute and relative terms) (Figures IV-1 and IV-2). The majority of the annual variation in available ocean harvest is usually taken up in the commercial fishery. However, both

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<sup>1</sup>A recent changeover in methodology from FEAM-based to IO-PAC-based income impact multipliers means that comparisons of annual income impacts for years prior to 2010 with later years are not meaningful. Consequently, any comparisons of income impacts in this document are generally confined to describing trends appearing since 2009, during which period the IO-PAC-based models and multipliers were applied. See Appendix E of the *Review of 2014 Ocean Salmon Fisheries* for a more detailed explanation of the change in income impact modeling methodology.

commercial and recreational fisheries have suffered substantial declines relative to harvest levels of the 1980s, the effects of which are amplified within specific geographic areas.

Decisions on allowable harvests for a particular stock often have implicit allocation effects on the geographic distribution of salmon harvest. Seasons may be more restrictive along a particular area of the coast to protect a depressed stock that is encountered at a relatively higher rate in that area. The geographic distribution of harvest opportunity along the coast involves balancing the often conflicting objectives of maximizing ocean harvest and distributing the responsibility for resource conservation. A brief outline of the regulatory objectives that shaped the 2018 season is provided in Chapter I, and an assessment of success in meeting the objectives is provided in Chapters II and III for Chinook and coho, respectively.

## **COMMERCIAL SALMON FISHERIES**

### *West Coast Non-Indian Commercial Ocean Fishery*

#### **In-season Price Trends**

The coastwide weighted-average exvessel prices for salmon caught in the 2018 ocean commercial troll fishery were \$8.54 per dressed pound for Chinook and \$2.87 per dressed pound for coho. Monthly average exvessel price data provide information on price trends over the season (Table IV-1). California Chinook prices were at their highest in May, June and October, averaging \$12.21, \$9.62 and \$9.71 per pound, respectively, in those months. Weighted-average Chinook prices in Oregon were highest in May, June and November at \$12.30, \$10.95 and \$11.13 per pound, respectively. Weighted-average Chinook prices in Washington were highest in May and June at \$11.63 and 10.94 per pound, respectively. The lowest weighted-average Chinook exvessel prices were recorded in California in July at \$7.01, in Oregon in August at \$7.29, and in Washington in July at \$6.67 per pound. Over the entire 2018 season, Chinook exvessel prices in California, Oregon, and Washington averaged \$8.39, \$8.48 and \$9.16 per pound, respectively. Coho exvessel prices were highest in August, \$4.00 and \$2.86 in Oregon and Washington, respectively; and for the season averaged \$3.65 and \$2.72 per pound, in Oregon and Washington, respectively.

#### **Annual Trends (Seasons, Value, Prices, and Pounds)**

Average Chinook and coho troll exvessel price and value by state and species, compiled from fish receiving tickets and expressed both in nominal and inflation-adjusted terms, are presented in Tables IV-2, IV-3, and IV-4. Data on pink salmon are shown in Table IV-5. The gross domestic product implicit price deflator, developed by the Bureau of Economic Analysis, was used to adjust nominal dollar values for inflation (Appendix D, Table D-22). Landing weights by state and port for Chinook and coho are presented in Tables IV-6, IV-7, and IV-8. These tables and the following discussion focus on the non-Indian commercial troll fishery in Council management areas and associated state territorial ocean-area waters.

In 2018, the total coastwide exvessel value of the Council-managed non-Indian commercial troll salmon fishery was \$12.6 million, 23 percent above last year's \$10.2 million, 8 percent above the 2016 level of \$11.7 million, but 43 percent below the 2013-2017 average of \$22.2 million, all values adjusted for inflation (Figure IV-4). Coastwide exvessel value in 2018 was the highest level since \$20.2 million landed in 2015 (including pinks, adjusted for inflation). More than 99 percent of total coastwide exvessel value of non-Indian commercial troll salmon landed in 2018 was from Chinook. Exvessel revenues from coho landings in 2018 were \$26,200. With the exception of 2016 when no coho were landed in the non-Indian commercial troll fishery, the \$26,200 landed in 2018 total was lower than any other year's total exvessel revenues from coho landings since \$13,300 in 2002, and 68 percent below the 2013-2017 average of \$80,700, all values adjusted for inflation.

In 2018, California achieved \$7.8 million in non-Indian commercial troll salmon exvessel landings value, 55 percent above the prior year's level of \$5 million, 41 percent above the level of two years ago (\$5.3 million), but still 33 percent below the 2013-2017 average of \$11.7 million, and 75 percent below the 1979-1990 average of \$31.0 million (which include coho landings during that period). All values are adjusted for inflation.

The 2018 exvessel value of the Oregon non-Indian commercial troll harvest (\$2.4 million) was 12 percent above last year's level of \$2.2 million, but 45 percent below the \$4.4 million recorded in 2016, and 68 percent below the 2013-2017 average of \$7.7 million. Oregon's 2018 non-Indian commercial troll harvest value was also 87 percent below the 1979-1990 average of \$18.6 million, and the second lowest recorded since \$0.4 million in 2009. All values are adjusted for inflation.

The \$2.4 million exvessel value of Washington's 2018 non-Indian troll harvest was 21 percent below last year's value of \$3 million but 40 percent above the 2016 value of \$1.7 million. The 2018 value was also 18 percent below the 2013-2017 average of \$2.9 million, and 72 percent below the 1979-1990 average of \$8.4 million. All values are adjusted for inflation.

The 2018 average West Coast ocean harvest Chinook price of \$8.54 per pound was eight percent below last year's inflation-adjusted value of \$9.28 per pound, and the third highest value in inflation-adjusted terms (after \$9.28 in 2017 and \$8.74 in 2016) on record since at least 1979 (the earliest year of price data included in this review). Part of the reason exvessel prices have remained relatively high in recent years may be due to relatively restricted fishing opportunities and low harvests (see Chapter I and Appendix C for details).

In terms of numbers of fish, the 2018 coastwide, non-Indian commercial troll harvest of 126,500 Chinook was 30 percent above last year's level of 97,100, 10 percent above the 114,900 Chinook harvested in 2016, but 53 percent below the 2013-2017 recent five-year average of 269,500 fish, and 79 percent below the 1976-2017 long-term average of 603,000 fish (Figure IV-1). The 2018 coastwide average weight per non-Indian commercial troll harvested Chinook (11.6 pounds) was three percent above last year's average (11.3 pounds), the same as the average weight in 2016, and one percent below the previous five-year (2013-2017) average of 11.8 pounds per fish (Appendix D Tables D-1, D-2, and D-3).

The coastwide non-Indian commercial troll fishery landed 1,400 coho in 2018, 25 percent fewer than last year. The 2018 total represents the lowest non-zero coho harvest in the non-Indian commercial troll fishery since at least 1976 (Zero coho were harvested in the non-Indian commercial troll fishery 2016, 1998, 1997 and 1994).

West Coast port areas with the highest shares of coastwide non-Indian commercial troll Chinook landings (by weight) in 2018 were San Francisco (39 percent), Westport (11 percent), Monterey (10 percent), Newport (9 percent), Fort Bragg (8 percent) and Coos Bay (6 percent). In 2017 the leading ports were San Francisco (29 percent), Westport (22 percent), Newport (16 percent), Monterey (13 percent), and Neah Bay (6 percent). In 2016, the leading ports were Newport (25 percent), San Francisco (23 percent), Fort Bragg (12 percent), Monterey (10 percent), and Westport and Coos Bay (9 percent each). In 2018 the ports north of Cape Falcon accounted for only about 17 percent of the aggregate coastwide Chinook harvest by weight. By comparison, ports north of Cape Falcon accounted for about 32 percent of the aggregate coastwide Chinook harvest in 2017, 17 percent of coastwide Chinook landings in 2016, 25 percent in 2015, 12 percent in 2014, 9 percent in 2013, and 14 percent in 2012. Since 2008 and 2009, when there was no commercial ocean salmon harvest in California, ports north of Cape Falcon have accounted for an average of 22 percent of coastwide Chinook landings by weight.

Compared with 2017, non-Indian commercial troll Chinook harvest by weight in 2018 was up by 87 percent in California and by 9 percent in Oregon, but down 24 percent in Washington. Non-Indian commercial

troll coho harvest in 2018 was less than 9,300 pounds, 94 percent of which were landed in Washington. Commercial harvest of coho in California has been prohibited since 1992.

### **Ocean Commercial Salmon Harvesters**

Based on Pacific Coast Fisheries Information Network (PacFIN) data, a total of 643 vessels participated in the West Coast non-Indian commercial troll salmon fishery in 2018. This is five percent more vessels than participated in 2017 (611), but 17 percent fewer than participated in 2016 (772), and 40 percent fewer vessels than participated in 2015 (1,063). Note that these coastwide vessel counts are lower than totals derived by summing values in the three state-level tables (Appendix D, tables D-4, D-5 and D-6) due to a degree of incompleteness at the time PacFIN data were extracted for this report, and because vessels landing in more than one state are counted more than once.

In 2018, 456 non-Indian commercial vessels made salmon landings in California, 56 more vessels than last year, but the third fewest since 215 vessels made landings in 2010 (no vessels landed salmon in California in 2008 or 2009 due to complete season closures). In Oregon, the active fleet increased by 54 vessels to 230 vessels in 2018, up from 176 vessels making landings the prior year. With 2018, a string of three consecutive years of declining vessel counts ended. Note that the 176 vessels making landings in 2017 was the fewest vessels landing in Oregon since 2008 when 138 vessels participated. The number of active vessels in Washington in 2018 totaled 102, six fewer than last year, and the fewest number of vessels landing salmon in Washington since 97 vessels in 2009. Coastwide, the number of limited entry salmon permits issued in 2018 by the three states decreased by 36 over the previous year, declining from 2,194 to 2,158; the lowest number on record. Landings were made on 37 percent of all permits in 2018, an increase over last year, and slightly greater than the 10-year average (2008-2017) of 36 percent. Note that years 2008 (9 percent) and 2009 (13 percent) are the two lowest permitted vessel participation years on record (1982-2018). From 1982 to 1993, an average of 5,193 of 7,942 total permits (65 percent) harvested on an annual basis. Harvest opportunity began declining substantially after that time, and some permits were subsequently purchased in a buyback program. See Appendix D, tables D-4, D-5, and D-6 for details.

In 2018, coastwide average inflation-adjusted exvessel value of salmon landings per vessel increased seven percent compared with 2017 to approximately \$15,970 per vessel. Compared to 2017, average state-level exvessel revenue per vessel in 2018 was up 36 percent to \$17,100 in California, but down 14 percent to \$10,600 in Oregon, and down 17 percent to \$23,000 in Washington. Note that some caution needs to be exercised in interpreting average exvessel revenue per vessel. The averages may be influenced as much by disproportionate changes in the number of particularly small or large harvesters participating from one year to the next as by any real change in the average revenues of vessels that have consistently participated in the fishery.

Additional historical information on landings by vessel size, percentages of the fleet responsible for the majority of harvest, and harvest by residence of participants in each state's fisheries is included in Appendix D.

### ***West Coast Treaty Indian Commercial Ocean Fishery***

Treaty Indian commercial fisheries in ocean areas off Washington operate under regulations established by the Council. While some of the treaty Indian harvest is for ceremonial and subsistence purposes, the vast majority of the catch is sold commercially. Commercial treaty Indian fisheries provide food to consumers and generate income in local and state economies through expenditures related to harvesting, processing, and marketing of the catch. In 2018, the treaty Indian ocean troll fishery harvested 24,800 Chinook (186,200 pounds) and 11,800 coho (69,400 pounds), compared with 25,800 Chinook (207,900 pounds) and 13,400 coho (79,700 pounds) in 2017, 23,500 Chinook (218,800 pounds) and 46 coho (400 pounds) in

2016, and 62,200 Chinook (617,700 pounds) and 4,000 coho (20,300 pounds) in 2015. The preliminary exvessel value of Chinook and coho landed in the treaty Indian ocean troll fishery in 2018 was \$1.1 million, compared with inflation-adjusted values of \$1.3 million in 2017, \$1.4 million in 2016 and \$2.5 million in 2015<sup>2</sup>.

### *Columbia River Commercial Fishery*

Harvest in the ocean salmon fisheries affects the number of fish available for harvest in inside and in-river treaty Indian and non-Indian fisheries. Table IV-9 shows the exvessel value of treaty Indian and non-Indian commercial harvest of Chinook, coho, and chum salmon in the Columbia River. All prices and dollar values in the table and the following discussion are reported in inflation-adjusted dollars. Exvessel prices for in-river commercial salmon landings vary considerably with species (Chinook, coho or chum), race (e.g., spring versus fall Chinook), and stock (e.g., tules versus brights). Spring Chinook generally bring the highest prices, and tule fall Chinook and chum the lowest prices.

Total exvessel value of combined treaty Indian and non-Indian commercial salmon harvested in the Columbia River in 2018 was \$5.3 million. This was 47 percent below the 2017 level of \$9.9 million, 60 percent below the 2016 level of \$13.2 million, and the lowest value recorded since \$3 million in 2007 (all values adjusted for inflation). Of these amounts, the total exvessel value of salmon harvested in the non-Indian portion of the Columbia River commercial fishery in 2018 was \$2.3 million, compared with \$3.5 million in 2017 and \$5.6 million in 2016 (all values adjusted for inflation) (Table IV-9).

Total exvessel value of treaty Indian salmon harvested in the Columbia River and sold on fish tickets was \$3 million in 2018. This is 53 percent below the \$6.4 million in 2017, 60 percent below \$7.6 million in 2015, and the lowest value since \$1.9 million in 2009 (all values adjusted for inflation). Note that these values include only sales made to licensed fish buyers. Treaty Indian fishers' direct sales to the public are accounted for in harvest monitoring reports (Table B-20), but estimates of the pounds and value of such sales are not included in Table IV-9.

### *Puget Sound and Washington Coastal Inside Fisheries*

Information on 2018 Puget Sound and Washington coastal inside fisheries below is preliminary. All dollar values reported below are adjusted for inflation. In previous years, substantial revisions to these numbers have occurred after publication of this review. Based on PacFIN data (as of January 30, 2019), the exvessel value of all salmon species taken in the commercial non-Indian fisheries in Puget Sound and Washington coastal inside fisheries (excluding the Columbia River) in 2018 was \$8.6 million. This was eight percent greater than last year's inflation-adjusted value of \$8.0 million, and 90 percent above the \$4.5 million harvest value in 2016 (Note that the 2015 value of \$4.1 million was the lowest since 2005). Of the total Puget Sound and Washington coastal inside fisheries non-Indian commercial landings in 2018, \$0.8 million were Chinook and coho, compared with \$0.8 million in 2017 and \$0.9 million in 2016. The 1981-2017 inflation-adjusted average annual exvessel value from Puget Sound and Washington coastal inside non-Indian commercial fisheries salmon landings was \$15.6 million, of which approximately \$3.7 million on average were landings of Chinook and coho. It is interesting to note that all years with recorded values higher than those averages occurred prior to 1994.

The preliminary 2018 exvessel value reported to PacFIN (as of January 30, 2019) for all salmon species taken in Puget Sound and Washington coastal inside commercial treaty Indian fisheries (excluding the Columbia River) was \$9.0 million, of which \$2.9 million were Chinook and coho. Compared with 2017 the preliminary 2018 harvest represent reductions of 39 percent for all species and 65 percent for Chinook

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<sup>2</sup> Numbers of fish are from Table A-15, average weights are from Table D-3, and revenue values are based on January 30, 2019 PacFIN data.

and coho. Compared with 2016, the 2018 harvest represents reductions of 24 percent for all species and 61 percent for Chinook and coho (all values adjusted for inflation). For reference, the (revised) inflation-adjusted total exvessel value for the 2017 commercial treaty Indian harvest in Puget Sound and Washington coastal inside fisheries was \$14.7 million for all salmon species, of which \$8.3 million were Chinook and coho. The inflation-adjusted exvessel value of the 2016 commercial treaty Indian harvest in Puget Sound and Washington coastal inside fisheries was \$11.8 million for all salmon species, of which \$7.5 million were Chinook and coho. From 1981 through 2017, the inflation-adjusted average annual exvessel value of commercial treaty Indian salmon fisheries in Puget Sound and Washington coastal inside areas was \$20.7 million, of which on average \$8.1 million were Chinook and coho.

### *Klamath River Fisheries*

Commercial sales from the Yurok and Hoopa Valley tribal spring and fall gillnet fisheries on the Klamath and Trinity rivers occur periodically, however these commercial fisheries have not occurred since 2015 when no spring Chinook and 16,900 fall Chinook were harvested commercially (Appendix B, Table B-5). Sales from the spring Chinook fishery occurred in 1989, 1996, 2000-2004, and 2007-2013. The average annual commercial catch of spring Chinook during years that the fishery was open was approximately about 1,100 fish. Sales from the fall Chinook fishery occurred in 1987-1989, 1996, 1999-2004, 2007-2015. The average annual commercial catch of fall Chinook during years that the fishery was open was approximately 22,300 fish, the vast majority of which were taken in the estuary.

Records are not available for the weight and value of harvests for years since 1997, when each Indian fisher began marketing their fish independently. The 1989 total harvest of 25,500 fall Chinook reportedly had an average weight of 15.4 pounds per fish and sold for \$852,000 (\$1.4 million in inflation-adjusted 2018 dollars). In 1996, 3,100 spring Chinook and 40,100 fall Chinook were harvested, with an average weight per fish landed of 13.5 pounds and combined value at first sale of an estimated \$525,000 (\$0.7 million in inflation-adjusted 2018 dollars).

## **CEREMONIAL AND SUBSISTENCE SALMON FISHERIES**

In addition to the commercial Indian fisheries discussed above, fish are taken in Indian fisheries each year for ceremonial and subsistence purposes. Estimates of the amount of salmon used for ceremonial and subsistence purposes are documented in Appendix B, Table B-5. Discussion of the importance of ceremonial and subsistence fish to Indian communities is presented in Appendix B to Amendment 14 of the salmon FMP.

## **RECREATIONAL SALMON FISHERIES**

### *West Coast Recreational Ocean Fishery*

The preliminary number of vessel-based ocean salmon recreational angler trips taken on the West Coast in 2018 was 208,200, an increase of 19 percent from last year, and 33 percent above the number taken in 2016, but 16 percent below the 2013-2017 average of 247,300, and 65 percent below the 1979-1990 average of 599,700 angler-trips per year. Compared with last year, preliminary estimates of the number of trips taken in 2018 increased by 30 percent in California and by 51 percent in Oregon, but fell by 18 percent in Washington. Note that Washington effort estimates shown in Tables IV-10 and IV-13 may differ from those in Table I-4 and Appendix A, Table A-17 because the former exclude bank fishers on the Columbia River north jetty.

Recreational ocean area salmon fishing takes place primarily in two modes: (1) anglers fishing from privately owned pleasure craft, and (2) anglers employing the services of charter vessels. In general, success rates on charter vessels tend to be higher than success rates on private vessels. Small amounts of shore-based effort directed toward ocean area salmon also occur from jetties and piers. The coastwide

proportion of angler trips taken on charter vessels in 2018 (32 percent) was slightly above the proportion of charter trips last year (31 percent) and in 2016 (30 percent). Underlying the coastwide values were increases of three percent compared with last year in the proportion of charter trips in California, 56 percent in the proportion of charter trips in Oregon, and nine percent in the proportion of charter trips in Washington. Figure IV-5 and Tables IV-10, IV-11, IV-12, and IV-13 display recreational effort and catch statistics by port area and mode for each state.

### **California**

The number of ocean recreational salmon trips in California in 2018 (96,400) was 30 percent above the level in 2017 (74,000) and 38 percent higher than in 2016 (70,100). Regionally, the numbers of recreational salmon trips in 2018 increased from the prior year in all California port areas except Monterey, where it fell eight percent. Trips from Crescent City and Eureka rebounded after complete closure of the California KMZ in 2017. A total of 87,000 Chinook were caught in California on the total of 96,400 trips, for an average success rate of 0.9 fish per trip. The charter industry's share of California recreational salmon trips in 2018 was 49 percent, 3 percent above last year's share, and the highest proportion of charter trips recorded since 50 percent in 1981 (Table IV-10, Table IV-11 and Figure IV-5).

### **Oregon**

The 63,800 ocean recreational salmon trips in Oregon in 2018 were up 51 percent compared with 42,300 angler trips in 2017, and 64 percent above the 38,900 angler trips in 2016, but 10 percent below the most recent five-year (2013-2017) average of 71,000 trips (Tables IV-10 and IV-12). Compared with last year, regional effort was lower by 10 percent in Astoria, but up by 30 percent in Tillamook, by 12 percent in Coos Bay, by more than double in Newport, and by more than triple in Brookings. The charter industry's share of Oregon recreational salmon trips in 2018 was 9 percent, 56 percent higher than in 2017, but less than one percent below the recent five-year (2013-2017) average share (Table IV-10, Table IV-12, and Figure IV-5).

From 1984 to 1993, on average coho accounted for 87 percent of the Oregon annual recreational ocean salmon catch. From 1994 through 1998, the lack of opportunity to retain coho south of Cape Falcon generally resulted in much lower angler success rates. Salmon retention rates increased with the opportunity to retain coho in mark-selective fisheries south of Cape Falcon beginning in 1999. From 2002 through 2015, retention rates ranged between 0.44 and 1.08 salmon per angler-day. The 2018 Oregon salmon retention rate of 0.51 falls within this historical range, but is 16 percent lower than last year's value of 0.61, and 15 percent below the recent five-year (2013-2017) average retention rate of 0.60. In 2018, coho contributed 85 percent of total Oregon recreational ocean salmon catch, the highest share since 98 percent in 2009.

### **Washington**

In 2018, 48,000 ocean angler trips were taken on vessels on the Washington coast, a decrease of 18 percent from the 58,600 trips taken in 2017, and 38 percent below the recent five-year (2013-2017) average of 77,600. About 30 percent of Washington angler trips in 2018 were taken on charter vessels, up nine percent from 2017, but slightly below the recent five-year (2013-2017) average charter trip share (Table IV-10, Table IV-13, and Figure IV-5).

The angler success rate in Washington (in terms of retained fish per angler-trip) was 0.93 in 2018, down three percent from last year, and 10 percent below the recent five-year (2013-2017) average success rate of 1.04 fish per angler-trip. Note that these figures do not include angler effort that occurs from the ocean side of the Columbia River jetty, or in the state managed Area 4B add-on fishery (if open).



### *North of Cape Falcon Non-Salmon Recreational Fisheries*

In order to benefit coastal communities by offsetting reduced recreational salmon trips by increasing angler participation in non-salmon recreational fishing (e.g., bottomfish) and extending the overall length of the salmon season, partial-week closures were instituted in the recreational salmon fishery north of Cape Falcon beginning in 1985. Beginning in 1996, Sunday through Thursday salmon openings were generally used in the two southern areas (Westport and Columbia River), and seven-day per week seasons were common in the two northern areas (Neah Bay and La Push). Starting in 1999, seven-day per week openings began to be used in the later part of the summer in the Columbia River area and, initially to a lesser extent, in Westport. In the same year, partial week openings were instituted for much of the season in both northern areas. Since then, seven-day per week openings have been increasingly used in the Westport and Columbia River areas. Beginning in 2011, seven-day openings became common for all areas.

In 2018, there were 61,400 total recreational bottomfish trips north of Cape Falcon, 16 percent more than in 2017 and the greatest number since at least 1986. Compared with 2017, total bottomfish effort increased in all four Washington coast ocean port areas: Columbia River–Buoy 10, Westport, La Push and Neah Bay–Area 4B (Table IV-14).

### *Buoy 10 and Area 4B Add-On Fisheries*

Salmon anglers fishing from private and charter boats originating from Oregon and Washington ports made a total of approximately 65,200 trips in the Buoy 10 fishery in 2018. The 2018 effort level is 26 percent less than the 88,100 trips recorded in 2017, 27 percent below the approximately 88,700 trips made in 2016 (and on average during 2013-2017), and the lowest number of trips in the Buoy 10 fishery since 64,000 in 2013. The success/retention rate for anglers fishing from boats in the Buoy 10 fishery in 2018 was 0.27 salmon per angler day, 47 percent below the 0.52 success rate in 2017, and 50 percent below the average success rate of 0.55 salmon per angler day in the Buoy 10 fishery during 2013-2017 (Table IV-15).

As in previous years, there was no Area 4B add-on fishery in 2018. In 2000, approximately 3,400 trips were made in the late-season Area 4B add-on fishery. Since then there have been no late season Area 4B add-on fisheries, with the exception of 2008, when there were an estimated 782 private trips and no charter trips (Table IV-15).

There were numerous other inside recreational salmon fishing opportunities in coastal streams and estuaries and Puget Sound that are not enumerated in this chapter of the Review. See Appendix B for estimates of harvest in some of those other fisheries.

## **SALMON FISHERY INCOME IMPACTS AND COMMUNITY DEPENDENCE**

Coastal community income impacts provide information on the effects of fluctuations in annual salmon harvest on local economies and small businesses. Income impacts are based on commercial landings and recreational fishing days (angler-trips), and were estimated using the IO-PAC fisheries economic impact model. Prior to the *Review of 2014 Ocean Salmon Fisheries*, income impacts were estimated using the Fisheries Economic Assessment Model (FEAM). When IO-PAC was adopted it was applied retrospectively back to 2010. The change in methodology means that income impacts estimated using IO-PAC for years beginning with 2010 are not completely comparable with historical values for years prior to 2010, which were estimated using FEAM. Consequently, comparisons of income impacts in this document are generally confined to describing trends appearing over 2010-2018, during which period the IO-PAC-based models and multipliers were applied. Appendix E to the *Review of 2014 Ocean Salmon Fisheries* contains a more detailed explanation of the change in income modeling methodology, including comparisons of IO-PAC with FEAM-based estimates for overlapping years.

Estimated state and local community income impacts of commercial and recreational ocean salmon fisheries and selected state-managed fisheries are shown in Tables IV-16 through IV-20. Income impacts are most relevant to those dependent on an income stream from the fishery, including individuals, businesses, and state and local governments. These impacts represent estimates of total personal income associated with harvesting and processing activities in the commercial salmon fisheries and trip-related expenditures made by recreational salmon anglers, expressed at the local community (county) and state levels.<sup>3</sup> The income impacts reported in this chapter consist of the following personal income earned by those directly participating in the fishery (e.g. vessel owners, crew members, processing workers, recreational charter operators), income indirectly associated with the fishery that is earned by those providing inputs to harvesting, processing and recreational sectors (e.g. fuel, gear, packaging, bait, and ice suppliers; and hotel, restaurant, and campground operators), and income earned by those whose goods and services are purchased when direct and indirect income is re-spent in the community (e.g. grocery store owners and employees, local manufacturers, auto mechanics, restaurants, health care, and legal professionals). This latter category is sometimes called ‘induced income.’

When the commercial or recreational fishery is reduced or absent, the net impact on local communities will depend on the economic base of the community and on how people respond to the reduced fishery. For example, if a recreational angler is unable to make a coastal salmon trip and instead travels inland to fish in-river or at a mountain lake, then the impact associated with the lost salmon trip represents a net loss to the members of the coastal community. On the other hand, if the recreational fisher instead took part in another form of recreational activity in the same coastal community, then there may be little or no net loss to the community as a whole. However, at least some of those whose livelihood involves the salmon fishery would experience an income reduction, as if the angler’s money had been spent elsewhere (or not at all). Similarly, for those involved in the commercial fishery, whether or not reduced income impacts associated with a reduction in salmon harvest represents a net loss to the community depends on the degree to which opportunities exist in the community to take up some other economic activity to compensate for the loss of income from commercial salmon harvesting and processing.

Income impacts are presented at the local and state levels. When assessing local income impacts but changing the area of consideration from a local-level economy to a larger state or national economy, it is likely that an indicated change in local income impacts increasingly represents a disruption due to redistribution of activity within the economy and decreasingly represents a net loss to the greater economy under consideration.

Income impacts are estimated based on several data components, including: reported commercial landings and exvessel prices by port or area, an inventory of local harvesters and processors, estimates of expenditures by harvesters and processors, data on the expenditure patterns of recreational anglers, and local and state-level total income impact coefficients generated by IMPLAN<sup>®</sup> models constructed for each port or area. Commercial ocean harvests that are landed outside of coastal areas (e.g., ocean troll caught salmon landed in Puget Sound ports) are not included in these estimates of coastal community impacts, but may be included in the overall state-level impacts.

The income impacts presented below are estimates of annual trends and are intended to indicate the possible redirection of economic activity between fishing-dependent and non-fishing sectors. As such, they

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<sup>3</sup> Because *income impact* refers to income “associated with” a given level of economic activity, the term *impact* in this context should not be confused with the term *impact* as frequently employed in policy analyses such as those required by the National Environmental Policy Act. Such policy analyses refer to impact as the effect (the difference) which results from taking an action (as compared to not taking the action). Income impacts are one of a number of different but related measures of total economic activity (e.g. income impacts, gross receipts, total jobs, etc.).

represent likely upper bounds on the local community and state-level income impacts generated by West Coast salmon fisheries. All income impact estimates reported in this document are in terms of inflation-adjusted 2018 dollars.

### *West Coast Ocean Fishery Commercial and Recreational Income Impacts*

Total state-level income impacts associated with recreational and non-Indian commercial ocean salmon fisheries for all three states combined in 2018 were \$61.8 million, 19 percent above the 2017 level of \$51.8 million, and 25 percent above the 2016 level, but 27 percent below the 2013-2017 average of \$84.2 million (all values adjusted for inflation) (Tables IV-16, IV-17, and IV-18). Total West Coast income impacts associated with the 2018 non-Indian commercial ocean fishery were \$19.1 million, 23 percent above the estimate for 2017 (\$15.5 million), 10 percent above the 2016 level of \$17.4 million, but 45 percent below the 2013-2017 average of \$34.4 million (all values adjusted for inflation).<sup>4</sup> Income impacts generated by the three states' combined 2018 ocean recreational fisheries totaled \$42.8 million, 18 percent above last year's level of \$36.2 million, 33 percent above the 2016 level of \$32.2 million, but 14 percent below the 2013-2017 average of \$49.8 million (all values adjusted for inflation). Note that these coastwide values may mask effects in the individual states and communities. Tables IV-16, IV-17, and IV-18 provide greater detail on the income impacts estimated for individual port areas in the three West Coast states.

### *Selected Inside Fisheries*

#### **Columbia River Commercial Fisheries**

Historically the non-Indian and treaty Indian Columbia River commercial fisheries have generated a substantial amount of income for Oregon and Washington communities on the Columbia River. In 2018, income impacts associated with the Columbia River commercial catch (combined non-Indian and treaty Indian) were estimated at \$7.2 million, 47 percent below the annual estimate for 2017 of \$13.5 million, 61 percent below the 2016 level of \$18.1 million, and 62 percent below the recent five-year average of \$19.0 million for the 2013-2017 period (all values adjusted for inflation) (Table IV-19).

#### **Buoy 10 and Area 4B Add-On**

Estimated local community income impacts associated with the 2018 Buoy 10 recreational salmon fishery were \$5.1 million, 27 percent below last year's and the 2013-2017 average value of approximately \$7 million, and 28 percent below the \$7.1 million estimated for 2016. The 2018 value was also the lowest income impact value estimated for this fishery since \$5.0 million in 2013 (all values adjusted for inflation). There was no late-season Area 4B add-on fishery in 2018. The most recent Area 4B add-on fishery, the only time since 2000, occurred in 2008. Local community income impacts associated with the 2008 area 4B add-on fishery were estimated to be \$34,500 (adjusted for inflation) (Table IV-20).

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<sup>4</sup> Income impact estimates for the commercial fishery do not include postseason settlement payments fishers may have received from buyers. In certain years postseason settlements have been particularly significant in the California fishery.

TABLE IV-1. Average monthly exvessel troll salmon price in dollars per dressed pound for California, Oregon, and Washington in 2018.

| Species/Grade                  | Mar. | Apr. | May   | June  | July | Aug. | Sept. | Oct.  | Nov.  | Dec. | Season <sup>b/</sup> |
|--------------------------------|------|------|-------|-------|------|------|-------|-------|-------|------|----------------------|
| <b>CALIFORNIA</b>              |      |      |       |       |      |      |       |       |       |      |                      |
| Chinook <sup>a/</sup>          | -    | -    | 12.21 | 9.62  | 7.01 | 7.46 | 8.51  | 9.71  | -     | -    | 8.39                 |
| Coho                           | -    | -    | -     | -     | -    | -    | -     | -     | -     | -    | -                    |
| <b>OREGON</b>                  |      |      |       |       |      |      |       |       |       |      |                      |
| Chinook                        |      |      |       |       |      |      |       |       |       |      |                      |
| Large (>11 Pounds)             | -    | -    | 12.15 | 11.39 | 8.10 | 7.28 | 8.85  | 9.42  | 11.25 | -    | 8.53                 |
| Medium (7-11 Pounds)           | -    | -    | 12.05 | 10.93 | 7.80 | 6.93 | 8.17  | 10.17 | 11.25 | -    | 8.06                 |
| Small (<7 Pounds)              | -    | -    | 12.33 | 9.00  | 6.28 | 6.26 | 9.40  | -     | 8.00  | -    | 7.31                 |
| Ungraded Chinook               | -    | -    | 12.37 | 10.63 | 7.90 | 7.56 | 8.36  | 9.13  | 9.76  | -    | 8.65                 |
| Weighted Average               | -    | -    | 12.30 | 10.95 | 7.93 | 7.29 | 8.44  | 9.41  | 11.13 | -    | 8.48                 |
| Mixed Coho                     | -    | -    | -     | -     | 2.87 | 3.76 | 4.00  | -     | -     | -    | 3.65                 |
| <b>WASHINGTON<sup>d/</sup></b> |      |      |       |       |      |      |       |       |       |      |                      |
| Chinook                        |      |      |       |       |      |      |       |       |       |      |                      |
| Large (>11 Pounds)             | -    | -    | 11.79 | 10.88 | 6.80 | 7.11 | 7.56  | -     | -     | -    | 9.32                 |
| Medium (8-11 Pounds)           | -    | -    | 11.68 | 11.20 | 6.42 | 6.74 | 6.07  | -     | -     | -    | 9.56                 |
| Small (<8 Pounds)              | -    | -    | 8.67  | 8.60  | 6.12 | 4.98 | -     | -     | -     | -    | 8.10                 |
| Ungraded Chinook               | -    | -    | -     | -     | -    | -    | -     | -     | -     | -    | -                    |
| Weighted Average               | -    | -    | 11.63 | 10.94 | 6.67 | 7.04 | 7.30  | -     | -     | -    | 9.16                 |
| Mixed Coho                     | -    | -    | -     | -     | 2.70 | 2.63 | 2.86  | -     | -     | -    | 2.72                 |

a/ Chinook salmon are sometimes sold in multiple size categories. Prices paid in these categories are not extracted from dealer ticket information.

b/ The "Season" numbers shown for California and Washington in this table are weighted average values per dressed pound of salmon caught each month during the season, whereas the "Season" numbers for Oregon represent simple averages of the monthly prices per dressed pound.

c/ Non-Indian data only.

TABLE IV-2. Troll Chinook and coho landed in California, estimates of exvessel value, and average price (dollars per dressed pound) in nominal and real (inflation adjusted, 2018) dollars.<sup>a/</sup>

| Year or Avg        | Chinook                  |                       |                              |                           | Coho                     |                       |                              |                           | Total <sup>b/</sup>      |                       |
|--------------------|--------------------------|-----------------------|------------------------------|---------------------------|--------------------------|-----------------------|------------------------------|---------------------------|--------------------------|-----------------------|
|                    | Nominal Value (\$*1,000) | Real Value (\$*1,000) | Nominal Price Per Pound (\$) | Real Price Per Pound (\$) | Nominal Value (\$*1,000) | Real Value (\$*1,000) | Nominal Price Per Pound (\$) | Real Price Per Pound (\$) | Nominal Value (\$*1,000) | Real Value (\$*1,000) |
| 1979               | 17,356                   | 43,809                | 2.53                         | 6.39                      | 2,303                    | 5,813                 | 2.19                         | 5.53                      | 19,659                   | 49,622                |
| 1980               | 12,741                   | 29,473                | 2.27                         | 5.25                      | 408                      | 944                   | 1.36                         | 3.15                      | 13,149                   | 30,416                |
| 1981-1985          | 10,945                   | 21,425                | 2.42                         | 4.68                      | 554                      | 1,097                 | 1.62                         | 3.14                      | 11,499                   | 22,522                |
| 1986-1990          | 21,151                   | 35,047                | 2.56                         | 4.20                      | 490                      | 799                   | 1.81                         | 2.97                      | 21,641                   | 35,846                |
| 1991-1995          | 7,335                    | 10,323                | 2.28                         | 3.24                      | 143                      | 211                   | 0.63                         | 0.92                      | 7,478                    | 10,534                |
| 1996               | 5,984                    | 7,955                 | 1.44                         | 1.91                      | -                        | -                     | -                            | -                         | 5,984                    | 7,955                 |
| 1997               | 7,288                    | 9,521                 | 1.38                         | 1.80                      | -                        | -                     | -                            | -                         | 7,288                    | 9,521                 |
| 1998               | 3,060                    | 3,953                 | 1.66                         | 2.14                      | -                        | -                     | -                            | -                         | 3,060                    | 3,953                 |
| 1999               | 7,429                    | 9,457                 | 1.93                         | 2.46                      | -                        | -                     | -                            | -                         | 7,429                    | 9,457                 |
| 2000               | 10,304                   | 12,839                | 2.01                         | 2.50                      | -                        | -                     | -                            | -                         | 10,304                   | 12,839                |
| 2001               | 4,773                    | 6,608                 | 1.98                         | 2.74                      | -                        | -                     | -                            | -                         | 4,773                    | 6,608                 |
| 2002               | 7,776                    | 10,597                | 1.55                         | 2.12                      | -                        | -                     | -                            | -                         | 7,776                    | 10,597                |
| 2003               | 12,181                   | 16,298                | 1.91                         | 2.56                      | -                        | -                     | -                            | -                         | 12,181                   | 16,298                |
| 2004               | 17,895                   | 23,315                | 2.87                         | 3.74                      | -                        | -                     | -                            | -                         | 17,895                   | 23,315                |
| 2005               | 12,913                   | 16,316                | 2.97                         | 3.75                      | -                        | -                     | -                            | -                         | 12,913                   | 16,316                |
| 2006               | 5,350                    | 6,561                 | 5.13                         | 6.29                      | -                        | -                     | -                            | -                         | 5,350                    | 6,561                 |
| 2007               | 7,902                    | 9,438                 | 5.18                         | 6.19                      | -                        | -                     | -                            | -                         | 7,902                    | 9,438                 |
| 2008               | -                        | -                     | -                            | -                         | -                        | -                     | -                            | -                         | -                        | -                     |
| 2009               | -                        | -                     | -                            | -                         | -                        | -                     | -                            | -                         | -                        | -                     |
| 2010               | 1,246                    | 1,432                 | 5.47                         | 6.29                      | -                        | -                     | -                            | -                         | 1,246                    | 1,432                 |
| 2011               | 5,133                    | 5,778                 | 5.18                         | 5.83                      | -                        | -                     | -                            | -                         | 5,133                    | 5,778                 |
| 2012               | 13,521                   | 14,935                | 5.34                         | 5.90                      | -                        | -                     | -                            | -                         | 13,521                   | 14,935                |
| 2013               | 23,632                   | 25,653                | 6.23                         | 6.76                      | -                        | -                     | -                            | -                         | 23,632                   | 25,653                |
| 2014               | 12,521                   | 13,340                | 5.56                         | 5.92                      | -                        | -                     | -                            | -                         | 12,521                   | 13,340                |
| 2015               | 8,347                    | 8,798                 | 7.03                         | 7.41                      | -                        | -                     | -                            | -                         | 8,347                    | 8,798                 |
| 2016               | 5,312                    | 5,539                 | 8.63                         | 9.00                      | -                        | -                     | -                            | -                         | 5,312                    | 5,539                 |
| 2017               | 4,925                    | 5,039                 | 9.90                         | 10.13                     | -                        | -                     | -                            | -                         | 4,925                    | 5,039                 |
| 2018 <sup>c/</sup> | 7,792                    | 7,792                 | 8.39                         | 8.39                      | -                        | -                     | -                            | -                         | 7,792                    | 7,792                 |

a/ These exvessel values do not include the postseason settlement payments some fishers may have received from buyers, and therefore may underestimate the true payments received by fishers for their landings. Beginning circa 1999, these postseason settlements are believed to have grown for the California fishery. For 2002, the exvessel value reported here is believed to be under-reported by roughly 5 percent to 10 percent.

b/ Does not include pink salmon landings, if any.

c/ Preliminary.

TABLE IV-3. Troll Chinook and coho landed in Oregon, estimates of exvessel value, and average price (dollars per dressed pound) in nominal and real (inflation adjusted, 2018) dollars.

| Year or Avg.       | Chinook                  |                       |                              |                           | Coho                     |                       |                              |                           | Total <sup>a/</sup>      |                       |
|--------------------|--------------------------|-----------------------|------------------------------|---------------------------|--------------------------|-----------------------|------------------------------|---------------------------|--------------------------|-----------------------|
|                    | Nominal Value (\$*1,000) | Real Value (\$*1,000) | Nominal Price Per Pound (\$) | Real Price Per Pound (\$) | Nominal Value (\$*1,000) | Real Value (\$*1,000) | Nominal Price Per Pound (\$) | Real Price Per Pound (\$) | Nominal Value (\$*1,000) | Real Value (\$*1,000) |
| 1971-1975          | 2,036                    | 7,590                 | 0.89                         | 3.38                      | 3,658                    | 13,969                | 0.64                         | 2.40                      | 5,694                    | 21,560                |
| 1976-1980          | 5,290                    | 14,287                | 2.17                         | 5.84                      | 6,389                    | 17,783                | 1.51                         | 4.06                      | 11,679                   | 32,071                |
| 1981-1985          | 3,582                    | 6,975                 | 2.46                         | 4.76                      | 2,248                    | 4,567                 | 1.45                         | 2.81                      | 5,830                    | 11,542                |
| 1986-1990          | 9,381                    | 15,519                | 2.47                         | 4.06                      | 3,203                    | 5,311                 | 1.54                         | 2.53                      | 12,584                   | 20,830                |
| 1991-1995          | 1,971                    | 2,780                 | 2.24                         | 3.18                      | 326                      | 480                   | 0.64                         | 0.92                      | 2,297                    | 3,260                 |
| 1996               | 3,007                    | 3,998                 | 1.56                         | 2.07                      | -                        | -                     | -                            | -                         | 3,007                    | 3,998                 |
| 1997               | 2,469                    | 3,225                 | 1.60                         | 2.09                      | -                        | -                     | -                            | -                         | 2,469                    | 3,225                 |
| 1998               | 2,297                    | 2,967                 | 1.64                         | 2.12                      | -                        | -                     | -                            | -                         | 2,297                    | 2,967                 |
| 1999               | 1,400                    | 1,782                 | 1.94                         | 2.47                      | 1                        | 1                     | 1.03                         | 1.31                      | 1,401                    | 1,784                 |
| 2000               | 2,988                    | 3,723                 | 2.02                         | 2.52                      | 75                       | 93                    | 1.06                         | 1.32                      | 3,063                    | 3,817                 |
| 2001               | 4,680                    | 6,479                 | 1.61                         | 2.23                      | 41                       | 57                    | 0.79                         | 1.09                      | 4,721                    | 6,536                 |
| 2002               | 5,383                    | 7,336                 | 1.54                         | 2.10                      | 8                        | 11                    | 0.75                         | 1.02                      | 5,391                    | 7,347                 |
| 2003               | 7,186                    | 9,615                 | 1.97                         | 2.64                      | 36                       | 49                    | 0.85                         | 1.14                      | 7,222                    | 9,663                 |
| 2004               | 9,832                    | 12,811                | 3.45                         | 4.49                      | 86                       | 113                   | 1.24                         | 1.62                      | 9,919                    | 12,923                |
| 2005               | 8,466                    | 10,697                | 3.17                         | 4.01                      | 37                       | 47                    | 1.87                         | 2.36                      | 8,503                    | 10,744                |
| 2006               | 2,663                    | 3,265                 | 5.48                         | 6.72                      | 38                       | 47                    | 2.90                         | 3.56                      | 2,701                    | 3,312                 |
| 2007               | 2,630                    | 3,141                 | 5.66                         | 6.76                      | 193                      | 230                   | 1.90                         | 2.27                      | 2,822                    | 3,371                 |
| 2008               | 484                      | 566                   | 7.31                         | 8.56                      | 10                       | 12                    | 2.82                         | 3.30                      | 494                      | 579                   |
| 2009               | 77                       | 90                    | 5.06                         | 5.88                      | 267                      | 311                   | 2.04                         | 2.37                      | 345                      | 401                   |
| 2010               | 2,775                    | 3,190                 | 5.49                         | 6.31                      | 16                       | 18                    | 2.23                         | 2.56                      | 2,791                    | 3,207                 |
| 2011               | 2,396                    | 2,698                 | 5.96                         | 6.71                      | 5                        | 6                     | 2.01                         | 2.26                      | 2,401                    | 2,703                 |
| 2012               | 4,263                    | 4,709                 | 5.75                         | 6.35                      | 8                        | 9                     | 2.20                         | 2.43                      | 4,271                    | 4,718                 |
| 2013               | 7,604                    | 8,255                 | 5.88                         | 6.38                      | 7                        | 7                     | 2.56                         | 2.78                      | 7,611                    | 8,262                 |
| 2014               | 14,692                   | 15,653                | 5.71                         | 6.08                      | 67                       | 72                    | 2.00                         | 2.13                      | 14,760                   | 15,724                |
| 2015               | 7,313                    | 7,709                 | 6.15                         | 6.48                      | 21                       | 22                    | 1.88                         | 1.98                      | 7,334                    | 7,731                 |
| 2016               | 4,261                    | 4,443                 | 8.23                         | 8.58                      | -                        | -                     | -                            | -                         | 4,261                    | 4,443                 |
| 2017               | 2,121                    | 2,170                 | 8.03                         | 8.22                      | 8                        | 9                     | 3.03                         | 3.10                      | 2,129                    | 2,179                 |
| 2018 <sup>b/</sup> | 2,440                    | 2,440                 | 8.48                         | 8.48                      | 2                        | 2                     | 3.65                         | 3.65                      | 2,442                    | 2,442                 |

a/ Does not include pink salmon landings.

b/ Preliminary.

TABLE IV-4. Non-Indian troll Chinook and coho landed in Washington, estimates of exvessel value, and average price (dollars per dressed pound) in nominal and real (inflation adjusted, 2018) dollars.<sup>a/</sup>

| Year or Avg.            | Chinook                  |                       |                              |                           | Coho                     |                       |                              |                           | Total <sup>b/</sup>      |                       |
|-------------------------|--------------------------|-----------------------|------------------------------|---------------------------|--------------------------|-----------------------|------------------------------|---------------------------|--------------------------|-----------------------|
|                         | Nominal Value (\$*1,000) | Real Value (\$*1,000) | Nominal Price Per Pound (\$) | Real Price Per Pound (\$) | Nominal Value (\$*1,000) | Real Value (\$*1,000) | Nominal Price Per Pound (\$) | Real Price Per Pound (\$) | Nominal Value (\$*1,000) | Real Value (\$*1,000) |
| 1971-1975               | 2,714                    | 10,249                | 0.89                         | 3.38                      | 3,060                    | 11,583                | 0.66                         | 2.51                      | 5,775                    | 21,831                |
| 1976-1980               | 5,313                    | 14,653                | 2.39                         | 6.39                      | 6,086                    | 16,745                | 1.67                         | 4.48                      | 11,399                   | 31,399                |
| 1981-1985               | 1,954                    | 3,916                 | 2.46                         | 4.76                      | 1,272                    | 2,559                 | 1.32                         | 2.55                      | 3,225                    | 6,476                 |
| 1986-1990 <sup>c/</sup> | 1,310                    | 2,162                 | 2.61                         | 4.31                      | 360                      | 585                   | 1.62                         | 2.67                      | 1,670                    | 2,747                 |
| 1991-1995 <sup>d/</sup> | 550                      | 794                   | 2.17                         | 3.08                      | 120                      | 174                   | 0.86                         | 1.23                      | 670                      | 968                   |
| 1996 <sup>d/</sup>      | d/                       | d/                    | d/                           | d/                        | 59                       | 78                    | 0.86                         | 1.14                      | d/                       | d/                    |
| 1997                    | 125                      | 163                   | 1.55                         | 2.02                      | -                        | -                     | -                            | -                         | 125                      | 163                   |
| 1998                    | 123                      | 159                   | 1.51                         | 1.95                      | -                        | -                     | -                            | -                         | 123                      | 159                   |
| 1999                    | 377                      | 480                   | 1.90                         | 2.42                      | 19                       | 24                    | 0.88                         | 1.12                      | 396                      | 504                   |
| 2000                    | 224                      | 280                   | 1.71                         | 2.13                      | 34                       | 42                    | 1.09                         | 1.36                      | 258                      | 322                   |
| 2001                    | 349                      | 483                   | 1.44                         | 1.99                      | 34                       | 47                    | 0.69                         | 0.96                      | 383                      | 530                   |
| 2002                    | 756                      | 1,030                 | 1.11                         | 1.51                      | 2                        | 2                     | 1.58                         | 2.15                      | 758                      | 1,033                 |
| 2003                    | 951                      | 1,272                 | 1.15                         | 1.54                      | 40                       | 54                    | 0.74                         | 0.99                      | 991                      | 1,326                 |
| 2004                    | 1,079                    | 1,406                 | 2.14                         | 2.79                      | 106                      | 138                   | 1.16                         | 1.51                      | 1,185                    | 1,544                 |
| 2005                    | 1,273                    | 1,609                 | 2.70                         | 3.41                      | 16                       | 20                    | 1.65                         | 2.08                      | 1,290                    | 1,629                 |
| 2006                    | 1,029                    | 1,261                 | 4.64                         | 5.69                      | 16                       | 20                    | 1.69                         | 2.07                      | 1,045                    | 1,282                 |
| 2007                    | 905                      | 1,080                 | 4.90                         | 5.85                      | 48                       | 58                    | 1.46                         | 1.74                      | 953                      | 1,138                 |
| 2008                    | 673                      | 789                   | 6.73                         | 7.88                      | 36                       | 42                    | 2.49                         | 2.92                      | 709                      | 831                   |
| 2009                    | 893                      | 1,038                 | 5.76                         | 6.70                      | 276                      | 321                   | 2.02                         | 2.35                      | 1,169                    | 1,359                 |
| 2010                    | 3,083                    | 3,543                 | 5.61                         | 6.45                      | 32                       | 37                    | 2.14                         | 2.46                      | 3,115                    | 3,580                 |
| 2011                    | 1,652                    | 1,860                 | 5.12                         | 5.76                      | 35                       | 40                    | 2.10                         | 2.36                      | 1,687                    | 1,900                 |
| 2012                    | 2,323                    | 2,566                 | 5.34                         | 5.90                      | 35                       | 39                    | 1.99                         | 2.20                      | 2,358                    | 2,605                 |
| 2013                    | 2,771                    | 3,008                 | 6.16                         | 6.69                      | 67                       | 73                    | 2.15                         | 2.33                      | 2,838                    | 3,080                 |
| 2014                    | 2,549                    | 2,715                 | 5.50                         | 5.86                      | 160                      | 170                   | 1.83                         | 1.95                      | 2,709                    | 2,886                 |
| 2015                    | 3,423                    | 3,608                 | 5.48                         | 5.78                      | 26                       | 27                    | 1.67                         | 1.76                      | 3,448                    | 3,635                 |
| 2016                    | 1,606                    | 1,675                 | 8.00                         | 8.34                      | -                        | -                     | -                            | -                         | 1,606                    | 1,675                 |
| 2017                    | 2,896                    | 2,963                 | 8.66                         | 8.86                      | 23                       | 24                    | 2.59                         | 2.65                      | 2,919                    | 2,987                 |
| 2018                    | 2,326                    | 2,326                 | 9.16                         | 9.16                      | 24                       | 24                    | 2.81                         | 2.81                      | 2,350                    | 2,350                 |

a/ All values in this table are based on preliminary information available at the start of each year's salmon review.

b/ Does not include pink salmon landings.

c/ There was no legal coho fishery in 1988. The value used in this average for 1988 is for landings of fish caught south of Cape Falcon and seizures of illegal fish.

d/ In 1994-1996 Chinook were caught off Oregon and landed in Washington. Value information was not provided to preserve confidentiality.

TABLE IV-5. Non-Indian troll pink salmon landed in Oregon and Washington, estimates of exvessel value, and average price (dollars per dressed pound) in nominal and real (inflation adjusted, 2018) dollars.

| Year or Avg. <sup>a/</sup> | Oregon                   |                       |                              |                           | Washington               |                       |                              |                           | Total                    |                       |
|----------------------------|--------------------------|-----------------------|------------------------------|---------------------------|--------------------------|-----------------------|------------------------------|---------------------------|--------------------------|-----------------------|
|                            | Nominal Value (\$*1,000) | Real Value (\$*1,000) | Nominal Price Per Pound (\$) | Real Price Per Pound (\$) | Nominal Value (\$*1,000) | Real Value (\$*1,000) | Nominal Price Per Pound (\$) | Real Price Per Pound (\$) | Nominal Value (\$*1,000) | Real Value (\$*1,000) |
| 1976-1980                  | 167                      | 472                   | 0.75                         | 2.01                      | 1,200                    | 3,196                 | 0.54                         | 1.46                      | 1,367                    | 3,668                 |
| 1981-1985                  | 129                      | 255                   | 0.74                         | 1.44                      | 287                      | 575                   | 0.41                         | 0.80                      | 416                      | 829                   |
| 1986-1990                  | 41                       | 70                    | 0.77                         | 1.27                      | 57                       | 91                    | 0.66                         | 1.09                      | 98                       | 161                   |
| 1991-1995                  | 1                        | 2                     | 0.88                         | 1.24                      | 38                       | 55                    | 0.64                         | 0.90                      | 39                       | 57                    |
| 1997                       | b/                       | b/                    | 0.56                         | 0.73                      | b/                       | b/                    | 0.20                         | 0.26                      | b/                       | b/                    |
| 1999                       | b/                       | b/                    | 0.67                         | 0.85                      | b/                       | b/                    | 0.38                         | 0.48                      | b/                       | b/                    |
| 2001                       | 1                        | 1                     | 0.58                         | 0.80                      | b/                       | b/                    | 0.22                         | 0.30                      | 1                        | 1                     |
| 2003                       | b/                       | b/                    | 0.85                         | 1.14                      | b/                       | b/                    | 0.30                         | 0.40                      | b/                       | 1                     |
| 2005                       | b/                       | b/                    | 1.25                         | 1.58                      | b/                       | b/                    | 0.52                         | 0.66                      | b/                       | b/                    |
| 2007                       | b/                       | b/                    | 1.11                         | 1.33                      | b/                       | b/                    | 0.33                         | 0.39                      | b/                       | b/                    |
| 2009                       | b/                       | b/                    | 0.51                         | 0.59                      | b/                       | b/                    | 0.33                         | 0.38                      | b/                       | b/                    |
| 2011                       | b/                       | b/                    | 1.31                         | 1.47                      | 1                        | 1                     | 0.83                         | 0.93                      | 1                        | 1                     |
| 2013                       | b/                       | b/                    | 1.35                         | 1.47                      | b/                       | b/                    | 0.61                         | 0.66                      | b/                       | b/                    |
| 2015                       | b/                       | b/                    | 1.60                         | 1.69                      | b/                       | b/                    | 0.77                         | 0.81                      | b/                       | b/                    |
| 2017                       | -                        | -                     | -                            | -                         | b/                       | b/                    | b/                           | b/                        | b/                       | b/                    |

a/ Odd year averages.

b/ Less than \$500.



TABLE IV-6. Pounds of salmon landed by the commercial troll ocean fishery for major California port areas.<sup>a/b/</sup>

| Year or Avg.                                 | Crescent City | Eureka | Fort Bragg | San Francisco | Monterey | State Total |
|--|---------------|--------|------------|---------------|----------|-------------|
| <b>CHINOOK (thousands of dressed pounds)</b> |               |        |            |               |          |             |
| 1976-1980                                    | 393           | 1,403  | 1,449      | 1,733         | 889      | 5,867       |
| 1981-1985                                    | 350           | 428    | 1,128      | 1,806         | 742      | 4,454       |
| 1986-1990                                    | 155           | 405    | 2,299      | 3,648         | 1,592    | 8,097       |
| 1991-1995                                    | 2             | 25     | 183        | 1,893         | 1,326    | 3,429       |
| 1996-2000                                    | 2             | 35     | 146        | 2,155         | 1,699    | 4,037       |
| 2001-2005                                    | 86            | 64     | 1,268      | 2,704         | 756      | 4,877       |
| 2006   | -             | -      | 273        | 684           | 87       | 1,043       |
| 2007   | 34            | 81     | 357        | 888           | 165      | 1,525       |
| 2008   | -             | -      | -          | -             | -        | -           |
| 2009   | -             | -      | -          | -             | -        | -           |
| 2010   | -             | 4      | 186        | 16            | 20       | 228         |
| 2011   | 8             | 53     | 622        | 215           | 94       | 992         |
| 2012   | 5             | 78     | 611        | 1,189         | 648      | 2,530       |
| 2013   | 24            | 200    | 1,427      | 1,776         | 367      | 3,793       |
| 2014   | 27            | 110    | 1,038      | 970           | 108      | 2,253       |
| 2015   | 6             | 48     | 617        | 363           | 154      | 1,188       |
| 2016   | c/            | 6      | 165        | 313           | 131      | 615         |
| 2017   | -             | 3      | 37         | 316           | 141      | 497         |
| 2018 <sup>d/</sup>                           | 42            | 43     | 123        | 576           | 144      | 929         |
| <b>COHO (thousands of dressed pounds)</b>    |               |        |            |               |          |             |
| 1976-1980                                    | 360           | 391    | 277        | 109           | 48       | 1,184       |
| 1981-1985                                    | 89            | 104    | 89         | 54            | 9        | 345         |
| 1986-1990                                    | 22            | 43     | 136        | 53            | 9        | 262         |
| 1991-1995                                    | c/            | 4      | 11         | 56            | 23       | 94          |
| 1996-2000                                    | -             | -      | -          | -             | -        | -           |
| 2001-2005                                    | -             | -      | -          | -             | -        | -           |
| 2006   | -             | -      | -          | -             | -        | -           |
| 2007   | -             | -      | -          | -             | -        | -           |
| 2008   | -             | -      | -          | -             | -        | -           |
| 2009   | -             | -      | -          | -             | -        | -           |
| 2010   | -             | -      | -          | -             | -        | -           |
| 2011   | -             | -      | -          | -             | -        | -           |
| 2012   | -             | -      | -          | -             | -        | -           |
| 2013   | -             | -      | -          | -             | -        | -           |
| 2014   | -             | -      | -          | -             | -        | -           |
| 2015   | -             | -      | -          | -             | -        | -           |
| 2016   | -             | -      | -          | -             | -        | -           |
| 2017   | -             | -      | -          | -             | -        | -           |
| 2018 <sup>d/</sup>                           | -             | -      | -          | -             | -        | -           |

a/ The major port areas listed may include smaller ports as follows: Crescent City includes only Crescent City; Eureka includes Trinidad and Humboldt Bay; Fort Bragg includes Shelter Cove, Noyo Harbor, and Mendocino; San Francisco includes Bodega Bay, Sausalito, Berkeley, and Half Moon Bay; Monterey includes Santa Cruz, Moss Landing, Morro Bay, Avila, and all ports south of Pt. Conception.

b/ Prior to 2005 landings were based on catch area, not port of landing.

c/ Less than 500 pounds.

d/ Preliminary.

TABLE IV-7. Pounds of salmon landed by the commercial troll ocean fishery for major Oregon port areas.<sup>a/</sup>

| Year or Avg.                                 | Astoria | Tillamook | New port | Coos Bay | Brookings | State Total |
|--|---------|-----------|----------|----------|-----------|-------------|
| <b>CHINOOK (thousands of dressed pounds)</b> |         |           |          |          |           |             |
| 1976-1980                                    | 170.7   | 118.3     | 530.4    | 907.7    | 699.9     | 2,426.9     |
| 1981-1985                                    | 92.5    | 44.6      | 270.7    | 638.3    | 385.8     | 1,431.8     |
| 1986-1990                                    | 52.1    | 264.2     | 828.7    | 2,118.1  | 467.5     | 3,730.6     |
| 1991-1995                                    | 7.4     | 85.8      | 579.5    | 235.5    | 31.0      | 939.6       |
| 1996-2000                                    | 25.2    | 70.4      | 790.3    | 435.0    | 92.2      | 1,413.6     |
| 2001-2005                                    | 186.5   | 213.8     | 1,380.7  | 1,124.0  | 203.6     | 3,108.9     |
| 2006   | 99.0    | 67.5      | 218.1    | 56.2     | 45.0      | 485.8       |
| 2007   | 21.7    | 36.5      | 75.8     | 231.9    | 98.3      | 464.3       |
| 2008   | 39.2    | 19.0      | -        | -        | 7.9       | 66.2        |
| 2009   | 6.7     | 4.1       | -        | -        | 4.6       | 15.3        |
| 2010   | 116.4   | 40.0      | 184.5    | 122.2    | 42.6      | 505.7       |
| 2011   | 30.4    | 13.7      | 67.9     | 231.2    | 58.8      | 401.9       |
| 2012   | 84.4    | 64.0      | 275.0    | 221.0    | 97.1      | 741.5       |
| 2013   | 34.0    | 76.0      | 232.0    | 783.0    | 166.0     | 1,291.0     |
| 2014   | 172.1   | 149.0     | 927.0    | 1,025.0  | 298.0     | 2,571.1     |
| 2015   | 115.0   | 89.0      | 429.0    | 429.0    | 127.0     | 1,189.0     |
| 2016   | 24.0    | 16.0      | 338.0    | 116.0    | 24.0      | 518.0       |
| 2017   | 22.0    | 15.0      | 180.0    | 34.0     | 14.0      | 265.0       |
| 2018 <sup>c/</sup>                           | 3.0     | 8.0       | 131.0    | 87.0     | 59.0      | 288.0       |
| <b>COHO (thousands of dressed pounds)</b>    |         |           |          |          |           |             |
| 1976-1980                                    | 384.6   | 659.7     | 1,189.8  | 1,660.5  | 357.2     | 4,251.8     |
| 1981-1985                                    | 132.9   | 293.1     | 450.5    | 549.9    | 110.7     | 1,537.1     |
| 1986-1990                                    | 73.4    | 473.2     | 693.0    | 648.4    | 69.2      | 1,957.2     |
| 1991-1995                                    | 16.5    | 92.9      | 110.3    | 103.9    | 1.5       | 325.1       |
| 1996-2000                                    | 14.4    | -         | -        | -        | -         | 14.4        |
| 2001-2005                                    | 28.7    | 9.8       | 1.0      | -        | -         | 39.1        |
| 2006   | 7.6     | 5.5       | -        | -        | -         | 13.1        |
| 2007   | 36.5    | 34.3      | 13.5     | 14.3     | 2.5       | 101.1       |
| 2008   | 2.9     | 0.7       | -        | -        | -         | 3.7         |
| 2009   | 47.7    | 43.4      | 35.0     | 4.6      | b/        | 130.8       |
| 2010   | 6.3     | 0.7       | -        | -        | -         | 7.0         |
| 2011   | 2.0     | 0.6       | -        | -        | -         | 2.6         |
| 2012   | 2.5     | 1.3       | -        | -        | -         | 3.8         |
| 2013   | 2.0     | -         | -        | -        | -         | 2.0         |
| 2014   | 32.7    | 17.8      | 9.2      | 6.5      | 1.3       | 67.5        |
| 2015   | 10.0    | 1.0       | -        | -        | -         | 11.0        |
| 2016   | -       | -         | -        | -        | -         | -           |
| 2017   | 1.0     | 1.0       | -        | -        | -         | 2.0         |
| 2018 <sup>c/</sup>                           | b/      | b/        | -        | -        | -         | -           |

a/ The major port areas listed include smaller ports as follows: Astoria also includes Gearhart/Seaside and Cannon Beach; Tillamook also includes Garibaldi, Netarts, Pacific City, and Nehalem Bay; New port also includes Depoe Bay, Siletz Bay, Salmon River, and Waldport; Coos Bay also includes Florence, Winchester Bay, Charleston, and Bandon; Brookings also includes Port Orford and Gold Beach.

b/ Less than 500 pounds.

c/ Preliminary.

TABLE IV-8. Pounds of salmon landed by the non-Indian commercial troll ocean fishery for major Washington port areas.<sup>a/b/</sup>

| Year or Avg.                                 | Coastal Community |         |          |        |       | Puget Sound | State Total <sup>c/</sup> |
|--|-------------------|---------|----------|--------|-------|-------------|---------------------------|
|  | Neah Bay          | La Push | Westport | Ilwaco | Total |             |                           |
| <b>CHINOOK (thousands of dressed pounds)</b> |                   |         |          |        |       |             |                           |
| 1976-1980                                    | 288               | 421     | 919      | 261    | 1,889 | 426         | 2,315                     |
| 1981-1985                                    | 88                | 32      | 370      | 74     | 564   | 124         | 689                       |
| 1986-1990                                    | 71                | 17      | 234      | 48     | 371   | 122         | 493                       |
| 1991-1995 <sup>d/</sup>                      | 137               | 29      | 123      | 9      | 204   | 30          | 234                       |
| 1996-2000 <sup>d/</sup>                      | 49                | 1       | 37       | 3      | 80    | 22          | 102                       |
| 2001-2005                                    | 250               | 55      | 208      | 26     | 539   | 4           | 543                       |
| 2006   | 86                | 64      | 40       | 26     | 216   | 5           | 222                       |
| 2007   | 38                | 31      | 105      | 8      | 182   | 2           | 184                       |
| 2008   | 20                | 17      | 49       | 13     | 99    | 1           | 100                       |
| 2009   | 31                | 25      | 92       | 3      | 153   | 2           | 155                       |
| 2010   | 48                | 62      | 402      | 10     | 522   | -           | 522                       |
| 2011   | 113               | 44      | 155      | 11     | 322   | -           | 322                       |
| 2012   | 172               | 92      | 147      | 23     | 435   | -           | 435                       |
| 2013   | 85                | 83      | 275      | 7      | 450   | e/          | 450                       |
| 2014   | 77                | 93      | 182      | 112    | 463   | e/          | 463                       |
| 2015   | 61                | 133     | 383      | 43     | 621   | 4           | 625                       |
| 2016   | 28                | 32      | 118      | 19     | 197   | 3           | 201                       |
| 2017   | 69                | 22      | 237      | 6      | 334   | -           | 334                       |
| 2018   | 42                | 49      | 162      | 1      | 254   | -           | 254                       |
| <b>COHO (thousands of dressed pounds)</b>    |                   |         |          |        |       |             |                           |
| 1976-1980                                    | 600               | 786     | 1,066    | 678    | 3,130 | 496         | 3,626                     |
| 1981-1985                                    | 133               | 63      | 277      | 142    | 616   | 128         | 744                       |
| 1986-1990                                    | 70                | 19      | 97       | 53     | 239   | 19          | 259                       |
| 1991-1995                                    | 52                | 14      | 49       | 13     | 102   | 12          | 111                       |
| 1996-2000                                    | 10                | e/      | 8        | 3      | 22    | 2           | 24                        |
| 2001-2005                                    | 7                 | 8       | 23       | 5      | 40    | 1           | 41                        |
| 2006   | 3                 | 3       | 3        | 1      | 10    | e/          | 10                        |
| 2007   | 3                 | 3       | 9        | 17     | 33    | -           | 33                        |
| 2008   | 2                 | 3       | 8        | 1      | 14    | e/          | 14                        |
| 2009   | 29                | 34      | 54       | 14     | 131   | 5           | 136                       |
| 2010   | 1                 | 2       | 12       | 1      | 15    | -           | 15                        |
| 2011   | 6                 | 2       | 9        | e/     | 17    | -           | 17                        |
| 2012   | 7                 | 5       | 6        | 1      | 18    | -           | 18                        |
| 2013   | 5                 | 8       | 18       | 1      | 31    | e/          | 31                        |
| 2014   | 7                 | 22      | 47       | 12     | 87    | -           | 87                        |
| 2015   | e/                | 1       | 10       | 4      | 15    | e/          | 15                        |
| 2016   | e/                | -       | -        | -      | -     | e/          | e/                        |
| 2017   | 2                 | 1       | 5        | 1      | 9     | -           | 9                         |
| 2018   | 1                 | 3       | 4        | e/     | 9     | -           | 9                         |

a/ All values in this table are based on preliminary information available at the start of each year's salmon review .

b/ The major port areas listed may include smaller ports as follows: Neah Bay includes only Neah Bay; La Push also includes Kalaloch; Westport also includes Aberdeen, Bay City, Copalis Beach, Hoquiam, Moclips, Taholah, Bay Center, Grayland Beach, Raymond, South Bend, and Tokeland; Ilwaco also includes Long Beach, Nahcotta, Naselle, and all Columbia River Ports; Puget Sound includes all Puget Sound ports east of Neah Bay.

c/ State total includes landings where port of landing is not specified.

d/ There was no ocean commercial fishery for Chinook north of Cape Falcon in 1994-1996; however, Chinook were caught off Oregon and landed in Washington.

e/ Less than 500 pounds.

TABLE IV-9. Landings, exvessel values and average prices (inflation adjusted, 2018 dollars) of inriver commercial harvest of Columbia River salmon.<sup>a/</sup> (Page 1 of 2)

| Year or Avg.   | Non-Indian Gillnet <sup>b/</sup> |       |      |       |                    |                       | Treaty Indian <sup>c/</sup> - All Gears |       |      |      |                    |       | Col. R.<br>Total By<br>State |
|--|----------------------------------|-------|------|-------|--------------------|-----------------------|---|-------|------|------|--------------------|-------|------------------------------|
|  | Chinook                          |       |      | Coho  | Chum <sup>e/</sup> | TOTAL                 | Chinook                                 |       |      | Coho | Chum <sup>e/</sup> | TOTAL |                              |
|  | Spring                           | Fall  |      |       |                    |                       | Spring                                  | Fall  |      |      |                    |       |                              |
|  | Brights <sup>d/</sup>            | Tules |      |       |                    | Brights <sup>d/</sup> | Tules                                   |       |      |      |                    |       |                              |
| <b>Oregon</b>  |                                  |       |      |       |                    |                       |   |       |      |      |                    |       |                              |
| Average Price Per Landed Pound <sup>f/</sup> (dollars) |                                  |       |      |       |                    |                       |   |       |      |      |                    |       |                              |
| 1986-1990  | 5.20                             | 2.25  | 0.79 | 2.50  | 1.04               |                       | 5.53                                    | 2.26  | 0.66 | 1.80 | -                  |       |                              |
| 1991-1995  | 4.83                             | 1.45  | 0.39 | 1.13  | 0.47               |                       | 4.97                                    | 1.24  | 0.28 | 0.82 | -                  |       |                              |
| 1996-2000  | 3.29                             | 1.17  | 0.24 | 0.87  | 0.28               |                       | 3.51                                    | 0.95  | 0.17 | 0.52 | -                  |       |                              |
| 2001-2005  | 4.14                             | 1.32  | 0.22 | 0.82  | 0.41               |                       | 2.91                                    | 1.27  | 0.31 | 0.84 | -                  |       |                              |
| 2006-2010  | 6.06                             | 2.75  | 0.48 | 1.62  | 0.64               |                       | 4.45                                    | 2.39  | 0.40 | 1.48 | -                  |       |                              |
| 2011   | 5.72                             | 2.57  | 0.65 | 1.86  | 0.87               |                       | 4.02                                    | 2.66  | 0.80 | 1.72 | -                  |       |                              |
| 2012   | 6.43                             | 2.44  | 0.60 | 1.78  | 0.54               |                       | 6.10                                    | 2.83  | 0.82 | 2.04 | -                  |       |                              |
| 2013   | 7.00                             | 2.72  | 0.62 | 2.00  | 0.54               |                       | 5.63                                    | 2.24  | 0.69 | 1.45 | -                  |       |                              |
| 2014   | 5.73                             | 1.95  | 0.61 | 1.25  | 0.53               |                       | 5.36                                    | 1.83  | 0.61 | 0.97 | -                  |       |                              |
| 2015   | 6.08                             | 2.55  | 0.53 | 1.60  | 0.32               |                       | 4.41                                    | 2.62  | 0.48 | 1.54 | -                  |       |                              |
| 2016   | 7.39                             | 3.35  | 0.66 | 1.92  | -                  |                       | 6.26                                    | 3.02  | 0.63 | 1.62 | -                  |       |                              |
| 2017   | 7.66                             | 3.25  | 0.63 | 2.08  | 0.51               |                       | 7.34                                    | 5.01  | 0.61 | 2.01 | -                  |       |                              |
| 2018 <sup>h/</sup>                                     | 10.42                            | 3.54  | 0.67 | 1.97  | -                  |                       | 7.95                                    | 4.66  | 0.69 | 2.10 | -                  |       |                              |
| Exvessel Value (thousands of dollars)                  |                                  |       |      |       |                    |                       |   |       |      |      |                    |       |                              |
| 1986-1990  | 1,044                            | 6,714 | 381  | 3,019 | 7                  | 11,165                | 5                                       | 2,632 | 30   | 14   | -                  | 2,681 | 13,846                       |
| 1991-1995  | 284                              | 250   | 17   | 626   | g/                 | 1,177                 | 1                                       | 234   | 28   | 7    | -                  | 270   | 1,447                        |
| 1996-2000  | 125                              | 89    | 10   | 323   | g/                 | 546                   | 1                                       | 70    | 10   | 2    | -                  | 82    | 628                          |
| 2001-2005  | 887                              | 457   | 38   | 788   | g/                 | 2,169                 | 55                                      | 199   | 11   | 6    | -                  | 271   | 2,440                        |
| 2006-2010  | 1,036                            | 898   | 76   | 801   | g/                 | 2,812                 | 260                                     | 620   | 43   | 32   | g/                 | 954   | 3,766                        |
| 2011   | 1,314                            | 1,629 | 153  | 815   | g/                 | 3,910                 | 206                                     | 673   | 35   | 34   | -                  | 947   | 4,858                        |
| 2012   | 1,167                            | 994   | 121  | 164   | g/                 | 2,447                 | 81                                      | 386   | 6    | 13   | -                  | 486   | 2,932                        |
| 2013   | 1,005                            | 2,304 | 115  | 533   | g/                 | 3,957                 | 97                                      | 1,125 | 24   | 7    | -                  | 1,254 | 5,211                        |
| 2014   | 669                              | 1,727 | 150  | 1,769 | g/                 | 4,314                 | 297                                     | 945   | 15   | 37   | -                  | 1,294 | 5,608                        |
| 2015   | 1,313                            | 1,529 | 98   | 272   | g/                 | 3,212                 | 449                                     | 1,037 | 31   | 2    | -                  | 1,520 | 4,731                        |
| 2016   | 1,301                            | 1,379 | 63   | 406   | -                  | 3,149                 | 147                                     | 878   | 2    | 8    | -                  | 1,036 | 4,184                        |
| 2017   | 1,501                            | 565   | 31   | 449   | g/                 | 2,546                 | 165                                     | 910   | 3    | 16   | -                  | 1,094 | 3,639                        |
| 2018 <sup>h/</sup>                                     | 1,401                            | 308   | 22   | 140   | -                  | 1,871                 | 442                                     | 881   | 2    | 19   | -                  | 1,345 | 3,215                        |
| Pounds (thousands)                                     |                                  |       |      |       |                    |                       |   |       |      |      |                    |       |                              |
| 1986-1990  | 182                              | 2,331 | 378  | 1,843 | 6                  | 4,741                 | 1                                       | 1,057 | 54   | 14   | -                  | 1,126 | 5,867                        |
| 1991-1995  | 58                               | 165   | 45   | 539   | 1                  | 809                   | g/                                      | 194   | 113  | 8    | -                  | 314   | 1,124                        |
| 1996-2000  | 37                               | 80    | 46   | 395   | 1                  | 559                   | g/                                      | 72    | 58   | 3    | -                  | 133   | 692                          |
| 2001-2005  | 211                              | 355   | 178  | 1,082 | g/                 | 1,825                 | 24                                      | 141   | 73   | 8    | -                  | 246   | 2,071                        |
| 2006-2010  | 174                              | 342   | 120  | 517   | g/                 | 1,152                 | 54                                      | 268   | 81   | 22   | g/                 | 425   | 1,577                        |
| 2011   | 230                              | 635   | 234  | 439   | g/                 | 1,537                 | 51                                      | 253   | 43   | 20   | -                  | 367   | 1,904                        |
| 2012   | 181                              | 407   | 204  | 92    | g/                 | 885                   | 13                                      | 137   | 7    | 6    | -                  | 163   | 1,048                        |
| 2013   | 144                              | 846   | 186  | 267   | g/                 | 1,442                 | 17                                      | 503   | 35   | 5    | -                  | 560   | 2,002                        |
| 2014   | 117                              | 886   | 247  | 1,419 | g/                 | 2,669                 | 55                                      | 516   | 24   | 38   | -                  | 634   | 3,302                        |
| 2015   | 216                              | 599   | 186  | 170   | g/                 | 1,171                 | 102                                     | 395   | 64   | 1    | -                  | 563   | 1,734                        |
| 2016   | 176                              | 412   | 95   | 211   | g/                 | 895                   | 24                                      | 290   | 3    | 5    | -                  | 322   | 1,217                        |
| 2017   | 196                              | 174   | 48   | 215   | g/                 | 633                   | 22                                      | 182   | 4    | 8    | -                  | 216   | 850                          |
| 2018 <sup>h/</sup>                                     | 134                              | 87    | 34   | 71    | -                  | 326                   | 56                                      | 189   | 3    | 9    | -                  | 257   | 583                          |

TABLE IV-9. Landings, exvessel values and average prices (inflation adjusted, 2018 dollars) of inriver commercial harvest of Columbia River salmon.<sup>a/</sup> (Page 2 of 2)

| Year or Avg.   | Non-Indian Gillnet <sup>b/</sup> |       |   |       |                    |                       | Treaty Indian <sup>c/</sup> - All Gears |       |   |      |                    |       | Col. R.<br>Total By<br>State |
|--|----------------------------------|-------|---|-------|--------------------|-----------------------|---|-------|---|------|--------------------|-------|------------------------------|
|  | Chinook                          |       |   | Coho  | Chum <sup>e/</sup> | TOTAL                 | Chinook                                 |       |   | Coho | Chum <sup>e/</sup> | TOTAL |                              |
|  | Spring                           | Fall  |   |       |                    |                       | Spring                                  | Fall  |   |      |                    |       |                              |
|  | Brights <sup>d/</sup>            | Tules |   |       |                    | Brights <sup>d/</sup> | Tules                                   |       |   |      |                    |       |                              |
| <b>Washington<sup>h/wj/</sup></b>                      |                                  |       |   |       |                    |                       |   |       |   |      |                    |       |                              |
| Average Price Per Landed Pound <sup>f/</sup> (dollars) |                                  |       |   |       |                    |                       |   |       |   |      |                    |       |                              |
| 1986-1990  | 5.34                             | 2.07  | - | 2.56  | 1.26               |                       | 5.06                                    | 2.13  | - | 1.94 | -                  |       |                              |
| 1991-1995  | 4.71                             | 1.32  | - | 1.12  | 0.44               |                       | 3.25                                    | 0.77  | - | 0.80 | -                  |       |                              |
| 1996-2000  | 5.66                             | 1.16  | - | 0.84  | 0.33               |                       | 4.59                                    | 0.60  | - | 0.58 | -                  |       |                              |
| 2001-2005  | 5.23                             | 1.11  | - | 0.82  | 0.41               |                       | 1.79                                    | 0.43  | - | 0.22 | -                  |       |                              |
| 2006-2010  | 6.45                             | 2.54  | - | 1.49  | 0.92               |                       | 4.25                                    | 1.47  | - | 0.85 | 0.91               |       |                              |
| 2011   | 5.05                             | 2.15  |   | 1.70  | 0.65               |                       | 3.95                                    | 2.05  |   | 1.61 | 3.52               |       |                              |
| 2012   | 6.93                             | 2.25  |   | 1.80  | 0.47               |                       | 5.10                                    | 1.91  |   | 1.39 | -                  |       |                              |
| 2013   | 6.65                             | 2.32  |   | 1.99  | -                  |                       | 4.96                                    | 2.05  |   | 1.27 | -                  |       |                              |
| 2014   | 5.71                             | 1.73  |   | 1.20  | 0.49               |                       | 5.02                                    | 1.54  |   | 1.04 | 1.15               |       |                              |
| 2015   | 5.84                             | 2.12  |   | 1.72  | -                  |                       | 4.21                                    | 1.96  |   | 1.36 | -                  |       |                              |
| 2016   | 7.76                             | 3.02  |   | 1.95  | -                  |                       | 5.61                                    | 2.50  |   | 1.45 | -                  |       |                              |
| 2017   | 9.84                             | 3.02  |   | 2.11  | -                  |                       | 5.49                                    | 0.86  |   | 1.36 | 0.86               |       |                              |
| 2018   | 12.69                            | 2.93  |   | 1.78  | -                  |                       | 6.74                                    | 2.99  |   | 1.72 | 0.95               |       |                              |
| Exvessel Value (thousands of dollars)                  |                                  |       |   |       |                    |                       |   |       |   |      |                    |       |                              |
| 1986-1990  | 610                              | 3,182 | - | 1,503 | -                  | 5,295                 | 26                                      | 11    | - | 56   | -                  | 93    | 5,388                        |
| 1991-1995  | 191                              | 99    | - | 273   | 1                  | 563                   | 1                                       | g/    | - | 8    | -                  | 9     | 572                          |
| 1996-2000  | 5                                | 70    | - | 112   | g/                 | 186                   | 13                                      | 4     | - | 5    | -                  | 22    | 209                          |
| 2001-2005  | 265                              | 309   | - | 375   | g/                 | 950                   | 246                                     | 53    | - | 8    | -                  | 308   | 1,258                        |
| 2006-2010  | 380                              | 520   | - | 335   | 1                  | 1,236                 | 930                                     | 313   | - | 64   | g/                 | 1,308 | 2,543                        |
| 2011   | 397                              | 840   | - | 268   | 1                  | 1,505                 | 1,876                                   | 973   | - | 262  | 1                  | 3,112 | 4,618                        |
| 2012   | 364                              | 803   | - | 68    | g/                 | 1,236                 | 1,018                                   | 1,882 | - | 39   | -                  | 2,940 | 4,176                        |
| 2013   | 211                              | 1,467 | - | 236   | -                  | 1,915                 | 949                                     | 4,613 | - | 118  | -                  | 5,680 | 7,595                        |
| 2014   | 263                              | 1,458 | - | 633   | g/                 | 2,354                 | 2,109                                   | 5,461 | - | 385  | 2                  | 7,958 | 10,312                       |
| 2015   | 532                              | 1,567 | - | 84    | -                  | 2,183                 | 2,796                                   | 6,383 | - | 28   | -                  | 9,207 | 11,390                       |
| 2016   | 436                              | 1,905 | - | 114   | -                  | 2,456                 | 1,967                                   | 4,510 | - | 90   | -                  | 6,567 | 9,022                        |
| 2017   | 96                               | 664   | - | 160   | -                  | 920                   | 1,136                                   | 4,063 | - | 105  | 11                 | 5,315 | 6,236                        |
| 2018   | 78                               | 262   | - | 45    | -                  | 384                   | 368                                     | 1,239 | - | 56   | 8                  | 1,671 | 2,056                        |
| Pounds (thousands)                                     |                                  |       |   |       |                    |                       |   |       |   |      |                    |       |                              |
| 1986-1990  | 109                              | 1,053 | - | 835   | 4                  | 2,001                 | 5                                       | 1,490 | - | 51   | -                  | 1,546 | 3,546                        |
| 1991-1995  | 38                               | 71    | - | 225   | 2                  | 335                   | g/                                      | 351   | - | 10   | -                  | 361   | 696                          |
| 1996-2000  | 1                                | 60    | - | 147   | 1                  | 209                   | 5                                       | 567   | - | 9    | -                  | 581   | 790                          |
| 2001-2005  | 51                               | 272   | - | 566   | g/                 | 889                   | 142                                     | 1,342 | - | 38   | -                  | 1,521 | 2,410                        |
| 2006-2010  | 64                               | 214   | - | 218   | 1                  | 497                   | 226                                     | 1,023 | - | 73   | g/                 | 1,322 | 1,819                        |
| 2011   | 78                               | 391   | - | 158   | 1                  | 628                   | 475                                     | 1,596 | - | 163  | g/                 | 2,234 | 2,862                        |
| 2012   | 53                               | 355   | - | 38    | g/                 | 446                   | 194                                     | 980   | - | 28   | -                  | 1,202 | 1,648                        |
| 2013   | 32                               | 630   | - | 119   | -                  | 781                   | 191                                     | 2,244 | - | 93   | -                  | 2,528 | 3,309                        |
| 2014   | 46                               | 846   | - | 524   | g/                 | 1,416                 | 421                                     | 3,540 | - | 369  | 2                  | 4,332 | 5,748                        |
| 2015   | 91                               | 738   | - | 49    | -                  | 878                   | 666                                     | 3,254 | - | 21   | -                  | 3,940 | 4,818                        |
| 2016   | 56                               | 629   | - | 59    | -                  | 744                   | 350                                     | 1,803 | - | 62   | -                  | 2,216 | 2,960                        |
| 2017   | 10                               | 220   | - | 76    | -                  | 306                   | 207                                     | 1,325 | - | 77   | 12                 | 1,621 | 1,927                        |
| 2018   | 6                                | 89    | - | 25    | -                  | 121                   | 55                                      | 415   | - | 32   | 8                  | 510   | 631                          |

a/ Excluding pink, sockeye, and steelhead.

b/ Mainstem below Bonneville and Select Areas (Youngs Bay, Tongue Point, Blind Slough, and Deep River). Gear type may also include purse seine, beach seine and tanglenet gear after 2013.

c/ Treaty Indian landings and values do not include direct sales to consumers ('Over-the-bank' sales).

d/ For Washington, this column includes fall brights, tules, and jacks. Price changes may reflect a change in the mix of brights, tules, and jacks rather than annual price changes.

e/ Sale and possession of chum salmon prohibited beginning October 2013 in Columbia R. commercial fisheries. Reported sales are likely mis-identified fish at time of landing.

f/ Gillnet exvessel salmon prices are recorded in round weight and therefore are not strictly comparable to exvessel troll prices.

g/ Less than \$500 or 500 pounds.

h/ Preliminary. (All Washington values in this table are based on preliminary information available when each year's Salmon Review is drafted.)

i/ Washington prices for years prior to 2000 are based on a combination of Washington and Oregon value information.

j/ Treaty Indian values are primarily mainstem Columbia gillnet, but also include Klickitat dipnet, Drano Lake (Little White Salmon River mouth),

TABLE IV-10. California, Oregon, and Washington ocean recreational salmon effort in thousands of angler trips and catch in thousands of fish by boat type. (Page 1 of 2)

| Year or Avg.                 | Angler Trips |         | Chinook Catch <sup>a/</sup> |         | Coho Catch <sup>a/</sup> |         |
|------------------------------|--------------|---------|-----------------------------|---------|--------------------------|---------|
|                              | Charter      | Private | Charter                     | Private | Charter                  | Private |
| <b>CALIFORNIA</b>            |              |         |                             |         |                          |         |
| 1981-1985                    | 68.9         | 78.1    | 74.6                        | 34.4    | 1.5                      | 18.3    |
| 1986-1990                    | 95.9         | 144.8   | 100.1                       | 66.3    | 5.3                      | 35.1    |
| 1991-1995                    | 81.7         | 131.8   | 85.9                        | 83.0    | 3.8                      | 18.7    |
| 1996-2000                    | 82.2         | 112.5   | 77.5                        | 80.3    | b/                       | 0.4     |
| 2001-2005                    | 76.5         | 103.6   | 72.5                        | 75.5    | 0.1                      | 0.9     |
| 2006                         | 44.9         | 81.6    | 35.3                        | 61.0    | b/                       | 1.6     |
| 2007                         | 31.4         | 74.5    | 12.4                        | 35.4    | b/                       | 0.7     |
| 2008                         | 0.1          | 0.3     | -                           | b/      | -                        | -       |
| 2009                         | 0.6          | 4.7     | 0.1                         | 0.6     | -                        | b/      |
| 2010                         | 13.6         | 35.0    | 4.7                         | 10.1    | -                        | 0.2     |
| 2011                         | 29.5         | 62.2    | 18.7                        | 31.1    | b/                       | 0.3     |
| 2012                         | 52.7         | 95.3    | 44.2                        | 79.7    | b/                       | 0.1     |
| 2013                         | 55.0         | 92.3    | 49.2                        | 66.9    | b/                       | 0.3     |
| 2014                         | 48.3         | 72.0    | 33.8                        | 41.1    | -                        | 0.5     |
| 2015                         | 37.7         | 44.1    | 23.4                        | 14.1    | b/                       | b/      |
| 2016                         | 31.2         | 38.9    | 22.9                        | 15.1    | -                        | 0.1     |
| 2017                         | 35.3         | 38.7    | 38.8                        | 23.4    | b/                       | 0.4     |
| 2018 <sup>c/</sup>           | 47.5         | 49.0    | 58.9                        | 28.1    | b/                       | 0.2     |
| <b>OREGON<sup>d/e/</sup></b> |              |         |                             |         |                          |         |
| 1981-1985                    | 45.7         | 187.9   | 6.2                         | 26.9    | 48.0                     | 117.6   |
| 1986-1990                    | 56.5         | 184.6   | 7.0                         | 28.8    | 71.6                     | 148.4   |
| 1991-1995                    | 18.0         | 81.8    | 1.3                         | 8.0     | 27.1                     | 76.2    |
| 1996-2000                    | 5.3          | 40.3    | 1.5                         | 9.7     | 3.4                      | 9.1     |
| 2001-2005                    | 17.6         | 101.2   | 8.5                         | 31.5    | 13.6                     | 52.4    |
| 2006                         | 8.0          | 54.4    | 1.5                         | 10.1    | 3.6                      | 12.0    |
| 2007                         | 11.4         | 76.9    | 0.6                         | 6.4     | 10.6                     | 50.1    |
| 2008                         | 1.9          | 28.5    | 0.2                         | 1.4     | 1.0                      | 11.1    |
| 2009                         | 12.6         | 71.9    | 0.2                         | 1.3     | 14.2                     | 75.4    |
| 2010                         | 5.0          | 48.3    | 0.6                         | 4.4     | 2.8                      | 15.5    |
| 2011                         | 5.9          | 42.8    | 0.6                         | 4.6     | 3.5                      | 15.3    |
| 2012                         | 6.6          | 60.7    | 1.5                         | 17.3    | 3.0                      | 13.1    |
| 2013                         | 7.4          | 78.9    | 1.8                         | 28.6    | 3.5                      | 11.1    |
| 2014                         | 14.5         | 107.0   | 1.3                         | 17.2    | 19.0                     | 80.5    |
| 2015                         | 7.8          | 58.2    | 0.8                         | 8.7     | 5.3                      | 23.0    |
| 2016                         | 2.4          | 36.4    | 0.3                         | 3.8     | 1.2                      | 7.2     |
| 2017                         | 2.4          | 39.9    | 0.3                         | 4.3     | 1.7                      | 19.6    |
| 2018 <sup>c/</sup>           | 5.6          | 58.2    | 0.3                         | 4.7     | 2.0                      | 25.7    |

TABLE IV-10. California, Oregon, and Washington ocean recreational salmon effort in thousands of angler trips and catch in thousands of fish by boat type. (Page 2 of 2)

| Year or Avg.                     | Angler Trips |         | Chinook Catch <sup>a/</sup> |         | Coho Catch <sup>a/</sup> |         |
|----------------------------------|--------------|---------|-----------------------------|---------|--------------------------|---------|
|                                  | Charter      | Private | Charter                     | Private | Charter                  | Private |
| <b>WASHINGTON<sup>d/g/</sup></b> |              |         |                             |         |                          |         |
| 1981-1985                        | 102.0        | 69.7    | 42.6                        | 13.8    | 113.3                    | 69.2    |
| 1986-1990                        | 53.5         | 59.4    | 16.0                        | 10.0    | 78.0                     | 77.6    |
| 1991-1995                        | 28.0         | 45.1    | 4.5                         | 4.2     | 41.5                     | 54.8    |
| 1996-2000                        | 13.6         | 20.6    | 2.7                         | 2.2     | 17.4                     | 20.8    |
| 2001-2005                        | 38.2         | 67.5    | 17.0                        | 18.2    | 41.4                     | 66.9    |
| 2006                             | 24.5         | 39.1    | 4.0                         | 6.7     | 16.2                     | 19.9    |
| 2007                             | 26.7         | 45.9    | 3.1                         | 5.9     | 33.7                     | 50.1    |
| 2008                             | 14.2         | 22.2    | 6.0                         | 8.6     | 8.3                      | 10.5    |
| 2009                             | 29.4         | 69.5    | 3.1                         | 9.2     | 47.9                     | 90.0    |
| 2010                             | 26.5         | 54.4    | 15.4                        | 21.5    | 14.1                     | 22.2    |
| 2011                             | 22.2         | 49.2    | 9.8                         | 19.3    | 15.1                     | 24.4    |
| 2012                             | 24.5         | 50.5    | 11.8                        | 21.8    | 11.8                     | 19.3    |
| 2013                             | 24.7         | 52.3    | 9.2                         | 19.6    | 17.9                     | 27.9    |
| 2014                             | 34.6         | 78.1    | 12.1                        | 27.7    | 46.0                     | 73.3    |
| 2015                             | 30.6         | 61.3    | 12.0                        | 26.9    | 27.6                     | 39.5    |
| 2016                             | 13.7         | 34.0    | 4.5                         | 12.3    | 5.8                      | 10.1    |
| 2017                             | 16.3         | 42.4    | 4.2                         | 15.7    | 11.5                     | 24.5    |
| 2018 <sup>c/</sup>               | 14.5         | 33.5    | 3.0                         | 7.0     | 11.8                     | 22.9    |

a/ Catch numbers may include some illegal harvest.

b/ Fewer than 50 fish.

c/ Preliminary.

d/ Salmon data from surveyed ports only. These generally include Astoria, Garibaldi, Depoe Bay, Newport, Winchester Bay, Coos Bay, and Brookings. Since 1981, Pacific City and Florence have also been included. Gold Beach data are included from 1981-1987. Astoria was not included in 1994.

e/ Numbers do not include angling from the Columbia River jetty.

f/ Numbers do not include angling from the Columbia River jetty or from the late-season state waters Area 4B fishery.

g/ Values for 1982-1985 include some inriver Columbia River fishing after closure of the ocean fishery.

TABLE IV-11. Estimates of California recreational ocean salmon angler trips (thousands) by port area and boat type.

| Year or Avg.         | Crescent City | Eureka | Fort Bragg | San Francisco | Monterey | State Total |
|----------------------|---------------|--------|------------|---------------|----------|-------------|
| <b>CHARTER TRIPS</b> |               |        |            |               |          |             |
| 1981-1985            | 0.7           | 1.3    | 1.8        | 62.1          | 3.0      | 68.9        |
| 1986-1990            | 1.0           | 3.5    | 4.0        | 74.3          | 13.1     | 95.9        |
| 1991-1995            | 0.4           | 0.8    | 2.8        | 55.7          | 22.0     | 81.7        |
| 1996-2000            | a/            | 0.7    | 4.2        | 55.2          | 22.1     | 82.1        |
| 2001-2005            | a/            | 1.4    | 9.6        | 49.2          | 16.3     | 76.5        |
| 2006-2010            | 0.0           | 0.6    | 2.8        | 11.6          | 3.0      | 18.1        |
| 2011                 | 0.0           | 1.5    | 4.4        | 17.5          | 6.0      | 29.5        |
| 2012                 | 0.2           | 3.6    | 4.2        | 33.7          | 11.0     | 52.7        |
| 2013                 | a/            | 4.1    | 5.5        | 40.4          | 4.9      | 55.0        |
| 2014                 | 0.1           | 3.2    | 5.4        | 34.0          | 5.5      | 48.3        |
| 2015                 | a/            | 1.9    | 3.4        | 30.1          | 2.2      | 37.7        |
| 2016                 | a/            | 1.6    | 2.3        | 26.2          | 1.1      | 31.2        |
| 2017                 | -             | -      | 0.8        | 33.3          | 1.1      | 35.3        |
| 2018 <sup>b/</sup>   | a/            | 1.0    | 3.0        | 41.8          | 1.6      | 47.5        |
| <b>PRIVATE TRIPS</b> |               |        |            |               |          |             |
| 1981-1985            | 22.4          | 21.8   | 7.8        | 16.8          | 9.3      | 78.1        |
| 1986-1990            | 38.6          | 34.4   | 11.4       | 24.3          | 36.1     | 144.8       |
| 1991-1995            | 13.9          | 14.0   | 17.6       | 37.1          | 49.3     | 131.9       |
| 1996-2000            | 6.8           | 10.9   | 15.0       | 38.8          | 40.9     | 112.5       |
| 2001-2005            | 4.1           | 15.5   | 18.6       | 34.3          | 31.1     | 103.6       |
| 2006-2010            | 1.0           | 7.7    | 6.2        | 13.1          | 11.3     | 39.2        |
| 2011                 | 0.8           | 12.7   | 9.9        | 16.9          | 21.9     | 62.2        |
| 2012                 | 7.7           | 20.0   | 10.6       | 23.8          | 33.3     | 95.3        |
| 2013                 | 7.0           | 18.6   | 11.7       | 29.2          | 25.7     | 92.3        |
| 2014                 | 4.3           | 13.0   | 12.1       | 20.7          | 22.0     | 72.0        |
| 2015                 | 0.6           | 6.4    | 8.4        | 15.8          | 13.0     | 44.1        |
| 2016                 | 0.6           | 6.8    | 7.3        | 17.6          | 6.7      | 38.9        |
| 2017                 | -             | -      | 3.8        | 20.9          | 13.9     | 38.7        |
| 2018 <sup>b/</sup>   | 1.3           | 5.0    | 6.8        | 23.5          | 12.3     | 49.0        |
| <b>TOTAL TRIPS</b>   |               |        |            |               |          |             |
| 1981-1985            | 23.1          | 23.1   | 9.6        | 78.9          | 12.2     | 147.0       |
| 1986-1990            | 39.6          | 37.9   | 15.4       | 98.6          | 49.2     | 240.7       |
| 1991-1995            | 14.3          | 14.8   | 20.4       | 92.8          | 71.2     | 213.6       |
| 1996-2000            | 6.8           | 11.7   | 19.1       | 94.0          | 63.0     | 194.6       |
| 2001-2005            | 4.1           | 16.9   | 28.2       | 83.5          | 47.4     | 180.1       |
| 2006-2010            | 1.0           | 8.3    | 9.0        | 24.8          | 14.3     | 57.4        |
| 2011                 | 0.8           | 14.2   | 14.4       | 34.4          | 28.0     | 91.7        |
| 2012                 | 7.8           | 23.6   | 14.8       | 57.5          | 44.3     | 148.0       |
| 2013                 | 7.0           | 22.8   | 17.3       | 69.5          | 30.7     | 147.3       |
| 2014                 | 4.4           | 16.2   | 17.5       | 54.7          | 27.5     | 120.3       |
| 2015                 | 0.6           | 8.3    | 11.8       | 45.9          | 15.2     | 81.8        |
| 2016                 | 0.6           | 8.4    | 9.6        | 43.8          | 7.8      | 70.1        |
| 2017                 | -             | -      | 4.7        | 54.2          | 15.1     | 74.0        |
| 2018 <sup>b/</sup>   | 1.3           | 6.0    | 9.9        | 65.3          | 13.9     | 96.4        |

a/ Few er than 50 angler trips.

b/ Preliminary.



TABLE IV-12. Estimates of Oregon recreational ocean salmon angler trips (thousands) by port area and boat type

| Year or Avg.            | Astoria | Tillamook | New port | Coos Bay | Brookings | State Total |
|-------------------------|---------|-----------|----------|----------|-----------|-------------|
| <b>CHARTER TRIPS</b>    |         |           |          |          |           |             |
| 1981-1985               | 10.3    | 3.0       | 17.2     | 11.9     | 3.3       | 45.7        |
| 1986-1990               | 7.1     | 5.3       | 27.5     | 13.0     | 3.6       | 56.5        |
| 1991-1995 <sup>a/</sup> | 4.3     | 1.6       | 7.9      | 3.5      | 0.7       | 18.0        |
| 1996-2000               | 1.3     | 0.4       | 2.4      | 0.6      | 0.6       | 5.3         |
| 2001-2005               | 3.3     | 1.7       | 8.8      | 3.4      | 0.5       | 17.6        |
| 2006-2010               | 2.0     | 0.7       | 4.1      | 0.9      | 0.2       | 7.8         |
| 2011                    | 1.6     | 0.5       | 3.6      | 0.1      | 0.1       | 5.9         |
| 2012                    | 1.7     | 0.4       | 3.7      | 0.5      | 0.2       | 6.6         |
| 2013                    | 1.7     | 0.6       | 4.2      | 0.3      | 0.6       | 7.4         |
| 2014                    | 2.6     | 1.0       | 10.2     | 0.3      | 0.4       | 14.5        |
| 2015                    | 2.0     | 0.6       | 5.1      | c/       | 0.1       | 7.8         |
| 2016                    | 0.4     | 0.1       | 1.9      | -        | c/        | 2.4         |
| 2017                    | 0.6     | 0.2       | 1.5      | c/       | c/        | 2.4         |
| 2018 <sup>b/</sup>      | 0.5     | 0.4       | 4.7      | c/       | 0.1       | 5.6         |
| <b>PRIVATE TRIPS</b>    |         |           |          |          |           |             |
| 1981-1985               | 15.6    | 27.1      | 40.4     | 51.8     | 53.0      | 187.9       |
| 1986-1990               | 10.6    | 23.7      | 47.1     | 48.4     | 54.8      | 184.5       |
| 1991-1995 <sup>a/</sup> | 8.5     | 12.0      | 17.0     | 22.4     | 22.0      | 82.0        |
| 1996-2000               | 4.1     | 7.7       | 3.0      | 7.6      | 17.8      | 40.3        |
| 2001-2005               | 14.0    | 20.3      | 18.0     | 31.1     | 17.8      | 101.2       |
| 2006-2010               | 7.4     | 15.7      | 12.2     | 13.2     | 7.5       | 56.0        |
| 2011                    | 5.8     | 12.3      | 8.3      | 10.2     | 6.2       | 42.8        |
| 2012                    | 3.1     | 12.0      | 11.1     | 16.0     | 18.6      | 60.7        |
| 2013                    | 4.4     | 13.5      | 11.1     | 29.5     | 19.5      | 78.1        |
| 2014                    | 9.7     | 24.2      | 27.0     | 29.5     | 16.7      | 107.0       |
| 2015                    | 6.6     | 14.9      | 13.1     | 14.7     | 8.9       | 58.2        |
| 2016                    | 4.0     | 10.9      | 6.3      | 11.2     | 4.2       | 36.4        |
| 2017                    | 7.9     | 8.4       | 8.8      | 12.8     | 2.0       | 39.9        |
| 2018 <sup>b/</sup>      | 7.2     | 10.8      | 18.9     | 14.3     | 6.9       | 58.2        |
| <b>TOTAL TRIPS</b>      |         |           |          |          |           |             |
| 1981-1985               | 26.0    | 30.0      | 57.5     | 63.7     | 56.3      | 233.5       |
| 1986-1990               | 17.7    | 29.0      | 74.6     | 61.4     | 58.4      | 241.0       |
| 1991-1995 <sup>a/</sup> | 12.8    | 13.6      | 24.9     | 26.0     | 22.7      | 100.0       |
| 1996-2000               | 5.4     | 8.1       | 5.3      | 8.3      | 18.4      | 45.6        |
| 2001-2005               | 17.3    | 22.1      | 26.7     | 34.5     | 18.3      | 118.9       |
| 2006-2010               | 9.4     | 16.4      | 16.2     | 14.1     | 7.7       | 63.8        |
| 2011                    | 7.4     | 12.8      | 12.0     | 10.3     | 6.3       | 48.8        |
| 2012                    | 4.8     | 12.4      | 14.8     | 16.5     | 18.8      | 67.3        |
| 2013                    | 6.1     | 14.1      | 15.3     | 29.8     | 20.1      | 85.5        |
| 2014                    | 12.3    | 25.2      | 37.2     | 29.8     | 17.1      | 121.5       |
| 2015                    | 8.6     | 15.5      | 18.2     | 14.7     | 9.0       | 66.0        |
| 2016                    | 4.3     | 11.0      | 8.2      | 11.2     | 4.2       | 38.9        |
| 2017                    | 8.6     | 8.6       | 10.3     | 12.8     | 2.0       | 42.3        |
| 2018 <sup>b/</sup>      | 7.7     | 11.3      | 23.6     | 14.3     | 7.0       | 63.8        |

a/ The fishery north of Cape Falcon was closed in 1994, and it is assumed that no trips were taken out of Astoria into the south of Cape Falcon area. No samplers were stationed in Astoria.

b/ Preliminary.

c/ Less than 50 trips.

TABLE IV-13. Estimates of Washington recreational ocean salmon angler trips (thousands) by port area and boat type.

| Year or Avg.         | Neah Bay <sup>a/</sup> | La Push | Westport | Iwaco <sup>b/</sup> | State Total |
|----------------------|------------------------|---------|----------|---------------------|-------------|
| <b>CHARTER TRIPS</b> |                        |         |          |                     |             |
| 1986-1990            | 2.0                    | -       | 35.7     | 15.9                | 53.5        |
| 1991-1995            | 0.7                    | 0.1     | 19.4     | 7.9                 | 28.0        |
| 1996-2000            | 0.3                    | 0.1     | 9.7      | 3.6                 | 13.6        |
| 2001-2005            | 1.6                    | 0.6     | 24.1     | 11.9                | 38.2        |
| 2006-2010            | 0.5                    | 0.5     | 15.6     | 7.7                 | 24.3        |
| 2011                 | 0.5                    | 0.7     | 14.1     | 6.9                 | 22.2        |
| 2012                 | 0.8                    | 0.7     | 16.2     | 6.9                 | 24.5        |
| 2013                 | 0.9                    | 0.7     | 15.9     | 7.1                 | 24.7        |
| 2014                 | 1.1                    | 1.1     | 22.7     | 9.7                 | 34.6        |
| 2015                 | 1.0                    | 0.8     | 20.2     | 8.6                 | 30.6        |
| 2016                 | 0.6                    | 0.3     | 7.5      | 5.3                 | 13.7        |
| 2017                 | 0.7                    | 0.4     | 10.5     | 4.7                 | 16.3        |
| 2018 <sup>c/</sup>   | 0.7                    | 0.5     | 9.2      | 4.1                 | 14.5        |
| <b>PRIVATE TRIPS</b> |                        |         |          |                     |             |
| 1986-1990            | 16.9                   | 2.5     | 16.6     | 23.4                | 59.4        |
| 1991-1995            | 16.4                   | 2.8     | 18.5     | 25.4                | 63.1        |
| 1996-2000            | 8.8                    | 1.6     | 12.7     | 12.8                | 35.8        |
| 2001-2005            | 17.7                   | 3.6     | 18.4     | 27.8                | 67.5        |
| 2006-2010            | 11.6                   | 3.2     | 13.5     | 17.9                | 46.2        |
| 2011                 | 10.6                   | 3.6     | 19.4     | 15.7                | 49.2        |
| 2012                 | 12.7                   | 3.3     | 21.1     | 13.4                | 50.5        |
| 2013                 | 14.4                   | 3.6     | 20.0     | 14.4                | 52.3        |
| 2014                 | 15.4                   | 3.9     | 31.2     | 27.6                | 78.1        |
| 2015                 | 13.8                   | 2.7     | 25.2     | 19.6                | 61.3        |
| 2016                 | 7.7                    | 0.8     | 10.4     | 15.1                | 34.0        |
| 2017                 | 10.0                   | 1.5     | 15.5     | 15.4                | 42.4        |
| 2018 <sup>c/</sup>   | 8.0                    | 1.4     | 13.3     | 10.7                | 33.5        |
| <b>TOTAL TRIPS</b>   |                        |         |          |                     |             |
| 1986-1990            | 18.9                   | 2.5     | 52.3     | 39.3                | 113.0       |
| 1991-1995            | 17.1                   | 2.9     | 37.9     | 33.3                | 91.1        |
| 1996-2000            | 9.1                    | 1.6     | 22.4     | 16.4                | 49.4        |
| 2001-2005            | 19.3                   | 4.1     | 42.5     | 39.7                | 105.6       |
| 2006-2010            | 12.1                   | 3.7     | 29.1     | 25.6                | 70.5        |
| 2011                 | 11.1                   | 4.2     | 33.5     | 22.5                | 71.4        |
| 2012                 | 13.4                   | 3.9     | 37.3     | 20.3                | 75.0        |
| 2013                 | 15.4                   | 4.3     | 35.9     | 21.5                | 77.0        |
| 2014                 | 16.5                   | 5.1     | 53.9     | 37.2                | 112.7       |
| 2015                 | 14.8                   | 3.5     | 45.5     | 28.2                | 91.9        |
| 2016                 | 8.3                    | 1.1     | 17.8     | 20.5                | 47.7        |
| 2017                 | 10.7                   | 1.9     | 26.0     | 20.0                | 58.6        |
| 2018 <sup>c/</sup>   | 8.7                    | 1.9     | 22.5     | 14.9                | 48.0        |

a/ Does not include effort from the late-season state water Area 4B fishery, when open.

b/ Does not include effort from the Columbia River Jetty.

c/ Preliminary.

TABLE IV-14. Oregon and Washington recreational salmon, bottomfish, and sturgeon angler trips (thousands) by ocean port area and boat type for the area north of Cape Falcon. (Page 1 of 3)

| Year                 | Columbia River and Buoy 10 |         |          |                     |       | Westport |         |       | La Push |         |       | Neah Bay and Area 4B Add-On |         |       |
|----------------------|----------------------------|---------|----------|---------------------|-------|----------|---------|-------|---------|---------|-------|-----------------------------|---------|-------|
|                      | Charter                    | Private | Subtotal | Jetty <sup>b/</sup> | Total | Charter  | Private | Total | Charter | Private | Total | Charter                     | Private | Total |
| <b>SALMON EFFORT</b> |                            |         |          |                     |       |          |         |       |         |         |       |                             |         |       |
| 1984-1990            | 36.8                       | 145.6   | 182.4    | 14.5                | 153.7 | 33.2     | 14.2    | 47.3  | 0.0     | 2.0     | 2.0   | 2.1                         | 18.5    | 20.6  |
| 1991-1995            | 18.0                       | 88.5    | 106.4    | 20.1                | 126.6 | 24.2     | 20.6    | 44.8  | 0.2     | 2.5     | 2.6   | 1.2                         | 19.3    | 20.5  |
| 1996-2000            | 7.5                        | 51.3    | 58.8     | 6.3                 | 65.1  | 9.7      | 6.3     | 15.9  | 0.1     | 1.5     | 1.5   | 0.4                         | 7.9     | 8.3   |
| 2001-2005            | 17.0                       | 123.0   | 140.0    | 7.6                 | 146.0 | 28.1     | 18.4    | 42.5  | 0.6     | 3.6     | 4.1   | 1.6                         | 17.8    | 19.4  |
| 2006-2010            | 10.3                       | 70.9    | 81.2     | 1.2                 | 82.2  | 15.6     | 13.5    | 29.1  | 0.5     | 3.2     | 3.7   | 0.5                         | 11.8    | 12.2  |
| 2011                 | 10.5                       | 76.2    | 86.7     | 2.2                 | 88.9  | 14.1     | 19.4    | 33.5  | 0.7     | 3.6     | 4.2   | 0.5                         | 10.6    | 11.1  |
| 2012                 | 9.5                        | 79.3    | 88.8     | 2.7                 | 91.5  | 16.2     | 21.1    | 37.3  | 0.7     | 3.3     | 3.9   | 0.8                         | 12.7    | 13.4  |
| 2013                 | 10.2                       | 82.3    | 92.5     | 4.8                 | 97.2  | 15.9     | 20.0    | 35.9  | 0.7     | 3.6     | 4.3   | 0.9                         | 14.4    | 15.4  |
| 2014                 | 12.8                       | 140.3   | 153.1    | 10.9                | 164.0 | 22.5     | 31.2    | 53.8  | 1.1     | 3.9     | 5.1   | 1.1                         | 15.4    | 16.5  |
| 2015                 | 11.1                       | 127.4   | 138.5    | 5.2                 | 143.8 | 20.2     | 25.2    | 45.5  | 0.8     | 2.7     | 3.5   | 1.0                         | 13.8    | 14.8  |
| 2016                 | 6.0                        | 107.5   | 113.5    | 3.8                 | 117.3 | 7.5      | 10.4    | 17.8  | 0.3     | 0.8     | 1.1   | 0.6                         | 7.7     | 8.3   |
| 2017                 | 5.9                        | 110.8   | 116.7    | 8.2                 | 124.9 | 10.5     | 15.5    | 26.0  | 0.4     | 1.5     | 1.9   | 0.7                         | 10.0    | 10.7  |
| 2018 <sup>c/</sup>   | 5.3                        | 82.5    | 87.7     | 2.2                 | 89.9  | 9.2      | 13.3    | 22.5  | 0.5     | 1.4     | 1.9   | 0.7                         | 8.0     | 8.7   |

TABLE IV-14. Oregon and Washington recreational salmon, bottomfish, and sturgeon angler trips (thousands) by ocean port area and boat type for the area north of Cape Falcon. (Page 2 of 3)

| Year                                  | Columbia River and Buoy 10 |         |          |                     |       | Westport |         |       | La Push |         |       | Neah Bay and Area 4B Add-On |         |       |
|---------------------------------------|----------------------------|---------|----------|---------------------|-------|----------|---------|-------|---------|---------|-------|-----------------------------|---------|-------|
|                                       | Charter                    | Private | Subtotal | Jetty <sup>b/</sup> | Total | Charter  | Private | Total | Charter | Private | Total | Charter                     | Private | Total |
| <b>BOTTOMFISH EFFORT<sup>d/</sup></b> |                            |         |          |                     |       |          |         |       |         |         |       |                             |         |       |
| 1984-1990                             | 1.7                        | 0.3     | 2.0      | 1.3                 | 3.3   | 19.1     | 0.9     | 20.0  | 0.0     | 0.4     | 0.4   | 4.7                         | 14.2    | 18.9  |
| 1991-1995                             | 1.8                        | 0.6     | 2.4      | 2.3                 | 4.7   | 22.5     | 1.7     | 24.1  | 0.1     | 1.4     | 1.5   | 4.8                         | 18.1    | 22.9  |
| 1996-2000 <sup>e/f/</sup>             | 1.3                        | 0.6     | 1.9      | 1.2                 | 3.1   | 19.2     | 1.2     | 20.4  | 0.1     | 1.5     | 1.5   | 4.8                         | 21.6    | 26.4  |
| 2001-2005                             | 4.9                        | 0.7     | 3.0      | 0.7                 | 3.6   | 15.1     | 1.5     | 16.6  | 0.5     | 1.8     | 2.3   | 4.2                         | 17.5    | 21.7  |
| 2006-2010                             | 2.9                        | 1.5     | 4.5      | 0.5                 | 4.9   | 14.8     | 1.8     | 16.6  | 0.6     | 2.8     | 3.4   | 2.7                         | 15.6    | 18.3  |
| 2011                                  | 3.6                        | 1.8     | 4.5      | 0.9                 | 5.4   | 13.9     | 2.4     | 16.3  | 0.5     | 4.8     | 5.3   | 1.2                         | 14.2    | 15.4  |
| 2012                                  | 3.2                        | 2.0     | 5.2      | 0.6                 | 5.8   | 15.5     | 2.5     | 18.0  | 0.4     | 5.9     | 6.3   | 0.9                         | 13.5    | 14.4  |
| 2013                                  | 3.3                        | 2.2     | 5.6      | 0.4                 | 6.0   | 14.5     | 2.9     | 17.3  | 0.4     | 5.2     | 5.6   | 0.7                         | 15.9    | 16.6  |
| 2014                                  | 3.0                        | 1.5     | 4.5      | 0.8                 | 5.3   | 13.8     | 2.7     | 16.5  | 0.4     | 5.0     | 5.4   | 0.8                         | 17.6    | 18.4  |
| 2015                                  | 3.0                        | 1.6     | 4.6      | b/                  | 4.6   | 16.4     | 3.6     | 19.9  | 0.5     | 5.3     | 5.8   | 0.9                         | 15.3    | 16.2  |
| 2016                                  | 4.6                        | 3.0     | 7.5      | 1.6                 | 7.5   | 18.8     | 5.5     | 24.3  | 0.8     | 6.4     | 7.2   | 1.3                         | 17.7    | 19.0  |
| 2017                                  | 3.6                        | 3.2     | 6.8      | 2.1                 | 6.8   | 17.1     | 5.8     | 22.9  | 0.7     | 5.0     | 5.6   | 1.3                         | 16.2    | 17.5  |
| 2018 <sup>c/</sup>                    | 5.2                        | 3.8     | 9.0      | 0.0                 | 9.0   | 19.0     | 5.8     | 24.8  | 1.0     | 6.3     | 7.3   | 1.6                         | 18.7    | 20.3  |

TABLE IV-14. Oregon and Washington recreational salmon, bottomfish, and sturgeon angler trips (thousands) by ocean port area and boat type for the area north of Cape Falcon. (Page 3 of 3)

| Year                                | Columbia River and Buoy 10 |         |          |                     |       | Westport |         |       | La Push |         |       | Neah Bay and Area 4B Add-On |         |       |
|-------------------------------------|----------------------------|---------|----------|---------------------|-------|----------|---------|-------|---------|---------|-------|-----------------------------|---------|-------|
|                                     | Charter                    | Private | Subtotal | Jetty <sup>b/</sup> | Total | Charter  | Private | Total | Charter | Private | Total | Charter                     | Private | Total |
| <b>STURGEON EFFORT<sup>g/</sup></b> |                            |         |          |                     |       |          |         |       |         |         |       |                             |         |       |
| 1984-1990                           | 4.7                        | 31.6    | 36.2     | -                   | 36.2  | -        | -       | -     | -       | -       | -     | -                           | -       | -     |
| 1991-1995                           | 6.0                        | 41.7    | 47.7     | -                   | 47.7  | -        | -       | -     | -       | -       | -     | -                           | -       | -     |
| 1996-2000                           | 12.5                       | 53.4    | 65.9     | -                   | 65.9  | -        | -       | -     | -       | -       | -     | -                           | -       | -     |
| 2001-2005                           | 8.7                        | 41.7    | 50.3     | -                   | 50.3  | -        | -       | -     | -       | -       | -     | -                           | -       | -     |
| 2006-2010                           | 6.7                        | 38.0    | 44.7     | -                   | 44.7  | -        | -       | -     | -       | -       | -     | -                           | -       | -     |
| 2011                                | 3.6                        | 21.7    | 25.3     | -                   | 25.3  | -        | -       | -     | -       | -       | -     | -                           | -       | -     |
| 2012                                | 2.4                        | 16.5    | 18.9     | -                   | 18.9  | -        | -       | -     | -       | -       | -     | -                           | -       | -     |
| 2013                                | 1.5                        | 14.8    | 16.3     | -                   | 16.3  | -        | -       | -     | -       | -       | -     | -                           | -       | -     |
| 2014                                | 0.1                        | 1.5     | 1.7      | -                   | 1.7   | -        | -       | -     | -       | -       | -     | -                           | -       | -     |
| 2015                                | a/                         | 1.0     | 1.0      | -                   | 1.0   | -        | -       | -     | -       | -       | -     | -                           | -       | -     |
| 2016                                | a/                         | 2.5     | 2.5      | -                   | 2.5   | -        | -       | -     | -       | -       | -     | -                           | -       | -     |
| 2017                                | 0.5                        | 13.7    | 14.2     | -                   | 14.2  | -        | -       | -     | -       | -       | -     | -                           | -       | -     |
| 2018 <sup>c/</sup>                  | 1.0                        | 16.5    | 17.5     | -                   | 17.5  | -        | -       | -     | -       | -       | -     | -                           | -       | -     |

a/ Fewer than 50 angler trips.

b/ Columbia River north jetty was not sampled in 2005, 2007 and 2018 due to construction limiting access; the outer jetty was not sampled in 2015 due to construction limiting access to near-beach areas.

c/ Preliminary.

d/ Oregon data is a minimum estimate, as the jetty is not sampled, and bottomfish sampling of vessels only occurs when the ocean is open for salmon.

e/ For 1996, no Oregon bottomfish trips are included.

f/ For 1996, includes tuna trips: Ilwaco - 9 charter, 14 private; Westport - 784 charter, 0 private.

g/ Annual sturgeon angler trips for the lower Columbia River from the western tip of Puget Island to mouth.

TABLE IV-15. Buoy 10<sup>a/b/</sup> and Area 4B add-on recreational salmon angler trips and catch by boat type. (Page 1 of 2)

| Year or Avg.              | Angler Trips |         |       | Chinook Catch |         |       | Coho Catch |         |       | Pink Catch |         |
|---------------------------|--------------|---------|-------|---------------|---------|-------|------------|---------|-------|------------|---------|
|                           | Charter      | Private | Jetty | Charter       | Private | Jetty | Charter    | Private | Jetty | Charter    | Private |
| <b>OREGON BUOY 10</b>     |              |         |       |               |         |       |            |         |       |            |         |
| 1987-1990                 | 4,002        | 38,619  | 4,029 | 793           | 6,415   | 29    | 3,292      | 18,348  | 690   | 0          | 0       |
| 1991-1995                 | 1,528        | 21,547  | 4,555 | 122           | 1,318   | 30    | 1,625      | 14,520  | 1,389 | 0          | 0       |
| 1996-2000                 | 626          | 15,760  | 1,832 | 126           | 2,712   | 3     | 206        | 3,764   | 353   | 0          | 0       |
| 2001-2005                 | 664          | 41,198  | 2,025 | 32            | 8,055   | 3     | 435        | 20,070  | 237   | 0          | 0       |
| 2006-2010                 | 131          | 26,556  | 929   | 11            | 3,511   | 5     | 56         | 8,860   | 117   | 0          | 0       |
| 2011                      | 70           | 30,074  | 1,705 | 3             | 7,150   | 34    | 6          | 5,029   | 315   | 0          | 0       |
| 2012                      | 468          | 39,753  | 1,368 | 52            | 12,934  | 22    | 42         | 4,909   | 104   | 0          | 0       |
| 2013                      | 459          | 40,648  | 1,754 | 81            | 15,448  | 41    | 50         | 4,638   | 148   | 0          | 0       |
| 2014                      | 237          | 70,402  | 3,696 | 13            | 19,033  | 41    | 385        | 39,873  | 2,295 | 0          | 0       |
| 2015                      | 150          | 67,883  | 6,081 | 43            | 25,227  | 246   | 88         | 22,067  | 3,442 | 0          | 0       |
| 2016                      | 96           | 59,778  | 4,114 | 5             | 13,551  | 404   | 13         | 5,560   | 582   | 0          | 0       |
| 2017                      | 73           | 59,382  | 2,443 | 2             | 21,368  | 160   | 30         | 11,469  | 475   | 0          | 0       |
| 2018 <sup>c/</sup>        | 36           | 41,898  | 2,153 | 1             | 8,191   | 66    | 13         | 3,927   | 457   | 0          | 0       |
| <b>WASHINGTON BUOY 10</b> |              |         |       |               |         |       |            |         |       |            |         |
| 1987-1990                 | 10,678       | 71,927  | 6,567 | 1,907         | 14,398  | 68    | 8,353      | 40,415  | 1,627 | 1          | 11      |
| 1991-1995                 | 4,162        | 41,770  | 5,908 | 466           | 3,710   | 42    | 5,178      | 31,681  | 1,426 | 0          | 16      |
| 1996-2000                 | 1,957        | 23,952  | 1,045 | 393           | 3,999   | 24    | 950        | 6,305   | 82    | 0          | 0       |
| 2001-2005                 | 970          | 39,680  | 97    | 61            | 6,547   | 5     | 738        | 21,472  | -     | 0          | 0       |
| 2006-2010                 | 486          | 18,765  | -     | 41            | 1,748   | -     | 222        | 6,090   | -     | 0          | 0       |
| 2011                      | 372          | 17,188  | -     | 43            | 3,689   | -     | 70         | 2,194   | -     | 0          | 0       |
| 2012                      | 447          | 23,034  | -     | 51            | 5,491   | -     | 82         | 2,248   | -     | 0          | 0       |
| 2013                      | 93           | 22,813  | -     | 6             | 7,018   | -     | 27         | 2,757   | -     | 0          | 0       |
| 2014                      | 179          | 32,675  | 333   | -             | 7,701   | -     | 179        | 14,673  | 339   | 0          | 0       |
| 2015                      | 316          | 33,386  | -     | 30            | 10,947  | -     | 337        | 10,918  | -     | 0          | 0       |
| 2016                      | 149          | 28,668  | 2,145 | 7             | 3,797   | 16    | 62         | 2,691   | 274   | 0          | 0       |
| 2017                      | 471          | 28,162  | 3,016 | 79            | 6,721   | 68    | 252        | 5,933   | 675   | 0          | 0       |
| 2018 <sup>c/</sup>        | 615          | 22,616  | -     | 84            | 3,278   | -     | 114        | 2,250   | -     | 0          | 0       |

TABLE IV-15. Buoy 10<sup>a/b/</sup> and Area 4B add-on recreational salmon angler trips and catch by boat type. (Page 2 of 2)

| Year or Avg.                             | Angler Trips |         |        | Chinook Catch |         |       | Coho Catch |         |       | Pink Catch |         |
|--|--------------|---------|--------|---------------|---------|-------|------------|---------|-------|------------|---------|
|  | Charter      | Private | Jetty  | Charter       | Private | Jetty | Charter    | Private | Jetty | Charter    | Private |
| <b>TOTAL BUOY 10</b>                     |              |         |        |               |         |       |            |         |       |            |         |
| 1987-1990                                | 14,680       | 110,547 | 10,596 | 2,700         | 20,812  | 98    | 11,645     | 58,763  | 2,317 | 1          | 11      |
| 1991-1995                                | 5,690        | 63,317  | 10,463 | 588           | 5,029   | 72    | 6,803      | 46,201  | 2,814 | 0          | 16      |
| 1996-2000                                | 2,583        | 39,712  | 2,877  | 519           | 6,710   | 27    | 1,157      | 10,070  | 435   | 0          | 0       |
| 2001-2005                                | 1,634        | 80,878  | 2,122  | 93            | 14,602  | 8     | 1,173      | 41,541  | 237   | 0          | 0       |
| 2006-2010                                | 617          | 45,322  | 929    | 51            | 5,259   | 5     | 278        | 14,950  | 117   | 0          | 0       |
| 2011                                     | 442          | 47,262  | 1,705  | 46            | 10,839  | 34    | 76         | 7,223   | 315   | 0          | 0       |
| 2012                                     | 915          | 62,787  | 1,368  | 103           | 18,425  | 22    | 124        | 7,157   | 104   | 0          | 0       |
| 2013                                     | 552          | 63,461  | 1,754  | 87            | 22,466  | 41    | 77         | 7,395   | 148   | 0          | 0       |
| 2014                                     | 416          | 103,077 | 4,029  | 13            | 26,734  | 41    | 564        | 54,546  | 2,634 | 0          | 0       |
| 2015                                     | 466          | 101,269 | 6,081  | 73            | 36,174  | 246   | 425        | 32,985  | 3,442 | 0          | 0       |
| 2016                                     | 245          | 88,446  | 6,259  | 12            | 17,348  | 420   | 75         | 8,251   | 856   | 0          | 0       |
| 2017                                     | 544          | 87,544  | 5,459  | 81            | 28,089  | 228   | 282        | 17,402  | 1,150 | 0          | 0       |
| 2018 <sup>c/</sup>                       | 651          | 64,514  | 2,153  | 85            | 11,469  | 66    | 127        | 6,177   | 457   | 0          | 0       |
| <b>TOTAL AREA 4B ADD-ON<sup>d/</sup></b> |              |         |        |               |         |       |            |         |       |            |         |
| 1989-1990                                | 1,084        | 10,941  | -      | 62            | 375     | -     | 2,095      | 18,021  | -     | 36         | 212     |
| 1991-1995                                | 429          | 6,852   | -      | 12            | 153     | -     | 725        | 9,188   | -     | 73         | 970     |
| 1996-2000 <sup>e/</sup>                  | 123          | 2,528   | -      | 1             | 23      | -     | 173        | 3,086   | -     | 28         | 83      |
| 2001-2005                                | -            | -       | -      | -             | -       | -     | -          | -       | -     | 0          | 0       |
| 2006 <sup>e/</sup>                       | -            | -       | -      | -             | -       | -     | -          | -       | -     | 0          | 0       |
| 2007                                     | -            | -       | -      | -             | -       | -     | -          | -       | -     | 0          | 0       |
| 2008                                     | -            | 782     | -      | -             | 11      | -     | -          | 137     | -     | 0          | 0       |
| 2009 <sup>f/</sup>                       | -            | -       | -      | -             | -       | -     | -          | -       | -     | 0          | 0       |

a/ From 2000, catch downstream of boundary line from Tongue Pt., OR to Rocky Pt., WA. Prior to 2000, only catch downstream of Astoria-Megler Br.

b/ Prior to 1987, data on charter and private anglers were combined. Total Buoy 10 catch and effort data prior to 1987 are provided in Table B-21.

c/ Preliminary.

d/ There was no Area 4B add-on fishery prior to 1989.

e/ There was no Area 4B add-on fishery opening in 1999 and 2006 as the Area 4 ocean quota was not attained.

f/ There has been no Area 4B add-on fishery planned since 2008.

TABLE IV-16. Estimates of California coastal community and state personal income impacts in thousands of real (inflation adjusted, 2018) dollars of the troll and recreational ocean salmon fishery for major port areas.<sup>a/</sup>

| Year or Avg.                    | Crescent City | Eureka | Fort Bragg | San Francisco | Monterey | Coastal Community Total <sup>b/</sup> | State-Level Total |
|---------------------------------|---------------|--------|------------|---------------|----------|---------------------------------------|-------------------|
| <b>OCEAN TROLL<sup>c/</sup></b> |               |        |            |               |          |                                       |                   |
| 1976-1980                       | 6,619         | 16,813 | 16,486     | 21,627        | 9,283    | 70,828                                | 91,058            |
| 1981-1985                       | 3,352         | 4,044  | 9,466      | 17,868        | 6,088    | 40,819                                | 50,821            |
| 1986-1990                       | 1,261         | 3,121  | 16,602     | 32,236        | 12,056   | 65,276                                | 80,112            |
| 1991-1995                       | 10            | 148    | 1,043      | 12,132        | 6,912    | 20,245                                | 24,397            |
| 1996-2000                       | 11            | 176    | 737        | 12,700        | 7,701    | 21,325                                | 22,563            |
| 2001-2005                       | 566           | 379    | 7,145      | 17,221        | 4,645    | 29,956                                | 31,550            |
| 2006-2010                       | 73            | 187    | 1,593      | 3,203         | 598      | 5,654                                 | 5,909             |
| 2011                            | 37            | 453    | 4,358      | 2,761         | 672      | 8,281                                 | 10,335            |
| 2012                            | 21            | 697    | 4,004      | 12,675        | 3,830    | 21,226                                | 25,434            |
| 2013                            | 113           | 1,788  | 10,448     | 20,269        | 2,057    | 34,674                                | 40,523            |
| 2014                            | 109           | 783    | 6,678      | 9,893         | 582      | 18,045                                | 21,012            |
| 2015                            | 28            | 374    | 4,607      | 4,826         | 889      | 10,724                                | 13,061            |
| 2016                            | d/            | 60     | 1,643      | 4,733         | 993      | 7,430                                 | 8,423             |
| 2017 <sup>e/</sup>              | -             | 39     | 379        | 5,486         | 1,211    | 7,115                                 | 7,665             |
| 2018 <sup>f/</sup>              | 279           | 428    | 920        | 8,499         | 1,103    | 11,229                                | 11,851            |
| <b>RECREATIONAL</b>             |               |        |            |               |          |                                       |                   |
| 1976-1980                       | 1,284         | 1,489  | 867        | 13,031        | 873      | 17,544                                | 19,679            |
| 1981-1985                       | 1,407         | 1,450  | 695        | 11,540        | 922      | 16,013                                | 18,024            |
| 1986-1990                       | 2,383         | 2,484  | 1,211      | 14,104        | 3,790    | 23,972                                | 27,936            |
| 1991-1995                       | 864           | 931    | 1,405      | 11,930        | 5,713    | 20,843                                | 24,472            |
| 1996-2000                       | 400           | 737    | 1,435      | 11,960        | 5,254    | 19,787                                | 23,020            |
| 2001-2005                       | 185           | 888    | 2,163      | 9,620         | 3,874    | 16,730                                | 17,739            |
| 2006-2010                       | 46            | 485    | 766        | 2,932         | 1,215    | 5,443                                 | 6,367             |
| 2011                            | 82            | 1,664  | 2,158      | 7,323         | 3,705    | 14,932                                | 21,351            |
| 2012                            | 847           | 2,884  | 2,174      | 12,906        | 6,056    | 24,867                                | 35,346            |
| 2013                            | 753           | 2,861  | 2,616      | 15,537        | 3,844    | 25,611                                | 35,625            |
| 2014                            | 484           | 2,064  | 2,622      | 12,553        | 3,590    | 21,313                                | 29,670            |
| 2015                            | 70            | 1,086  | 1,739      | 10,758        | 1,875    | 15,528                                | 21,004            |
| 2016                            | 60            | 1,063  | 1,351      | 9,901         | 949      | 13,324                                | 17,811            |
| 2017                            | -             | -      | 623        | 12,389        | 1,719    | 14,730                                | 19,206            |
| 2018 <sup>f/</sup>              | 150           | 746    | 1,478      | 15,162        | 1,653    | 19,189                                | 25,285            |

a/ Estimates of income impacts are provided from output of the Fishery Economic Assessment Model (FEAM) and IOPAC. These are the income impacts associated with expenditures in the troll and/or recreational sectors. There is no differentiation between money that may be new to the area versus money that may otherwise have been expended in other sectors. Values through 1995 are based on a 1992 run of the FEAM using 1989 IMPLAN data. Values from 1996 through 2000 are based on a 1998 run of the FEAM using 1996 IMPLAN data. Values from 2001 through 2009 are based on a run of the FEAM using 2000 PacFIN landings and 1998 IMPLAN data. Beginning with the 2010 data year, income impact estimates are based on the NWFSC's IOPAC model, which uses updated IMPLAN and landings data, and survey-based industry cost data. A description of the transition from FEAM-based to IOPAC-based impact multipliers and comparisons of results from the two models are found in Appendix E of the Review of 2014 Ocean Salmon Fisheries: <http://www.pcouncil.org/salmon/stock-assessment-and-fishery-evaluation-safe-documents/review-of-2014-ocean-salmon-fisheries/>

b/ Total personal income impacts on coastal areas. Totals do not include impacts of one coastal area on another.

c/ Excluding pink salmon.

d/ Less than 500 dollars.

e/ Eureka impacts are from fish caught in the Fort Bragg area fishery and landed in Eureka.

f/ Preliminary.



TABLE IV-17. Estimates of Oregon coastal community and state personal income impacts in thousands of real (inflation adjusted, 2018) dollars of the troll and recreational ocean salmon fishery for major port areas.<sup>a/</sup>

| Year or Avg.                    | Astoria | Tillamook | New port | Coos Bay | Brookings | Coastal<br>Community<br>Total <sup>b/</sup> | State-Level<br>Total |
|---------------------------------|---------|-----------|----------|----------|-----------|---|----------------------|
| <b>OCEAN TROLL<sup>c/</sup></b> |         |           |          |          |           |   |                      |
| 1976-1980                       | 4,250   | 5,470     | 12,831   | 19,746   | 8,209     | 50,505                                      | 68,476               |
| 1981-1985                       | 1,376   | 1,771     | 4,153    | 7,324    | 3,179     | 17,804                                      | 24,196               |
| 1986-1990                       | 636     | 3,705     | 8,246    | 15,895   | 3,012     | 31,495                                      | 42,535               |
| 1991-1995                       | 89      | 691       | 2,830    | 1,375    | 140       | 5,124                                       | 6,909                |
| 1996-2000                       | 147     | 290       | 2,995    | 1,729    | 417       | 5,578                                       | 6,797                |
| 2001-2005                       | 922     | 1,020     | 6,378    | 5,626    | 1,068     | 15,015                                      | 17,326               |
| 2006-2010                       | 606     | 336       | 796      | 760      | 317       | 2,816                                       | 3,277                |
| 2011                            | 251     | 60        | 545      | 2,428    | 271       | 3,555                                       | 4,677                |
| 2012                            | 722     | 289       | 1,992    | 2,269    | 368       | 5,640                                       | 8,001                |
| 2013                            | 363     | 508       | 1,607    | 6,836    | 640       | 9,954                                       | 13,419               |
| 2014                            | 1,882   | 988       | 5,628    | 8,366    | 1,239     | 18,103                                      | 25,553               |
| 2015                            | 1,007   | 715       | 2,660    | 3,669    | 541       | 8,593                                       | 10,676               |
| 2016                            | 271     | 174       | 3,021    | 1,251    | 136       | 4,853                                       | 6,319                |
| 2017                            | 287     | 166       | 1,477    | 350      | 84        | 2,364                                       | 3,109                |
| 2018 <sup>d/</sup>              | 43      | 101       | 1,065    | 958      | 372       | 2,539                                       | 3,475                |
| <b>RECREATIONAL</b>             |         |           |          |          |           |   |                      |
| 1979-1980                       | 3,932   | 1,513     | 5,698    | 5,616    | 2,603     | 19,362                                      | 24,950               |
| 1981-1985                       | 2,100   | 1,693     | 4,044    | 4,124    | 2,870     | 14,831                                      | 19,253               |
| 1986-1990                       | 1,437   | 1,798     | 5,596    | 4,076    | 2,988     | 15,895                                      | 20,694               |
| 1991-1995                       | 976     | 786       | 1,780    | 1,589    | 1,122     | 6,252                                       | 8,107                |
| 1996-2000                       | 378     | 433       | 427      | 471      | 905       | 2,614                                       | 3,447                |
| 2001-2005                       | 1,157   | 1,092     | 2,083    | 1,827    | 803       | 6,962                                       | 8,556                |
| 2006-2010                       | 718     | 779       | 1,206    | 685      | 351       | 3,739                                       | 4,801                |
| 2011                            | 775     | 744       | 1,275    | 416      | 365       | 3,575                                       | 5,446                |
| 2012                            | 621     | 705       | 1,469    | 695      | 1,106     | 4,595                                       | 7,209                |
| 2013                            | 704     | 826       | 1,570    | 1,191    | 1,226     | 5,516                                       | 8,977                |
| 2014                            | 1,272   | 1,466     | 3,813    | 1,182    | 1,027     | 8,760                                       | 13,509               |
| 2015                            | 931     | 897       | 1,874    | 576      | 525       | 4,803                                       | 7,338                |
| 2016                            | 361     | 599       | 790      | 432      | 244       | 2,425                                       | 3,904                |
| 2017                            | 697     | 489       | 857      | 496      | 117       | 2,656                                       | 4,198                |
| 2018 <sup>d/</sup>              | 605     | 652       | 2,150    | 554      | 408       | 4,369                                       | 6,717                |

a/ Estimates of income impacts are provided from output of the Fishery Economic Assessment Model (FEAM) and IOPAC. These are the income impacts associated with expenditures in the troll and/or recreational sectors. There is no differentiation between money that may be new to the area versus money that may otherwise have been expended in other sectors. Values through 1995 are based on a 1992 run of the FEAM using 1989 IMPLAN data. Values from 1996 through 2000 are based on a 1998 run of the FEAM using 1996 IMPLAN data. Values from 2001 through 2009 are based on a run of the FEAM using 2000 PacFIN landings and 1998 IMPLAN data. Beginning with the 2010 data year, income impact estimates are based on the NWFSC's IOPAC model, which uses updated IMPLAN and landings data, and survey-based industry cost data. A description of the transition from FEAM-based to IOPAC-based impact multipliers and comparisons of results from the two models are found in Appendix E of the Review of 2014 Ocean Salmon Fisheries:

<http://www.pcouncil.org/salmon/stock-assessment-and-fishery-evaluation-safe-documents/review-of-2014-ocean-salmon-fisheries>

b/ Total personal income impacts on coastal areas. Totals do not include impacts of one coastal area on another.

c/ Excluding pink salmon.

d/ Preliminary.

TABLE IV-18. Estimates of Washington coastal community and state personal income impacts in thousands of real (inflation adjusted, 2018) dollars of the troll and recreational ocean salmon fishery for major port areas.<sup>a/</sup>

| Year or Avg.                      | Neah Bay | La Push | Westport | Ilwaco <sup>b/</sup> | Coastal Community Total <sup>c/d/</sup> | Puget Sound | State-Level Total |
|-----------------------------------|----------|---------|----------|----------------------|---|-------------|-------------------|
| <b>OCEAN TROLL<sup>e/f/</sup></b> |          |         |          |                      |   |             |                   |
| 1976-1980                         | 6,137    | 8,379   | 16,611   | 5,948                | 37,075                                  | 8,257       | 59,145            |
| 1981-1985                         | 1,206    | 488     | 4,551    | 1,089                | 7,335                                   | 1,762       | 11,529            |
| 1986-1990                         | 667      | 175     | 2,091    | 455                  | 3,389                                   | 1,020       | 5,551             |
| 1991-1995 <sup>g/</sup>           | 491      | 108     | 699      | 50                   | 1,350                                   | 197         | 1,987             |
| 1996-2000                         | 165      | 3       | 199      | 19                   | 387                                     | 102         | 532               |
| 2001-2005                         | 815      | 215     | 1,081    | 135                  | 2,246                                   | 16          | 2,544             |
| 2006-2010                         | 320      | 343     | 1,463    | 157                  | 2,284                                   | 23          | 2,664             |
| 2011                              | 590      | 234     | 1,444    | 99                   | 2,367                                   | -           | 3,107             |
| 2012                              | 871      | 507     | 1,445    | 231                  | 3,054                                   | -           | 4,187             |
| 2013                              | 496      | 458     | 2,738    | 76                   | 3,769                                   | 0           | 4,694             |
| 2014                              | 394      | 455     | 1,563    | 1,133                | 3,546                                   | 1           | 4,386             |
| 2015                              | 290      | 591     | 2,905    | 404                  | 4,190                                   | 30          | 5,563             |
| 2016                              | 192      | 190     | 1,395    | 221                  | 1,998                                   | 44          | 2,656             |
| 2017                              | 393      | 123     | 3,163    | 79                   | 3,758                                   | -           | 4,742             |
| 2018                              | 299      | 313     | 2,168    | 21                   | 2,800                                   | -           | 3,730             |
| <b>RECREATIONAL</b>               |          |         |          |                      |   |             |                   |
| 1976-1980                         | 2,261    | 1,122   | 22,488   | 11,008               | 36,878                                  | -           | 49,853            |
| 1981-1985                         | 1,367    | 140     | 8,848    | 4,547                | 14,903                                  | -           | 20,168            |
| 1986-1990                         | 1,049    | 120     | 5,021    | 2,707                | 8,897                                   | -           | 12,050            |
| 1991-1995                         | 557      | 109     | 3,099    | 1,572                | 5,337                                   | -           | 7,217             |
| 1996-2000                         | 295      | 80      | 1,451    | 710                  | 2,536                                   | -           | 3,420             |
| 2001-2005                         | 959      | 240     | 5,900    | 3,627                | 10,726                                  | -           | 12,548            |
| 2006-2010                         | 572      | 233     | 4,225    | 2,597                | 7,627                                   | -           | 10,047            |
| 2011                              | 776      | 371     | 5,305    | 3,106                | 9,557                                   | -           | 16,170            |
| 2012                              | 967      | 351     | 5,989    | 2,922                | 10,228                                  | -           | 17,280            |
| 2013                              | 1,115    | 377     | 5,816    | 3,058                | 10,366                                  | -           | 17,617            |
| 2014                              | 1,219    | 495     | 8,515    | 4,845                | 15,075                                  | -           | 25,443            |
| 2015                              | 1,085    | 342     | 7,376    | 3,884                | 12,687                                  | -           | 21,291            |
| 2016                              | 609      | 115     | 2,812    | 2,667                | 6,203                                   | -           | 10,534            |
| 2017                              | 786      | 182     | 4,032    | 2,511                | 7,511                                   | -           | 12,834            |
| 2018                              | 653      | 198     | 3,507    | 1,985                | 6,343                                   | -           | 10,777            |

a/ Estimates of income impacts are provided from output of the Fishery Economic Assessment Model (FEAM) and IOPAC. These are the income impacts associated with expenditures in the troll and/or recreational sectors. There is no differentiation between money that may be new to the area versus money that may otherwise have been expended in other sectors. Values through 1995 are based on a 1992 run of the FEAM using 1989 IMPLAN data. Values from 1996 through 2000 are based on a 1998 run of the FEAM using 1996 IMPLAN data. Values from 2001 through 2009 are based on a run of the FEAM using 2000 PacFIN landings and 1998 IMPLAN data. Beginning with the 2010 data year, income impact estimates are based on the NWFSC's IOPAC model, which uses updated IMPLAN and landings data, and survey-based industry cost data. A description of the transition from FEAM-based to IOPAC-based impact multipliers and comparisons of results from the two models are found in Appendix E of the Review of 2014 Ocean Salmon Fisheries:

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b/ Recreational values exclude recreational shorebased effort from the Columbia River north jetty.

c/ Total personal income impacts on coastal areas. Totals do not include impacts of one coastal area on another.

d/ Through 1993, commercial values include a very small amount of fish landed in Washington coastal areas not included in the major port groups.

e/ Excluding pink salmon.

f/ All commercial values in this table are based on preliminary information available at the start of each year's Salmon Review.

g/ The non-Indian commercial and recreational fisheries were closed north of Cape Falcon in 1994. Some commercial catch taken south of Cape Falcon was landed in the Puget Sound area.

TABLE IV-19. Local personal income impacts in real (inflation adjusted, 2018) dollars of the inriver commercial salmon fishery on Oregon and Washington Columbia River communities.<sup>a/</sup> (page 1 of 2)

| Year or<br>Avg.                  | Non-Indian - Gillnet <sup>b/</sup> |       |      |         |       |                       | Treaty Indian - All Gears <sup>c/</sup> |       |      |         |                       |        | Columbia<br>River Total |      |        |
|----------------------------------|------------------------------------|-------|------|---------|-------|-----------------------|---|-------|------|---------|-----------------------|--------|-------------------------|------|--------|
|                                  | Chinook                            |       |      | Chinook |       |                       | Chinook                                 |       |      | Chinook |                       |        |                         |      |        |
|                                  | Spring                             | Fall  |      | Spring  | Fall  |                       | Spring                                  | Fall  |      | Spring  | Fall                  |        |                         |      |        |
|                                  | Brights <sup>d/</sup>              | Tules | Coho | Chum    | TOTAL | Brights <sup>d/</sup> | Tules                                   | Coho  | Chum | TOTAL   | Brights <sup>d/</sup> | Tules  | Coho                    | Chum | TOTAL  |
| <b>Oregon</b>                    |                                    |       |      |         |       |                       |   |       |      |         |                       |        |                         |      |        |
| 1984-1985                        | 3,666                              | e/    | e/   | 3,866   | e/    | 7,532                 | e/                                      | 2,093 | 7    | 29      | e/                    | 2,129  |                         |      | 9,661  |
| 1986-1990                        | 1,860                              | 8,358 | 707  | 6,009   | 10    | 16,945                | 8                                       | 3,570 | 88   | 39      | e/                    | 3,705  |                         |      | 20,650 |
| 1991-1995                        | 551                                | 485   | 59   | 1,242   | 1     | 2,338                 | 1                                       | 481   | 118  | 15      | e/                    | 616    |                         |      | 2,954  |
| 1996-2000                        | 243                                | 237   | 66   | 858     | 1     | 1,406                 | 1                                       | 198   | 80   | 6       | e/                    | 285    |                         |      | 1,691  |
| 2001-2005                        | 1,672                              | 1,155 | 262  | 2,306   | e/    | 5,395                 | 118                                     | 477   | 100  | 13      | e/                    | 708    |                         |      | 6,103  |
| 2006-2010                        | 1,619                              | 1,619 | 171  | 1,413   | e/    | 4,822                 | 400                                     | 1,170 | 107  | 60      | e/                    | 1,736  |                         |      | 6,558  |
| 2011                             | 1,737                              | 2,153 | 202  | 1,077   | e/    | 5,168                 | 272                                     | 889   | 46   | 45      | e/                    | 1,252  |                         |      | 6,420  |
| 2012                             | 1,519                              | 1,294 | 158  | 214     | e/    | 3,185                 | 106                                     | 503   | 7    | 16      | e/                    | 632    |                         |      | 3,817  |
| 2013                             | 1,563                              | 3,584 | 179  | 829     | e/    | 6,155                 | 151                                     | 1,750 | 38   | 11      | e/                    | 1,950  |                         |      | 8,105  |
| 2014                             | 1,036                              | 2,675 | 233  | 2,741   | e/    | 6,685                 | 460                                     | 1,465 | 23   | 57      | e/                    | 2,005  |                         |      | 8,690  |
| 2015                             | 1,710                              | 1,990 | 127  | 355     | e/    | 4,182                 | 585                                     | 1,350 | 41   | 3       | e/                    | 1,979  |                         |      | 6,161  |
| 2016                             | 1,747                              | 1,852 | 84   | 545     | e/    | 4,228                 | 198                                     | 1,179 | 3    | 11      | e/                    | 1,390  |                         |      | 5,618  |
| 2017                             | 2,016                              | 759   | 41   | 602     | e/    | 3,418                 | 221                                     | 1,222 | 4    | 21      | e/                    | 1,468  |                         |      | 4,886  |
| 2018 <sup>f/</sup>               | 1,881                              | 414   | 30   | 187     | e/    | 2,512                 | 594                                     | 1,183 | 3    | 26      | e/                    | 1,805  |                         |      | 4,317  |
| <b>Washington<sup>g/h/</sup></b> |                                    |       |      |         |       |                       |   |       |      |         |                       |        |                         |      |        |
| 1984-1985                        | 2,550                              | e/    |      | 1,162   | e/    | 3,711                 | e/                                      | 721   |      | e/      | e/                    | 721    |                         |      | 4,432  |
| 1986-1990                        | 1,129                              | 3,666 |      | 2,658   | 3     | 7,457                 | 31                                      | 4,904 |      | 139     | e/                    | 5,074  |                         |      | 12,530 |
| 1991-1995                        | 296                                | 198   |      | 536     | 2     | 1,031                 | 1                                       | 686   |      | 19      | e/                    | 706    |                         |      | 1,737  |
| 1996-2000                        | 8                                  | 180   |      | 308     | 1     | 497                   | 27                                      | 1,235 |      | 17      | e/                    | 1,280  |                         |      | 1,777  |
| 2001-2005                        | 482                                | 823   |      | 1,173   | e/    | 2,478                 | 582                                     | 2,591 |      | 58      | e/                    | 3,231  |                         |      | 5,710  |
| 2006-2010                        | 628                                | 963   |      | 601     | 1     | 2,192                 | 1,540                                   | 2,814 |      | 153     | e/                    | 4,507  |                         |      | 6,699  |
| 2011                             | 584                                | 1,236 | -    | 395     | 1     | 2,215                 | 2,761                                   | 1,432 | e/   | 386     | 1                     | 4,579  |                         |      | 6,794  |
| 2012                             | 522                                | 1,153 | -    | 98      | e/    | 1,774                 | 1,461                                   | 2,701 | e/   | 57      | e/                    | 4,218  |                         |      | 5,992  |
| 2013                             | 300                                | 2,082 | -    | 335     | e/    | 2,717                 | 1,347                                   | 6,545 | e/   | 168     | e/                    | 8,059  |                         |      | 10,776 |
| 2014                             | 372                                | 2,061 | -    | 895     | e/    | 3,328                 | 2,981                                   | 7,720 | e/   | 544     | 3                     | 11,245 |                         |      | 14,573 |
| 2015                             | 707                                | 2,081 | -    | 112     | e/    | 2,900                 | 3,715                                   | 8,480 | e/   | 38      | e/                    | 12,233 |                         |      | 15,133 |
| 2016                             | 605                                | 2,643 | -    | 159     | e/    | 3,407                 | 2,728                                   | 6,256 | e/   | 124     | e/                    | 9,109  |                         |      | 12,516 |
| 2017                             | 133                                | 921   | -    | 223     | e/    | 1,276                 | 1,576                                   | 5,636 | e/   | 146     | 15                    | 7,358  |                         |      | 8,635  |
| 2018                             | 108                                | 363   | -    | 62      | e/    | 533                   | 511                                     | 1,719 | e/   | 77      | 11                    | 2,307  |                         |      | 2,841  |

TABLE IV-19. Local personal income impacts in thousands of real (inflation adjusted, 2018) dollars of the inriver commercial salmon fishery on Oregon and Washington Columbia River communities.<sup>a/</sup> (page 2 of 2)

| Year or<br>Avg.                  | Non-Indian - Gillnet <sup>b/</sup> |        |                       |         |      |        | Treaty Indian - All Gears <sup>c/</sup> |       |     |         |      |        | Columbia<br>River Total |
|----------------------------------|------------------------------------|--------|-----------------------|---------|------|--------|---|-------|-----|---------|------|--------|-------------------------|
|                                  | Chinook                            |        |                       | Chinook |      |        | Chinook                                 |       |     | Chinook |      |        |                         |
|                                  | Spring                             | Fall   |                       | Coho    | Chum | TOTAL  | Spring                                  | Fall  |     | Coho    | Chum | TOTAL  |                         |
|                                  | Brights <sup>d/</sup>              | Tules  | Brights <sup>d/</sup> |         |      |        | Tules                                   |       |     |         |      |        |                         |
| <b>Columbia River (Combined)</b> |                                    |        |                       |         |      |        |   |       |     |         |      |        |                         |
| 1984-1985                        | 6,216                              | e/     | e/                    | 5,027   | e/   | 11,243 | e/                                      | 2,814 | 7   | 29      | e/   | 2,851  | 14,094                  |
| 1986-1990                        | 2,988                              | 12,025 | 707                   | 8,668   | 13   | 24,401 | 39                                      | 8,474 | 88  | 177     | e/   | 8,779  | 33,180                  |
| 1991-1995                        | 847                                | 682    | 59                    | 1,778   | 3    | 3,369  | 2                                       | 1,168 | 118 | 34      | e/   | 1,322  | 4,691                   |
| 1996-2000                        | 251                                | 417    | 66                    | 1,167   | 3    | 1,903  | 29                                      | 1,433 | 80  | 23      | e/   | 1,565  | 3,468                   |
| 2001-2005                        | 2,154                              | 1,978  | 262                   | 3,478   | 1    | 7,874  | 701                                     | 3,067 | 100 | 71      | e/   | 3,939  | 11,813                  |
| 2006-2010                        | 2,247                              | 2,582  | 171                   | 2,014   | 2    | 7,015  | 1,939                                   | 3,984 | 107 | 212     | e/   | 6,243  | 13,257                  |
| 2011                             | 2,321                              | 3,591  |                       | 1,471   | 1    | 7,384  | 3,034                                   | 2,366 |     | 431     | 1    | 5,831  | 13,214                  |
| 2012                             | 2,041                              | 2,605  |                       | 312     | e/   | 4,959  | 1,567                                   | 3,211 |     | 73      | e/   | 4,851  | 9,810                   |
| 2013                             | 1,863                              | 5,844  |                       | 1,164   | e/   | 8,872  | 1,498                                   | 8,333 |     | 178     | e/   | 10,009 | 18,881                  |
| 2014                             | 1,409                              | 4,969  |                       | 3,636   | e/   | 10,013 | 3,442                                   | 9,208 |     | 601     | 3    | 13,251 | 23,264                  |
| 2015                             | 2,416                              | 4,199  |                       | 467     | e/   | 7,082  | 4,300                                   | 9,872 |     | 41      | e/   | 14,212 | 21,294                  |
| 2016                             | 2,352                              | 4,579  |                       | 703     | e/   | 7,634  | 2,926                                   | 7,438 |     | 135     | e/   | 10,499 | 18,134                  |
| 2017                             | 2,149                              | 1,721  |                       | 825     | e/   | 4,695  | 1,797                                   | 6,862 |     | 167     | 15   | 8,827  | 13,521                  |
| 2018 <sup>f/</sup>               | 1,989                              | 807    |                       | 250     | e/   | 3,045  | 1,104                                   | 2,905 |     | 103     | 11   | 4,113  | 7,158                   |

a/ Estimates of income impacts are provided from output of the Fishery Economic Assessment Model (FEAM) and IOPAC. These are the income impacts associated with expenditures in the troll and/or recreational sectors. There is no differentiation between money that may be new to the area versus money that may otherwise have been expended in other sectors. Values through 1995 are based on a 1992 run of the FEAM using 1989 IMPLAN data. Values from 1996 through 2000 are based on a 1998 run of the FEAM using 1996 IMPLAN data. Values from 2001 through 2009 are based on a run of the FEAM using 2000 PacFIN landings and 1998 IMPLAN data. Beginning with the 2010 data year, income impact estimates are based on the NWFSC's IOPAC model, which uses updated IMPLAN and landings data, and survey-based industry cost data. A description of the transition from FEAM-based to IOPAC-based impact multipliers and comparisons of results from the two models are found in Appendix E of the Review of 2014 Ocean Salmon Fisheries:

<http://www.pcouncil.org/salmon/stock-assessment-and-fishery-evaluation-safe-documents/review-of-2014-ocean-salmon-fisheries/>

b/ Mainstem below Bonneville and Select Areas (Youngs Bay, Tongue Point, Blind Slough, and Deep River).

c/ Treaty Indian values do not include direct sales to consumers.

d/ For Washington and the Columbia River this column includes fall brights, tules, and jacks.

e/ Less than \$500.

f/ Preliminary. (All Washington values in this table are based on preliminary information available when each year's Salmon Review is drafted.)

g/ Washington income impacts for years prior to 2000 are based on a combination of Washington and Oregon value information.

h/ Treaty Indian values are primarily mainstem Columbia set gillnet but also include Klickitat dipnet, Drano Lake (Little White Salmon River mouth), and Priest Rapids Pool fisheries.

TABLE IV-20. Local personal income impacts in real (inflation adjusted, 2018) dollars of the Buoy 10 recreational fishery in Oregon and Washington and the Area 4B add-on fishery in Washington<sup>a/</sup>.

| Year or Avg.                            | Total Angler<br>Trips<br>(thousands) | Income Impacts (thousands of dollars) |            |       |
|---|--------------------------------------|---------------------------------------|------------|-------|
|   |                                      | Oregon                                | Washington | Total |
| <b>BUOY 10 (including bank fishing)</b> |                                      |                                       |            |       |
| 1987-1990                               | 136                                  | 2,657                                 | 4,632      | 7,288 |
| 1991-1995                               | 79                                   | 1,511                                 | 2,571      | 4,082 |
| 1996-2000                               | 45                                   | 968                                   | 1,324      | 2,292 |
| 2001-2005                               | 85                                   | 2,009                                 | 1,727      | 3,736 |
| 2006-2010                               | 68                                   | 1,385                                 | 1,021      | 2,406 |
| 2011                                    | 49                                   | 2,207                                 | 1,557      | 3,764 |
| 2012                                    | 65                                   | 2,944                                 | 2,073      | 5,018 |
| 2013                                    | 66                                   | 3,031                                 | 1,963      | 4,993 |
| 2014                                    | 108                                  | 5,164                                 | 2,851      | 8,015 |
| 2015                                    | 108                                  | 5,135                                 | 2,919      | 8,053 |
| 2016                                    | 95                                   | 4,427                                 | 2,657      | 7,085 |
| 2017                                    | 94                                   | 4,280                                 | 2,771      | 7,051 |
| 2018 <sup>b/</sup>                      | 67                                   | 3,046                                 | 2,081      | 5,127 |
| <b>AREA 4B ADD-ON<sup>c/d/e/</sup></b>  |                                      |                                       |            |       |
| 1989-1990                               | 12                                   | -                                     | 656        | 656   |
| 1991-1995                               | 6                                    | -                                     | 382        | 382   |
| 1996-2000                               | 3                                    | -                                     | 137        | 137   |
| 2001-2005                               | -                                    | -                                     | -          | -     |
| 2006                                    | -                                    | -                                     | -          | -     |
| 2007                                    | -                                    | -                                     | -          | -     |
| 2008                                    | 1                                    | -                                     | 34         | 34    |
| 2009                                    | -                                    | -                                     | -          | -     |

a/ Estimates of income impacts are provided from output of the Fishery Economic Assessment Model (FEAM) and IOPAC. These are the income impacts associated with expenditures in the troll and/or recreational sectors. There is no differentiation between money that may be new to the area versus money that may otherwise have been expended in other sectors. Values through 1995 are based on a 1992 run of the FEAM using 1989 IMPLAN data. Values from 1996 through 2000 are based on a 1998 run of the FEAM using 1996 IMPLAN data. Values from 2001 through 2009 are based on a run of the FEAM using 2000 PacFIN landings and 1998 IMPLAN data. Beginning with the 2010 data year, income impact estimates are based on the NWFSC's IOPAC model, which uses updated IMPLAN and landings data, and survey-based industry cost data. A description of the transition from FEAM-based to IOPAC-based impact multipliers and comparisons of results from the two models are found in Appendix E of the Review of 2014 Ocean Salmon Fisheries:

<http://www.pcouncil.org/salmon/stock-assessment-and-fishery-evaluation-safe-documents/review-of-2014-ocean-salmon-fisheries/>

b/ Preliminary

c/ There were no Area 4B add-on fisheries prior to 1989.

d/ There was no Area 4B add-on fishery opening in 1999 and 2006 as the Area 4 ocean quota was not attained.

e/ There has been no Area 4B add-on fishery planned since 2008.

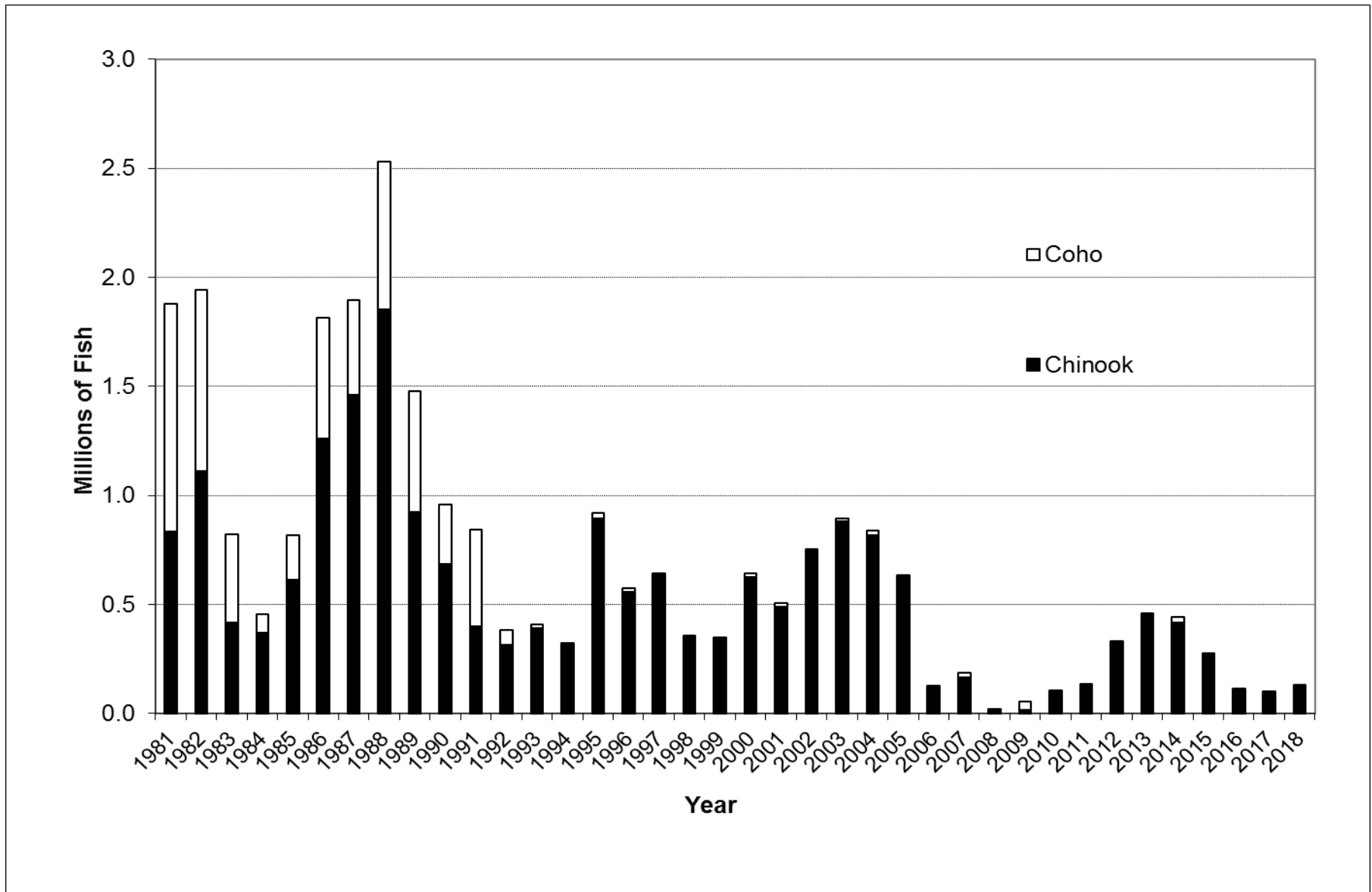


Figure IV-1. West Coast ocean non-Indian commercial Chinook and coho harvest.

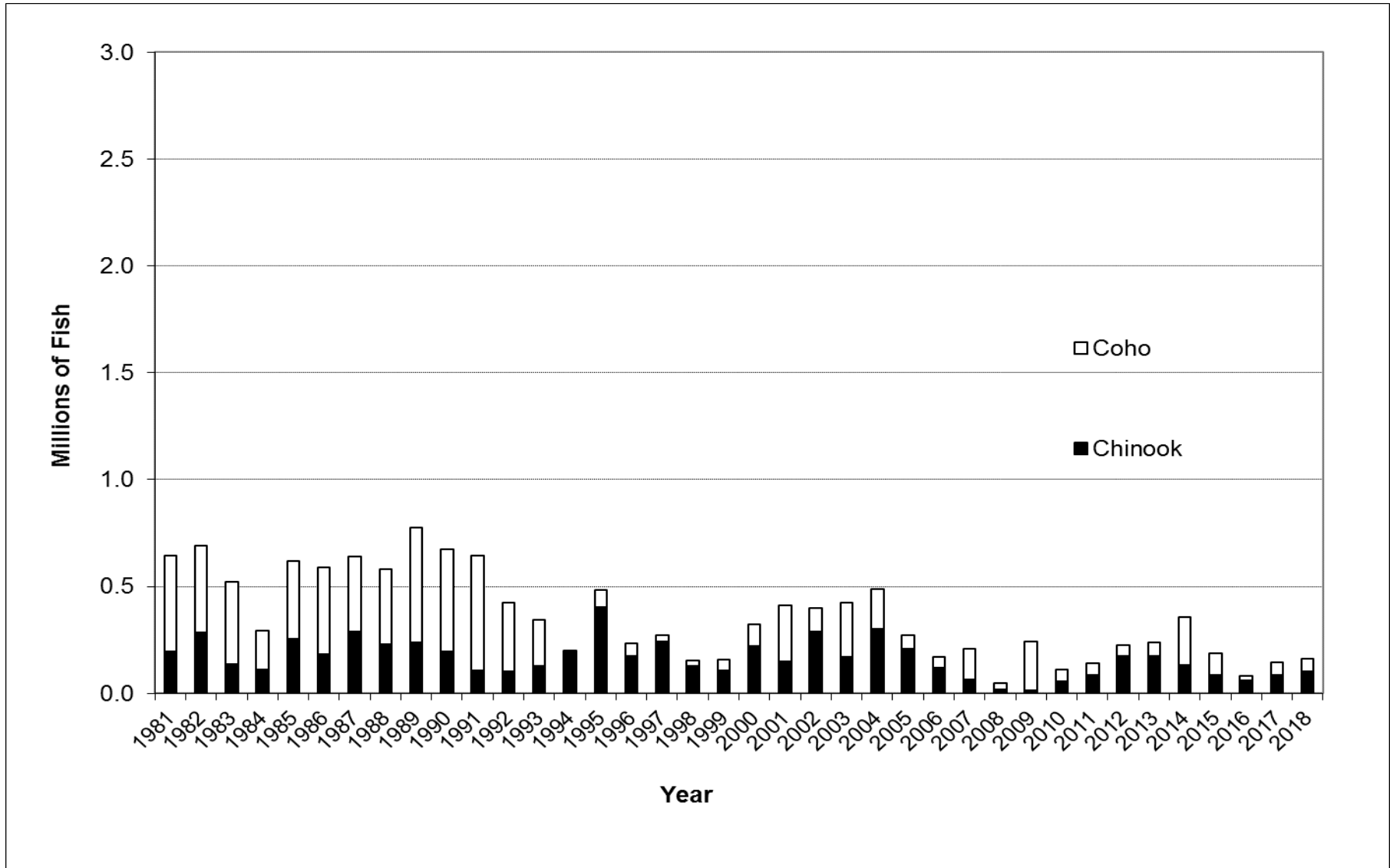


Figure IV-2. West Coast ocean recreational Chinook and coho harvest.

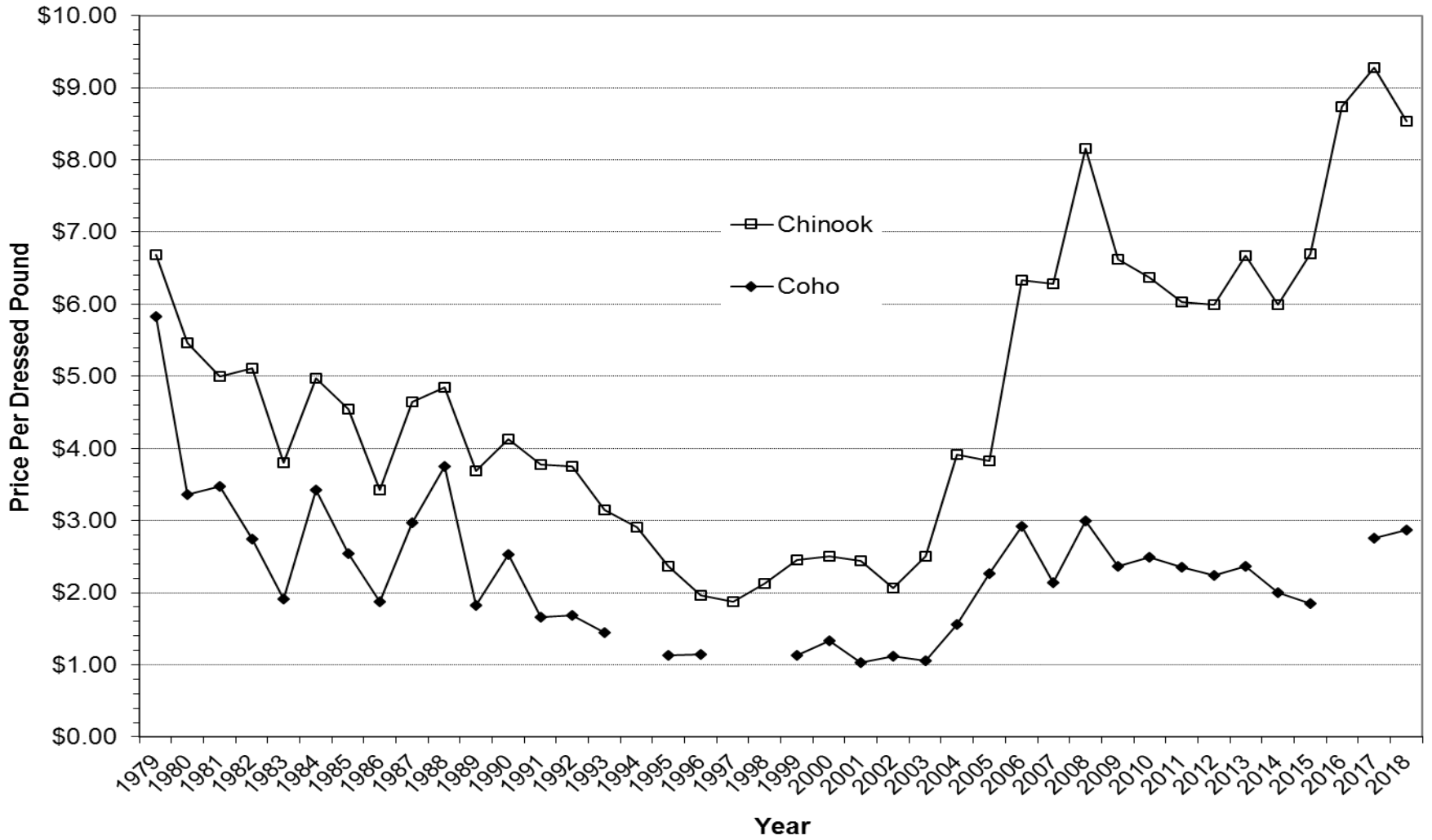


Figure IV-3. West Coast non-Indian ocean commercial salmon average annual exvessel prices (inflation adjusted, 2018 dollars).



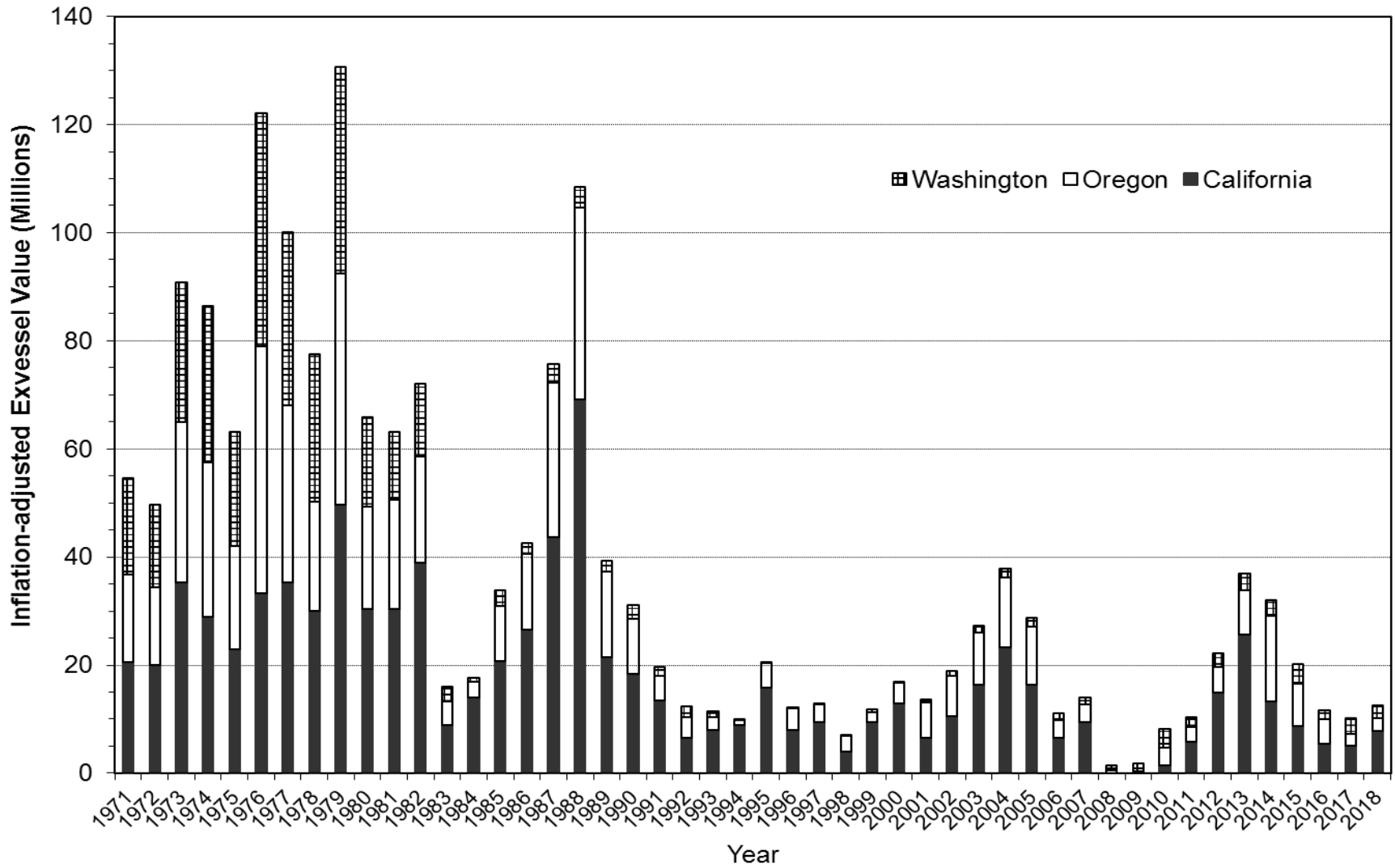


Figure IV-4. Exvessel value of West Coast non-Indian ocean commercial Chinook and coho landings by state of landing (inflation adjusted, 2018 dollars).

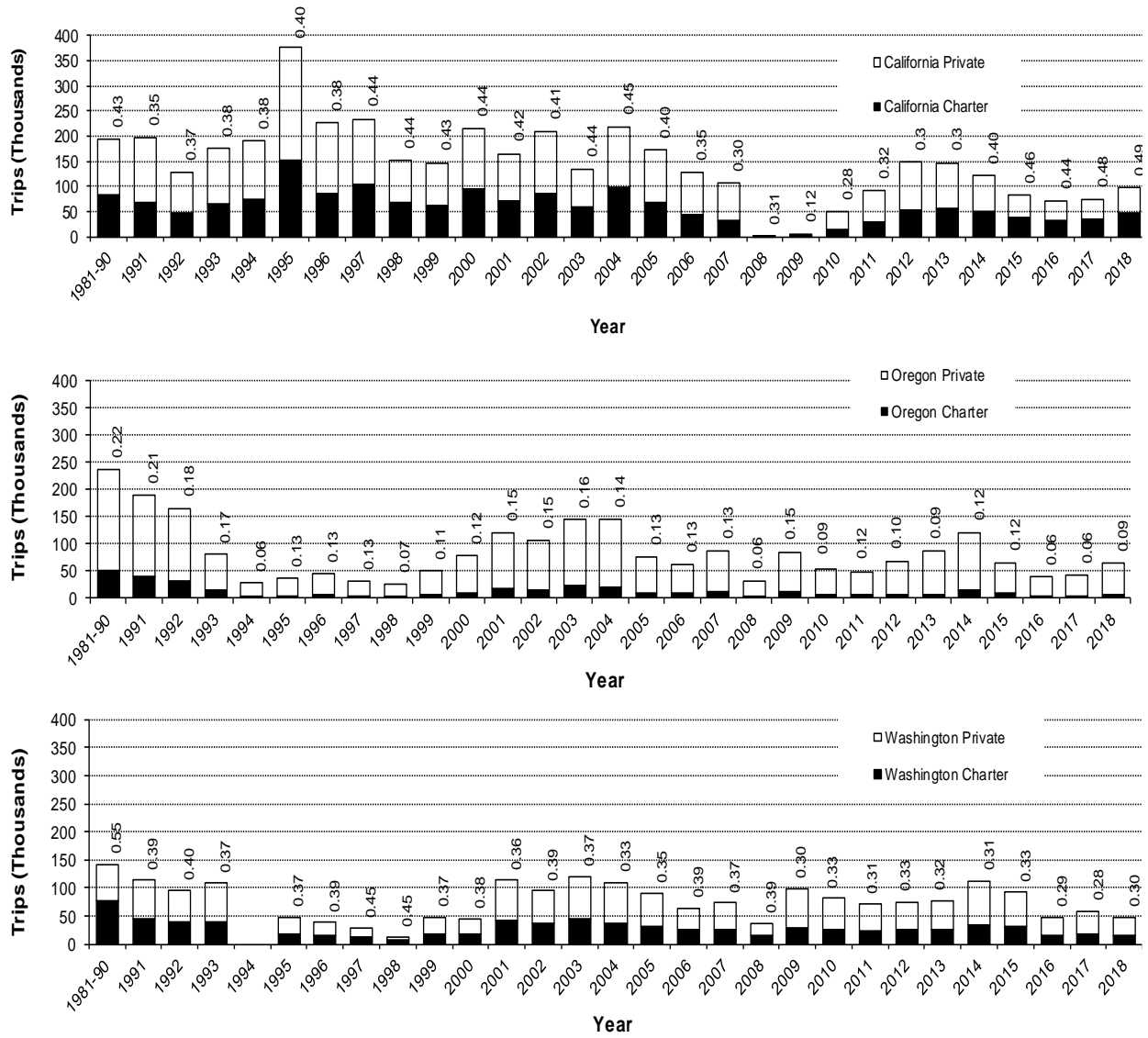


Figure IV-5. Total recreational ocean salmon trips for California, Oregon, and Washington, with proportion of charter trips shown above each bar.

**APPENDIX A  
HISTORICAL RECORD OF OCEAN SALMON FISHERY  
EFFORT AND LANDINGS**

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TABLE A-1. California commercial troll salmon fishing effort in days fished and landings in numbers of fish by catch area.

| Year or Avg.            | Crescent City <sup>a/</sup> | Eureka | Fort Bragg | San Francisco | Monterey | Oregon | Season  |
|-------------------------|-----------------------------|--------|------------|---------------|----------|--------|---------|
| <b>DAYS FISHED</b>      |                             |        |            |               |          |        |         |
| 1981-1985               | 7,428                       | 8,053  | 13,716     | 22,182        | 11,482   | 0      | 59,765  |
| 1986-1990               | 545                         | 1,629  | 16,392     | 25,555        | 14,391   | 12     | 58,511  |
| 1991-1995               | -                           | 600    | 1,775      | 13,340        | 10,820   | 0      | 25,700  |
| 1996-2000               | 15                          | 202    | 796        | 9,546         | 7,740    | 0      | 18,299  |
| 2001-2005               | 66                          | 261    | 3,255      | 8,878         | 4,674    | 87     | 17,187  |
| 2006                    | -                           | -      | 434        | 5,488         | 2,337    | -      | 8,259   |
| 2007                    | 87                          | 270    | 1,400      | 6,736         | 2,178    | -      | 10,671  |
| 2008                    | -                           | -      | -          | -             | -        | -      | -       |
| 2009                    | -                           | -      | -          | -             | -        | -      | -       |
| 2010                    | -                           | -      | 1,486      | 244           | 245      | -      | 1,975   |
| 2011                    | 20                          | 181    | 2,143      | 2,907         | 1,722    | -      | 6,973   |
| 2012                    | 45                          | 260    | 2,221      | 7,505         | 4,491    | -      | 14,522  |
| 2013                    | 98                          | 563    | 5,341      | 8,327         | 2,964    | -      | 17,293  |
| 2014                    | 7                           | 92     | 4,261      | 8,441         | 1,593    | -      | 14,394  |
| 2015                    | 10                          | 22     | 4,971      | 5,466         | 2,542    | -      | 13,011  |
| 2016                    | 7                           | 52     | 1,486      | 4,093         | 1,560    | -      | 7,198   |
| 2017                    | -                           | -      | 267        | 4,374         | 2,084    | -      | 6,725   |
| 2018 <sup>b/</sup>      | 235                         | 462    | 817        | 4,709         | 1,301    | -      | 7,524   |
| <b>CHINOOK LANDINGS</b> |                             |        |            |               |          |        |         |
| 1981-1985               | 48,548                      | 61,130 | 109,258    | 181,548       | 84,103   | 0      | 462,652 |
| 1986-1990               | 13,997                      | 32,329 | 252,416    | 351,115       | 144,846  | 1,064  | 794,703 |
| 1991-1995               | -                           | 4,700  | 17,354     | 200,588       | 126,517  | 0      | 341,928 |
| 1996-2000               | 126                         | 3,379  | 12,529     | 195,662       | 156,305  | 0      | 368,001 |
| 2001-2005               | 1,412                       | 5,298  | 96,466     | 210,228       | 64,827   | 9,484  | 383,921 |
| 2006                    | -                           | -      | 10,835     | 47,689        | 11,204   | -      | 69,728  |
| 2007                    | 2,367                       | 6,395  | 16,116     | 75,254        | 14,009   | -      | 114,141 |
| 2008                    | -                           | -      | -          | -             | -        | -      | -       |
| 2009                    | -                           | -      | -          | -             | -        | -      | -       |
| 2010                    | -                           | -      | 12,553     | 1,105         | 1,430    | -      | 15,088  |
| 2011                    | 417                         | 1,974  | 39,311     | 21,912        | 6,414    | -      | 70,028  |
| 2012                    | 400                         | 4,831  | 38,282     | 119,100       | 52,972   | -      | 215,585 |
| 2013                    | 1,225                       | 8,953  | 116,158    | 143,654       | 27,637   | -      | 297,627 |
| 2014                    | 21                          | 599    | 76,931     | 82,424        | 8,308    | -      | 168,283 |
| 2015                    | 36                          | 10     | 60,052     | 35,696        | 14,713   | -      | 110,507 |
| 2016                    | 6                           | 190    | 15,380     | 26,363        | 13,246   | -      | 55,185  |
| 2017                    | -                           | -      | 1,935      | 27,912        | 12,479   | -      | 42,326  |
| 2018 <sup>b/</sup>      | 4,366                       | 4,600  | 10,642     | 39,514        | 19,364   | -      | 78,486  |
| <b>COHO LANDINGS</b>    |                             |        |            |               |          |        |         |
| 1981-1985               | 20,094                      | 23,675 | 14,628     | 7,728         | 1,356    | 0      | 67,480  |
| 1986-1990               | 3,795                       | 5,998  | 26,000     | 9,377         | 1,611    | 39     | 46,819  |
| 1991-1995               | -                           | 3,100  | 4,500      | 26,900        | 11,775   | -      | 46,275  |
| 1996-2000               | -                           | -      | -          | -             | -        | -      | -       |
| 2001-2005               | -                           | -      | -          | -             | -        | -      | -       |
| 2006                    | -                           | -      | -          | -             | -        | -      | -       |
| 2007                    | -                           | -      | -          | -             | -        | -      | -       |
| 2008                    | -                           | -      | -          | -             | -        | -      | -       |
| 2009                    | -                           | -      | -          | -             | -        | -      | -       |
| 2010                    | -                           | -      | -          | -             | -        | -      | -       |
| 2011                    | -                           | -      | -          | -             | -        | -      | -       |
| 2012                    | -                           | -      | -          | -             | -        | -      | -       |
| 2013                    | -                           | -      | -          | -             | -        | -      | -       |
| 2014                    | -                           | -      | -          | -             | -        | -      | -       |
| 2015                    | -                           | -      | -          | -             | -        | -      | -       |
| 2016                    | -                           | -      | -          | -             | -        | -      | -       |
| 2017                    | -                           | -      | -          | -             | -        | -      | -       |
| 2018                    | -                           | -      | -          | -             | -        | -      | -       |

a/ Includes minor effort off Oregon for fish landed in California prior to 1986.

b/ Preliminary.

TABLE A-2. California commercial troll salmon fishing effort in days fished by catch area and month. (Page 1 of 2)

| Year or Avg.                      | Apr. | May   | June  | July  | Aug.  | Sept. | Oct. | Season |
|-----------------------------------|------|-------|-------|-------|-------|-------|------|--------|
| <u>Crescent City<sup>a/</sup></u> |      |       |       |       |       |       |      |        |
| 1981-1985                         | -    | 1,363 | 961   | 1,947 | 2,509 | 1,295 | -    | 7,428  |
| 1986-1990                         | -    | 9     | 360   | 219   | 253   | 10    | -    | 545    |
| 1991-1995                         | -    | -     | -     | -     | -     | -     | -    | -      |
| 1996-2000                         | -    | -     | -     | -     | 10    | 13    | -    | 15     |
| 2001-2005 <sup>b/</sup>           | 18   | 2     | 3     | 36    | 97    | 61    | 6    | 119    |
| 2006                              | -    | -     | -     | -     | -     | -     | -    | -      |
| 2007                              | -    | -     | -     | -     | -     | 87    | -    | 87     |
| 2008                              | -    | -     | -     | -     | -     | -     | -    | -      |
| 2009                              | -    | -     | -     | -     | -     | -     | -    | -      |
| 2010                              | -    | -     | -     | -     | -     | -     | -    | -      |
| 2011                              | -    | -     | -     | 4     | 16    | -     | -    | 20     |
| 2012                              | -    | -     | -     | -     | -     | 45    | -    | 45     |
| 2013                              | -    | 8     | 31    | 46    | 10    | 3     | -    | 98     |
| 2014                              | -    | -     | -     | -     | -     | 7     | -    | 7      |
| 2015                              | -    | -     | -     | -     | -     | 10    | -    | 10     |
| 2016                              | -    | -     | -     | -     | -     | 7     | -    | 7      |
| 2017                              | -    | -     | -     | -     | -     | -     | -    | -      |
| 2018 <sup>c/</sup>                | -    | 20    | 108   | 39    | 68    | -     | -    | 235    |
| <u>Eureka</u>                     |      |       |       |       |       |       |      |        |
| 1981-1985                         | -    | 2,029 | 1,075 | 2,608 | 1,931 | 821   | -    | 8,053  |
| 1986-1990                         | -    | -     | 882   | 518   | 547   | 467   | 64   | 1,629  |
| 1991-1995                         | -    | -     | -     | -     | -     | 500   | 100  | 600    |
| 1996-2000                         | -    | -     | -     | -     | 128   | 177   | -    | 202    |
| 2001-2005                         | -    | -     | -     | -     | 94    | 242   | -    | 261    |
| 2006                              | -    | -     | -     | -     | -     | -     | -    | -      |
| 2007                              | -    | -     | -     | -     | -     | 270   | -    | 270    |
| 2008                              | -    | -     | -     | -     | -     | -     | -    | -      |
| 2009                              | -    | -     | -     | -     | -     | -     | -    | -      |
| 2010                              | -    | -     | -     | -     | -     | -     | -    | -      |
| 2011                              | -    | -     | -     | 148   | 33    | -     | -    | 181    |
| 2012                              | -    | -     | -     | -     | -     | 260   | -    | 260    |
| 2013                              | -    | 174   | 129   | 111   | 103   | 46    | -    | 563    |
| 2014                              | -    | -     | -     | -     | -     | 92    | -    | 92     |
| 2015                              | -    | -     | -     | -     | -     | 22    | -    | 22     |
| 2016                              | -    | -     | -     | -     | -     | 52    | -    | 52     |
| 2017                              | -    | -     | -     | -     | -     | -     | -    | -      |
| 2018 <sup>c/</sup>                | -    | 111   | 116   | 121   | 114   | -     | -    | 462    |
| <u>Fort Bragg</u>                 |      |       |       |       |       |       |      |        |
| 1981-1985                         | -    | 2,084 | 2,156 | 5,527 | 2,422 | 1,527 | -    | 13,716 |
| 1986-1990                         | -    | 2,775 | 3,887 | 5,151 | 3,802 | 777   | -    | 16,392 |
| 1991-1995                         | -    | 100   | -     | -     | 3,500 | 875   | -    | 1,775  |
| 1996-2000                         | -    | -     | -     | -     | 1,300 | 536   | -    | 796    |
| 2001-2005                         | -    | 614   | -     | 1,380 | 1,926 | 1,026 | -    | 3,255  |
| 2006                              | -    | -     | -     | -     | -     | 434   | -    | 434    |
| 2007                              | 106  | -     | -     | -     | 1,252 | 42    | -    | 1,400  |
| 2008                              | -    | -     | -     | -     | -     | -     | -    | -      |
| 2009                              | -    | -     | -     | -     | -     | -     | -    | -      |
| 2010                              | -    | -     | -     | 616   | 870   | -     | -    | 1,486  |
| 2011                              | -    | -     | -     | 596   | 1,386 | 161   | -    | 2,143  |
| 2012                              | -    | -     | -     | 960   | 973   | 288   | -    | 2,221  |
| 2013                              | -    | 277   | 1,032 | 2,221 | 1,251 | 560   | -    | 5,341  |
| 2014                              | -    | -     | 1,129 | 2,208 | 825   | 99    | -    | 4,261  |
| 2015                              | -    | 2,376 | 987   | 768   | 623   | 217   | -    | 4,971  |
| 2016                              | -    | -     | 663   | -     | 618   | 205   | -    | 1,486  |
| 2017                              | -    | -     | -     | -     | -     | 267   | -    | 267    |
| 2018 <sup>c/</sup>                | -    | -     | -     | 291   | 464   | 62    | -    | 817    |

TABLE A-2. California commercial troll salmon fishing effort in days fished by catch area and month. (Page 2 of 2)

| Year or Avg.                        | Apr.  | May    | June   | July   | Aug.   | Sept. | Oct. | Season |
|-------------------------------------|-------|--------|--------|--------|--------|-------|------|--------|
| <b>San Francisco</b>                |       |        |        |        |        |       |      |        |
| 1981-1985                           | 727   | 3,897  | 2,958  | 6,819  | 5,214  | 3,003 | -    | 22,182 |
| 1986-1990                           | -     | 6,506  | 7,111  | 5,948  | 4,125  | 1,864 | -    | 25,555 |
| 1991-1995                           | -     | 3,480  | 2,540  | 2,700  | 2,840  | 1,780 | -    | 13,340 |
| 1996-2000                           | 100   | 1,525  | 1,732  | 2,730  | 1,916  | 1,624 | -    | 9,546  |
| 2001-2005                           | -     | 2,106  | 1,894  | 2,643  | 1,493  | 1,249 | 293  | 8,878  |
| 2006                                | -     | -      | -      | 616    | 2,549  | 1,949 | 374  | 5,488  |
| 2007                                | -     | 1,656  | -      | 2,954  | 1,152  | 806   | 168  | 6,736  |
| 2008                                | -     | -      | -      | -      | -      | -     | -    | -      |
| 2009                                | -     | -      | -      | -      | -      | -     | -    | -      |
| 2010                                | -     | -      | -      | 244    | -      | -     | -    | 244    |
| 2011                                | -     | 900    | 164    | 873    | 394    | 459   | 117  | 2,907  |
| 2012                                | -     | 1,723  | 686    | 2,199  | 1,422  | 1,006 | 469  | 7,505  |
| 2013                                | -     | 2,401  | 2,062  | 1,358  | 1,269  | 1,014 | 223  | 8,327  |
| 2014                                | -     | 2,187  | 1,200  | 761    | 2,058  | 1,660 | 575  | 8,441  |
| 2015                                | -     | 839    | 745    | 639    | 1,250  | 1,478 | 515  | 5,466  |
| 2016                                | -     | 581    | 148    | -      | 1,832  | 1,358 | 174  | 4,093  |
| 2017                                | -     | -      | -      | -      | 2,610  | 1,544 | 220  | 4,374  |
| 2018 <sup>c/</sup>                  | -     | -      | -      | 467    | 2,318  | 1,483 | 441  | 4,709  |
| <b>Monterey</b>                     |       |        |        |        |        |       |      |        |
| 1981-1985                           | 1,311 | 4,245  | 2,767  | 2,746  | 964    | 236   | -    | 11,482 |
| 1986-1990                           | -     | 5,235  | 4,255  | 3,367  | 1,335  | 198   | -    | 14,391 |
| 1991-1995                           | -     | 4,360  | 3,080  | 2,460  | 780    | 140   | -    | 10,820 |
| 1996-2000                           | 313   | 3,117  | 2,441  | 1,840  | 178    | 94    | -    | 7,740  |
| 2001-2005                           | -     | 2,318  | 852    | 1,069  | 315    | 120   | -    | 4,674  |
| 2006                                | -     | 2,062  | 103    | 34     | 44     | 94    | -    | 2,337  |
| 2007                                | -     | 1,476  | 29     | 334    | 255    | 84    | -    | 2,178  |
| 2008                                | -     | -      | -      | -      | -      | -     | -    | -      |
| 2009                                | -     | -      | -      | -      | -      | -     | -    | -      |
| 2010                                | -     | -      | -      | 245    | -      | -     | -    | 245    |
| 2011                                | -     | 979    | 340    | 268    | 117    | 18    | -    | 1,722  |
| 2012                                | -     | 2,015  | 907    | 1,247  | 255    | 67    | -    | 4,491  |
| 2013                                | -     | 1,590  | 810    | 400    | 118    | 46    | -    | 2,964  |
| 2014                                | -     | 824    | 353    | 312    | 104    | -     | -    | 1,593  |
| 2015                                | -     | 1,219  | 660    | 536    | 127    | -     | -    | 2,542  |
| 2016                                | -     | 1,081  | 479    | -      | -      | -     | -    | 1,560  |
| 2017                                | -     | 874    | 1,210  | -      | -      | -     | -    | 2,084  |
| 2018 <sup>c/</sup>                  | -     | 465    | 836    | -      | -      | -     | -    | 1,301  |
| <b>Total Statewide<sup>a/</sup></b> |       |        |        |        |        |       |      |        |
| 1981-1985                           | 2,037 | 12,939 | 9,510  | 18,736 | 12,153 | 5,613 | -    | 59,765 |
| 1986-1990                           | -     | 14,524 | 16,246 | 14,658 | 9,741  | 3,316 | 64   | 58,511 |
| 1991-1995                           | -     | 7,860  | 5,620  | 5,160  | 4,320  | 2,720 | 100  | 25,700 |
| 1996-2000                           | 363   | 4,642  | 4,173  | 4,570  | 2,346  | 2,424 | -    | 18,299 |
| 2001-2005                           | 18    | 4,249  | 2,368  | 4,547  | 3,021  | 2,700 | 296  | 17,187 |
| 2006                                | -     | 2,062  | 103    | 650    | 2,593  | 2,477 | 374  | 8,259  |
| 2007                                | 106   | 3,132  | 29     | 3,288  | 2,659  | 1,289 | 168  | 10,671 |
| 2008                                | -     | -      | -      | -      | -      | -     | -    | -      |
| 2009                                | -     | -      | -      | -      | -      | -     | -    | -      |
| 2010                                | -     | -      | -      | 1,105  | 870    | -     | -    | 1,975  |
| 2011                                | -     | 1,879  | 504    | 1,889  | 1,946  | 638   | 117  | 6,973  |
| 2012                                | -     | 3,738  | 1,593  | 4,406  | 2,650  | 1,666 | 469  | 14,522 |
| 2013                                | -     | 4,450  | 4,064  | 4,136  | 2,751  | 1,669 | 223  | 17,293 |
| 2014                                | -     | 3,011  | 2,682  | 3,281  | 2,987  | 1,858 | 575  | 14,394 |
| 2015                                | -     | 4,434  | 2,392  | 1,943  | 2,000  | 1,727 | 515  | 13,011 |
| 2016                                | -     | 1,662  | 1,290  | -      | 2,450  | 1,622 | 174  | 7,198  |
| 2017                                | -     | 874    | 1,210  | -      | 2,610  | 1,811 | 220  | 6,725  |
| 2018 <sup>c/</sup>                  | -     | 596    | 1,060  | 918    | 2,964  | 1,545 | 441  | 7,524  |

a/ Includes minor effort off Oregon for fish landed in California.

b/ Commercial fishery closed in all months except August 2002 (27 days fished) and September 2001-2005 (quota fisheries); all other harvest occurred in Oregon waters but was landed in Crescent City.

c/ Preliminary.

TABLE A-3. California commercial troll Chinook and coho salmon landings in numbers of fish by catch area and month. (Page 1 of 3)

| Year or Avg.                      | Apr.  | May    | June   | July   | Aug.   | Sept. | Oct. | Season      | Apr. | May   | June  | July   | Aug.  | Sept. | Oct. | Season |
|-----------------------------------|-------|--------|--------|--------|--------|-------|------|-------------|------|-------|-------|--------|-------|-------|------|--------|
| <b>CHINOOK</b>                    |       |        |        |        |        |       |      | <b>COHO</b> |      |       |       |        |       |       |      |        |
| <u>Crescent City<sup>a/</sup></u> |       |        |        |        |        |       |      |             |      |       |       |        |       |       |      |        |
| 1981-1985                         | -     | 10,771 | 6,859  | 8,842  | 17,800 | 8,554 | -    | 48,548      | -    | 5,448 | 5,213 | 8,725  | 6,238 | 1,357 | -    | 20,094 |
| 1986-1990                         | -     | 527    | 12,995 | 3,017  | 2,534  | 452   | -    | 13,997      | -    | -     | 4,408 | 1,262  | 5     | 18    | -    | 3,795  |
| 1991-1995                         | -     | -      | -      | -      | -      | -     | -    | -           | -    | -     | -     | -      | -     | -     | -    | -      |
| 1996-2000                         | -     | -      | -      | -      | 98     | 106   | -    | 126         | -    | -     | -     | -      | -     | -     | -    | -      |
| 2001-2005 <sup>b/</sup>           | 1,186 | 84     | 53     | 5,245  | 10,184 | 1,351 | 293  | 7,103       | -    | -     | -     | -      | -     | -     | -    | -      |
| 2006                              | -     | -      | -      | -      | -      | -     | -    | -           | -    | -     | -     | -      | -     | -     | -    | -      |
| 2007                              | -     | -      | -      | -      | -      | 2,367 | -    | 2,367       | -    | -     | -     | -      | -     | -     | -    | -      |
| 2008                              | -     | -      | -      | -      | -      | -     | -    | -           | -    | -     | -     | -      | -     | -     | -    | -      |
| 2009                              | -     | -      | -      | -      | -      | -     | -    | -           | -    | -     | -     | -      | -     | -     | -    | -      |
| 2010                              | -     | -      | -      | -      | -      | -     | -    | -           | -    | -     | -     | -      | -     | -     | -    | -      |
| 2011                              | -     | -      | -      | 11     | 406    | -     | -    | 417         | -    | -     | -     | -      | -     | -     | -    | -      |
| 2012                              | -     | -      | -      | -      | -      | 400   | -    | 400         | -    | -     | -     | -      | -     | -     | -    | -      |
| 2013                              | -     | 85     | 524    | 487    | 116    | 13    | -    | 1,225       | -    | -     | -     | -      | -     | -     | -    | -      |
| 2014                              | -     | -      | -      | -      | -      | 21    | -    | 21          | -    | -     | -     | -      | -     | -     | -    | -      |
| 2015                              | -     | -      | -      | -      | -      | 36    | -    | 36          | -    | -     | -     | -      | -     | -     | -    | -      |
| 2016                              | -     | -      | -      | -      | -      | 6     | -    | 6           | -    | -     | -     | -      | -     | -     | -    | -      |
| 2017                              | -     | -      | -      | -      | -      | -     | -    | -           | -    | -     | -     | -      | -     | -     | -    | -      |
| 2018 <sup>c/</sup>                | -     | 241    | 1,497  | 729    | 1,899  | -     | -    | 4,366       | -    | -     | -     | -      | -     | -     | -    | -      |
| <u>Eureka</u>                     |       |        |        |        |        |       |      |             |      |       |       |        |       |       |      |        |
| 1981-1985                         | -     | 26,077 | 7,548  | 11,434 | 12,677 | 6,788 | -    | 61,130      | -    | 2,246 | 6,758 | 10,021 | 6,576 | 651   | -    | 23,675 |
| 1986-1990                         | -     | -      | 26,180 | 4,316  | 6,726  | 6,295 | 480  | 32,329      | -    | -     | 5,948 | 508    | 211   | 860   | 125  | 5,998  |
| 1991-1995                         | -     | -      | -      | -      | -      | 4,300 | 400  | 4,700       | -    | -     | -     | -      | -     | 3,000 | 100  | 3,100  |
| 1996-2000                         | -     | -      | -      | -      | -      | 2,860 | -    | 3,379       | -    | -     | -     | -      | -     | -     | -    | -      |
| 2001-2005                         | -     | -      | -      | -      | 1,392  | 5,020 | -    | 5,298       | -    | -     | -     | -      | -     | -     | -    | -      |
| 2006                              | -     | -      | -      | -      | -      | -     | -    | -           | -    | -     | -     | -      | -     | -     | -    | -      |
| 2007                              | -     | -      | -      | -      | -      | 6,395 | -    | 6,395       | -    | -     | -     | -      | -     | -     | -    | -      |
| 2008                              | -     | -      | -      | -      | -      | -     | -    | -           | -    | -     | -     | -      | -     | -     | -    | -      |
| 2009                              | -     | -      | -      | -      | -      | -     | -    | -           | -    | -     | -     | -      | -     | -     | -    | -      |
| 2010                              | -     | -      | -      | -      | -      | -     | -    | -           | -    | -     | -     | -      | -     | -     | -    | -      |
| 2011                              | -     | -      | -      | 1,573  | 401    | -     | -    | 1,974       | -    | -     | -     | -      | -     | -     | -    | -      |
| 2012                              | -     | -      | -      | -      | -      | 4,831 | -    | 4,831       | -    | -     | -     | -      | -     | -     | -    | -      |
| 2013                              | -     | 2,603  | 2,400  | 1,887  | 1,892  | 171   | -    | 8,953       | -    | -     | -     | -      | -     | -     | -    | -      |
| 2014                              | -     | -      | -      | -      | -      | 599   | -    | 599         | -    | -     | -     | -      | -     | -     | -    | -      |
| 2015                              | -     | -      | -      | -      | -      | 10    | -    | 10          | -    | -     | -     | -      | -     | -     | -    | -      |
| 2016                              | -     | -      | -      | -      | -      | 190   | -    | 190         | -    | -     | -     | -      | -     | -     | -    | -      |
| 2017                              | -     | -      | -      | -      | -      | -     | -    | -           | -    | -     | -     | -      | -     | -     | -    | -      |
| 2018 <sup>c/</sup>                | -     | 697    | 980    | 1,045  | 1,878  | -     | -    | 4,600       | -    | -     | -     | -      | -     | -     | -    | -      |





TABLE A-3. California commercial troll Chinook and coho salmon landings in numbers of fish by catch area and month. (Page 3 of 3)

| Year or Avg.                        | Apr.           | May     | June    | July    | Aug.   | Sept.  | Oct.  | Season  | Apr.        | May   | June   | July   | Aug.   | Sept. | Oct. | Season |
|-------------------------------------|----------------|---------|---------|---------|--------|--------|-------|---------|-------------|-------|--------|--------|--------|-------|------|--------|
|                                     | <b>CHINOOK</b> |         |         |         |        |        |       |         | <b>COHO</b> |       |        |        |        |       |      |        |
| <b>Monterey</b>                     |                |         |         |         |        |        |       |         |             |       |        |        |        |       |      |        |
| 1981-1985                           | 15,312         | 34,978  | 16,852  | 19,382  | 5,619  | 1,148  | -     | 84,103  | 84          | 149   | 896    | 260    | 65     | 12    | -    | 1,356  |
| 1986-1990                           | -              | 61,484  | 42,139  | 29,992  | 9,011  | 2,220  | -     | 144,846 | -           | -     | 1,024  | 508    | 89     | 10    | -    | 1,611  |
| 1991-1995                           | -              | 51,806  | 30,129  | 37,446  | 5,936  | 1,200  | -     | 126,517 | -           | -     | 9,300  | 2,400  | 75     | -     | -    | 11,775 |
| 1996-2000                           | 5,947          | 71,787  | 50,021  | 30,878  | 1,131  | 421    | -     | 156,305 | -           | -     | -      | -      | -      | -     | -    | -      |
| 2001-2005                           | -              | 32,363  | 13,821  | 16,115  | 2,047  | 480    | -     | 64,827  | -           | -     | -      | -      | -      | -     | -    | -      |
| 2006                                | -              | 9,911   | 391     | 346     | 248    | 308    | -     | 11,204  | -           | -     | -      | -      | -      | -     | -    | -      |
| 2007                                | -              | 11,202  | 156     | 1,930   | 605    | 116    | -     | 14,009  | -           | -     | -      | -      | -      | -     | -    | -      |
| 2008                                | -              | -       | -       | -       | -      | -      | -     | -       | -           | -     | -      | -      | -      | -     | -    | -      |
| 2009                                | -              | -       | -       | -       | -      | -      | -     | -       | -           | -     | -      | -      | -      | -     | -    | -      |
| 2010                                | -              | -       | -       | 1,430   | -      | -      | -     | 1,430   | -           | -     | -      | -      | -      | -     | -    | -      |
| 2011                                | -              | 3,979   | 1,359   | 695     | 333    | 48     | -     | 6,414   | -           | -     | -      | -      | -      | -     | -    | -      |
| 2012                                | -              | 24,852  | 9,295   | 16,926  | 1,670  | 229    | -     | 52,972  | -           | -     | -      | -      | -      | -     | -    | -      |
| 2013                                | -              | 14,111  | 10,003  | 2,900   | 514    | 109    | -     | 27,637  | -           | -     | -      | -      | -      | -     | -    | -      |
| 2014                                | -              | 4,341   | 1,538   | 2,011   | 418    | -      | -     | 8,308   | -           | -     | -      | -      | -      | -     | -    | -      |
| 2015                                | -              | 7,608   | 3,410   | 3,131   | 564    | -      | -     | 14,713  | -           | -     | -      | -      | -      | -     | -    | -      |
| 2016                                | -              | 10,220  | 3,026   | -       | -      | -      | -     | 13,246  | -           | -     | -      | -      | -      | -     | -    | -      |
| 2017                                | -              | 5,588   | 6,891   | -       | -      | -      | -     | 12,479  | -           | -     | -      | -      | -      | -     | -    | -      |
| 2018 <sup>c/</sup>                  | -              | 4,545   | 14,819  | -       | -      | -      | -     | 19,364  | -           | -     | -      | -      | -      | -     | -    | -      |
| <b>Total Statewide<sup>a/</sup></b> |                |         |         |         |        |        |       |         |             |       |        |        |        |       |      |        |
| 1981-1985                           | 31,016         | 124,589 | 74,723  | 145,130 | 82,132 | 23,673 | -     | 462,652 | 92          | 5,037 | 12,948 | 28,164 | 12,469 | 1,079 | -    | 58,726 |
| 1986-1990                           | -              | 240,135 | 257,835 | 195,138 | 77,291 | 24,112 | 480   | 794,703 | -           | -     | 23,790 | 18,257 | 4,444  | 1,138 | 125  | 46,780 |
| 1990-1995                           | -              | 121,373 | 73,940  | 80,950  | 42,707 | 22,878 | 400   | 341,928 | -           | -     | 25,850 | 12,250 | 2,825  | 3,000 | 100  | 42,475 |
| 1996-2000                           | 7,580          | 121,717 | 101,679 | 88,632  | 24,597 | 28,344 | -     | 368,001 | -           | -     | -      | -      | -      | -     | -    | -      |
| 2001-2005                           | 1,186          | 81,387  | 73,639  | 123,448 | 56,697 | 46,255 | 2,022 | 383,921 | -           | -     | -      | -      | -      | -     | -    | -      |
| 2006                                | -              | 9,911   | 391     | 16,783  | 18,589 | 22,982 | 1,072 | 69,728  | -           | -     | -      | -      | -      | -     | -    | -      |
| 2007                                | 748            | 36,598  | 156     | 41,808  | 23,212 | 11,267 | 352   | 114,141 | -           | -     | -      | -      | -      | -     | -    | -      |
| 2008                                | -              | -       | -       | -       | -      | -      | -     | -       | -           | -     | -      | -      | -      | -     | -    | -      |
| 2009                                | -              | -       | -       | -       | -      | -      | -     | -       | -           | -     | -      | -      | -      | -     | -    | -      |
| 2010                                | -              | -       | -       | 8,906   | 6,182  | -      | -     | 15,088  | -           | -     | -      | -      | -      | -     | -    | -      |
| 2011                                | -              | 11,732  | 4,189   | 31,669  | 20,301 | 1,820  | 317   | 70,028  | -           | -     | -      | -      | -      | -     | -    | -      |
| 2012                                | -              | 58,857  | 19,385  | 92,842  | 28,266 | 12,922 | 3,313 | 215,585 | -           | -     | -      | -      | -      | -     | -    | -      |
| 2013                                | -              | 77,516  | 84,549  | 98,270  | 25,257 | 11,094 | 941   | 297,627 | -           | -     | -      | -      | -      | -     | -    | -      |
| 2014                                | -              | 34,946  | 39,581  | 54,568  | 24,085 | 12,118 | 2,985 | 168,283 | -           | -     | -      | -      | -      | -     | -    | -      |
| 2015                                | -              | 53,561  | 19,489  | 12,920  | 11,467 | 10,453 | 2,617 | 110,507 | -           | -     | -      | -      | -      | -     | -    | -      |
| 2016                                | -              | 13,367  | 13,428  | -       | 18,334 | 9,467  | 589   | 55,185  | -           | -     | -      | -      | -      | -     | -    | -      |
| 2017                                | -              | 5,588   | 6,891   | -       | 18,336 | 10,232 | 1,279 | 42,326  | -           | -     | -      | -      | -      | -     | -    | -      |
| 2018 <sup>c/</sup>                  | -              | 5,483   | 17,296  | 13,848  | 28,824 | 11,000 | 2,035 | 78,486  | -           | -     | -      | -      | -      | -     | -    | -      |

a/ Includes minor catches made off Oregon and landed in California prior to 2005.

b/ Commercial fishery closed all months except Aug. 2002 (681 Chinook) and Sept. 2001-2005; all other harvest occurred in Oregon waters but was landed in Crescent City.

c/ Preliminary.

TABLE A-4. California ocean recreational salmon fishing effort in angler trips by catch area and month. (Page 1 of 3)

| Year or Avg.         | Feb. | Mar. | Apr. | May   | June   | July   | Aug.  | Sept. | Oct. | Nov. | Season |
|----------------------|------|------|------|-------|--------|--------|-------|-------|------|------|--------|
| <u>Crescent City</u> |      |      |      |       |        |        |       |       |      |      |        |
| 1981-1985            | --   | --   | 0    | 572   | 3,912  | 11,525 | 6,620 | 504   | 0    | 0    | 23,133 |
| 1986-1990            | --   | --   | -    | 1,417 | 11,087 | 19,316 | 6,758 | 981   | -    | -    | 39,560 |
| 1991-1995            | -    | -    | -    | 2,376 | 4,333  | 9,250  | 2,319 | 1,563 | -    | -    | 14,334 |
| 1996-2000            | -    | -    | -    | 555   | 2,320  | 1,460  | 2,184 | 331   | -    | -    | 6,849  |
| 2001-2005            | -    | -    | -    | 594   | 1,038  | 969    | 1,182 | 289   | -    | -    | 4,072  |
| 2006                 | -    | -    | -    | 325   | 754    | 312    | -     | 87    | -    | -    | 1,478  |
| 2007                 | -    | -    | -    | 277   | 484    | 1,027  | 225   | 69    | -    | -    | 2,082  |
| 2008                 | -    | -    | -    | -     | -      | -      | -     | -     | -    | -    | -      |
| 2009                 | -    | -    | -    | -     | -      | -      | 498   | 607   | -    | -    | 1,105  |
| 2010                 | -    | -    | -    | 72    | 38     | 48     | 33    | 15    | -    | -    | 206    |
| 2011                 | -    | -    | -    | 187   | 104    | 245    | 185   | 45    | -    | -    | 766    |
| 2012                 | -    | -    | -    | 455   | 1,018  | 4,134  | 1,702 | 502   | -    | -    | 7,811  |
| 2013                 | -    | -    | -    | 456   | 2,538  | 3,228  | 816   | 0     | -    | -    | 7,038  |
| 2014                 | -    | -    | -    | 1,441 | 786    | 1,996  | 172   | 10    | -    | -    | 4,405  |
| 2015                 | -    | -    | -    | 210   | 89     | 161    | 137   | 44    | -    | -    | 641    |
| 2016                 | -    | -    | -    | 59    | 222    | 176    | 56    | 50    | -    | -    | 563    |
| 2017                 | -    | -    | -    | -     | -      | -      | -     | -     | -    | -    | -      |
| 2018 <sup>al</sup>   | -    | -    | -    | -     | 359    | 679    | 328   | 3     | -    | -    | 1,369  |
| <u>Eureka</u>        |      |      |      |       |        |        |       |       |      |      |        |
| 1981-1985            | --   | --   | 1    | 1,222 | 4,740  | 11,724 | 4,914 | 493   | 14   | 0    | 23,108 |
| 1986-1990            | --   | --   | -    | 1,648 | 9,487  | 18,674 | 7,126 | 963   | 0    | -    | 37,898 |
| 1991-1995            | -    | -    | -    | 1,480 | 5,837  | 8,301  | 2,249 | 2,151 | 21   | -    | 14,789 |
| 1996-2000            | -    | -    | -    | 1,539 | 3,808  | 1,758  | 3,815 | 723   | -    | -    | 11,643 |
| 2001-2005            | -    | -    | -    | 2,309 | 4,388  | 2,651  | 5,749 | 1,819 | -    | -    | 16,915 |
| 2006                 | -    | -    | -    | 3,951 | 5,208  | 2,146  | -     | 3,668 | -    | -    | 14,973 |
| 2007                 | -    | -    | -    | 1,737 | 4,987  | 4,914  | 5,212 | 1,511 | -    | -    | 18,361 |
| 2008                 | -    | -    | -    | -     | -      | -      | -     | -     | -    | -    | -      |
| 2009                 | -    | -    | -    | -     | -      | -      | 2,017 | 2,237 | -    | -    | 4,254  |
| 2010                 | -    | -    | -    | 464   | 638    | 897    | 1,841 | 183   | -    | -    | 4,023  |
| 2011                 | -    | -    | -    | 1,664 | 2,574  | 4,625  | 4,597 | 723   | -    | -    | 14,183 |
| 2012                 | -    | -    | -    | 2,680 | 6,514  | 5,833  | 6,671 | 1,873 | -    | -    | 23,571 |
| 2013                 | -    | -    | -    | 2,756 | 5,976  | 6,028  | 7,416 | 614   | -    | -    | 22,790 |
| 2014                 | -    | -    | -    | 2,710 | 4,157  | 5,170  | 3,580 | 612   | -    | -    | 16,229 |
| 2015                 | -    | -    | -    | 2,431 | 1,166  | 2,321  | 2,216 | 164   | -    | -    | 8,298  |
| 2016                 | -    | -    | -    | 1,579 | 1,933  | 2,380  | 1,888 | 610   | -    | -    | 8,390  |
| 2017                 | -    | -    | -    | -     | -      | -      | -     | -     | -    | -    | -      |
| 2018 <sup>al</sup>   | -    | -    | -    | -     | 2,298  | 2,067  | 1,593 | 48    | -    | -    | 6,006  |

TABLE A-4. California ocean recreational salmon fishing effort in angler trips by catch area and month. (Page 2 of 3)

| Year or Avg.         | Feb.  | Mar.  | Apr.   | May    | June   | July   | Aug.   | Sept. | Oct.  | Nov.  | Season |
|----------------------|-------|-------|--------|--------|--------|--------|--------|-------|-------|-------|--------|
| <u>Fort Bragg</u>    |       |       |        |        |        |        |        |       |       |       |        |
| 1981-1985            | --    | --    | 2      | 53     | 2,246  | 5,039  | 2,074  | 138   | 4     | 0     | 9,557  |
| 1986-1990            | 0     | 2     | 80     | 705    | 4,483  | 7,055  | 2,464  | 650   | 4     | 0     | 15,441 |
| 1991-1995            | 161   | 313   | 745    | 2,001  | 6,137  | 9,103  | 5,427  | 1,316 | 276   | 6     | 20,573 |
| 1996-2000            | 32    | 374   | 910    | 2,269  | 6,011  | 3,120  | 5,059  | 1,277 | 265   | --    | 19,117 |
| 2001-2005            | 463   | 878   | 1,309  | 3,054  | 6,649  | 8,885  | 6,013  | 996   | 75    | 8     | 28,239 |
| 2006                 | 289   | 298   | 800    | 2,327  | 5,917  | 6,655  | 4,051  | 631   | 0     | 0     | 20,968 |
| 2007                 | 249   | 855   | 692    | 2,280  | 5,593  | 5,271  | 2,013  | 146   | 25    | 0     | 17,124 |
| 2008                 | 206   | 185   | -      | -      | -      | -      | -      | -     | -     | -     | 391    |
| 2009                 | -     | -     | -      | -      | -      | -      | -      | -     | -     | -     | -      |
| 2010                 | -     | -     | 1,269  | 1,230  | 743    | 1,460  | 1,625  | 232   | -     | -     | 6,559  |
| 2011                 | -     | -     | 1,532  | 1,522  | 2,294  | 6,234  | 1,975  | 650   | 182   | -     | 14,389 |
| 2012                 | -     | -     | 1,230  | 2,088  | 2,975  | 4,076  | 2,890  | 1,069 | 334   | 151   | 14,813 |
| 2013                 | -     | -     | 934    | 1,666  | 3,519  | 7,136  | 3,076  | 667   | 220   | 47    | 17,265 |
| 2014                 | -     | -     | 1,049  | 1,371  | 2,538  | 9,435  | 2,554  | 373   | 102   | 48    | 17,470 |
| 2015                 | -     | -     | 1,051  | 1,321  | 1,615  | 5,002  | 2,278  | 423   | 94    | 5     | 11,789 |
| 2016                 | -     | -     | 706    | 934    | 1,003  | 4,817  | 1,751  | 295   | 68    | 0     | 9,574  |
| 2017                 | -     | -     | 403    | 1,101  | -      | -      | 1,869  | 1,286 | 17    | 0     | 4,676  |
| 2018 <sup>af</sup>   | -     | -     | -      | -      | 1,009  | 5,523  | 2,874  | 414   | 39    | -     | 9,859  |
| <u>San Francisco</u> |       |       |        |        |        |        |        |       |       |       |        |
| 1981-1985            | 4,117 | 5,811 | 6,039  | 6,892  | 10,779 | 15,006 | 14,061 | 9,291 | 5,577 | 1,343 | 78,915 |
| 1986-1990            | 4,825 | 9,832 | 12,258 | 8,986  | 12,572 | 18,560 | 15,985 | 9,606 | 4,755 | 1,198 | 98,579 |
| 1991-1995            | 666   | 5,891 | 6,812  | 8,020  | 12,807 | 29,791 | 17,622 | 8,726 | 4,520 | 148   | 94,781 |
| 1996-2000            | -     | 6,364 | 9,125  | 9,112  | 13,999 | 27,446 | 17,266 | 7,577 | 3,985 | 916   | 93,968 |
| 2001-2005            | -     | -     | 6,252  | 10,800 | 11,324 | 24,675 | 16,469 | 8,815 | 4,073 | 1,140 | 83,548 |
| 2006                 | -     | -     | 3,860  | 11,575 | 13,994 | 20,739 | 5,557  | 3,371 | 1,827 | 448   | 61,371 |
| 2007                 | -     | -     | 3,505  | 6,915  | 8,340  | 13,775 | 4,908  | 2,511 | 1,766 | 1,394 | 43,114 |
| 2008                 | -     | -     | -      | -      | -      | -      | -      | -     | -     | -     | -      |
| 2009                 | -     | -     | -      | -      | -      | -      | -      | -     | -     | -     | -      |
| 2010                 | -     | -     | 3,889  | 1,521  | 1,693  | 4,846  | 5,730  | 1,673 | -     | -     | 19,352 |
| 2011                 | -     | -     | 2,046  | 2,272  | 1,630  | 8,505  | 9,094  | 7,591 | 3,249 | -     | 34,387 |
| 2012                 | -     | -     | 4,113  | 6,663  | 11,396 | 15,667 | 10,085 | 6,421 | 2,779 | 418   | 57,542 |
| 2013                 | -     | -     | 6,406  | 7,823  | 11,183 | 22,814 | 14,354 | 4,572 | 2,003 | 379   | 69,534 |
| 2014                 | -     | -     | 3,433  | 3,406  | 2,163  | 11,779 | 18,604 | 9,589 | 5,046 | 675   | 54,695 |
| 2015                 | -     | -     | 2,380  | 2,708  | 5,176  | 9,851  | 12,523 | 9,838 | 3,389 | -     | 45,865 |
| 2016                 | -     | -     | 2,797  | 4,723  | 2,797  | 11,554 | 11,437 | 8,205 | 2,298 | -     | 43,811 |
| 2017                 | -     | -     | 1,470  | 1,665  | 5,429  | 19,131 | 17,489 | 7,210 | 1,834 | -     | 54,228 |
| 2018 <sup>af</sup>   | -     | -     | -      | -      | 8,043  | 28,190 | 15,523 | 8,526 | 5,009 | -     | 65,291 |

TABLE A-4. California ocean recreational salmon fishing effort in angler trips by catch area and month. (Page 3 of 3)

| Year or Avg.           | Feb.  | Mar.   | Apr.   | May    | June   | July   | Aug.   | Sept.  | Oct.  | Nov.  | Season  |
|------------------------|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|---------|
| <b>Monterey</b>        |       |        |        |        |        |        |        |        |       |       |         |
| 1981-1985              | 990   | 2,134  | 2,730  | 1,953  | 1,317  | 1,993  | 805    | 164    | 67    | 84    | 12,237  |
| 1986-1990              | 3,447 | 7,261  | 11,695 | 4,141  | 6,637  | 10,555 | 4,182  | 637    | 269   | 364   | 49,189  |
| 1991-1995              | 792   | 8,912  | 15,522 | 12,159 | 11,062 | 16,341 | 4,519  | 1,051  | 1,498 | 600   | 71,520  |
| 1996-2000              | -     | 11,189 | 15,209 | 10,403 | 11,864 | 12,301 | 3,672  | 762    | -     | -     | 63,009  |
| 2001-2005              | -     | 2,946  | 20,318 | 9,402  | 6,396  | 7,846  | 1,366  | 322    | --    | -     | 47,353  |
| 2006                   | -     | -      | 14,538 | 3,226  | 5,465  | 4,311  | 76     | 100    | -     | -     | 27,716  |
| 2007                   | -     | -      | 10,846 | 4,102  | 5,687  | 2,502  | 1,611  | 434    | 26    | -     | 25,208  |
| 2008                   | -     | -      | -      | -      | -      | -      | -      | -      | -     | -     | -       |
| 2009                   | -     | -      | -      | -      | -      | -      | -      | -      | -     | -     | -       |
| 2010                   | -     | -      | 11,616 | 4,019  | 300    | 2,004  | 528    | 60     | -     | -     | 18,527  |
| 2011                   | -     | -      | 11,987 | 2,149  | 3,013  | 5,561  | 3,318  | 1,923  | -     | -     | 27,951  |
| 2012                   | -     | -      | 16,123 | 9,326  | 7,603  | 8,674  | 1,645  | 424    | 475   | -     | 44,270  |
| 2013                   | -     | -      | 12,262 | 5,698  | 3,613  | 6,210  | 2,582  | 282    | 22    | -     | 30,669  |
| 2014                   | -     | -      | 15,744 | 3,745  | 2,974  | 2,678  | 1,841  | 481    | 45    | -     | 27,508  |
| 2015                   | -     | -      | 7,654  | 3,372  | 2,419  | 1,391  | 317    | 32     | -     | -     | 15,185  |
| 2016                   | -     | -      | 4,503  | 2,624  | 484    | 150    | -      | -      | -     | -     | 7,761   |
| 2017                   | -     | -      | 8,232  | 2,234  | 1,145  | 3,459  | -      | -      | -     | -     | 15,070  |
| 2018 <sup>a/</sup>     | -     | -      | 8,122  | 2,021  | 3,244  | 514    | -      | -      | -     | -     | 13,901  |
| <b>Total Statewide</b> |       |        |        |        |        |        |        |        |       |       |         |
| 1981-1985              | 5,107 | 7,945  | 8,772  | 10,692 | 22,993 | 45,287 | 28,475 | 10,590 | 5,662 | 1,426 | 146,950 |
| 1986-1990              | 8,272 | 17,094 | 24,034 | 16,896 | 44,266 | 74,160 | 36,515 | 12,837 | 5,029 | 1,563 | 240,667 |
| 1991-1995              | 1,263 | 15,054 | 23,079 | 25,264 | 38,143 | 62,125 | 30,137 | 14,807 | 5,943 | 302   | 215,996 |
| 1996-2000              | 32    | 17,927 | 25,245 | 23,878 | 38,002 | 46,084 | 31,995 | 10,517 | 4,144 | 916   | 194,586 |
| 2001-2005              | 463   | 2,645  | 27,879 | 26,158 | 29,796 | 45,026 | 30,779 | 12,176 | 4,148 | 1,148 | 180,127 |
| 2006                   | 289   | 298    | 19,198 | 21,404 | 31,338 | 34,163 | 9,684  | 7,857  | 1,827 | 448   | 126,506 |
| 2007                   | 249   | 855    | 15,043 | 15,311 | 25,091 | 27,489 | 13,969 | 4,671  | 1,817 | 1,394 | 105,889 |
| 2008                   | 206   | 185    | -      | -      | -      | -      | -      | -      | -     | -     | 391     |
| 2009                   | -     | -      | -      | -      | -      | -      | 2,515  | 2,844  | -     | -     | 5,359   |
| 2010                   | -     | -      | 16,774 | 7,306  | 3,412  | 9,255  | 9,757  | 2,163  | -     | -     | 48,667  |
| 2011                   | -     | -      | 15,565 | 7,794  | 9,615  | 25,170 | 19,169 | 10,932 | 3,431 | -     | 91,676  |
| 2012                   | -     | -      | 21,466 | 21,212 | 29,506 | 38,384 | 22,993 | 10,289 | 3,588 | 569   | 148,007 |
| 2013                   | -     | -      | 19,602 | 18,399 | 26,829 | 45,416 | 28,244 | 6,135  | 2,245 | 426   | 147,296 |
| 2014                   | -     | -      | 20,226 | 12,673 | 12,618 | 31,058 | 26,751 | 11,065 | 5,193 | 723   | 120,307 |
| 2015                   | -     | -      | 11,085 | 10,042 | 10,465 | 18,726 | 17,471 | 10,501 | 3,483 | 5     | 81,778  |
| 2016                   | -     | -      | 8,006  | 9,919  | 6,439  | 19,077 | 15,132 | 9,160  | 2,366 | 0     | 70,099  |
| 2017                   | -     | -      | 10,105 | 5,000  | 6,574  | 22,590 | 19,358 | 8,496  | 1,851 | 0     | 73,974  |
| 2018 <sup>a/</sup>     | -     | -      | 8,122  | 2,021  | 14,953 | 36,973 | 20,318 | 8,991  | 5,048 | -     | 96,426  |

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TABLE A-5. California ocean recreational salmon landings in numbers of fish by catch area and month. (Page 1 of 3)

| Year or Avg.         | Feb.           | Mar. | Apr. | May   | June   | July  | Aug.  | Sept. | Oct. | Nov. | Season | Feb.        | Mar. | Apr. | May | June  | July   | Aug.  | Sept. | Oct. | Nov. | Season |
|----------------------|----------------|------|------|-------|--------|-------|-------|-------|------|------|--------|-------------|------|------|-----|-------|--------|-------|-------|------|------|--------|
|                      | <b>CHINOOK</b> |      |      |       |        |       |       |       |      |      |        | <b>COHO</b> |      |      |     |       |        |       |       |      |      |        |
| <u>Crescent City</u> |                |      |      |       |        |       |       |       |      |      |        |             |      |      |     |       |        |       |       |      |      |        |
| 1981-1985            | --             | --   | 0    | 497   | 1,439  | 3,107 | 1,925 | 65    | 0    | 0    | 7,032  | --          | --   | 0    | 23  | 1,222 | 4,403  | 1,656 | 72    | 0    | 0    | 7,376  |
| 1986-1990            | --             | --   | -    | 414   | 4,552  | 7,689 | 1,640 | 315   | -    | -    | 14,610 | --          | --   | -    | 71  | 3,561 | 8,430  | 1,645 | 141   | -    | -    | 13,847 |
| 1991-1995            | -              | -    | -    | 1,316 | 1,402  | 1,101 | 301   | 405   | -    | -    | 3,481  | -           | -    | -    | 5   | 2,223 | 5,171  | 725   | 133   | -    | -    | 5,597  |
| 1996-2000            | -              | -    | -    | 166   | 827    | 680   | 659   | 81    | -    | -    | 2,413  | -           | -    | -    | 4   | 27    | 23     | 21    | 19    | -    | -    | 61     |
| 2001-2005            | -              | -    | -    | 265   | 403    | 237   | 308   | 91    | -    | -    | 1,304  | -           | -    | -    | 6   | 19    | 22     | 15    | -     | -    | -    | 49     |
| 2006                 | -              | -    | -    | 252   | 273    | 216   | -     | 15    | -    | -    | 756    | -           | -    | -    | 3   | 9     | 8      | -     | -     | -    | -    | 20     |
| 2007                 | -              | -    | -    | 30    | 198    | 589   | 27    | 27    | -    | -    | 871    | -           | -    | -    | -   | 8     | 43     | -     | 5     | -    | -    | 56     |
| 2008                 | -              | -    | -    | -     | -      | -     | -     | -     | -    | -    | -      | -           | -    | -    | -   | -     | -      | -     | -     | -    | -    | -      |
| 2009                 | -              | -    | -    | -     | -      | -     | 36    | 111   | -    | -    | 147    | -           | -    | -    | -   | -     | -      | -     | 3     | -    | -    | 3      |
| 2010                 | -              | -    | -    | 0     | 0      | 0     | 0     | 0     | -    | -    | 0      | -           | -    | -    | -   | -     | -      | -     | -     | -    | -    | -      |
| 2011                 | -              | -    | -    | 36    | 12     | 42    | 18    | 5     | -    | -    | 113    | -           | -    | -    | -   | -     | -      | -     | -     | -    | -    | -      |
| 2012                 | -              | -    | -    | 115   | 761    | 4,761 | 1,469 | 326   | -    | -    | 7,432  | -           | -    | -    | -   | 23    | 27     | -     | -     | -    | -    | 50     |
| 2013                 | -              | -    | -    | 140   | 2,913  | 2,726 | 284   | 0     | -    | -    | 6,063  | -           | -    | -    | -   | 22    | 19     | -     | -     | -    | -    | 41     |
| 2014                 | -              | -    | -    | 1,522 | 402    | 1,284 | 25    | 0     | -    | -    | 3,233  | -           | -    | -    | -   | 16    | 50     | -     | -     | -    | -    | 66     |
| 2015                 | -              | -    | -    | 23    | 19     | 0     | 22    | 0     | -    | -    | 64     | -           | -    | -    | -   | -     | -      | -     | -     | -    | -    | -      |
| 2016                 | -              | -    | -    | 4     | 9      | 20    | 0     | 0     | -    | -    | 33     | -           | -    | -    | -   | -     | -      | -     | -     | -    | -    | -      |
| 2017                 | -              | -    | -    | -     | -      | -     | -     | -     | -    | -    | -      | -           | -    | -    | -   | -     | -      | -     | -     | -    | -    | -      |
| 2018 <sup>a/</sup>   | -              | -    | -    | -     | 124    | 128   | 76    | 0     | -    | -    | 328    | -           | -    | -    | -   | 8     | 16     | -     | -     | -    | -    | 24     |
| <u>Eureka</u>        |                |      |      |       |        |       |       |       |      |      |        |             |      |      |     |       |        |       |       |      |      |        |
| 1981-1985            | --             | --   | 1    | 1,284 | 2,226  | 4,927 | 1,075 | 73    | 8    | 0    | 9,594  | --          | --   | 0    | 157 | 2,585 | 5,755  | 1,718 | 151   | 0    | 0    | 10,366 |
| 1986-1990            | --             | --   | -    | 953   | 4,926  | 6,722 | 3,014 | 184   | 0    | -    | 15,798 | --          | --   | -    | 660 | 5,551 | 12,445 | 2,726 | 269   | 0    | -    | 21,651 |
| 1991-1995            | -              | -    | -    | 621   | 3,097  | 1,890 | 725   | 625   | 1    | -    | 5,313  | -           | -    | -    | 209 | 3,364 | 5,067  | 506   | 381   | 2    | -    | 6,642  |
| 1996-2000            | -              | -    | -    | 805   | 1,948  | 992   | 2,064 | 239   | -    | -    | 6,049  | -           | -    | -    | 12  | 38    | 16     | 44    | 12    | -    | -    | 108    |
| 2001-2005            | -              | -    | -    | 2,609 | 3,762  | 2,062 | 4,074 | 1,808 | -    | -    | 14,315 | -           | -    | -    | 51  | 83    | 26     | 41    | 27    | -    | -    | 217    |
| 2006                 | -              | -    | -    | 4,316 | 5,413  | 2,113 | -     | 3,805 | -    | -    | 15,647 | -           | -    | -    | 88  | 20    | 25     | -     | 88    | -    | -    | 221    |
| 2007                 | -              | -    | -    | 797   | 5,050  | 4,296 | 6,037 | 1,845 | -    | -    | 18,025 | -           | -    | -    | -   | 105   | 96     | 108   | 36    | -    | -    | 345    |
| 2008                 | -              | -    | -    | -     | -      | -     | -     | -     | -    | -    | -      | -           | -    | -    | -   | -     | -      | -     | -     | -    | -    | -      |
| 2009                 | -              | -    | -    | -     | -      | -     | 266   | 259   | -    | -    | 525    | -           | -    | -    | -   | -     | -      | -     | 5     | -    | -    | 5      |
| 2010                 | -              | -    | -    | 17    | 158    | 37    | 477   | 31    | -    | -    | 720    | -           | -    | -    | -   | -     | -      | 50    | -     | -    | -    | 50     |
| 2011                 | -              | -    | -    | 630   | 934    | 4,342 | 3,672 | 296   | -    | -    | 9,874  | -           | -    | -    | 5   | 10    | 50     | 29    | 4     | -    | -    | 98     |
| 2012                 | -              | -    | -    | 3,462 | 10,104 | 7,049 | 9,019 | 2,378 | -    | -    | 32,012 | -           | -    | -    | -   | 12    | 5      | -     | -     | -    | -    | 17     |
| 2013                 | -              | -    | -    | 2,423 | 7,601  | 8,579 | 8,876 | 439   | -    | -    | 27,918 | -           | -    | -    | -   | 35    | 39     | 122   | -     | -    | -    | 196    |
| 2014                 | -              | -    | -    | 2,074 | 4,877  | 3,159 | 2,181 | 303   | -    | -    | 12,594 | -           | -    | -    | 19  | 72    | 118    | 4     | 3     | -    | -    | 216    |
| 2015                 | -              | -    | -    | 877   | 260    | 1,088 | 1,385 | 16    | -    | -    | 3,626  | -           | -    | -    | -   | 8     | 4      | -     | -     | -    | -    | 12     |
| 2016                 | -              | -    | -    | 1,450 | 934    | 1,414 | 646   | 523   | -    | -    | 4,967  | -           | -    | -    | -   | 18    | 9      | -     | -     | -    | -    | 27     |
| 2017                 | -              | -    | -    | -     | -      | -     | -     | -     | -    | -    | -      | -           | -    | -    | -   | -     | -      | -     | -     | -    | -    | -      |
| 2018 <sup>a/</sup>   | -              | -    | -    | -     | 1,590  | 734   | 1,059 | 27    | -    | -    | 3,410  | -           | -    | -    | -   | 41    | 4      | 33    | -     | -    | -    | 78     |

TABLE A-5. California ocean recreational salmon landings in numbers of fish by catch area and month. (Page 2 of 3)

| Year or Avg.         | Feb.           | Mar.   | Apr.   | May    | June   | July   | Aug.   | Sept. | Oct.  | Nov.  | Season | Feb.        | Mar. | Apr. | May | June  | July  | Aug. | Sept. | Oct. | Nov. | Season |
|----------------------|----------------|--------|--------|--------|--------|--------|--------|-------|-------|-------|--------|-------------|------|------|-----|-------|-------|------|-------|------|------|--------|
|                      | <b>CHINOOK</b> |        |        |        |        |        |        |       |       |       |        | <b>COHO</b> |      |      |     |       |       |      |       |      |      |        |
| <u>Fort Bragg</u>    |                |        |        |        |        |        |        |       |       |       |        |             |      |      |     |       |       |      |       |      |      |        |
| 1981-1985            | --             | --     | 1      | 29     | 616    | 1,553  | 319    | 11    | 1     | 0     | 2,530  | --          | --   | 0    | 0   | 224   | 568   | 137  | 3     | 0    | 0    | 932    |
| 1986-1990            | 0              | 1      | 85     | 360    | 2,626  | 3,857  | 674    | 71    | 2     | 0     | 7,676  | 0           | 0    | 0    | 38  | 860   | 1,862 | 264  | 70    | 0    | 0    | 3,094  |
| 1991-1995            | 52             | 85     | 429    | 1,182  | 5,940  | 2,869  | 2,378  | 456   | 43    | 1     | 11,801 | 0           | 1    | 4    | 177 | 1,847 | 7,157 | 678  | 111   | 10   | 0    | 6,985  |
| 1996-2000            | 6              | 112    | 641    | 1,433  | 4,923  | 3,268  | 3,312  | 728   | 37    | -     | 14,291 | -           | -    | 3    | 8   | 66    | 20    | 46   | 17    | -    | -    | 123    |
| 2001-2005            | 196            | 426    | 746    | 2,129  | 6,469  | 9,036  | 4,379  | 397   | 28    | 0     | 23,767 | -           | -    | -    | 21  | 89    | 119   | 33   | 13    | -    | -    | 241    |
| 2006                 | 55             | 109    | 255    | 1,418  | 4,630  | 4,672  | 2,743  | 111   | 0     | 0     | 13,993 | -           | -    | -    | 19  | 140   | 176   | 40   | -     | -    | -    | 375    |
| 2007                 | 48             | 200    | 67     | 1,425  | 1,873  | 1,980  | 158    | 0     | 0     | 0     | 5,751  | -           | -    | -    | -   | 5     | 12    | 4    | -     | -    | -    | 21     |
| 2008                 | 0              | 6      | -      | -      | -      | -      | -      | -     | -     | -     | 6      | -           | -    | -    | -   | -     | -     | -    | -     | -    | -    | -      |
| 2009                 | -              | -      | -      | -      | -      | -      | -      | -     | -     | -     | -      | -           | -    | -    | -   | -     | -     | -    | -     | -    | -    | -      |
| 2010                 | -              | -      | 204    | 264    | 27     | 417    | 657    | 109   | -     | -     | 1,678  | -           | -    | -    | 7   | -     | 15    | 19   | -     | -    | -    | 41     |
| 2011                 | -              | -      | 880    | 705    | 938    | 4,043  | 510    | 204   | 118   | -     | 7,398  | -           | -    | -    | -   | 18    | 83    | 4    | -     | 5    | -    | 110    |
| 2012                 | -              | -      | 414    | 1,530  | 1,951  | 2,300  | 1,185  | 393   | 84    | 72    | 7,929  | -           | -    | -    | -   | 13    | 9     | -    | 3     | -    | -    | 25     |
| 2013                 | -              | -      | 310    | 695    | 2,459  | 5,145  | 1,296  | 258   | 5     | 0     | 10,168 | -           | -    | -    | -   | 9     | 20    | 4    | -     | -    | -    | 33     |
| 2014                 | -              | -      | 714    | 630    | 1,358  | 9,035  | 696    | 103   | 4     | 0     | 12,540 | -           | -    | -    | -   | 18    | 123   | -    | -     | -    | -    | 141    |
| 2015                 | -              | -      | 394    | 331    | 215    | 3,071  | 1,295  | 183   | 4     | 0     | 5,493  | -           | -    | -    | 5   | -     | 13    | 5    | -     | -    | -    | 23     |
| 2016                 | -              | -      | 108    | 104    | 222    | 3,524  | 990    | 75    | 8     | 0     | 5,031  | -           | -    | -    | -   | -     | 35    | -    | -     | -    | -    | 35     |
| 2017                 | -              | -      | 22     | 650    | -      | -      | 837    | 370   | 8     | 0     | 1,887  | -           | -    | -    | -   | -     | -     | 4    | -     | -    | -    | 4      |
| 2018 <sup>a/</sup>   | -              | -      | -      | -      | 536    | 3,205  | 1,780  | 89    | 0     | -     | 5,610  | -           | -    | -    | -   | -     | 13    | 4    | 8     | -    | -    | 25     |
| <u>San Francisco</u> |                |        |        |        |        |        |        |       |       |       |        |             |      |      |     |       |       |      |       |      |      |        |
| 1981-1985            | 5,339          | 5,819  | 5,505  | 7,181  | 12,346 | 16,869 | 16,032 | 8,497 | 5,527 | 1,367 | 84,484 | 0           | 1    | 11   | 138 | 439   | 323   | 145  | 37    | 29   | 0    | 1,123  |
| 1986-1990            | 4,510          | 10,976 | 16,873 | 8,315  | 12,172 | 17,167 | 15,479 | 7,596 | 4,108 | 1,094 | 98,291 | 0           | 1    | 38   | 159 | 339   | 379   | 480  | 83    | 12   | 0    | 1,490  |
| 1991-1995            | 249            | 5,050  | 7,028  | 6,921  | 14,149 | 33,404 | 13,387 | 8,221 | 3,591 | 52    | 91,971 | 1           | 8    | 17   | 71  | 1,035 | 1,184 | 157  | 31    | 13   | 0    | 2,517  |
| 1996-2000            | -              | 6,310  | 8,191  | 8,343  | 13,124 | 27,456 | 12,395 | 4,759 | 2,955 | 982   | 82,664 | -           | -    | -    | 8   | 60    | 68    | 12   | 15    | 6    | -    | 140    |
| 2001-2005            | -              | -      | 5,540  | 11,659 | 13,806 | 26,717 | 10,680 | 6,287 | 2,220 | 395   | 77,305 | -           | -    | 2    | 56  | 68    | 187   | 55   | 9     | -    | -    | 348    |
| 2006                 | -              | -      | 1,803  | 12,416 | 18,151 | 20,092 | 1,280  | 861   | 256   | 67    | 54,926 | -           | -    | -    | 57  | 296   | 310   | 9    | -     | -    | -    | 672    |
| 2007                 | -              | -      | 796    | 4,245  | 4,642  | 5,419  | 650    | 278   | 441   | 325   | 16,796 | -           | -    | -    | 37  | 30    | 114   | 9    | 14    | -    | -    | 204    |
| 2008                 | -              | -      | -      | -      | -      | -      | -      | -     | -     | -     | -      | -           | -    | -    | -   | -     | -     | -    | -     | -    | -    | -      |
| 2009                 | -              | -      | -      | -      | -      | -      | -      | -     | -     | -     | -      | -           | -    | -    | -   | -     | -     | -    | -     | -    | -    | -      |
| 2010                 | -              | -      | 1,004  | 452    | 598    | 1,764  | 2,012  | 286   | -     | -     | 6,116  | -           | -    | -    | -   | 68    | -     | -    | 8     | -    | -    | 76     |
| 2011                 | -              | -      | 432    | 934    | 326    | 4,457  | 6,531  | 5,914 | 1,140 | -     | 19,734 | -           | -    | -    | -   | 17    | 26    | -    | -     | -    | -    | 43     |
| 2012                 | -              | -      | 3,837  | 5,143  | 10,700 | 15,329 | 5,340  | 3,871 | 1,881 | 88    | 46,189 | -           | -    | -    | 3   | -     | 5     | -    | -     | -    | -    | 8      |
| 2013                 | -              | -      | 8,121  | 9,018  | 12,204 | 21,798 | 6,818  | 1,891 | 1,354 | 87    | 61,291 | -           | -    | -    | -   | 24    | 62    | -    | -     | -    | -    | 86     |
| 2014                 | -              | -      | 1,854  | 2,318  | 559    | 5,587  | 12,679 | 6,266 | 3,065 | 125   | 32,453 | -           | -    | -    | 4   | -     | 40    | -    | -     | -    | -    | 44     |
| 2015                 | -              | -      | 933    | 1,072  | 2,396  | 5,126  | 6,113  | 8,014 | 1,573 | -     | 25,227 | -           | -    | -    | -   | 4     | 2     | -    | -     | -    | -    | 6      |
| 2016                 | -              | -      | 1,206  | 3,563  | 1,253  | 8,025  | 6,111  | 5,858 | 630   | -     | 26,646 | -           | -    | -    | -   | -     | -     | 8    | -     | -    | -    | 8      |
| 2017                 | -              | -      | 398    | 1,206  | 5,241  | 24,206 | 17,972 | 3,890 | 843   | -     | 53,756 | -           | -    | -    | 3   | -     | 322   | 40   | -     | -    | -    | 365    |
| 2018 <sup>a/</sup>   | -              | -      | -      | -      | 11,361 | 38,174 | 11,670 | 6,656 | 4,148 | -     | 72,009 | -           | -    | -    | -   | 5     | 63    | -    | -     | -    | -    | 68     |

TABLE A-5. California ocean recreational salmon landings in numbers of fish by catch area and month. (Page 3 of 3)

| Year or Avg.           | Feb.           | Mar.   | Apr.   | May    | June   | July   | Aug.   | Sept. | Oct.  | Nov.  | Season  | Feb.        | Mar. | Apr. | May | June   | July   | Aug.  | Sept. | Oct. | Nov. | Season |
|------------------------|----------------|--------|--------|--------|--------|--------|--------|-------|-------|-------|---------|-------------|------|------|-----|--------|--------|-------|-------|------|------|--------|
|                        | <b>CHINOOK</b> |        |        |        |        |        |        |       |       |       |         | <b>COHO</b> |      |      |     |        |        |       |       |      |      |        |
| <b>Monterey</b>        |                |        |        |        |        |        |        |       |       |       |         |             |      |      |     |        |        |       |       |      |      |        |
| 1981-1985              | 608            | 1,446  | 1,731  | 444    | 341    | 568    | 236    | 22    | 18    | 43    | 5,457   | 0           | 0    | 10   | 11  | 17     | 12     | 20    | 0     | 0    | 0    | 70     |
| 1986-1990              | 1,120          | 4,312  | 9,407  | 1,362  | 4,126  | 7,467  | 1,704  | 167   | 129   | 225   | 30,020  | 0           | 0    | 18   | 15  | 101    | 144    | 28    | 1     | 0    | 0    | 306    |
| 1991-1995              | 292            | 6,001  | 14,107 | 7,457  | 7,574  | 18,690 | 2,519  | 248   | 1,032 | 372   | 57,730  | 0           | 0    | 2    | 12  | 245    | 361    | 34    | 0     | 6    | 0    | 657    |
| 1996-2000              | -              | 7,763  | 15,030 | 7,820  | 11,023 | 9,943  | 1,908  | 490   | -     | -     | 52,326  | -           | -    | -    | -   | 19     | 12     | 4     | -     | -    | -    | 20     |
| 2001-2005              | -              | 2,235  | 15,937 | 3,243  | 4,292  | 5,967  | 440    | 81    | --    | -     | 31,284  | -           | -    | 4    | 82  | 40     | 34     | -     | -     | -    | -    | 124    |
| 2006                   | -              | -      | 7,350  | 399    | 1,318  | 1,893  | 0      | 10    | -     | -     | 10,970  | -           | -    | -    | 32  | 204    | 102    | -     | -     | -    | -    | 338    |
| 2007                   | -              | -      | 2,289  | 735    | 2,098  | 681    | 346    | 112   | 0     | -     | 6,261   | -           | -    | -    | 16  | 69     | 23     | 12    | -     | -    | -    | 120    |
| 2008                   | -              | -      | -      | -      | -      | -      | -      | -     | -     | -     | -       | -           | -    | -    | -   | -      | -      | -     | -     | -    | -    | -      |
| 2009                   | -              | -      | -      | -      | -      | -      | -      | -     | -     | -     | -       | -           | -    | -    | -   | -      | -      | -     | -     | -    | -    | -      |
| 2010                   | -              | -      | 4,057  | 1,692  | 5      | 387    | 154    | 0     | -     | -     | 6,295   | -           | -    | 8    | -   | -      | -      | -     | -     | -    | -    | 8      |
| 2011                   | -              | -      | 4,210  | 280    | 1,170  | 3,998  | 2,369  | 676   | -     | -     | 12,703  | -           | -    | 8    | 10  | 27     | 7      | 13    | -     | -    | -    | 65     |
| 2012                   | -              | -      | 14,535 | 4,473  | 4,376  | 6,268  | 462    | 121   | 129   | -     | 30,364  | -           | -    | -    | -   | 1      | -      | -     | -     | -    | -    | 1      |
| 2013                   | -              | -      | 5,225  | 1,624  | 1,066  | 2,261  | 440    | 18    | 0     | -     | 10,634  | -           | -    | -    | -   | 1      | 4      | -     | -     | -    | -    | 5      |
| 2014                   | -              | -      | 11,356 | 964    | 782    | 613    | 267    | 34    | 4     | -     | 14,020  | -           | -    | -    | -   | 12     | -      | -     | -     | -    | -    | 12     |
| 2015                   | -              | -      | 1,697  | 490    | 543    | 313    | 27     | 0     | -     | -     | 3,070   | -           | -    | -    | -   | -      | -      | -     | -     | -    | -    | -      |
| 2016                   | -              | -      | 716    | 572    | 47     | 0      | -      | -     | -     | -     | 1,335   | -           | -    | -    | -   | -      | -      | -     | -     | -    | -    | -      |
| 2017                   | -              | -      | 3,878  | 449    | 192    | 2,035  | -      | -     | -     | -     | 6,554   | -           | -    | -    | -   | -      | 96     | -     | -     | -    | -    | 96     |
| 2018 <sup>a/</sup>     | -              | -      | 3,929  | 476    | 1,157  | 123    | -      | -     | -     | -     | 5,685   | -           | -    | -    | -   | -      | -      | -     | -     | -    | -    | -      |
| <b>Total Statewide</b> |                |        |        |        |        |        |        |       |       |       |         |             |      |      |     |        |        |       |       |      |      |        |
| 1981-1985              | 5,947          | 7,266  | 7,239  | 9,435  | 16,968 | 27,024 | 19,587 | 8,667 | 5,554 | 1,410 | 109,097 | 0           | 1    | 21   | 329 | 4,486  | 11,061 | 3,677 | 262   | 29   | 0    | 19,866 |
| 1986-1990              | 5,630          | 15,288 | 26,365 | 11,404 | 28,402 | 42,902 | 22,512 | 8,333 | 4,240 | 1,319 | 166,395 | 0           | 1    | 56   | 943 | 10,412 | 23,259 | 5,142 | 563   | 12   | 0    | 40,388 |
| 1991-1995              | 484            | 11,136 | 21,564 | 17,109 | 31,262 | 55,610 | 18,628 | 9,956 | 4,451 | 239   | 170,296 | 0           | 9    | 23   | 389 | 7,597  | 11,982 | 1,717 | 656   | 25   | 0    | 22,399 |
| 1996-2000              | 6              | 14,184 | 23,734 | 18,567 | 31,846 | 42,339 | 20,338 | 6,198 | 2,977 | 982   | 157,742 | -           | -    | 3    | 16  | 167    | 126    | 125   | 29    | 6    | -    | 452    |
| 2001-2005              | 196            | 1,767  | 22,222 | 19,905 | 28,732 | 44,019 | 19,882 | 8,648 | 2,248 | 395   | 147,974 | -           | -    | 3    | 171 | 280    | 379    | 122   | 31    | -    | -    | 979    |
| 2006                   | 55             | 109    | 9,408  | 18,801 | 29,785 | 28,986 | 4,023  | 4,802 | 256   | 67    | 96,292  | -           | -    | -    | 199 | 669    | 621    | 49    | 88    | -    | -    | 1,626  |
| 2007                   | 48             | 200    | 3,152  | 7,232  | 13,861 | 12,965 | 7,218  | 2,262 | 441   | 325   | 47,704  | -           | -    | -    | 53  | 217    | 288    | 133   | 55    | -    | -    | 746    |
| 2008                   | 0              | 6      | -      | -      | -      | -      | -      | -     | -     | -     | 6       | -           | -    | -    | -   | -      | -      | -     | -     | -    | -    | -      |
| 2009                   | -              | -      | -      | -      | -      | -      | 302    | 370   | -     | -     | 672     | -           | -    | -    | -   | -      | -      | -     | 8     | -    | -    | 8      |
| 2010                   | -              | -      | 5,265  | 2,425  | 788    | 2,605  | 3,300  | 426   | -     | -     | 14,809  | -           | -    | 8    | 7   | 68     | 15     | 69    | 8     | -    | -    | 175    |
| 2011                   | -              | -      | 5,522  | 2,585  | 3,380  | 16,882 | 13,100 | 7,095 | 1,258 | -     | 49,822  | -           | -    | 8    | 15  | 72     | 166    | 46    | 4     | 5    | -    | 316    |
| 2012                   | -              | -      | 18,786 | 14,723 | 27,892 | 35,707 | 17,475 | 7,089 | 2,094 | 160   | 123,926 | -           | -    | -    | 3   | 49     | 46     | -     | 3     | -    | -    | 101    |
| 2013                   | -              | -      | 13,656 | 13,900 | 26,243 | 40,509 | 17,714 | 2,606 | 1,359 | 87    | 116,074 | -           | -    | -    | -   | 91     | 144    | 126   | -     | -    | -    | 361    |
| 2014                   | -              | -      | 13,924 | 7,508  | 7,978  | 19,678 | 15,848 | 6,706 | 3,073 | 125   | 74,840  | -           | -    | -    | 23  | 118    | 331    | 4     | 3     | -    | -    | 479    |
| 2015                   | -              | -      | 3,024  | 2,793  | 3,433  | 9,598  | 8,842  | 8,213 | 1,577 | 0     | 37,480  | -           | -    | -    | 5   | 12     | 19     | 5     | -     | -    | -    | 41     |
| 2016                   | -              | -      | 2,030  | 5,693  | 2,465  | 12,983 | 7,747  | 6,456 | 638   | 0     | 38,012  | -           | -    | -    | -   | 18     | 44     | 8     | -     | -    | -    | 70     |
| 2017                   | -              | -      | 4,298  | 2,305  | 5,433  | 26,241 | 18,809 | 4,260 | 851   | 0     | 62,197  | -           | -    | -    | 3   | -      | 418    | 44    | -     | -    | -    | 465    |
| 2018 <sup>a/</sup>     | -              | -      | 3,929  | 476    | 14,768 | 42,364 | 14,585 | 6,772 | 4,148 | -     | 87,042  | -           | -    | -    | -   | 54     | 96     | 37    | 8     | -    | -    | 195    |

a/ Preliminary.



TABLE A-6. Summary of Oregon commercial troll salmon fishing effort in days fished and landings in fish by catch area.<sup>a/</sup> (Page 1 of 2)

| Year<br>or Ave.         | Oregon  |           |          |          |           |          | Alaska | Washington | California | Total   |
|-------------------------|---------|-----------|----------|----------|-----------|----------|--------|------------|------------|---------|
|                         | Astoria | Tillamook | New port | Coos Bay | Brookings | Subtotal |        |            |            |         |
| <b>DAYS FISHED</b>      |         |           |          |          |           |          |        |            |            |         |
| 1981-1985               | 1,096   | 3,409     | 6,008    | 9,960    | 5,024     | 25,496   | 8      | 295        | 210        | 26,009  |
| 1986-1990               | 659     | 6,887     | 8,650    | 20,307   | 1,652     | 38,154   | 3      | 74         | 44         | 38,275  |
| 1991-1995               | 374     | 1,941     | 4,722    | 2,011    | 196       | 9,016    | 0      | 22         | 7          | 9,046   |
| 1996-2000               | 70      | 947       | 3,733    | 2,135    | 316       | 7,187    | 0      | 12         | 31         | 7,230   |
| 2001-2005               | 390     | 1,591     | 4,664    | 4,935    | 439       | 12,019   | 0      | 125        | 8          | 12,153  |
| 2006                    | 984     | 751       | 2,216    | 367      | 184       | 4,502    | 0      | 0          | 0          | 4,502   |
| 2007                    | 330     | 698       | 1,104    | 2,620    | 465       | 5,217    | 0      | 0          | 0          | 5,217   |
| 2008                    | 655     | 49        | -        | 48       | 51        | 803      | 0      | 0          | -          | 803     |
| 2009                    | 540     | 271       | 286      | 137      | -         | 1,234    | 0      | 0          | -          | 1,234   |
| 2010                    | 632     | 404       | 1,524    | 1,555    | 181       | 4,296    | 0      | 0          | -          | 4,296   |
| 2011                    | 289     | 220       | 748      | 2,206    | 289       | 3,752    | 0      | 0          | -          | 3,752   |
| 2012                    | 416     | 635       | 2,112    | 2,711    | 382       | 6,256    | 0      | 0          | -          | 6,256   |
| 2013                    | 287     | 830       | 1,722    | 5,440    | 707       | 8,986    | 0      | 0          | -          | 8,986   |
| 2014                    | 816     | 556       | 3,697    | 4,864    | 770       | 10,703   | 0      | 0          | -          | 10,703  |
| 2015                    | 818     | 866       | 2,752    | 3,773    | 520       | 8,729    | 0      | 0          | -          | 8,729   |
| 2016                    | 225     | 237       | 2,756    | 1,047    | 127       | 4,392    | 0      | 0          | -          | 4,392   |
| 2017                    | 342     | 182       | 1,264    | 155      | 109       | 2,052    | 0      | 0          | -          | 2,052   |
| 2018 <sup>b/</sup>      | 98      | 179       | 1,041    | 772      | 478       | 2,568    | 0      | 0          | -          | 2,568   |
| <b>CHINOOK LANDINGS</b> |         |           |          |          |           |          |        |            |            |         |
| 1981-1985               | 5,556   | 5,901     | 27,917   | 63,507   | 42,623    | 145,503  | 89     | 2,982      | 2,157      | 150,731 |
| 1986-1990               | 3,477   | 26,242    | 82,957   | 253,426  | 28,825    | 394,927  | 137    | 1,179      | 1,386      | 397,628 |
| 1991-1995               | 937     | 6,887     | 76,934   | 15,554   | 1,679     | 100,945  | 0      | 212        | 276        | 101,432 |
| 1996-2000               | 572     | 8,191     | 81,290   | 36,042   | 3,542     | 129,523  | 0      | 54         | 597        | 130,175 |
| 2001-2005               | 8,095   | 25,572    | 126,126  | 117,529  | 5,245     | 282,567  | 0      | 5,574      | 311        | 288,452 |
| 2006                    | 10,489  | 2,756     | 18,895   | 1,979    | 738       | 34,857   | 0      | 0          | 0          | 34,857  |
| 2007                    | 1,443   | 4,178     | 4,064    | 21,705   | 4,097     | 35,487   | 0      | 0          | 0          | 35,487  |
| 2008                    | 5,434   | 76        | -        | 208      | 236       | 5,954    | 0      | 0          | -          | 5,954   |
| 2009                    | 712     | 144       | -        | 293      | -         | 1,149    | 0      | 0          | -          | 1,149   |
| 2010                    | 11,120  | 3,648     | 12,377   | 11,419   | 869       | 39,433   | 0      | 0          | -          | 39,433  |
| 2011                    | 2,836   | 1,106     | 4,980    | 21,833   | 1,326     | 32,081   | 0      | 0          | -          | 32,081  |
| 2012                    | 8,444   | 7,397     | 26,612   | 25,204   | 5,444     | 73,101   | 0      | 0          | -          | 73,101  |
| 2013                    | 1,945   | 8,880     | 15,700   | 79,416   | 6,816     | 112,757  | 0      | 0          | -          | 112,757 |
| 2014                    | 16,182  | 7,009     | 83,122   | 85,637   | 16,146    | 208,096  | 0      | 0          | -          | 208,096 |
| 2015                    | 10,882  | 8,845     | 36,858   | 43,451   | 4,223     | 104,259  | 0      | 0          | -          | 104,259 |
| 2016                    | 2,058   | 1,067     | 31,281   | 7,543    | 398       | 42,347   | 0      | 0          | -          | 42,347  |
| 2017                    | 2,627   | 717       | 17,438   | 734      | 329       | 21,845   | 0      | 0          | -          | 21,845  |
| 2018 <sup>b/</sup>      | 333     | 463       | 14,329   | 5,395    | 3,898     | 24,418   | 0      | 0          | -          | 24,418  |

TABLE A-6. Summary of Oregon commercial troll salmon fishing effort in days fished and landings in numbers of fish by catch area.<sup>a/</sup> (Page 2 of 2)

| Year<br>or Ave.      | Astoria | Tillamook | New port | Coos Bay | Brookings | Oregon<br>Subtotal | Alaska | Washington | California | Total   |
|----------------------|---------|-----------|----------|----------|-----------|--------------------|--------|------------|------------|---------|
| <b>COHO LANDINGS</b> |         |           |          |          |           |                    |        |            |            |         |
| 1981-1985            | 21,305  | 84,331    | 109,715  | 131,470  | 24,728    | 301,499            | 0      | 9,590      | 621        | 311,710 |
| 1986-1990            | 21,364  | 106,658   | 135,872  | 132,522  | 6,375     | 397,243            | 7      | 4,179      | 279        | 401,708 |
| 1991-1995            | 9,949   | 48,905    | 41,190   | 35,625   | -         | 119,367            | 0      | 106        | 55         | 119,527 |
| 1996-2000            | 12,258  | -         | -        | 8        | -         | 6,133              | 0      | 57         | -          | 6,190   |
| 2001-2005            | 5,749   | -         | -        | -        | -         | 5,749              | 0      | 189        | -          | 5,938   |
| 2006                 | 1,414   | -         | -        | -        | -         | 1,414              | 0      | 0          | -          | 1,414   |
| 2007                 | 11,554  | 1,279     | 1,883    | 2,393    | -         | 17,109             | 0      | 0          | -          | 17,109  |
| 2008                 | 434     | -         | -        | -        | -         | 434                | 0      | 0          | -          | 434     |
| 2009                 | 12,684  | 3,490     | 5,105    | 683      | -         | 21,962             | 0      | 0          | -          | 21,962  |
| 2010                 | 1,040   | -         | -        | -        | -         | 1,040              | 0      | 0          | -          | 1,040   |
| 2011                 | 464     | -         | -        | -        | -         | 464                | 0      | 0          | -          | 464     |
| 2012                 | 624     | -         | -        | -        | -         | 624                | 0      | 0          | -          | 624     |
| 2013                 | 452     | -         | -        | -        | -         | 452                | 0      | 0          | -          | 452     |
| 2014                 | 7,702   | 1,104     | 1,222    | 970      | -         | 10,998             | 0      | 0          | -          | 10,998  |
| 2015                 | 2,213   | -         | -        | -        | -         | 2,213              | 0      | 0          | -          | 2,213   |
| 2016                 | -       | -         | -        | -        | -         | -                  | 0      | 0          | -          | 0       |
| 2017                 | 470     | -         | -        | -        | -         | 470                | 0      | 0          | -          | 470     |
| 2018 <sup>b/</sup>   | 92      | -         | -        | -        | -         | 92                 | 0      | 0          | -          | 92      |

a/ Days fished and landings are reported by port of landing through 1978 and by area of catch beginning in 1979. Catch and landing areas include the following port areas: Astoria area includes Oregon ports from Astoria through Cannon Beach; Tillamook area includes Nehalem through Pacific City; New port area includes Depoe Bay through Waldport; Coos Bay area prior to 1986 includes Florence through Bandon and after 1987 includes Florence through Port Orford; Brookings area prior to 1986 includes Port Orford through Brookings and after 1987 includes Gold Beach through Brookings. Values include state-w aters only terminal area fisheries.

b/ Preliminary.

TABLE A-7. Oregon commercial troll salmon fishing effort in days fished by area and month.<sup>a/</sup> (Page 1 of 4)

| Year or<br>Average | Mar. | Apr. | May | June | July  | Aug.  | Sept. | Oct. | Nov. | Dec. | Season |
|--------------------|------|------|-----|------|-------|-------|-------|------|------|------|--------|
| <u>Astoria</u>     |      |      |     |      |       |       |       |      |      |      |        |
| 1981-1985          | -    | -    | 402 | 0    | 322   | 338   | 33    | 0    | -    | -    | 1,096  |
| 1986-1990          | -    | -    | 146 | 26   | 183   | 579   | 273   | 22   | -    | -    | 659    |
| 1991-1995          | -    | -    | 58  | 43   | 50    | 166   | 111   | -    | -    | -    | 374    |
| 1996-2000          | -    | -    | 2   | 2    | -     | 246   | 18    | -    | -    | -    | 70     |
| 2001-2005          | -    | -    | 78  | 28   | 89    | 152   | 72    | -    | -    | -    | 390    |
| 2006               | -    | -    | 516 | 296  | -     | 79    | 93    | -    | -    | -    | 984    |
| 2007               | -    | -    | 77  | 46   | 40    | 153   | 14    | -    | -    | -    | 330    |
| 2008               | -    | -    | 272 | 282  | 33    | 58    | 10    | -    | -    | -    | 655    |
| 2009               | -    | -    | 72  | 85   | 239   | 135   | 9     | -    | -    | -    | 540    |
| 2010               | -    | -    | 68  | 288  | 141   | 119   | 16    | -    | -    | -    | 632    |
| 2011               | -    | -    | 85  | 124  | 41    | 24    | 15    | -    | -    | -    | 289    |
| 2012               | -    | -    | 58  | 223  | 37    | 25    | 73    | -    | -    | -    | 416    |
| 2013               | -    | -    | 64  | 119  | 32    | 46    | 26    | -    | -    | -    | 287    |
| 2014               | -    | -    | 455 | 79   | 161   | 65    | 56    | -    | -    | -    | 816    |
| 2015               | -    | -    | 531 | 88   | 48    | 61    | 90    | -    | -    | -    | 818    |
| 2016               | -    | -    | 71  | 82   | 21    | 51    | -     | -    | -    | -    | 225    |
| 2017               | -    | -    | 82  | 92   | 11    | 104   | 53    | -    | -    | -    | 342    |
| 2018 <sup>b/</sup> | -    | -    | 16  | 50   | 3     | 29    | 0     | -    | -    | -    | 98     |
| <u>Tillamook</u>   |      |      |     |      |       |       |       |      |      |      |        |
| 1981-1985          | -    | -    | 98  | 47   | 2,030 | 999   | 140   | 94   | -    | -    | 3,409  |
| 1986-1990          | -    | -    | 182 | 328  | 2,931 | 1,831 | 1,007 | 604  | 17   | -    | 6,887  |
| 1991-1995          | -    | -    | 96  | 95   | 714   | 476   | 558   | 513  | 2    | -    | 1,941  |
| 1996-2000          | -    | -    | 71  | 188  | 61    | 186   | 276   | 186  | 13   | -    | 947    |
| 2001-2005          | 71   | 64   | 268 | 354  | 174   | 225   | 301   | 218  | 10   | -    | 1,591  |
| 2006               | -    | -    | -   | 179  | 12    | 34    | 178   | 317  | 31   | -    | 751    |
| 2007               | -    | 8    | 280 | 100  | 4     | 86    | 95    | 95   | 30   | -    | 698    |
| 2008               | -    | -    | -   | -    | -     | -     | 37    | 12   | --   | -    | 49     |
| 2009               | -    | -    | -   | -    | -     | -     | 247   | 24   | -    | -    | 271    |
| 2010               | -    | -    | 33  | 177  | 109   | 39    | 37    | 9    | -    | -    | 404    |
| 2011               | -    | -    | 25  | 96   | 21    | 23    | 42    | 13   | -    | -    | 220    |
| 2012               | -    | -    | 175 | 91   | 36    | 22    | 102   | 157  | -    | -    | 635    |
| 2013               | -    | 189  | 87  | 52   | 40    | 196   | 192   | 74   | -    | -    | 830    |
| 2014               | -    | 10   | 96  | 159  | 60    | 40    | 177   | 14   | -    | -    | 556    |
| 2015               | -    | 50   | 321 | 249  | 9     | 26    | 140   | 71   | -    | -    | 866    |
| 2016               | -    | 44   | 38  | 66   | 8     | 12    | 55    | 14   | -    | -    | 237    |
| 2017               | -    | 7    | 34  | 46   | 8     | -     | 70    | 17   | -    | -    | 182    |
| 2018 <sup>b/</sup> | -    | -    | 60  | 44   | 5     | 36    | 23    | 11   | -    | -    | 179    |

TABLE A-7. Oregon commercial troll salmon fishing effort in days fished by area and month.<sup>a/</sup> (Page 2 of 4)

| Year or Average    | Mar. | Apr. | May   | June  | July  | Aug.  | Sept. | Oct. | Nov. | Dec. | Season |
|--------------------|------|------|-------|-------|-------|-------|-------|------|------|------|--------|
| <u>New port</u>    |      |      |       |       |       |       |       |      |      |      |        |
| 1981-1985          | -    | -    | 600   | 300   | 3,004 | 1,728 | 198   | 174  | 4    | -    | 6,008  |
| 1986-1990          | -    | -    | 826   | 1,180 | 3,835 | 1,597 | 619   | 594  | -    | -    | 8,650  |
| 1991-1995          | -    | -    | 945   | 1,236 | 1,176 | 1,159 | 601   | 554  | -    | -    | 4,722  |
| 1996-2000          | -    | -    | 920   | 915   | 329   | 848   | 453   | 241  | -    | -    | 3,733  |
| 2001-2005          | 252  | 452  | 954   | 923   | 407   | 631   | 753   | 551  | -    | -    | 4,664  |
| 2006               | -    | -    | -     | 838   | 471   | 151   | 413   | 250  | 93   | -    | 2,216  |
| 2007               | -    | 81   | 347   | 286   | 94    | 170   | 91    | 29   | 6    | -    | 1,104  |
| 2008               | -    | -    | -     | -     | -     | -     | -     | -    | -    | -    | -      |
| 2009               | -    | -    | -     | -     | -     | -     | 286   | -    | -    | -    | 286    |
| 2010               | -    | -    | 477   | 411   | 290   | 346   | -     | -    | -    | -    | 1,524  |
| 2011               | -    | 60   | 325   | 229   | 22    | 101   | -     | 11   | -    | -    | 748    |
| 2012               | -    | 155  | 475   | 335   | 114   | 312   | 465   | 256  | -    | -    | 2,112  |
| 2013               | -    | 334  | 484   | 263   | 141   | 325   | 98    | 77   | -    | -    | 1,722  |
| 2014               | -    | 469  | 1,076 | 507   | 354   | 932   | 255   | 104  | -    | -    | 3,697  |
| 2015               | -    | 738  | 317   | 230   | 782   | 530   | 155   | -    | -    | -    | 2,752  |
| 2016               | -    | 666  | 625   | 309   | 388   | 547   | 217   | 4    | -    | -    | 2,756  |
| 2017               | -    | 99   | 149   | 345   | 647   | -     | 18    | 6    | -    | -    | 1,264  |
| 2018 <sup>b/</sup> | -    | -    | 164   | 118   | 188   | 534   | 35    | 2    | -    | -    | 1,041  |
| <u>Coos Bay</u>    |      |      |       |       |       |       |       |      |      |      |        |
| 1981-1985          | -    | -    | 714   | 664   | 5,159 | 2,633 | 604   | 180  | 5    | -    | 9,960  |
| 1986-1990          | -    | -    | 2,737 | 2,986 | 7,267 | 4,665 | 1,588 | 964  | 497  | -    | 20,307 |
| 1991-1995          | -    | -    | 193   | 696   | 554   | 418   | 287   | 255  | 88   | -    | 2,011  |
| 1996-2000          | -    | -    | 291   | 471   | 570   | 498   | 243   | 209  | 104  | -    | 2,135  |
| 2001-2005          | 364  | 692  | 1,088 | 897   | 361   | 776   | 619   | 443  | 151  | 25   | 4,935  |
| 2006               | -    | -    | -     | -     | -     | -     | 30    | 156  | 155  | 26   | 367    |
| 2007               | -    | 253  | 554   | 388   | 167   | 895   | 117   | 120  | 126  | -    | 2,620  |
| 2008               | -    | -    | -     | -     | -     | -     | -     | -    | 48   | -    | 48     |
| 2009               | -    | -    | -     | -     | -     | -     | 101   | 36   | -    | -    | 137    |
| 2010               | -    | -    | 505   | 399   | 169   | 334   | -     | 148  | -    | -    | 1,555  |
| 2011               | -    | 256  | 538   | 755   | 57    | 83    | 80    | 202  | 235  | -    | 2,206  |
| 2012               | -    | 315  | 784   | 510   | 96    | 298   | 320   | 267  | 121  | -    | 2,711  |
| 2013               | -    | 506  | 563   | 456   | 337   | 1,626 | 1,055 | 742  | 155  | -    | 5,440  |
| 2014               | -    | 473  | 929   | 1,052 | 648   | 1,183 | 310   | 171  | 98   | -    | 4,864  |
| 2015               | -    | 967  | 924   | 770   | 484   | 232   | 72    | 166  | 158  | -    | 3,773  |
| 2016               | -    | 178  | 170   | 260   | 146   | 75    | 58    | 119  | 41   | -    | 1,047  |
| 2017               | -    | -    | -     | -     | -     | -     | -     | 114  | 41   | -    | 155    |
| 2018 <sup>b/</sup> | -    | -    | 127   | 268   | 88    | 98    | 19    | 89   | 83   | -    | 772    |

TABLE A-7. Oregon commercial troll salmon fishing effort in days fished by area and month.<sup>a/</sup> (Page 3 of 4)

| Year or<br>Average          | Mar. | Apr.  | May   | June  | July   | Aug.  | Sept. | Oct.  | Nov. | Dec. | Season |
|-----------------------------|------|-------|-------|-------|--------|-------|-------|-------|------|------|--------|
| <b>Brookings</b>            |      |       |       |       |        |       |       |       |      |      |        |
| 1981-1985                   | -    | -     | 265   | 188   | 1,367  | 1,708 | 427   | 732   | 336  | -    | 5,024  |
| 1986-1990                   | -    | -     | 319   | 647   | 556    | 607   | 125   | 224   | 217  | -    | 1,652  |
| 1991-1995                   | -    | -     | 45    | -     | 48     | 56    | 22    | 186   | -    | -    | 196    |
| 1996-2000                   | -    | -     | 55    | -     | -      | 80    | 47    | 150   | -    | -    | 316    |
| 2001-2005                   | 3    | 8     | 40    | 81    | 98     | 94    | 84    | 108   | 13   | -    | 439    |
| 2006                        | -    | -     | -     | -     | -      | -     | 6     | 151   | 27   | -    | 184    |
| 2007                        | -    | 6     | 8     | 138   | 99     | 95    | 60    | 47    | 12   | -    | 465    |
| 2008                        | -    | -     | -     | -     | -      | -     | -     | 51    | -    | -    | 51     |
| 2009                        | -    | -     | -     | -     | -      | -     | -     | -     | -    | -    | -      |
| 2010                        | -    | -     | 43    | -     | 26     | 40    | -     | 72    | -    | -    | 181    |
| 2011                        | -    | -     | 60    | 60    | 8      | 86    | -     | 75    | -    | -    | 289    |
| 2012                        | -    | -     | 23    | 118   | 90     | 67    | 43    | 41    | -    | -    | 382    |
| 2013                        | -    | 13    | 3     | 107   | 284    | 208   | 40    | 52    | -    | -    | 707    |
| 2014                        | -    | 10    | 471   | 82    | 38     | 70    | 21    | 78    | -    | -    | 770    |
| 2015                        | -    | 12    | 150   | 100   | 90     | 24    | -     | 144   | -    | -    | 520    |
| 2016                        | -    | 7     | 13    | 47    | 8      | -     | -     | 52    | -    | -    | 127    |
| 2017                        | -    | -     | -     | -     | -      | -     | -     | 109   | -    | -    | 109    |
| 2018 <sup>b/</sup>          | -    | -     | 37    | 127   | 123    | 75    | -     | 116   | -    | -    | 478    |
| <b>South of Cape Falcon</b> |      |       |       |       |        |       |       |       |      |      |        |
| 1981-1985                   | -    | -     | 1,678 | 1,199 | 11,559 | 7,068 | 1,368 | 1,180 | 346  | -    | 24,400 |
| 1986-1990                   | -    | -     | 4,065 | 5,011 | 14,144 | 8,457 | 3,289 | 2,296 | 292  | -    | 37,495 |
| 1991-1995                   | -    | -     | 1,252 | 2,027 | 1,845  | 1,654 | 1,339 | 1,396 | 88   | -    | 8,792  |
| 1996-2000                   | -    | -     | 1,337 | 1,579 | 960    | 1,612 | 992   | 786   | 116  | -    | 7,131  |
| 2001-2005                   | 689  | 1,215 | 2,342 | 2,058 | 1,015  | 1,725 | 1,757 | 1,321 | 168  | 25   | 11,629 |
| 2006                        | -    | -     | -     | 1,017 | 483    | 185   | 627   | 874   | 306  | 26   | 3,518  |
| 2007                        | -    | 348   | 1,189 | 912   | 364    | 1,246 | 363   | 291   | 174  | -    | 4,887  |
| 2008                        | -    | -     | -     | -     | -      | -     | 37    | 63    | 48   | -    | 148    |
| 2009                        | -    | -     | -     | -     | -      | -     | 634   | 60    | -    | -    | 694    |
| 2010                        | -    | -     | 1,058 | 987   | 594    | 759   | 37    | 229   | -    | -    | 3,664  |
| 2011                        | -    | 316   | 948   | 1,140 | 108    | 293   | 122   | 301   | 235  | -    | 3,463  |
| 2012                        | -    | 522   | 1,457 | 1,054 | 336    | 699   | 930   | 721   | 121  | -    | 5,840  |
| 2013                        | -    | 1,042 | 1,137 | 878   | 802    | 2,355 | 1,385 | 945   | 155  | -    | 8,699  |
| 2014                        | -    | 962   | 2,572 | 1,800 | 1,100  | 2,225 | 763   | 367   | 98   | -    | 9,887  |
| 2015                        | -    | 1,767 | 1,712 | 1,349 | 1,365  | 812   | 367   | 381   | 158  | -    | 7,911  |
| 2016                        | -    | 895   | 846   | 682   | 550    | 634   | 330   | 189   | 41   | -    | 4,167  |
| 2017                        | -    | 106   | 183   | 391   | 655    | -     | 88    | 246   | 41   | -    | 1,710  |
| 2018 <sup>b/</sup>          | -    | -     | 388   | 557   | 404    | 743   | 77    | 218   | 83   | -    | 2,470  |

TABLE A-7. Oregon commercial troll salmon fishing effort in days fished by area and month.<sup>a/</sup> (Page 4 of 4)

| Year or<br>Average     | Mar. | Apr.  | May   | June  | July   | Aug.  | Sept. | Oct.  | Nov. | Dec. | Season |
|------------------------|------|-------|-------|-------|--------|-------|-------|-------|------|------|--------|
| <b>Statewide Total</b> |      |       |       |       |        |       |       |       |      |      |        |
| 1981-1985              | -    | -     | 2,080 | 1,199 | 11,881 | 7,407 | 1,401 | 1,181 | 346  | -    | 25,496 |
| 1986-1990              | -    | -     | 4,211 | 5,027 | 14,180 | 8,804 | 3,398 | 2,301 | 292  | -    | 38,154 |
| 1991-1995              | -    | -     | 1,287 | 1,647 | 1,870  | 1,753 | 1,384 | 1,396 | 88   | -    | 9,016  |
| 1996-2000              | -    | -     | 1,339 | 1,581 | 960    | 1,661 | 995   | 786   | 116  | -    | 7,187  |
| 2001-2005              | 689  | 1,215 | 2,419 | 2,086 | 901    | 1,532 | 1,800 | 1,321 | 168  | 25   | 12,019 |
| 2006                   | -    | -     | 516   | 1,313 | 483    | 264   | 720   | 874   | 306  | 26   | 4,502  |
| 2007                   | -    | 348   | 1,266 | 958   | 404    | 1,399 | 377   | 291   | 174  | -    | 5,217  |
| 2008                   | -    | -     | 272   | 282   | 33     | 58    | 47    | 63    | 48   | -    | 803    |
| 2009                   | -    | -     | 72    | 85    | 239    | 135   | 643   | 60    | -    | -    | 1,234  |
| 2010                   | -    | -     | 1,126 | 1,275 | 735    | 878   | 53    | 229   | -    | -    | 4,296  |
| 2011                   | -    | 316   | 1,033 | 1,264 | 149    | 317   | 137   | 301   | 235  | -    | 3,752  |
| 2012                   | -    | 522   | 1,515 | 1,277 | 373    | 724   | 1,003 | 721   | 121  | -    | 6,256  |
| 2013                   | -    | 1,042 | 1,201 | 997   | 834    | 2,401 | 1,411 | 945   | 155  | -    | 8,986  |
| 2014                   | -    | 962   | 3,027 | 1,879 | 1,261  | 2,290 | 819   | 367   | 98   | -    | 10,703 |
| 2015                   | -    | 1,767 | 2,243 | 1,437 | 1,413  | 873   | 457   | 381   | 158  | -    | 8,729  |
| 2016                   | -    | 895   | 917   | 764   | 571    | 685   | 330   | 189   | 41   | -    | 4,392  |
| 2017                   | -    | 106   | 265   | 483   | 666    | 104   | 141   | 246   | 41   | -    | 2,052  |
| 2018 <sup>b/</sup>     | -    | -     | 404   | 607   | 407    | 772   | 77    | 218   | 83   | -    | 2,568  |

a/ Summary of ODFW fish receiving ticket information. Beginning in 1979, monthly totals are the sum of statistical weeks with closest fit to the calendar month. Excludes effort occurring off Alaska, Washington, and California. Days fished data are reported by port of landing through 1978 and by area of catch beginning in 1979. Catch and landing areas include the following port areas: Astoria area includes Oregon ports from Astoria through Cannon Beach; Tillamook area includes Nehalem through Pacific City; New port area includes Depoe Bay through Waldport; Coos Bay area prior to 1986 includes Florence through Bandon and after 1987 includes Florence through Port Orford; Brookings area prior to 1986 includes Port Orford through Brookings and after 1987 includes Gold Beach through Brookings. Values include state-waters only terminal area fisheries.

b/ Preliminary.

TABLE A-8. Oregon commercial troll Chinook and coho salmon landings in numbers of fish by catch area and month.<sup>a/</sup> (Page 1 of 4)

| Year or Avg.       | Mar.           | Apr.  | May    | June  | July  | Aug.  | Sept. | Oct.  | Nov. | Dec. | Season | June        | July   | Aug.   | Sept. | Oct. | Season  |
|--------------------|----------------|-------|--------|-------|-------|-------|-------|-------|------|------|--------|-------------|--------|--------|-------|------|---------|
|                    | <b>CHINOOK</b> |       |        |       |       |       |       |       |      |      |        | <b>COHO</b> |        |        |       |      |         |
| <u>Astoria</u>     |                |       |        |       |       |       |       |       |      |      |        |             |        |        |       |      |         |
| 1981-1985          | -              | -     | 4,738  | 0     | 499   | 293   | 23    | 2     | -    | -    | 5,556  | -           | 18,828 | 11,874 | 2,543 | -    | 21,305  |
| 1986-1990          | -              | -     | 1,791  | 363   | 2,225 | 1,172 | 765   | 71    | -    | -    | 3,477  | -           | 7,390  | 21,733 | 6,281 | 304  | 21,364  |
| 1991-1995          | -              | -     | 318    | 322   | 78    | 187   | 88    | -     | -    | -    | 937    | -           | 435    | 7,655  | 3,007 | -    | 9,949   |
| 1996-2000          | -              | -     | 9      | 64    | -     | 1,951 | 49    | -     | -    | -    | 572    | -           | -      | 11,600 | 658   | -    | 12,258  |
| 2001-2005          | -              | -     | 2,633  | 1,402 | 1,445 | 2,329 | 478   | -     | -    | -    | 8,095  | -           | 1,524  | 2,472  | 3,430 | -    | 5,749   |
| 2006               | -              | -     | 7,167  | 3,168 | 1     | 61    | 92    | -     | -    | -    | 10,489 | -           | 10     | 915    | 489   | -    | 1,414   |
| 2007               | -              | -     | 777    | 374   | 115   | 163   | 14    | -     | -    | -    | 1,443  | -           | 1,062  | 10,335 | 157   | -    | 11,554  |
| 2008               | -              | -     | 2,616  | 2,508 | 129   | 161   | 20    | -     | -    | -    | 5,434  | -           | 49     | 356    | 29    | -    | 434     |
| 2009               | -              | -     | 119    | 232   | 240   | 117   | 4     | -     | -    | -    | 712    | -           | 9,061  | 3,458  | 165   | -    | 12,684  |
| 2010               | -              | -     | 580    | 6,652 | 2,121 | 1,657 | 110   | -     | -    | -    | 11,120 | -           | 637    | 368    | 35    | -    | 1,040   |
| 2011               | -              | -     | 1,057  | 1,400 | 114   | 239   | 26    | -     | -    | -    | 2,836  | -           | 234    | 147    | 83    | -    | 464     |
| 2012               | -              | -     | 1,034  | 5,366 | 210   | 149   | 1,685 | -     | -    | -    | 8,444  | -           | 38     | 35     | 551   | -    | 624     |
| 2013               | -              | -     | 432    | 704   | 136   | 279   | 394   | -     | -    | -    | 1,945  | -           | 39     | 295    | 118   | -    | 452     |
| 2014               | -              | -     | 12,804 | 725   | 2,282 | 175   | 196   | -     | -    | -    | 16,182 | -           | 2,428  | 1,570  | 3,704 | -    | 7,702   |
| 2015               | -              | -     | 6,806  | 1,527 | 1,293 | 700   | 556   | -     | -    | -    | 10,882 | -           | 328    | 411    | 1,474 | -    | 2,213   |
| 2016               | -              | -     | 519    | 743   | 169   | 627   | -     | -     | -    | -    | 2,058  | -           | -      | -      | -     | -    | -       |
| 2017               | -              | -     | 1,080  | 652   | 50    | 611   | 234   | -     | -    | -    | 2,627  | -           | 16     | 305    | 149   | -    | 470     |
| 2018 <sup>b/</sup> | -              | -     | 16     | 269   | 10    | 38    | 0     | -     | -    | -    | 333    | -           | 8      | 84     | -     | -    | 92      |
| <u>Tillamook</u>   |                |       |        |       |       |       |       |       |      |      |        |             |        |        |       |      |         |
| 1981-1985          | -              | -     | 1,547  | 283   | 2,380 | 1,210 | 281   | 199   | 7    | -    | 5,901  | -           | 68,832 | 20,120 | 1,637 | -    | 84,331  |
| 1986-1990          | -              | -     | 1,745  | 3,147 | 8,129 | 6,212 | 4,946 | 2,060 | 11   | -    | 26,242 | -           | 82,150 | 29,287 | 5,397 | -    | 106,658 |
| 1991-1995          | -              | -     | 306    | 375   | 1,435 | 2,843 | 1,922 | 1,607 | 7    | -    | 6,887  | -           | 45,367 | 7,065  | -     | -    | 48,905  |
| 1996-2000          | -              | -     | 363    | 2,863 | 370   | 2,082 | 1,413 | 1,259 | 21   | -    | 8,191  | -           | -      | -      | -     | -    | -       |
| 2001-2005          | 1,881          | 888   | 5,198  | 6,484 | 2,709 | 3,511 | 3,416 | 3,074 | 31   | -    | 25,572 | -           | -      | -      | -     | -    | -       |
| 2006               | -              | -     | -      | 1,153 | 60    | 39    | 450   | 959   | 95   | -    | 2,756  | -           | -      | -      | -     | -    | -       |
| 2007               | -              | 14    | 2,757  | 922   | 6     | 59    | 136   | 237   | 47   | -    | 4,178  | -           | -      | 1,195  | 84    | -    | 1,279   |
| 2008               | -              | -     | -      | -     | -     | -     | 64    | 12    | --   | -    | 76     | -           | -      | -      | -     | -    | -       |
| 2009               | -              | -     | -      | -     | -     | -     | 105   | 39    | -    | -    | 144    | -           | -      | -      | 3,490 | -    | 3,490   |
| 2010               | -              | -     | 108    | 2,466 | 931   | 72    | 56    | 15    | -    | -    | 3,648  | -           | -      | -      | -     | -    | -       |
| 2011               | -              | 1     | 130    | 615   | 174   | 52    | 114   | 20    | -    | -    | 1,106  | -           | -      | -      | -     | -    | -       |
| 2012               | -              | 440   | 1,492  | 441   | 178   | 55    | 1,146 | 3,645 | -    | -    | 7,397  | -           | -      | -      | -     | -    | -       |
| 2013               | -              | 1,391 | 349    | 144   | 380   | 2,869 | 3,461 | 286   | -    | -    | 8,880  | -           | -      | -      | -     | -    | -       |
| 2014               | -              | 20    | 1,133  | 2,640 | 593   | 246   | 2,355 | 22    | -    | -    | 7,009  | -           | -      | -      | 1,104 | -    | 1,104   |
| 2015               | -              | 205   | 4,114  | 3,118 | 96    | 186   | 807   | 319   | -    | -    | 8,845  | -           | -      | -      | -     | -    | -       |
| 2016               | -              | 167   | 185    | 515   | 16    | 23    | 135   | 26    | -    | -    | 1,067  | -           | -      | -      | -     | -    | -       |
| 2017               | -              | 6     | 325    | 224   | 17    | -     | 112   | 33    | -    | -    | 717    | -           | -      | -      | -     | -    | -       |
| 2018 <sup>b/</sup> | -              | -     | 180    | 168   | 19    | 56    | 26    | 14    | -    | -    | 463    | -           | -      | -      | -     | -    | -       |

TABLE A-8. Oregon commercial troll Chinook and coho salmon landings in numbers of fish by catch area and month.<sup>a/</sup> (Page 2 of 4)

| Year or Avg.       | Mar.           | Apr.   | May    | June   | July    | Aug.   | Sept.  | Oct.   | Nov.  | Dec. | Season  | June        | July    | Aug.   | Sept.  | Oct. | Season  |
|--------------------|----------------|--------|--------|--------|---------|--------|--------|--------|-------|------|---------|-------------|---------|--------|--------|------|---------|
|                    | <b>CHINOOK</b> |        |        |        |         |        |        |        |       |      |         | <b>COHO</b> |         |        |        |      |         |
| <u>New port</u>    |                |        |        |        |         |        |        |        |       |      |         |             |         |        |        |      |         |
| 1981-1985          | -              | -      | 6,292  | 2,256  | 11,737  | 5,174  | 959    | 1,476  | 111   | -    | 27,917  | -           | 75,337  | 66,674 | 4,161  | -    | 109,715 |
| 1986-1990          | -              | -      | 8,800  | 14,067 | 27,795  | 14,835 | 6,926  | 10,533 | -     | -    | 82,957  | 56          | 108,283 | 44,241 | 5,166  | -    | 135,872 |
| 1991-1995          | -              | -      | 11,091 | 14,000 | 14,613  | 29,112 | 11,702 | 10,884 | -     | -    | 76,934  | 58,218      | 24,704  | 7,972  | -      | -    | 41,190  |
| 1996-2000          | -              | -      | 17,947 | 16,800 | 3,786   | 24,729 | 12,138 | 4,150  | -     | -    | 81,290  | -           | -       | -      | -      | -    | -       |
| 2001-2005          | 5,438          | 7,253  | 23,241 | 18,832 | 10,415  | 20,541 | 26,687 | 20,998 | -     | -    | 126,126 | -           | -       | -      | -      | -    | -       |
| 2006               | -              | -      | -      | 8,397  | 3,556   | 923    | 3,852  | 1,528  | 639   | -    | 18,895  | -           | -       | -      | -      | -    | -       |
| 2007               | -              | 279    | 1,553  | 1,427  | 323     | 338    | 88     | 54     | 2     | -    | 4,064   | -           | -       | 1,607  | 276    | -    | 1,883   |
| 2008               | -              | -      | -      | -      | -       | -      | -      | -      | -     | -    | -       | -           | -       | -      | -      | -    | -       |
| 2009               | -              | -      | -      | -      | -       | -      | -      | -      | -     | -    | -       | -           | -       | -      | 5,105  | -    | 5,105   |
| 2010               | -              | -      | 3,950  | 3,513  | 2,505   | 2,409  | -      | -      | -     | -    | 12,377  | -           | -       | -      | -      | -    | -       |
| 2011               | -              | 378    | 2,357  | 1,477  | 192     | 561    | -      | 15     | -     | -    | 4,980   | -           | -       | -      | -      | -    | -       |
| 2012               | -              | 1,090  | 4,408  | 2,578  | 998     | 5,819  | 8,550  | 3,169  | -     | -    | 26,612  | -           | -       | -      | -      | -    | -       |
| 2013               | -              | 2,186  | 3,436  | 1,740  | 1,443   | 5,569  | 865    | 461    | -     | -    | 15,700  | -           | -       | -      | -      | -    | -       |
| 2014               | -              | 9,078  | 18,829 | 8,108  | 6,348   | 36,167 | 3,658  | 934    | -     | -    | 83,122  | -           | -       | -      | 1,222  | -    | 1,222   |
| 2015               | -              | 7,286  | 2,240  | 2,503  | 18,472  | 5,544  | 813    | -      | -     | -    | 36,858  | -           | -       | -      | -      | -    | -       |
| 2016               | -              | 5,610  | 5,044  | 1,948  | 9,188   | 8,063  | 1,426  | 2      | -     | -    | 31,281  | -           | -       | -      | -      | -    | -       |
| 2017               | -              | 547    | 904    | 2,950  | 13,002  | -      | 25     | 10     | -     | -    | 17,438  | -           | -       | -      | -      | -    | -       |
| 2018 <sup>b/</sup> | -              | -      | 483    | 711    | 2,100   | 10,880 | 151    | 4      | -     | -    | 14,329  | -           | -       | -      | -      | -    | -       |
| <u>Coos Bay</u>    |                |        |        |        |         |        |        |        |       |      |         |             |         |        |        |      |         |
| 1981-1985          | -              | -      | 5,515  | 4,301  | 29,871  | 17,260 | 5,419  | 1,129  | 11    | -    | 63,507  | -           | 115,958 | 31,021 | 5      | -    | 131,470 |
| 1986-1990          | -              | -      | 30,467 | 28,162 | 103,530 | 64,284 | 18,029 | 8,518  | 2,178 | -    | 253,426 | 22          | 103,641 | 44,708 | 10,213 | -    | 132,522 |
| 1991-1995          | -              | -      | 1,102  | 3,642  | 3,908   | 4,544  | 3,587  | 1,701  | 451   | -    | 15,554  | 33,031      | 35,841  | 1,069  | -      | -    | 35,625  |
| 1996-2000          | -              | -      | 3,377  | 8,994  | 9,724   | 11,353 | 4,218  | 1,930  | 981   | -    | 36,042  | 8           | -       | -      | -      | -    | 8       |
| 2001-2005          | 7,479          | 17,217 | 21,669 | 20,217 | 7,753   | 26,693 | 18,998 | 8,507  | 1,276 | 148  | 117,529 | -           | -       | -      | -      | -    | -       |
| 2006               | -              | -      | -      | -      | -       | -      | 65     | 962    | 821   | 131  | 1,979   | -           | -       | -      | -      | -    | -       |
| 2007               | -              | 1,563  | 3,018  | 2,114  | 1,430   | 11,963 | 489    | 504    | 621   | 3    | 21,705  | -           | -       | 2,234  | 159    | -    | 2,393   |
| 2008               | -              | -      | -      | -      | -       | -      | -      | -      | 208   | -    | 208     | -           | -       | -      | -      | -    | -       |
| 2009               | -              | -      | -      | -      | -       | -      | -      | 293    | -     | -    | 293     | -           | -       | -      | 683    | -    | 683     |
| 2010               | -              | -      | 4,961  | 2,987  | 840     | 1,316  | -      | 1,315  | -     | -    | 11,419  | -           | -       | -      | -      | -    | -       |
| 2011               | -              | 4,102  | 5,414  | 8,309  | 333     | 399    | 223    | 1,058  | 1,995 | -    | 21,833  | -           | -       | -      | -      | -    | -       |
| 2012               | -              | 2,103  | 8,633  | 4,338  | 609     | 2,897  | 3,981  | 1,942  | 701   | -    | 25,204  | -           | -       | -      | -      | -    | -       |
| 2013               | -              | 3,796  | 5,308  | 4,103  | 3,508   | 30,097 | 23,925 | 7,677  | 1,002 | -    | 79,416  | -           | -       | -      | -      | -    | -       |
| 2014               | -              | 6,403  | 15,427 | 17,812 | 11,385  | 30,187 | 2,838  | 1,116  | 469   | -    | 85,637  | -           | -       | -      | 970    | -    | 970     |
| 2015               | -              | 8,890  | 6,786  | 14,182 | 8,682   | 1,727  | 386    | 1,635  | 1,163 | -    | 43,451  | -           | -       | -      | -      | -    | -       |
| 2016               | -              | 808    | 760    | 2,273  | 2,039   | 541    | 251    | 689    | 182   | -    | 7,543   | -           | -       | -      | -      | -    | -       |
| 2017               | -              | -      | -      | -      | -       | -      | -      | 638    | 96    | -    | 734     | -           | -       | -      | -      | -    | -       |
| 2018 <sup>b/</sup> | -              | -      | 302    | 2,001  | 810     | 1,331  | 48     | 472    | 431   | -    | 5,395   | -           | -       | -      | -      | -    | -       |



TABLE A-8. Oregon commercial troll Chinook and coho salmon landings in numbers of fish by catch area and month.<sup>a/</sup> (Page 3 of 4)

| Year or Avg.                | Mar.   | Apr.   | May    | June   | July    | Aug.   | Sept.  | Oct.   | Nov.  | Dec. | Season  | June   | July    | Aug.   | Sept.  | Oct. | Season  |
|-----------------------------|--------|--------|--------|--------|---------|--------|--------|--------|-------|------|---------|--------|---------|--------|--------|------|---------|
| CHINOOK                     |        |        |        |        |         |        |        |        |       |      |         | COHO   |         |        |        |      |         |
| <b>Brookings</b>            |        |        |        |        |         |        |        |        |       |      |         |        |         |        |        |      |         |
| 1981-1985                   | -      | -      | 1,782  | 1,845  | 10,357  | 20,079 | 3,952  | 3,495  | 1,113 | -    | 42,623  | -      | 15,830  | 35,594 | -      | -    | 24,728  |
| 1986-1990                   | -      | -      | 5,087  | 16,802 | 9,562   | 8,706  | 2,844  | 963    | 1,460 | -    | 28,825  | 4,594  | 7,121   | -      | -      | -    | 6,375   |
| 1991-1995                   | -      | -      | 265    | -      | 1,682   | 234    | 210    | 1,191  | -     | -    | 1,679   | -      | -       | -      | -      | -    | -       |
| 1996-2000                   | -      | -      | 1,064  | -      | -       | 1,049  | 665    | 696    | -     | -    | 3,542   | -      | -       | -      | -      | -    | -       |
| 2001-2005                   | 25     | 63     | 425    | 1,156  | 1,615   | 1,434  | 1,211  | 543    | 66    | -    | 5,245   | -      | -       | -      | -      | -    | -       |
| 2006                        | -      | -      | -      | -      | -       | -      | 12     | 590    | 136   | -    | 738     | -      | -       | -      | -      | -    | -       |
| 2007                        | -      | 15     | 25     | 727    | 1,150   | 1,524  | 400    | 209    | 47    | -    | 4,097   | -      | -       | -      | -      | -    | -       |
| 2008                        | -      | -      | -      | -      | -       | -      | -      | 236    | -     | -    | 236     | -      | -       | -      | -      | -    | -       |
| 2009                        | -      | -      | -      | -      | -       | -      | -      | -      | -     | -    | -       | -      | -       | -      | -      | -    | -       |
| 2010                        | -      | -      | 164    | -      | 51      | 125    | -      | 529    | -     | -    | 869     | -      | -       | -      | -      | -    | -       |
| 2011                        | -      | -      | 601    | 254    | 27      | 337    | -      | 107    | -     | -    | 1,326   | -      | -       | -      | -      | -    | -       |
| 2012                        | -      | -      | 371    | 1,287  | 1,456   | 1,328  | 884    | 118    | -     | -    | 5,444   | -      | -       | -      | -      | -    | -       |
| 2013                        | -      | 50     | 7      | 1,450  | 3,171   | 1,848  | 135    | 155    | -     | -    | 6,816   | -      | -       | -      | -      | -    | -       |
| 2014                        | -      | 53     | 13,352 | 1,349  | 492     | 403    | 54     | 443    | -     | -    | 16,146  | -      | -       | -      | -      | -    | -       |
| 2015                        | -      | 39     | 1,146  | 1,528  | 779     | 92     | -      | 639    | -     | -    | 4,223   | -      | -       | -      | -      | -    | -       |
| 2016                        | -      | 12     | 34     | 179    | 21      | -      | -      | 152    | -     | -    | 398     | -      | -       | -      | -      | -    | -       |
| 2017                        | -      | -      | -      | -      | -       | -      | -      | 329    | -     | -    | 329     | -      | -       | -      | -      | -    | -       |
| 2018 <sup>b/</sup>          | -      | -      | 272    | 1,528  | 1,168   | 614    | -      | 316    | -     | -    | 3,898   | -      | -       | -      | -      | -    | -       |
| <b>South of Cape Falcon</b> |        |        |        |        |         |        |        |        |       |      |         |        |         |        |        |      |         |
| 1981-1985                   | -      | -      | 15,135 | 8,684  | 54,345  | 43,724 | 10,612 | 6,299  | 1,149 | -    | 139,947 | -      | 275,957 | 97,114 | 5,803  | -    | 350,243 |
| 1986-1990                   | -      | -      | 46,099 | 58,818 | 141,367 | 90,555 | 31,607 | 21,689 | 1,642 | -    | 391,449 | 3,700  | 295,499 | 95,999 | 20,776 | -    | 380,152 |
| 1991-1995                   | -      | -      | 12,605 | 18,016 | 15,388  | 29,246 | 16,869 | 14,668 | 453   | -    | 100,382 | 91,249 | 105,911 | 8,382  | -      | -    | 109,418 |
| 1996-2000                   | -      | -      | 22,751 | 29,104 | 13,880  | 39,214 | 18,035 | 8,035  | 1,002 | -    | 129,065 | 8      | -       | -      | -      | -    | 8       |
| 2001-2005                   | 14,823 | 25,409 | 50,447 | 42,413 | 22,088  | 52,179 | 50,313 | 33,123 | 1,347 | 148  | 274,472 | -      | -       | -      | -      | -    | -       |
| 2006                        | -      | -      | -      | 9,550  | 3,616   | 962    | 4,379  | 4,039  | 1,691 | 131  | 24,368  | -      | -       | -      | -      | -    | -       |
| 2007                        | -      | 1,871  | 7,353  | 5,190  | 2,909   | 13,884 | 1,113  | 1,004  | 717   | 3    | 34,044  | -      | -       | 5,036  | 519    | -    | 5,555   |
| 2008                        | -      | -      | -      | -      | -       | -      | 64     | 248    | 208   | -    | 520     | -      | -       | -      | -      | -    | -       |
| 2009                        | -      | -      | -      | -      | -       | -      | 105    | 332    | -     | -    | 437     | -      | -       | -      | 9,278  | -    | 9,278   |
| 2010                        | -      | -      | 9,183  | 8,966  | 4,327   | 3,922  | 56     | 1,859  | -     | -    | 28,313  | -      | -       | -      | -      | -    | -       |
| 2011                        | -      | 4,481  | 8,502  | 10,655 | 726     | 1,349  | 337    | 1,200  | 1,995 | -    | 29,245  | -      | -       | -      | -      | -    | -       |
| 2012                        | -      | 3,633  | 14,904 | 8,644  | 3,241   | 10,099 | 14,561 | 8,874  | 701   | -    | 64,657  | -      | -       | -      | -      | -    | -       |
| 2013                        | -      | 7,423  | 9,100  | 7,437  | 8,502   | 40,383 | 28,386 | 8,579  | 1,002 | -    | 110,812 | -      | -       | -      | -      | -    | -       |
| 2014                        | -      | 15,554 | 48,741 | 29,909 | 18,818  | 67,003 | 8,905  | 2,515  | 469   | -    | 191,914 | -      | -       | -      | 3,296  | -    | 3,296   |
| 2015                        | -      | 16,420 | 14,286 | 21,331 | 28,029  | 7,549  | 2,006  | 2,593  | 1,163 | -    | 93,377  | -      | -       | -      | -      | -    | -       |
| 2016                        | -      | 6,597  | 6,023  | 4,915  | 11,264  | 8,627  | 1,812  | 869    | 182   | -    | 40,289  | -      | -       | -      | -      | -    | -       |
| 2017                        | -      | 553    | 1,229  | 3,174  | 13,019  | -      | 137    | 1,010  | 96    | -    | 19,218  | -      | -       | -      | -      | -    | -       |
| 2018 <sup>b/</sup>          | -      | -      | 1,237  | 4,408  | 4,097   | 12,881 | 225    | 806    | 431   | -    | 24,085  | -      | -       | -      | -      | -    | -       |

TABLE A-8. Oregon commercial troll Chinook and coho salmon landings in numbers of fish by catch area and month.<sup>a/</sup> (Page 4 of 4)

| Year or Avg.           | Mar.   | Apr.   | May    | June   | July    | Aug.   | Sept.  | Oct.   | Nov.  | Dec. | Season  | June   | July    | Aug.   | Sept.  | Oct. | Season  |
|------------------------|--------|--------|--------|--------|---------|--------|--------|--------|-------|------|---------|--------|---------|--------|--------|------|---------|
| CHINOOK                |        |        |        |        |         |        |        |        |       |      |         | COHO   |         |        |        |      |         |
| <b>Statewide Total</b> |        |        |        |        |         |        |        |        |       |      |         |        |         |        |        |      |         |
| 1981-1985              | -      | -      | 19,873 | 8,684  | 54,844  | 44,017 | 10,635 | 6,301  | 1,149 | -    | 145,503 | -      | 290,078 | 84,710 | 8,346  | -    | 301,499 |
| 1986-1990              | -      | -      | 47,890 | 59,035 | 141,812 | 91,259 | 31,913 | 21,703 | 1,642 | -    | 394,927 | 3,700  | 296,977 | 89,839 | 11,112 | 304  | 397,243 |
| 1991-1995              | -      | -      | 12,795 | 14,606 | 15,426  | 29,358 | 16,904 | 14,668 | 453   | -    | 100,945 | 91,249 | 70,897  | 16,037 | 3,007  | 19   | 119,367 |
| 1996-2000              | -      | -      | 22,757 | 29,154 | 13,880  | 39,604 | 18,044 | 8,035  | 1,002 | -    | 129,523 | 8      | -       | 11,600 | 658    | -    | 6,133   |
| 2001-2005              | 14,823 | 25,409 | 53,080 | 43,815 | 19,115  | 44,072 | 50,600 | 33,123 | 1,347 | 148  | 282,567 | -      | 1,524   | 2,472  | 3,430  | -    | 5,749   |
| 2006                   | -      | -      | 7,167  | 12,718 | 3,617   | 1,023  | 4,471  | 4,039  | 1,691 | 131  | 34,857  | -      | 10      | 915    | 489    | -    | 1,414   |
| 2007                   | -      | 1,871  | 8,130  | 5,564  | 3,024   | 14,047 | 1,127  | 1,004  | 717   | 3    | 35,487  | -      | 1,062   | 15,371 | 676    | -    | 17,109  |
| 2008                   | -      | -      | 2,616  | 2,508  | 129     | 161    | 84     | 248    | 208   | -    | 5,954   | -      | 49      | 356    | 29     | -    | 434     |
| 2009                   | -      | -      | 119    | 232    | 240     | 117    | 109    | 332    | -     | -    | 1,149   | -      | 9,061   | 3,458  | 9,443  | -    | 21,962  |
| 2010                   | -      | -      | 9,763  | 15,618 | 6,448   | 5,579  | 166    | 1,859  | -     | -    | 39,433  | -      | 637     | 368    | 35     | -    | 1,040   |
| 2011                   | -      | 4,481  | 9,559  | 12,055 | 840     | 1,588  | 363    | 1,200  | 1,995 | -    | 32,081  | -      | 234     | 147    | 83     | -    | 464     |
| 2012                   | -      | 3,633  | 15,938 | 14,010 | 3,451   | 10,248 | 16,246 | 8,874  | 701   | -    | 73,101  | -      | 38      | 35     | 551    | -    | 624     |
| 2013                   | -      | 7,423  | 9,532  | 8,141  | 8,638   | 40,662 | 28,780 | 8,579  | 1,002 | -    | 112,757 | -      | 39      | 295    | 118    | -    | 452     |
| 2014                   | -      | 15,554 | 61,545 | 30,634 | 21,100  | 67,178 | 9,101  | 2,515  | 469   | -    | 208,096 | -      | 2,428   | 1,570  | 7,000  | -    | 10,998  |
| 2015                   | -      | 16,420 | 21,092 | 22,858 | 29,322  | 8,249  | 2,562  | 2,593  | 1,163 | -    | 104,259 | -      | 328     | 411    | 1,474  | -    | 2,213   |
| 2016                   | -      | 6,597  | 6,542  | 5,658  | 11,433  | 9,254  | 1,812  | 869    | 182   | -    | 42,347  | -      | -       | -      | -      | -    | -       |
| 2017                   | -      | 553    | 2,309  | 3,826  | 13,069  | 611    | 371    | 1,010  | 96    | -    | 21,845  | -      | 16      | 305    | 149    | -    | 470     |
| 2018 <sup>b/</sup>     | -      | -      | 1,253  | 4,677  | 4,107   | 12,919 | 225    | 806    | 431   | -    | 24,418  | -      | 8       | 84     | -      | -    | 92      |

a/ Monthly totals are the sum of statistical weeks with closest fit to the calendar month. Excludes harvests off Alaska, Washington (north of Leadbetter Point), and California that were landed in Oregon. Landings are reported by area of catch beginning in 1979. Catch and landing areas include the following port areas: Astoria area includes Oregon ports from Astoria through Cannon Beach; Tillamook area includes Nehalem through Pacific City; New port area includes Depoe Bay through Waldport; Coos Bay area prior to 1988 includes Florence through Bandon and after 1987 includes Florence through Port Orford; Brookings area prior to 1988 includes Port Orford through Brookings and after 1987 includes Gold Beach through Brookings. Values include state-waters only terminal area fisheries.

b/ Preliminary.

TABLE A-9. Oregon ocean recreational effort in salmon angler trips by catch area and month.<sup>a/</sup> (Page 1 of 4)

| Year or Average    | Mar. | Apr. | May   | June  | July   | Aug.   | Sept. | Oct.  | Nov. | Season |
|--------------------|------|------|-------|-------|--------|--------|-------|-------|------|--------|
| <u>Astoria</u>     |      |      |       |       |        |        |       |       |      |        |
| 1981-1985          | -    | -    | 977   | 3,269 | 11,837 | 9,897  | 4,192 | -     | -    | 26,221 |
| 1986-1990          | -    | -    | 146   | 1,110 | 8,890  | 9,559  | 1,423 | -     | -    | 17,740 |
| 1991-1995          | -    | -    | -     | 1,496 | 6,681  | 6,695  | 2,084 | -     | -    | 15,833 |
| 1996-2000          | -    | -    | -     | -     | 2,457  | 2,909  | 946   | -     | -    | 5,442  |
| 2001-2005          | -    | -    | 155   | 260   | 4,788  | 10,258 | 2,041 | -     | -    | 17,275 |
| 2006               | -    | -    | -     | -     | 1,711  | 5,769  | 762   | -     | -    | 8,242  |
| 2007               | -    | -    | -     | -     | 2,548  | 8,849  | 989   | -     | -    | 12,386 |
| 2008               | -    | -    | 66    | 498   | 1,875  | 1,215  | -     | -     | -    | 3,654  |
| 2009               | -    | -    | -     | 85    | 5,698  | 6,097  | 370   | -     | -    | 12,250 |
| 2010               | -    | -    | -     | 306   | 2,211  | 6,996  | 741   | -     | -    | 10,254 |
| 2011               | -    | -    | -     | 459   | 1,402  | 4,645  | 877   | -     | -    | 7,383  |
| 2012               | -    | -    | -     | 681   | 1,792  | 1,954  | 411   | -     | -    | 4,838  |
| 2013               | -    | -    | -     | 1,593 | 1,329  | 2,912  | 302   | -     | -    | 6,136  |
| 2014               | -    | -    | 42    | 708   | 3,579  | 6,279  | 1,647 | -     | -    | 12,255 |
| 2015               | -    | -    | 62    | 699   | 2,723  | 3,092  | 2,053 | -     | -    | 8,629  |
| 2016               | -    | -    | -     | -     | 1,920  | 2,412  | -     | -     | -    | 4,332  |
| 2017               | -    | -    | -     | 587   | 2,697  | 5,284  | -     | -     | -    | 8,568  |
| 2018 <sup>b/</sup> | -    | -    | -     | 380   | 1,839  | 5,332  | 148   | -     | -    | 7,699  |
| <u>Tillamook</u>   |      |      |       |       |        |        |       |       |      |        |
| 1981-1985          | -    | -    | 678   | 2,040 | 14,150 | 14,502 | 3,413 | 1,603 | -    | 30,298 |
| 1986-1990          | -    | -    | 222   | 2,005 | 12,063 | 11,291 | 4,392 | --    | --   | 29,007 |
| 1991-1995          | -    | -    | 728   | 1,722 | 10,452 | 4,271  | 2,075 | 4,879 | 396  | 13,369 |
| 1996-2000          | -    | -    | 489   | 102   | 1,451  | 346    | 2,772 | 2,895 | 170  | 8,126  |
| 2001-2005          | 19   | 35   | 441   | 2,043 | 8,269  | 3,897  | 4,170 | 3,017 | 182  | 22,064 |
| 2006               | 2    | 16   | 385   | 1,334 | 3,299  | 497    | 5,292 | 4,988 | 98   | 15,911 |
| 2007               | -    | 16   | 828   | 1,753 | 4,612  | 8,074  | 3,459 | 2,286 | --   | 21,028 |
| 2008               | -    | -    | -     | 643   | 1,269  | 1,226  | 3,635 | 2,348 | --   | 9,121  |
| 2009               | -    | -    | -     | 974   | 10,482 | 7,131  | 1,772 | 2,009 | -    | 22,368 |
| 2010               | -    | -    | 126   | 1,158 | 3,833  | 3,620  | 3,718 | 1,048 | -    | 13,503 |
| 2011               | 0    | 50   | 143   | 936   | 3,771  | 2,968  | 3,730 | 1,240 | -    | 12,838 |
| 2012               | 0    | 38   | 567   | 830   | 2,372  | 2,933  | 4,126 | 1,521 | -    | 12,387 |
| 2013               | 2    | 78   | 369   | 647   | 3,166  | 2,605  | 3,326 | 3,942 | -    | 14,135 |
| 2014               | 0    | 7    | 1,052 | 1,110 | 9,027  | 4,657  | 8,066 | 1,305 | -    | 25,224 |
| 2015               | 0    | 42   | 919   | 485   | 3,259  | 2,097  | 6,463 | 2,217 | -    | 15,482 |
| 2016               | 14   | 4    | 838   | 1,578 | 1,657  | 855    | 5,505 | 530   | -    | 10,981 |
| 2017               | 0    | 12   | 335   | 692   | 2,161  | 2,039  | 3,100 | 292   | -    | 8,631  |
| 2018 <sup>b/</sup> | 0    | 0    | 354   | 332   | 1,533  | 4,541  | 3,670 | 829   | -    | 11,259 |

TABLE A-9. Oregon ocean recreational effort in salmon angler trips by catch area and month.<sup>a/</sup> (Page 2 of 4)

| Year or Average    | Mar. | Apr. | May   | June   | July   | Aug.   | Sept. | Oct. | Nov. | Season |
|--------------------|------|------|-------|--------|--------|--------|-------|------|------|--------|
| <u>New port</u>    |      |      |       |        |        |        |       |      |      |        |
| 1981-1985          | -    | -    | 1,237 | 6,383  | 28,951 | 25,961 | 3,812 | --   | -    | 57,094 |
| 1986-1990          | -    | -    | 997   | 7,789  | 37,404 | 24,000 | 5,730 | -    | -    | 74,574 |
| 1991-1995          | -    | -    | 484   | 3,881  | 26,682 | 9,837  | 1,389 | 117  | -    | 24,888 |
| 1996-2000          | -    | -    | 101   | 114    | 3,819  | 1,090  | 249   | 29   | -    | 5,396  |
| 2001-2005          | 20   | 77   | 235   | 3,896  | 13,532 | 6,509  | 2,064 | 397  | -    | 26,723 |
| 2006               | 8    | 43   | 139   | 1,593  | 5,785  | 584    | 1,919 | 299  | -    | 10,370 |
| 2007               | 19   | 26   | 87    | 3,472  | 8,013  | 8,284  | 778   | 46   | 40   | 20,765 |
| 2008               | -    | -    | -     | 1,128  | 2,301  | 2,020  | -     | -    | -    | 5,449  |
| 2009               | -    | -    | -     | 2,126  | 13,786 | 12,307 | 1,388 | -    | -    | 29,607 |
| 2010               | -    | -    | 349   | 1,093  | 2,933  | 8,491  | 2,127 | -    | -    | 14,993 |
| 2011               | 20   | 2    | 103   | 847    | 4,550  | 2,518  | 3,913 | -    | -    | 11,953 |
| 2012               | 23   | 290  | 325   | 658    | 3,425  | 4,030  | 5,947 | 107  | -    | 14,805 |
| 2013               | 354  | 441  | 204   | 425    | 5,037  | 4,073  | 4,606 | 188  | -    | 15,328 |
| 2014               | 87   | 83   | 492   | 2,235  | 15,116 | 9,307  | 9,804 | 63   | -    | 37,187 |
| 2015               | 48   | 76   | 136   | 716    | 9,102  | 2,369  | 5,680 | 75   | -    | 18,202 |
| 2016               | 50   | 9    | 41    | 647    | 2,448  | 1,037  | 3,886 | 75   | -    | 8,193  |
| 2017               | 0    | 0    | 12    | 299    | 4,528  | 2,751  | 2,603 | 89   | -    | 10,282 |
| 2018 <sup>b/</sup> | 39   | 0    | 125   | 536    | 5,623  | 11,666 | 5,502 | 70   | -    | 23,561 |
| <u>Coos Bay</u>    |      |      |       |        |        |        |       |      |      |        |
| 1981-1985          | -    | -    | 3,365 | 13,367 | 34,917 | 20,849 | 3,452 | --   | --   | 63,724 |
| 1986-1990          | -    | -    | 891   | 8,744  | 33,097 | 15,721 | 3,842 | --   | --   | 61,349 |
| 1991-1995          | -    | -    | 605   | 5,646  | 26,029 | 8,416  | 1,728 | 21   | --   | 25,929 |
| 1996-2000          | -    | -    | 118   | 381    | 4,301  | 2,953  | 507   | 53   | --   | 8,282  |
| 2001-2005          | 24   | 100  | 783   | 6,477  | 16,186 | 8,250  | 2,564 | 117  | --   | 34,491 |
| 2006               | 14   | 33   | 279   | 1,991  | 9,250  | 2,736  | 2,784 | 81   | --   | 17,168 |
| 2007               | 17   | 33   | 329   | 2,603  | 9,442  | 9,550  | 990   | 9    | --   | 22,973 |
| 2008               | -    | -    | -     | 1,482  | 4,111  | 1,806  | -     | -    | --   | 7,399  |
| 2009               | -    | -    | -     | 1,044  | 8,744  | 3,991  | 583   | --   | --   | 14,362 |
| 2010               | -    | -    | 388   | 709    | 2,350  | 4,683  | 489   | --   | --   | 8,619  |
| 2011               | 2    | 23   | 187   | 1,182  | 2,514  | 4,687  | 1,711 | -    | 16   | 10,322 |
| 2012               | 0    | 52   | 730   | 2,290  | 4,075  | 5,568  | 3,647 | 77   | 18   | 16,457 |
| 2013               | 123  | 174  | 338   | 2,898  | 3,011  | 19,299 | 3,901 | 84   | --   | 29,828 |
| 2014               | 0    | 46   | 691   | 1,906  | 8,659  | 11,899 | 6,518 | 53   | --   | 29,772 |
| 2015               | 12   | 34   | 327   | 1,149  | 5,664  | 3,060  | 4,443 | 82   | --   | 14,771 |
| 2016               | 18   | 5    | 158   | 574    | 2,277  | 2,943  | 5,188 | 7    | --   | 11,170 |
| 2017               | 17   | 48   | 153   | 925    | 3,368  | 4,593  | 3,640 | 72   | --   | 12,816 |
| 2018 <sup>b/</sup> | 15   | 19   | 178   | 252    | 2,410  | 6,012  | 5,424 | 0    | --   | 14,310 |

TABLE A-9. Oregon ocean recreational effort in salmon angler trips by catch area and month.<sup>a/</sup> (Page 3 of 4)

| Year or Average             | Mar. | Apr. | May   | June   | July    | Aug.   | Sept.  | Oct.  | Nov. | Season  |
|-----------------------------|------|------|-------|--------|---------|--------|--------|-------|------|---------|
| <b>Brookings</b>            |      |      |       |        |         |        |        |       |      |         |
| 1981-1985                   | -    | -    | 2,109 | 10,478 | 25,949  | 15,387 | 3,357  | 3,402 | 230  | 56,207  |
| 1986-1990                   | -    | -    | 2,226 | 12,965 | 24,727  | 13,463 | 3,098  | 5,030 | --   | 58,492  |
| 1991-1995                   | -    | -    | 2,866 | 5,957  | 11,093  | 3,333  | 4,014  | 3,831 | -    | 22,694  |
| 1996-2000                   | -    | -    | 1,177 | 3,022  | 2,353   | 6,833  | 2,212  | 2,766 | -    | 18,363  |
| 2001-2005                   | -    | -    | 1,595 | 3,138  | 3,059   | 7,048  | 2,192  | 3,145 | -    | 20,177  |
| 2006                        | -    | -    | 611   | 2,657  | 716     | -      | 3,565  | 3,081 | -    | 10,630  |
| 2007                        | -    | -    | 332   | 752    | 1,600   | 4,741  | 424    | 3,263 | -    | 11,112  |
| 2008                        | -    | -    | -     | 712    | 2,317   | 701    | -      | 1,065 | -    | 4,795   |
| 2009                        | -    | -    | -     | 268    | 2,329   | 754    | 2,580  | -     | -    | 5,931   |
| 2010                        | -    | -    | 129   | 95     | 335     | 619    | 2,502  | 2,270 | -    | 5,950   |
| 2011                        | -    | -    | 393   | 296    | 189     | 1,772  | 1,853  | 1,757 | -    | 6,260   |
| 2012                        | -    | -    | 484   | 1,982  | 4,678   | 6,810  | 1,201  | 3,666 | -    | 18,821  |
| 2013                        | -    | -    | 289   | 2,259  | 6,658   | 7,147  | 208    | 3,547 | -    | 20,108  |
| 2014                        | -    | -    | 1,437 | 1,466  | 5,557   | 3,723  | 246    | 4,639 | -    | 17,068  |
| 2015                        | -    | -    | 305   | 424    | 1,492   | 574    | 1,120  | 5,040 | -    | 8,955   |
| 2016                        | -    | -    | 44    | 467    | 717     | 190    | 898    | 1,872 | -    | 4,188   |
| 2017                        | -    | -    | -     | -      | -       | -      | -      | 2,012 | -    | 2,012   |
| 2018 <sup>b/</sup>          | -    | -    | 508   | 1,058  | 1,398   | 1,934  | -      | 2,102 | -    | 7,000   |
| <b>South of Cape Falcon</b> |      |      |       |        |         |        |        |       |      |         |
| 1981-1985                   | -    | -    | 4,749 | 32,267 | 103,968 | 64,436 | 11,899 | 3,723 | 230  | 207,322 |
| 1986-1990                   | -    | -    | 3,869 | 31,504 | 107,292 | 64,475 | 14,270 | 5,030 | --   | 223,421 |
| 1991-1995                   | -    | -    | 4,110 | 16,015 | 74,256  | 11,676 | 6,091  | 7,130 | 396  | 86,880  |
| 1996-2000                   | -    | -    | 1,885 | 3,618  | 11,923  | 11,221 | 5,739  | 5,699 | 170  | 40,167  |
| 2001-2005                   | 63   | 212  | 3,123 | 15,737 | 40,575  | 23,882 | 11,307 | 6,514 | 182  | 101,571 |
| 2006                        | 24   | 92   | 1,414 | 7,575  | 19,050  | 3,817  | 13,560 | 8,449 | 98   | 54,079  |
| 2007                        | 36   | 75   | 1,576 | 8,580  | 23,667  | 30,649 | 5,651  | 5,604 | 40   | 75,878  |
| 2008                        | -    | -    | -     | 3,965  | 9,998   | 5,753  | 3,635  | 3,413 | --   | 26,764  |
| 2009                        | -    | -    | -     | 4,412  | 35,341  | 24,183 | 6,323  | 2,009 | --   | 72,268  |
| 2010                        | -    | -    | 992   | 3,055  | 9,451   | 17,413 | 8,836  | 3,318 | --   | 43,065  |
| 2011                        | 22   | 75   | 826   | 3,261  | 11,024  | 11,945 | 11,207 | 2,997 | 16   | 41,373  |
| 2012                        | 23   | 380  | 2,106 | 5,760  | 14,550  | 19,341 | 14,921 | 5,371 | 18   | 62,470  |
| 2013                        | 479  | 693  | 1,200 | 6,229  | 17,872  | 33,124 | 12,041 | 7,761 | --   | 79,399  |
| 2014                        | 87   | 136  | 3,672 | 6,717  | 38,359  | 29,586 | 24,634 | 6,060 | --   | 109,251 |
| 2015                        | 60   | 152  | 1,687 | 2,774  | 19,517  | 8,100  | 17,706 | 7,414 | --   | 57,410  |
| 2016                        | 82   | 18   | 1,081 | 3,266  | 7,099   | 5,025  | 15,477 | 2,484 | --   | 34,532  |
| 2017                        | 17   | 60   | 500   | 1,916  | 10,057  | 9,383  | 9,343  | 2,465 | --   | 33,741  |
| 2018 <sup>b/</sup>          | 54   | 19   | 1,165 | 2,178  | 10,964  | 24,153 | 14,596 | 3,001 | --   | 56,130  |

TABLE A-9. Oregon ocean recreational effort in salmon angler trips by catch area and month.<sup>a/</sup> (Page 4 of 4)

| Year or Average        | Mar. | Apr. | May   | June   | July    | Aug.   | Sept.  | Oct.  | Nov. | Season  |
|------------------------|------|------|-------|--------|---------|--------|--------|-------|------|---------|
| <b>Total All Areas</b> |      |      |       |        |         |        |        |       |      |         |
| 1981-1985              | -    | -    | 4,993 | 27,469 | 115,805 | 74,334 | 13,575 | 3,723 | 230  | 233,544 |
| 1986-1990              | -    | -    | 3,898 | 32,392 | 116,182 | 72,122 | 14,554 | 5,030 | --   | 241,161 |
| 1991-1995              | -    | -    | 4,110 | 16,314 | 62,372  | 17,032 | 7,757  | 7,130 | 396  | 99,547  |
| 1996-2000              | -    | -    | 1,885 | 3,618  | 13,888  | 14,130 | 6,307  | 5,699 | 170  | 45,609  |
| 2001-2005              | 63   | 212  | 3,154 | 15,893 | 45,363  | 34,140 | 13,348 | 6,515 | 182  | 118,845 |
| 2006                   | 24   | 92   | 1,414 | 7,575  | 20,761  | 9,586  | 14,322 | 8,449 | 98   | 62,321  |
| 2007                   | 36   | 75   | 1,576 | 8,580  | 26,215  | 39,498 | 6,640  | 5,604 | 40   | 88,264  |
| 2008                   | -    | -    | 66    | 4,463  | 11,873  | 6,968  | 3,635  | 3,413 | --   | 30,418  |
| 2009                   | -    | -    | -     | 4,497  | 41,039  | 30,280 | 6,693  | 2,009 | --   | 84,518  |
| 2010                   | -    | -    | 992   | 3,361  | 11,662  | 24,409 | 9,577  | 3,318 | --   | 53,319  |
| 2011                   | 22   | 75   | 826   | 3,720  | 12,426  | 16,590 | 12,084 | 2,997 | 16   | 48,756  |
| 2012                   | 23   | 380  | 2,106 | 6,441  | 16,342  | 21,295 | 15,332 | 5,371 | 18   | 67,308  |
| 2013                   | 479  | 693  | 1,200 | 7,822  | 19,201  | 36,036 | 12,343 | 7,761 | --   | 85,535  |
| 2014                   | 87   | 136  | 3,714 | 7,425  | 41,938  | 35,865 | 26,281 | 6,060 | --   | 121,506 |
| 2015                   | 60   | 152  | 1,749 | 3,473  | 22,240  | 11,192 | 19,759 | 7,414 | --   | 66,039  |
| 2016                   | 82   | 18   | 1,081 | 3,266  | 9,019   | 7,437  | 15,477 | 2,484 | --   | 38,864  |
| 2017                   | 17   | 60   | 500   | 2,503  | 12,754  | 14,667 | 9,343  | 2,465 | --   | 42,309  |
| 2018 <sup>b/</sup>     | 54   | 19   | 1,165 | 2,558  | 12,803  | 29,485 | 14,744 | 3,001 | --   | 63,829  |

a/ Monthly totals are the sum of statistical weeks with closest fit to the calendar month. Since 1981, data from sampled ports only. Effort consists of salmon angler trips only. Astoria area includes Astoria, Warrenton, and Hammond; Tillamook area includes Garibaldi and Pacific City; New port area includes Depoe Bay and New port; Coos Bay area includes Florence, Winchester Bay, and Coos Bay; Brookings area includes Gold Beach and Brookings. Values include state-waters only terminal area fisheries.

b/ Preliminary.

TABLE A-10. Oregon ocean recreational salmon landings in numbers of fish by catch area and month.<sup>a/</sup> (Page 1 of 4)

| Year or Average    | Mar.           | Apr. | May | June | July  | Aug.  | Sept. | Oct.  | Nov. | Season | May         | June  | July   | Aug.   | Sept. | Oct. | Season |
|--------------------|----------------|------|-----|------|-------|-------|-------|-------|------|--------|-------------|-------|--------|--------|-------|------|--------|
|                    | <b>CHINOOK</b> |      |     |      |       |       |       |       |      |        | <b>COHO</b> |       |        |        |       |      |        |
| <u>Astoria</u>     |                |      |     |      |       |       |       |       |      |        |             |       |        |        |       |      |        |
| 1981-1985          | -              | -    | 29  | 922  | 2,427 | 1,902 | 729   | -     | -    | 5,364  | 1,699       | 4,463 | 16,455 | 11,211 | 5,509 | -    | 33,780 |
| 1986-1990          | -              | -    | 29  | 127  | 954   | 1,459 | 87    | -     | -    | 2,246  | -           | 1,825 | 15,220 | 14,456 | 1,307 | -    | 28,506 |
| 1991-1995          | -              | -    | -   | 81   | 224   | 302   | 63    | -     | -    | 609    | -           | 2,409 | 10,831 | 9,892  | 2,332 | -    | 23,657 |
| 1996-2000          | -              | -    | -   | -    | 197   | 223   | 38    | -     | -    | 403    | -           | -     | 3,775  | 3,675  | 935   | -    | 7,257  |
| 2001-2005          | -              | -    | 33  | 127  | 774   | 1,605 | 241   | 3     | -    | 2,704  | -           | 212   | 6,991  | 14,070 | 2,020 | -    | 23,165 |
| 2006               | -              | -    | -   | -    | 81    | 370   | 58    | -     | -    | 509    | -           | -     | 1,616  | 3,560  | 235   | -    | 5,411  |
| 2007               | -              | -    | -   | -    | 81    | 457   | 56    | -     | -    | 594    | -           | -     | 3,812  | 13,807 | 778   | -    | 18,397 |
| 2008               | -              | -    | 17  | 152  | 343   | 305   | -     | -     | -    | 817    | -           | 101   | 1,108  | 982    | -     | -    | 2,191  |
| 2009               | -              | -    | -   | 4    | 422   | 543   | 11    | -     | -    | 980    | -           | 138   | 9,593  | 9,330  | 358   | -    | 19,419 |
| 2010               | -              | -    | -   | 37   | 388   | 1,321 | 66    | -     | -    | 1,812  | -           | 12    | 1,479  | 4,404  | 213   | -    | 6,108  |
| 2011               | -              | -    | -   | 129  | 147   | 1,264 | 79    | -     | -    | 1,619  | -           | 178   | 981    | 4,132  | 755   | -    | 6,046  |
| 2012               | -              | -    | -   | 578  | 650   | 431   | 45    | -     | -    | 1,704  | -           | 86    | 615    | 740    | 231   | -    | 1,672  |
| 2013               | -              | -    | -   | 731  | 323   | 792   | 72    | -     | -    | 1,918  | -           | 1,143 | 991    | 1,706  | 173   | -    | 4,013  |
| 2014               | -              | -    | 21  | 150  | 628   | 1,402 | 105   | -     | -    | 2,306  | -           | 391   | 5,030  | 8,503  | 2,816 | -    | 16,740 |
| 2015               | -              | -    | 28  | 259  | 434   | 1,030 | 1,006 | -     | -    | 2,757  | -           | 732   | 3,764  | 2,872  | 1,472 | -    | 8,840  |
| 2016               | -              | -    | -   | -    | 653   | 387   | -     | -     | -    | 1,040  | -           | -     | 915    | 1,739  | -     | -    | 2,654  |
| 2017               | -              | -    | -   | 330  | 567   | 1,011 | -     | -     | -    | 1,908  | -           | 13    | 2,249  | 4,308  | -     | -    | 6,570  |
| 2018 <sup>b/</sup> | -              | -    | -   | 120  | 150   | 415   | 4     | -     | -    | 689    | -           | 36    | 1,393  | 5,680  | 19    | -    | 7,128  |
| <u>Tillamook</u>   |                |      |     |      |       |       |       |       |      |        |             |       |        |        |       |      |        |
| 1981-1985          | -              | 0    | 18  | 28   | 790   | 582   | 117   | 42    | -    | 1,533  | 89          | 855   | 10,321 | 8,671  | 766   | 3    | 20,171 |
| 1986-1990          | -              | 0    | 10  | 67   | 441   | 864   | 486   | --    | --   | 1,766  | 29          | 1,993 | 12,423 | 8,726  | 1,827 | 63   | 24,621 |
| 1991-1995          | -              | -    | 62  | 140  | 380   | 186   | 169   | 1,237 | -    | 1,084  | 26          | 1,457 | 11,796 | 3,732  | 717   | -    | 12,184 |
| 1996-2000          | -              | -    | 70  | 10   | 65    | 31    | 502   | 494   | --   | 1,188  | -           | -     | 976    | 6      | 9     | -    | 602    |
| 2001-2005          | 6              | 4    | 51  | 331  | 1,890 | 1,240 | 1,181 | 939   | 31   | 5,668  | 2           | 1,663 | 7,354  | 2,212  | 66    | 20   | 10,979 |
| 2006               | 0              | 0    | 40  | 75   | 204   | 14    | 1,079 | 1,944 | 49   | 3,405  | -           | 184   | 1,055  | -      | 119   | -    | 1,358  |
| 2007               | -              | 0    | 41  | 58   | 109   | 241   | 507   | 474   | --   | 1,430  | 2           | 1,206 | 4,305  | 6,926  | 124   | -    | 12,563 |
| 2008               | -              | -    | -   | 2    | -     | 3     | 262   | 201   | --   | 468    | -           | 43    | 220    | 930    | 45    | 3    | 1,241  |
| 2009               | -              | -    | -   | 4    | 23    | 20    | 92    | 226   | -    | 365    | -           | 1,141 | 12,672 | 9,456  | 310   | 6    | 23,585 |
| 2010               | -              | -    | 12  | 72   | 112   | 190   | 323   | 122   | -    | 831    | -           | 323   | 1,392  | 1,390  | 268   | -    | 3,373  |
| 2011               | 0              | 0    | 4   | 29   | 128   | 182   | 574   | 207   | -    | 1,124  | -           | 366   | 1,535  | 1,288  | 2,532 | -    | 5,721  |
| 2012               | 0              | 1    | 79  | 102  | 133   | 429   | 1,008 | 419   | -    | 2,171  | -           | 13    | 423    | 1,302  | 1,424 | -    | 3,162  |
| 2013               | 0              | 21   | 28  | 82   | 189   | 156   | 709   | 712   | -    | 1,897  | -           | -     | 2,034  | 777    | 812   | 12   | 3,635  |
| 2014               | 0              | 0    | 84  | 16   | 385   | 236   | 703   | 111   | -    | 1,535  | -           | 641   | 10,479 | 5,817  | 9,692 | 49   | 26,678 |
| 2015               | 0              | 2    | 88  | 26   | 63    | 140   | 1,677 | 1,437 | -    | 3,433  | -           | 37    | 2,453  | 1,465  | 1,000 | 19   | 4,974  |
| 2016               | 0              | 0    | 124 | 179  | 30    | 131   | 687   | 70    | -    | 1,221  | -           | 158   | 188    | 2      | 1,426 | 22   | 1,796  |
| 2017               | 0              | 0    | 76  | 80   | 89    | 141   | 424   | 35    | -    | 845    | -           | 86    | 901    | 1,440  | 1,252 | -    | 3,679  |
| 2018 <sup>b/</sup> | 0              | 4    | 19  | 28   | 66    | 366   | 160   | 63    | -    | 706    | -           | 25    | 274    | 1,652  | 858   | -    | 2,809  |

TABLE A-10. Oregon ocean recreational salmon landings in numbers of fish by catch area and month. <sup>a/</sup> (Page 2 of 4)

| Year or Average    | Mar.           | Apr. | May | June  | July  | Aug.   | Sept. | Oct. | Nov. | Season | May         | June   | July   | Aug.   | Sept.  | Oct. | Season |
|--------------------|----------------|------|-----|-------|-------|--------|-------|------|------|--------|-------------|--------|--------|--------|--------|------|--------|
|                    | <b>CHINOOK</b> |      |     |       |       |        |       |      |      |        | <b>COHO</b> |        |        |        |        |      |        |
| <u>New port</u>    |                |      |     |       |       |        |       |      |      |        |             |        |        |        |        |      |        |
| 1981-1985          | -              | -    | 18  | 344   | 1,462 | 942    | 89    | --   | -    | 2,706  | 126         | 3,484  | 22,849 | 19,232 | 2,241  | -    | 46,040 |
| 1986-1990          | -              | -    | 68  | 497   | 1,687 | 1,029  | 601   | -    | -    | 3,649  | 662         | 9,013  | 46,079 | 23,917 | 3,429  | -    | 82,281 |
| 1991-1995          | -              | -    | 44  | 143   | 1,155 | 507    | 65    | 28   | -    | 1,113  | 31          | 8,315  | 36,626 | 11,925 | 1,119  | -    | 40,251 |
| 1996-2000          | -              | -    | 26  | 44    | 262   | 408    | 95    | 3    | -    | 837    | -           | -      | 8,151  | 30     | 7      | -    | 3,286  |
| 2001-2005          | 0              | 25   | 79  | 475   | 3,829 | 3,126  | 1,445 | 375  | -    | 9,354  | 2           | 3,466  | 12,245 | 4,402  | 79     | 2    | 19,484 |
| 2006               | 2              | 1    | 17  | 77    | 326   | 41     | 128   | 80   | -    | 672    | -           | 101    | 3,970  | 10     | 473    | -    | 4,554  |
| 2007               | 1              | 0    | 13  | 82    | 150   | 163    | 28    | 0    | 16   | 453    | -           | 2,715  | 6,516  | 5,982  | 175    | -    | 15,388 |
| 2008               | -              | -    | -   | -     | 3     | -      | -     | -    | -    | 3      | -           | 106    | 865    | 1,820  | -      | -    | 2,791  |
| 2009               | -              | -    | -   | 2     | 6     | 25     | -     | -    | -    | 33     | -           | 2,564  | 17,733 | 14,694 | 447    | -    | 35,438 |
| 2010               | -              | -    | 55  | 52    | 135   | 474    | 88    | -    | -    | 804    | -           | 27     | 551    | 6,283  | 966    | -    | 7,827  |
| 2011               | 0              | 6    | 21  | 44    | 111   | 52     | 234   | -    | -    | 468    | -           | 179    | 1,703  | 385    | 3,680  | -    | 5,947  |
| 2012               | 21             | 95   | 60  | 56    | 223   | 481    | 1,034 | 27   | -    | 1,997  | -           | 11     | 1,046  | 2,796  | 4,727  | -    | 8,580  |
| 2013               | 231            | 123  | 28  | 126   | 498   | 251    | 305   | 76   | -    | 1,638  | -           | -      | 2,648  | 1,779  | 1,517  | 7    | 5,951  |
| 2014               | 10             | 23   | 113 | 43    | 723   | 606    | 431   | 20   | -    | 1,969  | -           | 2,269  | 18,001 | 11,786 | 13,547 | -    | 45,603 |
| 2015               | 30             | 3    | 45  | 32    | 151   | 39     | 393   | 14   | -    | 707    | -           | 213    | 6,755  | 1,011  | 1,695  | 3    | 9,677  |
| 2016               | 28             | 5    | 2   | 14    | 117   | 348    | 135   | 6    | -    | 655    | -           | 29     | 582    | 18     | 1,793  | -    | 2,422  |
| 2017               | 0              | 0    | 6   | 31    | 207   | 467    | 47    | 4    | -    | 762    | -           | 36     | 3,419  | 1,943  | 2,192  | -    | 7,590  |
| 2018 <sup>b/</sup> | 0              | 0    | 23  | 58    | 409   | 490    | 217   | 11   | -    | 1,208  | -           | 2      | 2,125  | 6,042  | 3,095  | -    | 11,264 |
| <u>Coos Bay</u>    |                |      |     |       |       |        |       |      |      |        |             |        |        |        |        |      |        |
| 1981-1985          | -              | -    | 37  | 921   | 4,075 | 1,994  | 436   | --   | --   | 7,087  | 2,106       | 13,671 | 29,455 | 13,020 | 1,699  | --   | 53,301 |
| 1986-1990          | -              | -    | 75  | 1,213 | 4,999 | 2,206  | 963   | --   | --   | 9,249  | 453         | 10,859 | 39,003 | 12,888 | 1,568  | -    | 64,366 |
| 1991-1995          | -              | -    | 40  | 862   | 1,495 | 352    | 231   | 7    | --   | 2,033  | 465         | 12,213 | 39,345 | 10,077 | 2,713  | -    | 59,645 |
| 1996-2000          | -              | -    | 11  | 89    | 1,660 | 793    | 142   | 16   | --   | 2,702  | -           | -      | 2,042  | 22     | 3      | -    | 1,549  |
| 2001-2005          | 1              | 33   | 136 | 2,738 | 7,334 | 3,467  | 1,458 | 24   | --   | 15,190 | 11          | 2,357  | 8,406  | 1,264  | 34     | -    | 12,066 |
| 2006               | 0              | 3    | 11  | 388   | 3,225 | 927    | 656   | 0    | --   | 5,210  | -           | 184    | 3,321  | 26     | 42     | -    | 3,573  |
| 2007               | 2              | 0    | 18  | 115   | 545   | 672    | 62    | 0    | --   | 1,414  | -           | 813    | 8,402  | 3,509  | 12     | -    | 12,736 |
| 2008               | -              | -    | -   | 7     | 3     | -      | -     | -    | --   | 10     | -           | 621    | 1,726  | 1,381  | -      | -    | 3,728  |
| 2009               | -              | -    | -   | 3     | 7     | 2      | -     | -    | --   | 12     | -           | 1,154  | 7,596  | 1,175  | 42     | -    | 9,967  |
| 2010               | -              | -    | 8   | 83    | 133   | 444    | 28    | --   | --   | 696    | -           | 18     | 238    | 663    | 8      | -    | 927    |
| 2011               | 0              | 1    | 31  | 88    | 254   | 389    | 248   | -    | 6    | 1,017  | -           | 11     | 330    | 338    | 411    | -    | 1,090  |
| 2012               | 0              | 12   | 391 | 529   | 502   | 1,348  | 749   | 60   | 8    | 3,599  | -           | 31     | 782    | 829    | 814    | -    | 2,456  |
| 2013               | 26             | 52   | 135 | 1,189 | 790   | 11,479 | 657   | 4    | --   | 14,332 | -           | 9      | 66     | 94     | 329    | -    | 498    |
| 2014               | 0              | 9    | 69  | 767   | 1,865 | 2,399  | 736   | 6    | --   | 5,851  | 1           | 620    | 4,371  | 1,672  | 3,255  | -    | 9,919  |
| 2015               | 0              | 3    | 18  | 209   | 187   | 197    | 744   | 3    | --   | 1,361  | -           | 208    | 2,633  | 81     | 1,731  | -    | 4,653  |
| 2016               | 4              | 4    | 2   | 44    | 91    | 213    | 318   | 0    | --   | 676    | -           | 58     | 410    | 59     | 959    | -    | 1,486  |
| 2017               | 0              | 6    | 7   | 28    | 212   | 199    | 121   | 0    | --   | 573    | -           | 241    | 1,452  | 557    | 1,146  | -    | 3,396  |
| 2018 <sup>b/</sup> | 0              | 0    | 6   | 52    | 180   | 311    | 246   | 0    | --   | 795    | -           | 4      | 579    | 887    | 2,981  | -    | 4,451  |



TABLE A-10. Oregon ocean recreational salmon landings in numbers of fish by catch area and month. <sup>a/</sup> (Page 3 of 4)

| Year or Average             | Mar. | Apr. | May   | June  | July   | Aug.   | Sept. | Oct.  | Nov. | Season | May   | June   | July    | Aug.   | Sept.  | Oct. | Season  |
|-----------------------------|------|------|-------|-------|--------|--------|-------|-------|------|--------|-------|--------|---------|--------|--------|------|---------|
| CHINOOK                     |      |      |       |       |        |        |       |       |      |        | COHO  |        |         |        |        |      |         |
| <u>Brookings</u>            |      |      |       |       |        |        |       |       |      |        |       |        |         |        |        |      |         |
| 1981-1985                   | -    | -    | 853   | 2,140 | 9,162  | 4,185  | 566   | 507   | 14   | 16,395 | 247   | 3,102  | 7,541   | 2,962  | 165    | 4    | 12,102  |
| 1986-1990                   | -    | -    | 415   | 5,447 | 7,146  | 4,010  | 1,436 | 872   | -    | 18,803 | 350   | 3,346  | 11,414  | 3,280  | 467    | 16   | 18,863  |
| 1991-1995                   | -    | -    | 816   | 1,506 | 1,489  | 533    | 819   | 870   | -    | 4,517  | 97    | 3,448  | 5,118   | 994    | 386    | 3    | 6,341   |
| 1996-2000                   | -    | -    | 327   | 861   | 924    | 2,899  | 389   | 702   | -    | 6,102  | 17    | 11     | 21      | 32     | 11     | 9    | 75      |
| 2001-2005                   | -    | -    | 494   | 1,815 | 807    | 1,931  | 1,510 | 469   | -    | 7,027  | -     | 100    | 143     | 62     | 18     | 8    | 323     |
| 2006                        | -    | -    | 52    | 513   | 186    | -      | 644   | 397   | -    | 1,792  | 2     | 474    | 117     | -      | 81     | 7    | 681     |
| 2007                        | -    | -    | 14    | 42    | 116    | 2,000  | 343   | 535   | -    | 3,050  | -     | 132    | 606     | 809    | 19     | 3    | 1,569   |
| 2008                        | -    | -    | -     | -     | -      | -      | -     | 280   | -    | 280    | -     | 449    | 1,273   | 409    | -      | 3    | 2,134   |
| 2009                        | -    | -    | -     | -     | 9      | 23     | 163   | -     | -    | 195    | -     | 6      | 1,123   | 59     | 9      | -    | 1,197   |
| 2010                        | -    | -    | 7     | 2     | 3      | 24     | 247   | 541   | -    | 824    | -     | -      | 19      | 25     | 16     | -    | 60      |
| 2011                        | -    | -    | 148   | 24    | 7      | 328    | 196   | 233   | -    | 936    | -     | -      | 12      | 8      | 8      | -    | 28      |
| 2012                        | -    | -    | 334   | 904   | 2,329  | 4,014  | 1,208 | 534   | -    | 9,323  | -     | 15     | 144     | 48     | -      | 2    | 209     |
| 2013                        | -    | -    | 22    | 1,815 | 4,942  | 2,836  | 20    | 814   | -    | 10,449 | -     | 8      | 302     | 123    | -      | 6    | 439     |
| 2014                        | -    | -    | 817   | 477   | 3,341  | 1,053  | 16    | 1,115 | -    | 6,819  | 3     | 31     | 528     | 5      | -      | -    | 567     |
| 2015                        | -    | -    | 30    | 97    | 149    | 47     | 69    | 792   | -    | 1,184  | -     | 5      | 118     | 5      | 4      | 6    | 138     |
| 2016                        | -    | -    | 0     | 82    | 72     | 3      | 59    | 287   | -    | 503    | -     | 11     | 36      | 3      | 2      | -    | 52      |
| 2017                        | -    | -    | -     | -     | -      | -      | -     | 506   | -    | 506    | -     | -      | -       | -      | -      | -    | -       |
| 2018 <sup>b/</sup>          | -    | -    | 105   | 149   | 458    | 448    | 4     | 429   | -    | 1,593  | -     | 3      | 3       | 12     | -      | -    | 18      |
| <u>South of Cape Falcon</u> |      |      |       |       |        |        |       |       |      |        |       |        |         |        |        |      |         |
| 1981-1985                   | -    | -    | 908   | 2,071 | 15,489 | 7,703  | 1,208 | 516   | 9    | 27,722 | 1,988 | 21,112 | 70,167  | 43,292 | 4,870  | 4    | 131,613 |
| 1986-1990                   | -    | -    | 535   | 7,125 | 14,274 | 8,109  | 3,075 | 349   | --   | 33,467 | 1,259 | 25,210 | 108,918 | 48,811 | 5,926  | 16   | 190,131 |
| 1991-1995                   | -    | -    | 798   | 2,349 | 4,518  | 844    | 1,004 | 1,024 | 28   | 8,747  | 554   | 19,075 | 92,885  | 11,088 | 1,663  | 3    | 84,075  |
| 1996-2000                   | -    | -    | 434   | 1,004 | 2,911  | 4,132  | 1,128 | 1,204 | 14   | 10,828 | 17    | 11     | 5,092   | 74     | 18     | 8    | 5,203   |
| 2001-2005                   | 3    | 61   | 761   | 5,358 | 13,860 | 9,764  | 5,595 | 1,807 | 31   | 37,238 | 9     | 6,560  | 28,149  | 7,940  | 177    | 25   | 42,851  |
| 2006                        | 2    | 4    | 120   | 1,053 | 3,941  | 982    | 2,507 | 2,421 | 49   | 11,079 | 2     | 943    | 8,463   | 36     | 715    | 7    | 10,166  |
| 2007                        | 3    | 0    | 86    | 297   | 920    | 3,076  | 940   | 1,009 | 16   | 6,347  | 2     | 4,866  | 19,829  | 17,226 | 330    | 3    | 42,256  |
| 2008                        | -    | -    | -     | 9     | 6      | 3      | 262   | 481   | --   | 761    | -     | 1,219  | 4,084   | 4,540  | 45     | 6    | 9,894   |
| 2009                        | -    | -    | -     | 9     | 45     | 70     | 255   | 226   | --   | 605    | -     | 4,865  | 39,124  | 25,384 | 808    | 6    | 70,187  |
| 2010                        | -    | -    | 82    | 209   | 383    | 1,132  | 686   | 663   | --   | 3,155  | -     | 368    | 2,200   | 8,361  | 1,258  | -    | 12,187  |
| 2011                        | 0    | 7    | 204   | 185   | 500    | 951    | 1,252 | 440   | 6    | 3,545  | -     | 556    | 3,580   | 2,019  | 6,631  | -    | 12,786  |
| 2012                        | 21   | 108  | 864   | 1,591 | 3,187  | 6,272  | 3,999 | 1,040 | 8    | 17,090 | -     | 70     | 2,395   | 4,975  | 6,965  | 2    | 14,407  |
| 2013                        | 257  | 196  | 213   | 3,212 | 6,419  | 14,722 | 1,691 | 1,606 | --   | 28,316 | -     | 17     | 5,050   | 2,773  | 2,658  | 25   | 10,523  |
| 2014                        | 10   | 32   | 1,083 | 1,303 | 6,314  | 4,294  | 1,886 | 1,252 | --   | 16,174 | 4     | 3,561  | 33,379  | 19,280 | 26,494 | 49   | 82,767  |
| 2015                        | 30   | 8    | 181   | 364   | 550    | 423    | 2,883 | 2,246 | --   | 6,685  | -     | 463    | 11,959  | 2,562  | 4,430  | 28   | 19,442  |
| 2016                        | 32   | 9    | 128   | 319   | 310    | 695    | 1,199 | 363   | --   | 3,055  | -     | 256    | 1,216   | 82     | 4,180  | 22   | 5,756   |
| 2017                        | 0    | 6    | 89    | 139   | 508    | 807    | 592   | 545   | --   | 2,686  | -     | 363    | 5,772   | 3,940  | 4,590  | -    | 14,665  |
| 2018 <sup>b/</sup>          | 0    | 4    | 153   | 287   | 1,113  | 1,615  | 627   | 503   | --   | 4,302  | -     | 34     | 2,981   | 8,593  | 6,934  | -    | 18,542  |

TABLE A-10. Oregon ocean recreational salmon landings in numbers of fish by catch area and month. <sup>a/</sup> (Page 4 of 4)

| Year or Average        | Mar. | Apr. | May   | June  | July   | Aug.   | Sept. | Oct.  | Nov. | Season | May   | June   | July    | Aug.   | Sept.  | Oct. | Season  |
|------------------------|------|------|-------|-------|--------|--------|-------|-------|------|--------|-------|--------|---------|--------|--------|------|---------|
| CHINOOK                |      |      |       |       |        |        |       |       |      |        | COHO  |        |         |        |        |      |         |
| <b>Total All Areas</b> |      |      |       |       |        |        |       |       |      |        |       |        |         |        |        |      |         |
| 1981-1985              | -    | -    | 915   | 2,809 | 17,916 | 9,605  | 1,499 | 516   | 9    | 33,085 | 2,412 | 20,297 | 86,622  | 54,503 | 7,625  | 4    | 165,393 |
| 1986-1990              | -    | -    | 541   | 7,227 | 15,227 | 9,276  | 3,093 | 349   | --   | 35,713 | 1,259 | 26,670 | 124,138 | 60,376 | 6,187  | 16   | 218,637 |
| 1991-1995              | -    | -    | 798   | 2,365 | 3,613  | 1,085  | 1,055 | 1,024 | 28   | 9,234  | 554   | 19,677 | 80,495  | 19,002 | 3,528  | 3    | 103,001 |
| 1996-2000              | -    | -    | 434   | 1,004 | 3,069  | 4,355  | 1,150 | 1,204 | 14   | 11,231 | 17    | 11     | 8,112   | 3,750  | 580    | 8    | 12,459  |
| 2001-2005              | 3    | 61   | 767   | 5,434 | 14,634 | 11,369 | 5,836 | 1,808 | 31   | 39,942 | 9     | 6,645  | 35,139  | 22,010 | 2,198  | 25   | 66,017  |
| 2006                   | 2    | 4    | 120   | 1,053 | 4,022  | 1,352  | 2,565 | 2,421 | 49   | 11,588 | 2     | 943    | 10,079  | 3,596  | 950    | 7    | 15,577  |
| 2007                   | 3    | 0    | 86    | 297   | 1,001  | 3,533  | 996   | 1,009 | 16   | 6,941  | 2     | 4,866  | 23,641  | 31,033 | 1,108  | 3    | 60,653  |
| 2008                   | -    | -    | 17    | 161   | 349    | 308    | 262   | 481   | --   | 1,578  | -     | 1,320  | 5,192   | 5,522  | 45     | 6    | 12,085  |
| 2009                   | -    | -    | -     | 13    | 467    | 613    | 266   | 226   | --   | 1,585  | -     | 5,003  | 48,717  | 34,714 | 1,166  | 6    | 89,606  |
| 2010                   | -    | -    | 82    | 246   | 771    | 2,453  | 752   | 663   | --   | 4,967  | -     | 380    | 3,679   | 12,765 | 1,471  | -    | 18,295  |
| 2011                   | 0    | 7    | 204   | 314   | 647    | 2,215  | 1,331 | 440   | 6    | 5,164  | -     | 734    | 4,561   | 6,151  | 7,386  | -    | 18,832  |
| 2012                   | 21   | 108  | 864   | 2,169 | 3,837  | 6,703  | 4,044 | 1,040 | 8    | 18,794 | -     | 156    | 3,010   | 5,715  | 7,196  | 2    | 16,079  |
| 2013                   | 257  | 196  | 213   | 3,943 | 6,742  | 15,514 | 1,763 | 1,606 | --   | 30,234 | -     | 1,160  | 6,041   | 4,479  | 2,831  | 25   | 14,536  |
| 2014                   | 10   | 32   | 1,104 | 1,453 | 6,942  | 5,696  | 1,991 | 1,252 | --   | 18,480 | 4     | 3,952  | 38,409  | 27,783 | 29,310 | 49   | 99,507  |
| 2015                   | 30   | 8    | 209   | 623   | 984    | 1,453  | 3,889 | 2,246 | --   | 9,442  | -     | 1,195  | 15,723  | 5,434  | 5,902  | 28   | 28,282  |
| 2016                   | 32   | 9    | 128   | 319   | 963    | 1,082  | 1,199 | 363   | --   | 4,095  | -     | 256    | 2,131   | 1,821  | 4,180  | 22   | 8,410   |
| 2017                   | 0    | 6    | 89    | 469   | 1,075  | 1,818  | 592   | 545   | --   | 4,594  | -     | 376    | 8,021   | 8,248  | 4,590  | -    | 21,235  |
| 2018 <sup>b/</sup>     | 0    | 4    | 153   | 407   | 1,263  | 2,030  | 631   | 503   | --   | 4,991  | -     | 70     | 4,374   | 14,273 | 6,953  | -    | 25,670  |

a/ Monthly totals are the sum of statistical weeks with closest fit to the calendar month and may include illegal catch. Data is from sampled ports only. Astoria area includes Astoria, Warrenton, and Hammond; Tillamook area includes Garibaldi and Pacific City; New port area includes Depoe Bay and New port; Coos Bay area includes Florence, Winchester Bay, and Coos Bay; Brookings area includes Gold Beach and Brookings. Values include state-w aters only, terminal area fisheries.

b/ Preliminary.

TABLE A-11. Summary of Washington non-Indian commercial troll salmon fishing effort in days fished and landings in numbers of fish by catch area. (Page 1 of 2)

| Year<br>or Avg.         | Ilwaco | Westport | La Push | Neah Bay <sup>av</sup> | Washington |        |            | Alaska | Total  |
|-------------------------|--------|----------|---------|------------------------|------------|--------|------------|--------|--------|
|                         |        |          |         |                        | Subtotal   | Oregon | California |        |        |
| <b>DAYS FISHED</b>      |        |          |         |                        |            |        |            |        |        |
| 1981-1985               | 1,961  | 5,194    | 1,553   | 3,111                  | 11,819     | 244    | 18         | 25     | 12,106 |
| 1986-1990               | 871    | 2,619    | 300     | 928                    | 4,718      | 100    | 0          | 3      | 4,821  |
| 1991-1995               | 335    | 2,079    | 243     | 1,421                  | 3,475      | 100    | 0          | 3      | 3,578  |
| 1996-2000               | 20     | 128      | 55      | 235                    | 431        | 30     | 0          | 0      | 460    |
| 2001-2005               | 82     | 593      | 195     | 454                    | 1,324      | 30     | 0          | 0      | 1,354  |
| 2006                    | 134    | 367      | 597     | 340                    | 1,438      | -      | 0          | 0      | 1,438  |
| 2007                    | 100    | 638      | 436     | 100                    | 1,274      | -      | 0          | 0      | 1,274  |
| 2008                    | 128    | 655      | 331     | 109                    | 1,223      | -      | -          | 0      | 1,223  |
| 2009                    | 87     | 1,144    | 564     | 196                    | 1,991      | -      | -          | 0      | 1,991  |
| 2010                    | 92     | 1,620    | 426     | 298                    | 2,436      | -      | -          | 0      | 2,436  |
| 2011                    | 92     | 1,133    | 669     | 170                    | 2,064      | -      | -          | 0      | 2,064  |
| 2012                    | 107    | 654      | 1,045   | 254                    | 2,060      | -      | -          | 0      | 2,060  |
| 2013                    | 130    | 1,498    | 435     | 245                    | 2,308      | -      | -          | 0      | 2,308  |
| 2014                    | 394    | 791      | 716     | 121                    | 2,022      | -      | -          | 0      | 2,022  |
| 2015                    | 275    | 1,447    | 657     | 266                    | 2,645      | -      | -          | 0      | 2,645  |
| 2016                    | 188    | 881      | 411     | 148                    | 1,628      | -      | -          | 0      | 1,628  |
| 2017                    | 93     | 1,411    | 502     | 367                    | 2,373      | -      | -          | 0      | 2,373  |
| 2018 <sup>av</sup>      | 54     | 1,194    | 360     | 541                    | 2,149      | -      | -          | 0      | 2,149  |
| <b>CHINOOK LANDINGS</b> |        |          |         |                        |            |        |            |        |        |
| 1981-1985               | 9,172  | 34,995   | 7,061   | 10,074                 | 61,303     | 901    | 184        | 203    | 62,591 |
| 1986-1990               | 5,089  | 27,281   | 4,251   | 9,601                  | 46,222     | 1,431  | 0          | 1      | 47,654 |
| 1991-1995               | 1,386  | 13,907   | 2,769   | 12,082                 | 25,628     | 1,431  | 0          | 1      | 27,060 |
| 1996-2000               | 184    | 1,329    | 1,503   | 7,048                  | 10,018     | 812    | 0          | 0      | 10,830 |
| 2001-2005               | 1,293  | 17,254   | 4,481   | 17,310                 | 40,338     | 812    | 0          | 0      | 41,149 |
| 2006                    | 2,124  | 2,557    | 7,877   | 4,211                  | 16,769     | -      | 0          | 0      | 16,769 |
| 2007                    | 500    | 8,111    | 5,103   | 554                    | 14,268     | -      | 0          | 0      | 14,268 |
| 2008                    | 1,242  | 4,673    | 2,222   | 499                    | 8,636      | -      | -          | 0      | 8,636  |
| 2009                    | 261    | 8,132    | 2,722   | 1,201                  | 12,316     | -      | -          | 0      | 12,316 |
| 2010                    | 886    | 34,171   | 5,911   | 4,131                  | 45,099     | -      | -          | 0      | 45,099 |
| 2011                    | 1,032  | 12,518   | 10,418  | 2,934                  | 26,902     | -      | -          | 0      | 26,902 |
| 2012                    | 2,250  | 8,781    | 19,722  | 6,102                  | 36,855     | -      | -          | 0      | 36,855 |
| 2013                    | 560    | 25,171   | 8,388   | 5,971                  | 40,090     | -      | -          | 0      | 40,090 |
| 2014                    | 8,980  | 12,550   | 13,851  | 3,326                  | 38,707     | -      | -          | 0      | 38,707 |
| 2015                    | 4,025  | 33,410   | 13,180  | 4,698                  | 55,313     | -      | -          | 0      | 55,313 |
| 2016                    | 1,659  | 9,724    | 4,173   | 1,788                  | 17,344     | -      | -          | 0      | 17,344 |
| 2017                    | 574    | 21,177   | 4,831   | 6,351                  | 32,933     | -      | -          | 0      | 32,933 |
| 2018 <sup>av</sup>      | 131    | 12,941   | 3,208   | 7,276                  | 23,556     | -      | -          | 0      | 23,556 |

TABLE A-11. Summary of Washington non-Indian commercial troll salmon fishing effort in days fished and landings in numbers of fish by catch area. (Page 2 of 2)

| Year<br>or Avg.                   | Washington |          |         |                        |          | Oregon | California | Alaska | Total   |
|-----------------------------------|------------|----------|---------|------------------------|----------|--------|------------|--------|---------|
|                                   | Ilwaco     | Westport | La Push | Neah Bay <sup>a/</sup> | Subtotal |        |            |        |         |
| <b>COHO LANDINGS</b>              |            |          |         |                        |          |        |            |        |         |
| 1981-1985                         | 32,087     | 63,633   | 34,020  | 42,272                 | 152,480  | 8,260  | 33         | 876    | 161,649 |
| 1986-1990                         | 23,765     | 15,616   | 4,139   | 19,563                 | 54,379   | 1,501  | 0          | 103    | 55,983  |
| 1991-1995                         | 5,957      | 8,689    | 2,876   | 13,939                 | 27,800   | 1,501  | 0          | 103    | 29,404  |
| 1996-2000                         | 1,413      | 2,387    | 851     | 7,478                  | 8,881    | 0      | -          | 103    | 8,984   |
| 2001-2005                         | 929        | 3,240    | 1,555   | 1,231                  | 6,397    | 0      | -          | 103    | 6,500   |
| 2006                              | 74         | 184      | 766     | 241                    | 1,265    | -      | -          | 0      | 1,265   |
| 2007                              | 2,865      | 1,783    | 1,091   | 147                    | 5,886    | -      | -          | 0      | 5,886   |
| 2008                              | 77         | 1,132    | 490     | 7                      | 1,706    | -      | -          | 0      | 1,706   |
| 2009                              | 2,254      | 10,060   | 7,157   | 584                    | 20,055   | -      | -          | 0      | 20,055  |
| 2010                              | 151        | 1,657    | 209     | 87                     | 2,104    | -      | -          | 0      | 2,104   |
| 2011                              | 38         | 1,708    | 1,167   | 140                    | 3,053    | -      | -          | 0      | 3,053   |
| 2012                              | 89         | 856      | 2,119   | 204                    | 3,268    | -      | -          | 0      | 3,268   |
| 2013                              | 127        | 3,759    | 1,846   | 309                    | 6,041    | -      | -          | 0      | 6,041   |
| 2014                              | 2,239      | 8,525    | 4,602   | 41                     | 15,407   | -      | -          | 0      | 15,407  |
| 2015                              | 690        | 1,839    | 309     | 34                     | 2,872    | -      | -          | 0      | 2,872   |
| 2016                              | -          | -        | -       | -                      | -        | -      | -          | -      | -       |
| 2017                              | 131        | 524      | 402     | 311                    | 1,368    | -      | -          | -      | 1,368   |
| 2018 <sup>b/</sup>                | 33         | 366      | 488     | 405                    | 1,292    | -      | -          | -      | 1,292   |
| <b>PINK LANDINGS<sup>c/</sup></b> |            |          |         |                        |          |        |            |        |         |
| 1981-1985                         | 1,272      | 7,589    | 22,914  | 107,620                | 139,394  | 342    | 1          | 263    | 140,000 |
| 1986-1990                         | 45         | 412      | 364     | 18,894                 | 19,714   | 19     | 0          | 0      | 19,733  |
| 1991-1995                         | 30         | 11       | 1,773   | 23,992                 | 25,792   | 19     | 0          | 0      | 25,811  |
| 1996-2000                         | 0          | 2        | 7       | 21                     | 29       | 19     | 0          | 0      | 48      |
| 2001-2005                         | 13         | 18       | 38      | 29                     | 97       | 19     | 0          | 0      | 116     |
| 2006                              | 0          | 0        | 0       | 0                      | 0        | -      | 0          | 0      | 0       |
| 2007                              | 0          | 1        | 122     | 24                     | 147      | -      | 0          | 0      | 147     |
| 2008                              | 0          | 0        | 0       | 0                      | 0        | -      | -          | 0      | 0       |
| 2009                              | 0          | 9        | 117     | 9                      | 135      | -      | -          | 0      | 135     |
| 2010                              | 0          | 0        | 0       | 0                      | 0        | -      | -          | 0      | 0       |
| 2011                              | 0          | 110      | 98      | 7                      | 215      | -      | -          | 0      | 215     |
| 2012                              | 0          | 0        | 0       | 0                      | 0        | -      | -          | 0      | 0       |
| 2013                              | 0          | 15       | 99      | 27                     | 141      | -      | -          | 0      | 141     |
| 2014                              | 0          | 0        | 0       | 0                      | 0        | -      | -          | 0      | 0       |
| 2015                              | 0          | 12       | 36      | 20                     | 68       | -      | -          | 0      | 68      |
| 2016                              | 0          | 0        | 0       | 0                      | 0        | -      | -          | 0      | 0       |
| 2017                              | 0          | 0        | 2       | 11                     | 13       | -      | -          | 0      | 13      |
| 2018                              | 0          | 0        | 0       | 0                      | 0        | -      | -          | 0      | 0       |

a/ Neah Bay data include landings from Strait of Juan de Fuca Area 4B.

b/ Preliminary.

c/ Landings primarily in odd-years only; averages are odd-year average.

TABLE A-12. Washington non-Indian commercial troll salmon fishing effort in days fished by catch area and month.<sup>a/</sup> (Page 1 of 2)

| Year or Avg.                 | May   | June | July  | Aug.  | Sept. <sup>b/</sup> | Oct. | Season |
|------------------------------|-------|------|-------|-------|---------------------|------|--------|
| <u>Neah Bay<sup>c/</sup></u> |       |      |       |       |                     |      |        |
| 1981-1985                    | 416   | 53   | 1,662 | 1,332 | 14                  | -    | 3,111  |
| 1986-1990                    | 480   | 178  | 8     | 434   | -                   | -    | 928    |
| 1991-1995                    | 652   | 416  | 296   | 406   | 132                 | -    | 1,421  |
| 1996-2000                    | 140   | 63   | 96    | 88    | -                   | -    | 235    |
| 2001-2005                    | 165   | 56   | 129   | 119   | 24                  | -    | 454    |
| 2006                         | 144   | 89   | 15    | 54    | 38                  | -    | 340    |
| 2007                         | 49    | 10   | 37    | 2     | 2                   | -    | 100    |
| 2008                         | 34    | 65   | 1     | 9     | 0                   | -    | 109    |
| 2009                         | 68    | 74   | 50    | 2     | 2                   | -    | 196    |
| 2010                         | 139   | 97   | 44    | 18    | 0                   | -    | 298    |
| 2011                         | 107   | 34   | 17    | 3     | 9                   | -    | 170    |
| 2012                         | 114   | 83   | 21    | 21    | 15                  | -    | 254    |
| 2013                         | 151   | -    | 90    | 4     | -                   | -    | 245    |
| 2014                         | 109   | 1    | 6     | 5     | -                   | -    | 121    |
| 2015                         | 180   | 66   | 14    | 3     | 3                   | -    | 266    |
| 2016                         | 85    | 56   | 3     | 4     | -                   | -    | 148    |
| 2017                         | 41    | 40   | 140   | 112   | 34                  | -    | 367    |
| 2018 <sup>d/</sup>           | 234   | 121  | 149   | 22    | 15                  | -    | 541    |
| <u>La Push</u>               |       |      |       |       |                     |      |        |
| 1981-1985                    | 175   | 25   | 1,199 | 505   | -                   | -    | 1,553  |
| 1986-1990                    | 186   | 110  | 5     | 136   | 15                  | -    | 300    |
| 1991-1995                    | 74    | 85   | 127   | 52    | 16                  | -    | 243    |
| 1996-2000                    | 36    | 23   | 12    | 8     | 5                   | -    | 55     |
| 2001-2005                    | 31    | 12   | 76    | 88    | 15                  | -    | 195    |
| 2006                         | 39    | 179  | 63    | 209   | 107                 | -    | 597    |
| 2007                         | 29    | 180  | 168   | 57    | 2                   | -    | 436    |
| 2008                         | 10    | 118  | 119   | 73    | 11                  | -    | 331    |
| 2009                         | 123   | 114  | 173   | 124   | 30                  | -    | 564    |
| 2010                         | 154   | 93   | 95    | 81    | 3                   | -    | 426    |
| 2011                         | 199   | 236  | 139   | 70    | 25                  | -    | 669    |
| 2012                         | 124   | 286  | 229   | 246   | 160                 | -    | 1,045  |
| 2013                         | 190   | -    | 175   | 70    | -                   | -    | 435    |
| 2014                         | 291   | 84   | 169   | 140   | 32                  | -    | 716    |
| 2015                         | 227   | -    | 194   | 174   | 62                  | -    | 657    |
| 2016                         | 213   | 56   | 111   | 31    | -                   | -    | 411    |
| 2017                         | 194   | 89   | 33    | 129   | 57                  | -    | 502    |
| 2018 <sup>d/</sup>           | 160   | 14   | 36    | 103   | 47                  | -    | 360    |
| <u>Westport</u>              |       |      |       |       |                     |      |        |
| 1981-1985                    | 2,109 | 250  | 2,790 | 1,087 | -                   | -    | 5,194  |
| 1986-1990                    | 1,723 | 614  | 855   | 390   | -                   | -    | 2,619  |
| 1991-1995                    | 852   | 552  | 352   | 235   | 309                 | -    | 2,079  |
| 1996-2000                    | 46    | 39   | 51    | 65    | 2                   | -    | 128    |
| 2001-2005                    | 207   | 73   | 151   | 129   | 55                  | -    | 593    |
| 2006                         | 176   | 113  | 21    | 33    | 24                  | -    | 367    |
| 2007                         | 367   | 63   | 149   | 55    | 4                   | -    | 638    |
| 2008                         | 202   | 170  | 103   | 131   | 49                  | -    | 655    |
| 2009                         | 276   | 363  | 209   | 194   | 102                 | -    | 1,144  |
| 2010                         | 218   | 668  | 362   | 329   | 43                  | -    | 1,620  |
| 2011                         | 300   | 386  | 292   | 135   | 20                  | -    | 1,133  |
| 2012                         | 126   | 264  | 202   | 39    | 23                  | -    | 654    |
| 2013                         | 380   | 498  | 206   | 331   | 83                  | -    | 1,498  |
| 2014                         | 189   | 103  | 222   | 192   | 85                  | -    | 791    |
| 2015                         | 411   | 418  | 283   | 273   | 62                  | -    | 1,447  |
| 2016                         | 349   | 247  | 134   | 151   | -                   | -    | 881    |
| 2017                         | 527   | 477  | 207   | 170   | 30                  | -    | 1,411  |
| 2018 <sup>d/</sup>           | 347   | 539  | 237   | 64    | 7                   | -    | 1,194  |

TABLE A-12. Washington non-Indian commercial troll salmon fishing effort in days fished by catch area and month. <sup>a/</sup>  
(Page 2 of 2)

| Year or Avg.           | May   | June  | July  | Aug.  | Sept. <sup>b/</sup> | Oct. | Season |
|------------------------|-------|-------|-------|-------|---------------------|------|--------|
| <b>Ilwaco</b>          |       |       |       |       |                     |      |        |
| 1981-1985              | 566   | 97    | 1,092 | 710   | 568                 | -    | 1,961  |
| 1986-1990              | 197   | 61    | 284   | 583   | 578                 | -    | 871    |
| 1991-1995              | 95    | 9     | 63    | 160   | 44                  | -    | 335    |
| 1996-2000              | 0     | 0     | -     | 48    | 11                  | -    | 20     |
| 2001-2005              | 15    | 5     | 24    | 29    | 14                  | -    | 82     |
| 2006                   | 71    | 54    | 1     | 2     | 6                   | -    | 134    |
| 2007                   | 22    | 27    | 10    | 31    | 10                  | -    | 100    |
| 2008                   | 34    | 80    | 3     | 8     | 3                   | -    | 128    |
| 2009                   | 7     | 13    | 20    | 43    | 4                   | -    | 87     |
| 2010                   | 23    | 22    | 23    | 17    | 7                   | -    | 92     |
| 2011                   | 42    | 43    | 1     | 3     | 3                   | -    | 92     |
| 2012                   | 5     | 76    | 14    | 2     | 10                  | -    | 107    |
| 2013                   | 47    | 51    | 15    | 10    | 7                   | -    | 130    |
| 2014                   | 250   | 49    | 42    | 35    | 18                  | -    | 394    |
| 2015                   | 177   | 26    | 11    | 26    | 35                  | -    | 275    |
| 2016                   | 78    | 48    | 30    | 32    | -                   | -    | 188    |
| 2017                   | 16    | 24    | 15    | 15    | 23                  | -    | 93     |
| 2018 <sup>d/</sup>     | 13    | 17    | 15    | 7     | 2                   | -    | 54     |
| <b>Statewide Total</b> |       |       |       |       |                     |      |        |
| 1981-1985              | 3,266 | 382   | 6,469 | 2,956 | 291                 | -    | 11,819 |
| 1986-1990              | 2,452 | 876   | 580   | 1,100 | 585                 | -    | 4,718  |
| 1991-1995              | 1,673 | 1,063 | 838   | 755   | 333                 | -    | 3,475  |
| 1996-2000              | 221   | 124   | 158   | 145   | 10                  | -    | 431    |
| 2001-2005              | 417   | 146   | 381   | 324   | 94                  | -    | 1,324  |
| 2006                   | 430   | 435   | 100   | 298   | 175                 | -    | 1,438  |
| 2007                   | 467   | 280   | 364   | 145   | 18                  | -    | 1,274  |
| 2008                   | 280   | 433   | 226   | 221   | 63                  | -    | 1,223  |
| 2009                   | 474   | 564   | 452   | 363   | 138                 | -    | 1,991  |
| 2010                   | 534   | 880   | 524   | 445   | 53                  | -    | 2,436  |
| 2011                   | 648   | 699   | 449   | 211   | 57                  | -    | 2,064  |
| 2012                   | 369   | 709   | 466   | 308   | 208                 | -    | 2,060  |
| 2013                   | 768   | 549   | 486   | 415   | 90                  | -    | 2,308  |
| 2014                   | 839   | 237   | 439   | 372   | 135                 | -    | 2,022  |
| 2015                   | 995   | 510   | 502   | 476   | 162                 | -    | 2,645  |
| 2016                   | 725   | 407   | 278   | 218   | -                   | -    | 1,628  |
| 2017                   | 778   | 630   | 395   | 426   | 144                 | -    | 2,373  |
| 2018 <sup>d/</sup>     | 754   | 691   | 437   | 196   | 71                  | -    | 2,149  |

a/ Summary of Washington Department of Fish and Wildlife fish receiving ticket information by statistical month, excluding Washington landings from Oregon, California, and Alaska.

b/ Data for September include any effort after September.

c/ Neah Bay area includes effort and catches from Strait of Juan de Fuca Area 4B.

d/ Preliminary.

TABLE A-13. Washington non-Indian commercial troll Chinook, coho, and pink salmon landings in numbers of fish by catch area and month.<sup>a/</sup> (Page 1 of 3)

| Year or Avg.                 | May     | June  | July  | Aug.  | Sept. <sup>b/</sup> | Season | May  | June | July   | Aug.   | Sept. <sup>b/</sup> | Season | May   | June | July   | Aug.    | Sept. <sup>b/</sup> | Season  |  |
|------------------------------|---------|-------|-------|-------|---------------------|--------|------|------|--------|--------|---------------------|--------|-------|------|--------|---------|---------------------|---------|--|
|                              | CHINOOK |       |       |       |                     |        | COHO |      |        |        |                     |        | PINKS |      |        |         |                     |         |  |
| <u>Neah Bay<sup>c/</sup></u> |         |       |       |       |                     |        |      |      |        |        |                     |        |       |      |        |         |                     |         |  |
| 1981-1985                    | 3,293   | 532   | 6,289 | 1,424 | 31                  | 10,074 | -    | -    | 43,965 | 15,853 | 100                 | 42,272 | 113   | 20   | 38,466 | 103,127 | 415                 | 107,620 |  |
| 1986-1990                    | 8,157   | 4,180 | 74    | 672   | -                   | 9,601  | -    | -    | 776    | 24,066 | -                   | 19,563 | 0     | -    | 1,524  | 36,263  | -                   | 18,894  |  |
| 1991-1995                    | 8,818   | 5,679 | 1,388 | 424   | 366                 | 12,082 | -    | -    | 3,378  | 9,604  | 5,293               | 13,939 | 9     | 9    | 64     | 23,603  | 535                 | 23,992  |  |
| 1996-2000                    | 3,887   | 1,923 | 3,428 | 1,524 | -                   | 7,048  | -    | -    | 2,997  | 4,481  | -                   | 7,478  | 1     | 1    | 30     | 8       | -                   | 21      |  |
| 2001-2005                    | 6,624   | 2,491 | 4,402 | 4,393 | 699                 | 17,310 | -    | -    | 424    | 962    | 171                 | 1,231  | 0     | 3    | 18     | 12      | 0                   | 29      |  |
| 2006                         | 2,434   | 545   | 109   | 662   | 461                 | 4,211  | -    | -    | 12     | 206    | 23                  | 241    | -     | -    | -      | -       | -                   | -       |  |
| 2007                         | 223     | 122   | 171   | 20    | 18                  | 554    | -    | -    | 143    | 0      | 4                   | 147    | 8     | 0    | 16     | 0       | 0                   | 24      |  |
| 2008                         | 47      | 434   | 1     | 17    | 0                   | 499    | -    | -    | 0      | 7      | 0                   | 7      | -     | -    | -      | -       | -                   | -       |  |
| 2009                         | 597     | 461   | 138   | 3     | 2                   | 1,201  | -    | -    | 458    | 102    | 24                  | 584    | 1     | 8    | 0      | 0       | 0                   | 9       |  |
| 2010                         | 1,902   | 1,529 | 368   | 332   | 0                   | 4,131  | -    | -    | 69     | 18     | 0                   | 87     | -     | -    | -      | -       | -                   | -       |  |
| 2011                         | 2,022   | 513   | 276   | 30    | 93                  | 2,934  | -    | -    | 1      | 0      | 139                 | 140    | 0     | 0    | 7      | 0       | 0                   | 7       |  |
| 2012                         | 4,511   | 788   | 157   | 421   | 225                 | 6,102  | -    | -    | 0      | 125    | 79                  | 204    | -     | -    | -      | -       | -                   | -       |  |
| 2013                         | 3,984   | -     | 1,900 | 87    | -                   | 5,971  | -    | -    | 279    | 30     | -                   | 309    | 2     | -    | 2      | 23      | -                   | 27      |  |
| 2014                         | 3,075   | 27    | 168   | 56    | -                   | 3,326  | -    | -    | 19     | 22     | -                   | 41     | -     | -    | -      | -       | -                   | -       |  |
| 2015                         | 3,274   | 839   | 402   | 104   | 79                  | 4,698  | -    | -    | 15     | 13     | 6                   | 34     | 0     | 20   | 0      | 0       | 0                   | 20      |  |
| 2016                         | 948     | 794   | 39    | 7     | -                   | 1,788  | -    | -    | -      | -      | -                   | -      | -     | -    | -      | -       | -                   | -       |  |
| 2017                         | 451     | 374   | 3,058 | 2,158 | 310                 | 6,351  | -    | -    | 49     | 182    | 80                  | 311    | 0     | 0    | 10     | 1       | 0                   | 11      |  |
| 2018 <sup>d/</sup>           | 2,797   | 1,330 | 2,684 | 283   | 182                 | 7,276  | -    | -    | 249    | 50     | 106                 | 405    | -     | -    | -      | -       | -                   | -       |  |
| <u>La Push</u>               |         |       |       |       |                     |        |      |      |        |        |                     |        |       |      |        |         |                     |         |  |
| 1981-1985                    | 1,879   | 257   | 4,971 | 1,313 | -                   | 7,061  | -    | -    | 29,610 | 8,820  | -                   | 34,020 | 39    | -    | 7,150  | 15,725  | -                   | 22,914  |  |
| 1986-1990                    | 3,225   | 2,241 | 40    | 527   | 11                  | 4,251  | -    | -    | 350    | 5,397  | 16                  | 4,139  | 0     | -    | 728    | 0       | -                   | 364     |  |
| 1991-1995                    | 921     | 1,020 | 734   | 335   | 11                  | 2,769  | -    | -    | 1,773  | 1,465  | 1,050               | 2,876  | 0     | 0    | 20     | 1,736   | 46                  | 1,773   |  |
| 1996-2000                    | 966     | 416   | 336   | 150   | -                   | 1,503  | -    | -    | 140    | 547    | 328                 | 851    | 0     | 0    | 0      | 13      | 0                   | 7       |  |
| 2001-2005                    | 797     | 338   | 1,798 | 1,848 | 176                 | 4,481  | -    | -    | 745    | 956    | 187                 | 1,555  | 1     | 0    | 21     | 18      | 10                  | 38      |  |
| 2006                         | 723     | 2,371 | 844   | 2,658 | 1,281               | 7,877  | -    | -    | 100    | 551    | 115                 | 766    | -     | -    | -      | -       | -                   | -       |  |
| 2007                         | 144     | 2,932 | 1,588 | 437   | 2                   | 5,103  | -    | -    | 803    | 286    | 2                   | 1,091  | 0     | 19   | 103    | 0       | 0                   | 122     |  |
| 2008                         | 24      | 1,259 | 501   | 380   | 58                  | 2,222  | -    | -    | 186    | 265    | 39                  | 490    | -     | -    | -      | -       | -                   | -       |  |
| 2009                         | 1,372   | 523   | 522   | 272   | 33                  | 2,722  | -    | -    | 2,466  | 3,888  | 803                 | 7,157  | 0     | 2    | 80     | 34      | 1                   | 117     |  |
| 2010                         | 2,125   | 1,632 | 984   | 1,147 | 23                  | 5,911  | -    | -    | 121    | 87     | 1                   | 209    | -     | -    | -      | -       | -                   | -       |  |
| 2011                         | 2,700   | 4,075 | 2,683 | 781   | 179                 | 10,418 | -    | -    | 574    | 436    | 157                 | 1,167  | 0     | 2    | 58     | 37      | 1                   | 98      |  |
| 2012                         | 4,242   | 4,341 | 3,524 | 5,868 | 1,747               | 19,722 | -    | -    | 256    | 839    | 1,024               | 2,119  | -     | -    | -      | -       | -                   | -       |  |
| 2013                         | 4,186   | -     | 2,396 | 1,806 | -                   | 8,388  | -    | -    | 1,054  | 792    | -                   | 1,846  | 0     | 0    | 93     | 6       | 0                   | 99      |  |
| 2014                         | 7,553   | 1,217 | 3,208 | 1,672 | 201                 | 13,851 | -    | -    | 1,149  | 3,069  | 384                 | 4,602  | -     | -    | -      | -       | -                   | -       |  |
| 2015                         | 4,288   | -     | 4,292 | 3,619 | 981                 | 13,180 | -    | -    | 133    | 114    | 62                  | 309    | 0     | 0    | 36     | 0       | 0                   | 36      |  |
| 2016                         | 2,228   | 551   | 1,305 | 89    | -                   | 4,173  | -    | -    | -      | -      | -                   | -      | -     | -    | -      | -       | -                   | -       |  |
| 2017                         | 2,112   | 780   | 308   | 1,275 | 356                 | 4,831  | -    | -    | 34     | 228    | 140                 | 402    | 0     | 0    | 0      | 2       | 0                   | 2       |  |
| 2018 <sup>d/</sup>           | 1,174   | 94    | 297   | 1,119 | 524                 | 3,208  | -    | -    | 41     | 181    | 266                 | 488    | -     | -    | -      | -       | -                   | -       |  |

TABLE A-13. Washington non-Indian commercial troll Chinook, coho, and pink salmon landings in numbers of fish by catch area and month (odd year averages).<sup>a/</sup> (Page 2 of 3)

| Year or Avg.       | May     | June   | July   | Aug.  | Sept. <sup>b/</sup> | Season | May  | June | July   | Aug.   | Sept. <sup>b/</sup> | Season | May   | June | July  | Aug.  | Sept. <sup>b/</sup> | Season |
|--------------------|---------|--------|--------|-------|---------------------|--------|------|------|--------|--------|---------------------|--------|-------|------|-------|-------|---------------------|--------|
|                    | CHINOOK |        |        |       |                     |        | COHO |      |        |        |                     |        | PINKS |      |       |       |                     |        |
| <u>Westport</u>    |         |        |        |       |                     |        |      |      |        |        |                     |        |       |      |       |       |                     |        |
| 1981-1985          | 20,022  | 2,850  | 13,121 | 3,661 | -                   | 34,995 | -    | -    | 55,366 | 11,022 | -                   | 63,633 | 78    | 20   | 4,976 | 3,773 | -                   | 7,589  |
| 1986-1990          | 17,976  | 6,478  | 17,639 | 1,489 | -                   | 27,281 | -    | -    | 34,992 | 9,157  | -                   | 15,616 | 115   | 182  | 390   | 23    | -                   | 412    |
| 1991-1995          | 6,118   | 5,160  | 1,807  | 1,207 | 929                 | 13,907 | -    | -    | 1,968  | 3,364  | 6,020               | 8,689  | 2     | 1    | 4     | 6     | 4                   | 11     |
| 1996-2000          | 394     | 559    | 266    | 619   | 3                   | 1,329  | -    | -    | 769    | 1,855  | 29                  | 2,387  | 0     | 1    | 1     | 0     | 0                   | 2      |
| 2001-2005          | 7,894   | 3,243  | 3,497  | 2,336 | 475                 | 17,254 | -    | -    | 696    | 1,083  | 2,667               | 3,240  | 0     | 0    | 16    | 2     | 0                   | 18     |
| 2006               | 1,578   | 632    | 120    | 138   | 89                  | 2,557  | -    | -    | 10     | 59     | 115                 | 184    | -     | -    | -     | -     | -                   | -      |
| 2007               | 5,326   | 814    | 1,700  | 264   | 7                   | 8,111  | -    | -    | 998    | 757    | 28                  | 1,783  | 0     | 0    | 0     | 1     | 0                   | 1      |
| 2008               | 1,380   | 1,657  | 671    | 764   | 201                 | 4,673  | -    | -    | 165    | 645    | 322                 | 1,132  | -     | -    | -     | -     | -                   | -      |
| 2009               | 3,576   | 3,111  | 955    | 405   | 85                  | 8,132  | -    | -    | 1,933  | 5,291  | 2,836               | 10,060 | 0     | 4    | 2     | 3     | 0                   | 9      |
| 2010               | 4,192   | 19,171 | 4,761  | 5,788 | 259                 | 34,171 | -    | -    | 895    | 639    | 123                 | 1,657  | -     | -    | -     | -     | -                   | -      |
| 2011               | 2,960   | 4,727  | 3,056  | 1,709 | 66                  | 12,518 | -    | -    | 1,055  | 456    | 197                 | 1,708  | 0     | 1    | 53    | 56    | 0                   | 110    |
| 2012               | 1,613   | 5,242  | 1,631  | 109   | 186                 | 8,781  | -    | -    | 490    | 152    | 214                 | 856    | -     | -    | -     | -     | -                   | -      |
| 2013               | 2,317   | 11,848 | 3,520  | 6,796 | 690                 | 25,171 | -    | -    | 559    | 2,942  | 258                 | 3,759  | 0     | 0    | 6     | 8     | 1                   | 15     |
| 2014               | 2,160   | 1,313  | 4,722  | 3,936 | 419                 | 12,550 | -    | -    | 1,739  | 2,959  | 3,827               | 8,525  | -     | -    | -     | -     | -                   | -      |
| 2015               | 5,360   | 13,569 | 7,916  | 6,108 | 457                 | 33,410 | -    | -    | 539    | 871    | 429                 | 1,839  | 1     | 0    | 11    | 0     | 0                   | 12     |
| 2016               | 3,258   | 2,619  | 1,981  | 1,866 | -                   | 9,724  | -    | -    | -      | -      | -                   | -      | -     | -    | -     | -     | -                   | -      |
| 2017               | 10,793  | 6,092  | 2,340  | 1,852 | 100                 | 21,177 | -    | -    | 134    | 309    | 81                  | 524    | 0     | 0    | 0     | 0     | 0                   | 0      |
| 2018 <sup>d/</sup> | 2,682   | 7,518  | 2,457  | 281   | 3                   | 12,941 | -    | -    | 125    | 225    | 16                  | 366    | -     | -    | -     | -     | -                   | -      |
| <u>Ilwaco</u>      |         |        |        |       |                     |        |      |      |        |        |                     |        |       |      |       |       |                     |        |
| 1981-1985          | 6,464   | 1,263  | 2,309  | 603   | 418                 | 9,172  | -    | -    | 29,801 | 14,415 | 13,373              | 32,087 | 4     | -    | 931   | 647   | -                   | 1,272  |
| 1986-1990          | 2,998   | 901    | 1,324  | 1,518 | 937                 | 5,089  | -    | -    | 10,844 | 19,388 | 13,026              | 23,765 | 0     | 0    | 87    | 1     | 1                   | 45     |
| 1991-1995          | 1,147   | 36     | 57     | 156   | 15                  | 1,386  | -    | -    | 477    | 5,019  | 930                 | 5,957  | 0     | 0    | 0     | 30    | 0                   | 30     |
| 1996-2000          | 0       | 0      | -      | 513   | 40                  | 184    | -    | -    | -      | 1,221  | 385                 | 1,413  | 0     | 0    | -     | -     | -                   | 0      |
| 2001-2005          | 398     | 110    | 357    | 355   | 121                 | 1,293  | -    | -    | 278    | 405    | 502                 | 929    | 0     | 0    | 11    | 1     | 0                   | 13     |
| 2006               | 1,746   | 364    | 0      | 1     | 13                  | 2,124  | -    | -    | 7      | 29     | 38                  | 74     | -     | -    | -     | -     | -                   | -      |
| 2007               | 173     | 226    | 43     | 50    | 8                   | 500    | -    | -    | 338    | 2,401  | 126                 | 2,865  | 0     | 0    | 0     | 0     | 0                   | 0      |
| 2008               | 361     | 847    | 7      | 24    | 3                   | 1,242  | -    | -    | 4      | 65     | 8                   | 77     | -     | -    | -     | -     | -                   | -      |
| 2009               | 146     | 49     | 20     | 46    | 0                   | 261    | -    | -    | 587    | 1,667  | 0                   | 2,254  | 0     | 0    | 0     | 0     | 0                   | 0      |
| 2010               | 210     | 230    | 168    | 237   | 41                  | 886    | -    | -    | 99     | 38     | 14                  | 151    | -     | -    | -     | -     | -                   | -      |
| 2011               | 472     | 543    | 1      | 12    | 4                   | 1,032  | -    | -    | 1      | 25     | 12                  | 38     | 0     | 0    | 0     | 0     | 0                   | 0      |
| 2012               | 263     | 1,687  | 66     | 0     | 234                 | 2,250  | -    | -    | 23     | 2      | 64                  | 89     | -     | -    | -     | -     | -                   | -      |
| 2013               | 102     | 358    | 42     | 19    | 39                  | 560    | -    | -    | 28     | 80     | 19                  | 127    | 0     | 0    | 0     | 0     | 0                   | 0      |
| 2014               | 7,438   | 553    | 598    | 297   | 94                  | 8,980  | -    | -    | 534    | 822    | 883                 | 2,239  | -     | -    | -     | -     | -                   | -      |
| 2015               | 2,681   | 650    | 96     | 337   | 261                 | 4,025  | -    | -    | 41     | 171    | 478                 | 690    | 0     | 0    | 0     | 0     | 0                   | 0      |
| 2016               | 656     | 346    | 259    | 398   | -                   | 1,659  | -    | -    | -      | -      | -                   | -      | -     | -    | -     | -     | -                   | -      |
| 2017               | 148     | 222    | 74     | 21    | 109                 | 574    | -    | -    | 14     | 50     | 67                  | 131    | 0     | 0    | 0     | 0     | 0                   | 0      |
| 2018 <sup>d/</sup> | 20      | 68     | 20     | 19    | 4                   | 131    | -    | -    | 32     | 1      | -                   | 33     | -     | -    | -     | -     | -                   | -      |



TABLE A-13. Washington non-Indian commercial troll Chinook, coho, and pink salmon landings in numbers of fish by catch area and month (odd year averages).<sup>a/</sup> (Page 3 of 3)

| Year or Avg.           | May     | June   | July   | Aug.   | Sept. <sup>b/</sup> | Season | May  | June | July    | Aug.   | Sept. <sup>b/</sup> | Season  | May   | June | July   | Aug.   | Sept. <sup>b/</sup> | Season  |
|------------------------|---------|--------|--------|--------|---------------------|--------|------|------|---------|--------|---------------------|---------|-------|------|--------|--------|---------------------|---------|
|                        | CHINOOK |        |        |        |                     |        | COHO |      |         |        |                     |         | PINKS |      |        |        |                     |         |
| <b>Statewide Total</b> |         |        |        |        |                     |        |      |      |         |        |                     |         |       |      |        |        |                     |         |
| 1981-1985              | 31,659  | 4,389  | 26,113 | 5,153  | 225                 | 61,303 | -    | -    | 140,300 | 37,526 | 4,524               | 152,480 | 234   | 33   | 51,212 | 87,639 | 415                 | 139,394 |
| 1986-1990              | 30,079  | 11,970 | 9,576  | 2,950  | 943                 | 46,222 | -    | -    | 23,869  | 49,522 | 13,034              | 54,379  | 115   | 182  | 2,729  | 36,287 | 1                   | 19,714  |
| 1991-1995              | 17,003  | 11,895 | 3,985  | 1,396  | 1,132               | 25,628 | -    | -    | 7,595   | 17,356 | 8,862               | 27,800  | 10    | 9    | 88     | 25,360 | 390                 | 25,792  |
| 1996-2000              | 5,247   | 2,897  | 4,030  | 1,713  | 43                  | 10,018 | -    | -    | 3,905   | 6,021  | 386                 | 8,881   | 1     | 2    | 31     | 21     | 0                   | 29      |
| 2001-2005              | 15,712  | 6,182  | 10,054 | 7,683  | 1,178               | 40,338 | -    | -    | 2,142   | 2,639  | 3,408               | 6,397   | 2     | 3    | 66     | 23     | 5                   | 97      |
| 2006                   | 6,481   | 3,912  | 1,073  | 3,459  | 1,844               | 16,769 | -    | -    | 129     | 845    | 291                 | 1,265   | -     | -    | -      | -      | -                   | -       |
| 2007                   | 5,866   | 4,094  | 3,502  | 771    | 35                  | 14,268 | -    | -    | 2,282   | 3,444  | 160                 | 5,886   | 8     | 19   | 119    | 1      | 0                   | 147     |
| 2008                   | 1,812   | 4,197  | 1,180  | 1,185  | 262                 | 8,636  | -    | -    | 355     | 982    | 369                 | 1,706   | -     | -    | -      | -      | -                   | -       |
| 2009                   | 5,691   | 4,144  | 1,635  | 726    | 120                 | 12,316 | -    | -    | 5,444   | 10,948 | 3,663               | 20,055  | 1     | 14   | 82     | 37     | 1                   | 135     |
| 2010                   | 8,429   | 22,562 | 6,281  | 7,504  | 323                 | 45,099 | -    | -    | 1,184   | 782    | 138                 | 2,104   | -     | -    | -      | -      | -                   | -       |
| 2011                   | 8,154   | 9,858  | 6,016  | 2,532  | 342                 | 26,902 | -    | -    | 1,631   | 917    | 505                 | 3,053   | 0     | 3    | 118    | 93     | 1                   | 215     |
| 2012                   | 10,629  | 12,058 | 5,378  | 6,398  | 2,392               | 36,855 | -    | -    | 769     | 1,118  | 1,381               | 3,268   | -     | -    | -      | -      | -                   | -       |
| 2013                   | 10,589  | 12,206 | 7,858  | 8,708  | 729                 | 40,090 | -    | -    | 1,920   | 3,844  | 277                 | 6,041   | 2     | 0    | 101    | 37     | 1                   | 141     |
| 2014                   | 20,226  | 3,110  | 8,696  | 5,961  | 714                 | 38,707 | -    | -    | 3,441   | 6,872  | 5,094               | 15,407  | -     | -    | -      | -      | -                   | -       |
| 2015                   | 15,603  | 15,058 | 12,706 | 10,168 | 1,778               | 55,313 | -    | -    | 728     | 1,169  | 975                 | 2,872   | 1     | 20   | 47     | 0      | 0                   | 68      |
| 2016                   | 7,090   | 4,310  | 3,584  | 2,360  | -                   | 17,344 | -    | -    | -       | -      | -                   | -       | -     | -    | -      | -      | -                   | -       |
| 2017                   | 13,504  | 7,468  | 5,780  | 5,306  | 875                 | 32,933 | -    | -    | 231     | 769    | 368                 | 1,368   | 0     | 0    | 10     | 3      | 0                   | 13      |
| 2018 <sup>d/</sup>     | 6,673   | 9,010  | 5,458  | 1,702  | 713                 | 23,556 | -    | -    | 447     | 457    | 388                 | 1,292   | -     | -    | -      | -      | -                   | -       |

a/ Summary of Washington Department of Fish and Wildlife fish receiving ticket information by statistical month excluding Washington landings from Oregon, California, and Alaska.

b/ Data for September include any catch after September.

c/ Neah Bay area includes effort and catches from Strait of Juan de Fuca Area 4B.

d/ Preliminary.

TABLE A-14. Treaty Indian ocean troll salmon fishing effort in deliveries by catch area and month. (Page 1 of 2)

| Year or Avg.                | Jan.-Apr. | May | June | July | Aug. | Sept. | Oct. | Nov.-Dec. | May-Sept. | Year  |
|-----------------------------|-----------|-----|------|------|------|-------|------|-----------|-----------|-------|
| <u>Area 4B</u>              |           |     |      |      |      |       |      |           |           |       |
| 1981-1985                   | 167       | 53  | 43   | 54   | 57   | 16    | 14   | 32        | 224       | 436   |
| 1986-1990                   | 167       | 63  | 53   | 75   | 92   | 24    | 2    | 43        | 309       | 520   |
| 1991-1995                   | 75        | 35  | 27   | 29   | 64   | 3     | 26   | 26        | 158       | 269   |
| 1996-2000                   | 14        | 12  | 14   | 1    | 25   | 6     | -    | 2         | 58        | 74    |
| 2001-2005                   | 34        | 15  | 18   | 27   | 27   | 10    | -    | 65        | 97        | 196   |
| 2006                        | 28        | 13  | 157  | 16   | 15   | 10    | -    | 39        | 211       | 278   |
| 2007                        | 179       | 9   | 29   | 48   | 18   | 0     | -    | 129       | 104       | 412   |
| 2008                        | 52        | 9   | 21   | 59   | 110  | 13    | -    | 51        | 212       | 315   |
| 2009                        | 76        | 48  | 202  | 101  | 124  | 4     | -    | 18        | 479       | 573   |
| 2010                        | 145       | 143 | 200  | 25   | 7    | 1     | -    | 51        | 376       | 572   |
| 2011                        | 303       | 68  | 51   | 7    | 1    | 0     | -    | 22        | 127       | 452   |
| 2012                        | 182       | 75  | 78   | 67   | 16   | 8     | -    | 29        | 244       | 455   |
| 2013                        | 270       | 141 | 74   | 64   | 46   | 13    | -    | 124       | 338       | 732   |
| 2014                        | 419       | 45  | 167  | 6    | 6    | 6     | -    | 34        | 230       | 683   |
| 2015                        | 384       | 255 | 173  | 4    | 40   | 28    | -    | 7         | 500       | 891   |
| 2016                        | 35        | 167 | 40   | 22   | 27   | 2     | -    | 34        | 258       | 327   |
| 2017                        | 149       | 9   | 57   | 19   | 22   | 25    | -    | 3         | 132       | 284   |
| 2018 <sup>a/</sup>          | 93        | 73  | 114  | 86   | 21   | 22    | -    | 26        | 316       | 435   |
| <u>Neah Bay</u>             |           |     |      |      |      |       |      |           |           |       |
| 1981-1985                   | 0         | 11  | 59   | 115  | 140  | 100   | 3    | 0         | 424       | 427   |
| 1986-1990                   | 1         | 44  | 52   | 167  | 149  | 75    | 0    | 0         | 486       | 487   |
| 1991-1995                   | 0         | 29  | 34   | 83   | 95   | 28    | 0    | 1         | 269       | 271   |
| 1996-2000                   | 0         | 18  | 20   | 2    | 52   | 43    | -    | 0         | 136       | 136   |
| 2001-2005                   | 1         | 30  | 46   | 71   | 84   | 56    | -    | 0         | 286       | 287   |
| 2006                        | 1         | 78  | 118  | 138  | 112  | 101   | -    | 2         | 547       | 550   |
| 2007                        | 0         | 13  | 161  | 135  | 125  | 4     | -    | 0         | 438       | 438   |
| 2008                        | 2         | 14  | 74   | 30   | 83   | 74    | -    | 0         | 275       | 277   |
| 2009                        | 0         | 26  | 27   | 122  | 110  | 0     | -    | 0         | 285       | 285   |
| 2010                        | 0         | 5   | 94   | 63   | 99   | 41    | -    | 0         | 302       | 302   |
| 2011                        | 0         | 24  | 130  | 122  | 95   | 21    | -    | 0         | 392       | 392   |
| 2012                        | 0         | 56  | 175  | 134  | 190  | 94    | -    | 0         | 649       | 649   |
| 2013                        | 0         | 131 | 106  | 270  | 495  | 107   | -    | 0         | 1,109     | 1,109 |
| 2014                        | 0         | 103 | 62   | 141  | 137  | 36    | -    | 0         | 479       | 479   |
| 2015                        | 0         | 24  | 173  | 143  | 85   | 22    | -    | 0         | 447       | 447   |
| 2016                        | 0         | 12  | 171  | 105  | 57   | 0     | -    | 0         | 345       | 345   |
| 2017                        | 0         | 15  | 29   | 293  | 320  | 139   | -    | 0         | 796       | 796   |
| 2018 <sup>a/</sup>          | 0         | 21  | 133  | 185  | 108  | 80    | -    | 0         | 527       | 527   |
| <u>La Push<sup>b/</sup></u> |           |     |      |      |      |       |      |           |           |       |
| 1981-1985                   | 0         | 10  | 26   | 86   | 93   | 29    | 0    | 0         | 243       | 243   |
| 1986-1990                   | 0         | 21  | 39   | 119  | 150  | 37    | -    | -         | 366       | 366   |
| 1991-1995                   | 0         | 3   | 7    | 44   | 100  | 5     | -    | -         | 160       | 160   |
| 1996-2000                   | 0         | 0   | 1    | 0    | 3    | 2     | -    | -         | 6         | 6     |
| 2001-2005                   | 0         | 0   | 0    | 1    | 1    | 1     | 10   | -         | 4         | 12    |
| 2006                        | 0         | 2   | 7    | 11   | 8    | 3     | 5    | -         | 31        | 36    |
| 2007                        | 0         | 0   | 15   | 2    | 13   | 1     | 0    | -         | 31        | 31    |
| 2008                        | 0         | 4   | 26   | 11   | 9    | 2     | 1    | -         | 52        | 53    |
| 2009                        | 0         | 2   | 3    | 2    | 6    | 0     | 4    | -         | 13        | 17    |
| 2010                        | 0         | 3   | 1    | 11   | 12   | 2     | 4    | -         | 29        | 33    |
| 2011                        | 0         | 0   | 3    | 0    | 3    | 2     | 1    | -         | 8         | 9     |
| 2012                        | 0         | 8   | 3    | 5    | 12   | 2     | 4    | -         | 30        | 34    |
| 2013                        | 0         | 6   | 18   | 30   | 13   | 35    | 0    | -         | 102       | 102   |
| 2014                        | 0         | 41  | 61   | 304  | 253  | 82    | 0    | -         | 741       | 741   |
| 2015                        | 0         | 38  | 23   | 205  | 115  | 54    | 0    | -         | 435       | 435   |
| 2016                        | 0         | 21  | 15   | 4    | 1    | 0     | 0    | -         | 41        | 41    |
| 2017                        | 0         | 0   | 1    | 2    | 3    | 2     | 0    | -         | 8         | 8     |
| 2018 <sup>a/</sup>          | 0         | 0   | 1    | 0    | 0    | 3     | 0    | -         | 4         | 4     |

TABLE A-14. Treaty Indian ocean troll salmon fishing effort in deliveries by catch area and month.  
(Page 2 of 2)

| Year or Avg.           | Jan.-Apr. | May | June | July | Aug. | Sept. | Oct. | Nov.-Dec. | Total<br>May-Sept. | Year<br>Total |
|------------------------|-----------|-----|------|------|------|-------|------|-----------|--------------------|---------------|
| <b>Westport</b>        |           |     |      |      |      |       |      |           |                    |               |
| 1981-1985              | 0         | 6   | 12   | 30   | 23   | 2     | 0    | 0         | 72                 | 72            |
| 1986-1990              | 0         | 10  | 24   | 73   | 68   | 24    | -    | -         | 199                | 199           |
| 1991-1995              | 0         | 1   | 4    | 26   | 52   | 10    | -    | -         | 95                 | 95            |
| 1996-2000              | 0         | 1   | 2    | 8    | 15   | 3     | -    | -         | 29                 | 29            |
| 2001-2005              | 0         | 2   | 1    | 1    | 4    | 2     | -    | -         | 10                 | 10            |
| 2006                   | 0         | 3   | 3    | 2    | 5    | 3     | -    | -         | 16                 | 16            |
| 2007                   | 0         | 0   | 0    | 4    | 11   | 2     | -    | -         | 17                 | 17            |
| 2008                   | 0         | 3   | 4    | 2    | 29   | 3     | -    | -         | 41                 | 41            |
| 2009                   | 0         | 6   | 6    | 8    | 29   | 1     | -    | -         | 50                 | 50            |
| 2010                   | 0         | 4   | 40   | 56   | 32   | 18    | -    | -         | 150                | 150           |
| 2011                   | 0         | 0   | 8    | 23   | 41   | 1     | -    | -         | 73                 | 73            |
| 2012                   | 0         | 5   | 13   | 8    | 11   | 0     | -    | -         | 37                 | 37            |
| 2013                   | 0         | 1   | 8    | 5    | 29   | 4     | -    | -         | 47                 | 47            |
| 2014                   | 0         | 7   | 5    | 14   | 23   | 28    | -    | -         | 77                 | 77            |
| 2015                   | 0         | 7   | 11   | 37   | 21   | 0     | -    | -         | 76                 | 76            |
| 2016                   | 0         | 4   | 7    | 10   | 5    | 0     | -    | -         | 26                 | 26            |
| 2017                   | 0         | 3   | 3    | 3    | 12   | 6     | -    | -         | 27                 | 27            |
| 2018 <sup>a/</sup>     | 0         | 5   | 7    | 1    | 16   | 5     | -    | -         | 34                 | 34            |
| <b>Statewide Total</b> |           |     |      |      |      |       |      |           |                    |               |
| 1981-1985              | 167       | 79  | 141  | 284  | 313  | 146   | 17   | 32        | 963                | 1,179         |
| 1986-1990              | 168       | 138 | 168  | 434  | 460  | 161   | 2    | 43        | 1,360              | 1,572         |
| 1991-1995              | 75        | 69  | 71   | 182  | 311  | 48    | 10   | 27        | 682                | 794           |
| 1996-2000              | 14        | 31  | 38   | 11   | 96   | 53    | -    | 2         | 229                | 246           |
| 2001-2005              | 35        | 47  | 66   | 100  | 116  | 69    | 10   | 65        | 397                | 505           |
| 2006                   | 29        | 96  | 285  | 167  | 140  | 117   | 5    | 41        | 805                | 880           |
| 2007                   | 179       | 22  | 205  | 189  | 167  | 7     | 0    | 129       | 590                | 898           |
| 2008                   | 54        | 30  | 125  | 102  | 231  | 92    | 1    | 51        | 580                | 686           |
| 2009                   | 76        | 82  | 238  | 233  | 269  | 5     | 4    | 18        | 827                | 925           |
| 2010                   | 145       | 155 | 335  | 155  | 150  | 62    | 4    | 51        | 857                | 1,057         |
| 2011                   | 303       | 92  | 192  | 152  | 140  | 24    | 1    | 22        | 600                | 926           |
| 2012                   | 182       | 144 | 269  | 214  | 229  | 104   | 4    | 29        | 960                | 1,175         |
| 2013                   | 270       | 279 | 206  | 369  | 583  | 159   | 0    | 124       | 1,596              | 1,990         |
| 2014                   | 419       | 196 | 295  | 465  | 419  | 152   | 0    | 34        | 1,527              | 1,980         |
| 2015                   | 384       | 324 | 380  | 389  | 261  | 104   | 0    | 7         | 1,458              | 1,849         |
| 2016                   | 35        | 204 | 233  | 141  | 90   | 2     | 0    | 34        | 670                | 739           |
| 2017                   | 149       | 27  | 90   | 317  | 357  | 172   | 0    | 3         | 963                | 1,115         |
| 2018 <sup>a/</sup>     | 93        | 99  | 255  | 272  | 145  | 110   | 0    | 26        | 881                | 1,000         |

a/ Preliminary.

b/ October effort beginning in 2002 occurred during Quileute ceremonial and subsistence fishery.

TABLE A-15. Treaty Indian ocean troll Chinook and coho salmon landings in numbers of fish by catch area and month. (Page 1 of 3)

| Year or<br>Avg.    | Total          |       |        |        |        |       |                    |           |           |        | Total       |     |       |        |        |        |                    |           |           |        |
|--------------------|----------------|-------|--------|--------|--------|-------|--------------------|-----------|-----------|--------|-------------|-----|-------|--------|--------|--------|--------------------|-----------|-----------|--------|
|                    | Jan.-Apr.      | May   | June   | July   | Aug.   | Sept. | Oct. <sup>b/</sup> | Nov.-Dec. | May-Sept. | Year   | Jan.-Apr.   | May | June  | July   | Aug.   | Sept.  | Oct. <sup>b/</sup> | Nov.-Dec. | May-Sept. | Year   |
|                    | <b>CHINOOK</b> |       |        |        |        |       |                    |           |           |        | <b>COHO</b> |     |       |        |        |        |                    |           |           |        |
| <u>Area 4B</u>     |                |       |        |        |        |       |                    |           |           |        |             |     |       |        |        |        |                    |           |           |        |
| 1981-1985          | 13,109         | 1,066 | 248    | 94     | 49     | 29    | 145                | 823       | 1,485     | 15,562 | 42          | 245 | 184   | 825    | 1,015  | 208    | 36                 | 7         | 2,476     | 2,561  |
| 1986-1990          | 6,009          | 2,540 | 1,746  | 284    | 323    | 63    | 12                 | 2,677     | 4,956     | 13,654 | 9           | 0   | 65    | 2,150  | 7,766  | 813    | 7                  | 13        | 10,794    | 10,822 |
| 1991-1995          | 3,549          | 467   | 865    | 60     | 282    | 2     | 147                | 1,068     | 1,677     | 6,323  | 2           | 0   | 0     | 554    | 4,036  | 30     | 257                | 7         | 4,620     | 4,731  |
| 1996-2000          | 694            | 371   | 459    | 25     | 113    | 31    | -                  | 32        | 1,000     | 1,726  | 0           | 0   | 0     | 0      | 1,221  | 132    | -                  | 0         | 1,353     | 1,353  |
| 2001-2005          | 894            | 388   | 2,299  | 522    | 485    | 358   | -                  | 3,765     | 4,052     | 8,711  | 1           | 0   | 0     | 1,309  | 3,197  | 545    | -                  | 30        | 5,051     | 5,082  |
| 2006               | 157            | 154   | 2,335  | 50     | 93     | 81    | -                  | 456       | 2,713     | 3,326  | 0           | 1   | 3     | 96     | 22     | 47     | -                  | 0         | 169       | 169    |
| 2007               | 2,218          | 53    | 324    | 556    | 167    | 0     | -                  | 1,340     | 1,100     | 4,658  | 0           | 0   | 0     | 1,496  | 29     | 0      | -                  | 5         | 1,525     | 1,530  |
| 2008               | 483            | 35    | 272    | 618    | 1,607  | 109   | -                  | 375       | 2,641     | 3,499  | 0           | 0   | 8     | 81     | 483    | 72     | -                  | 0         | 644       | 644    |
| 2009               | 464            | 481   | 4,528  | 593    | 615    | 12    | -                  | 68        | 6,229     | 6,761  | 0           | 0   | 0     | 3,319  | 4,555  | 17     | -                  | 0         | 7,891     | 7,891  |
| 2010               | 1,722          | 1,657 | 3,240  | 171    | 37     | 9     | -                  | 200       | 5,114     | 7,036  | 0           | 0   | 0     | 106    | 3      | 0      | -                  | 12        | 109       | 121    |
| 2011               | 2,883          | 585   | 373    | 46     | 15     | 0     | -                  | 90        | 1,019     | 3,992  | 2           | 0   | 0     | 10     | 13     | 0      | -                  | 2         | 23        | 27     |
| 2012               | 1,216          | 635   | 699    | 651    | 295    | 43    | -                  | 335       | 2,323     | 3,874  | 0           | 0   | 2     | 235    | 229    | 166    | -                  | 4         | 632       | 636    |
| 2013               | 1,661          | 1,989 | 2,468  | 223    | 383    | 10    | -                  | 721       | 5,073     | 7,455  | 3           | 0   | 0     | 378    | 454    | 354    | -                  | 10        | 1,186     | 1,199  |
| 2014               | 3,316          | 819   | 3,051  | 20     | 22     | 12    | -                  | 267       | 3,924     | 7,507  | 3           | 0   | 0     | 12     | 24     | 19     | -                  | 0         | 55        | 58     |
| 2015               | 3,249          | 4,142 | 4,283  | 47     | 135    | 73    | -                  | 17        | 8,680     | 11,946 | 0           | 0   | 0     | 0      | 249    | 190    | -                  | 2         | 439       | 441    |
| 2016               | 244            | 1,758 | 239    | 135    | 84     | 5     | -                  | 182       | 2,221     | 2,647  | 0           | 0   | 0     | 8      | 10     | 0      | -                  | 0         | 18        | 18     |
| 2017               | 1,343          | 68    | 712    | 452    | 56     | 92    | -                  | 11        | 1,380     | 2,734  | 0           | 0   | 0     | 48     | 51     | 288    | -                  | 0         | 387       | 387    |
| 2018 <sup>a/</sup> | 798            | 727   | 2,363  | 511    | 94     | 54    | -                  | 129       | 3,749     | 4,676  | 0           | 0   | 3     | 192    | 222    | 239    | -                  | 0         | 656       | 656    |
| <u>Neah Bay</u>    |                |       |        |        |        |       |                    |           |           |        |             |     |       |        |        |        |                    |           |           |        |
| 1981-1985          | 0              | 520   | 1,191  | 2,406  | 673    | 772   | 54                 | 11        | 5,561     | 5,626  | 0           | 8   | 4,647 | 9,017  | 16,515 | 13,404 | 18                 | 0         | 43,590    | 43,609 |
| 1986-1990          | 6              | 2,604 | 2,317  | 3,114  | 2,657  | 685   | 0                  | 0         | 11,376    | 11,382 | 0           | 3   | 106   | 16,829 | 16,934 | 7,241  | 0                  | 0         | 41,114    | 41,114 |
| 1991-1995          | 0              | 3,800 | 2,807  | 2,797  | 2,704  | 471   | 0                  | 16        | 12,579    | 12,595 | 0           | 1   | 1     | 12,665 | 13,860 | 4,816  | 0                  | 1         | 31,342    | 31,343 |
| 1996-2000          | 1              | 2,191 | 5,957  | 353    | 3,368  | 1,809 | -                  | 17        | 13,679    | 13,697 | 0           | 0   | 0     | 15     | 9,027  | 7,940  | -                  | 0         | 16,982    | 16,982 |
| 2001-2005          | 11             | 4,666 | 12,259 | 8,821  | 5,524  | 2,762 | -                  | 0         | 34,033    | 34,044 | 20          | 2   | 3     | 5,938  | 14,570 | 8,744  | -                  | 0         | 29,257    | 29,277 |
| 2006               | 6              | 2,565 | 5,714  | 6,827  | 5,696  | 4,744 | -                  | 35        | 25,546    | 25,587 | 2           | 15  | 99    | 9,928  | 9,304  | 10,418 | -                  | 0         | 29,764    | 29,766 |
| 2007               | 0              | 263   | 12,532 | 2,639  | 4,099  | 52    | -                  | 0         | 19,585    | 19,585 | 0           | 0   | 12    | 20,862 | 14,951 | 745    | -                  | 0         | 36,570    | 36,570 |
| 2008               | 55             | 242   | 5,694  | 1,066  | 3,119  | 3,071 | -                  | 0         | 13,192    | 13,247 | 17          | 0   | 8     | 511    | 2,107  | 9,304  | -                  | 0         | 11,930    | 11,947 |
| 2009               | 0              | 799   | 1,083  | 1,615  | 1,649  | 0     | -                  | 0         | 5,146     | 5,146  | 0           | 0   | 0     | 21,558 | 23,832 | 0      | -                  | 0         | 45,390    | 45,390 |
| 2010               | 0              | 231   | 8,059  | 5,080  | 8,486  | 957   | -                  | 0         | 22,813    | 22,813 | 0           | 0   | 13    | 1,304  | 4,580  | 2,882  | -                  | 0         | 8,779     | 8,779  |
| 2011               | 0              | 535   | 7,701  | 14,462 | 5,014  | 359   | -                  | 0         | 28,071    | 28,071 | 0           | 0   | 0     | 1,951  | 4,196  | 6,174  | -                  | 0         | 12,321    | 12,321 |
| 2012               | 0              | 2,975 | 19,218 | 8,805  | 13,121 | 4,627 | -                  | 0         | 48,746    | 48,746 | 0           | 1   | 27    | 2,131  | 16,750 | 15,524 | -                  | 0         | 34,433    | 34,433 |
| 2013               | 0              | 8,983 | 13,788 | 7,834  | 6,995  | 2,073 | -                  | 0         | 39,673    | 39,673 | 0           | 0   | 0     | 6,955  | 33,559 | 3,847  | -                  | 1         | 44,361    | 44,362 |
| 2014               | 0              | 7,247 | 5,754  | 4,362  | 2,617  | 492   | -                  | 0         | 20,472    | 20,472 | 0           | 0   | 11    | 2,852  | 9,739  | 1,070  | -                  | 0         | 13,672    | 13,672 |
| 2015               | 0              | 1,196 | 17,352 | 7,361  | 1,153  | 189   | -                  | 0         | 27,251    | 27,251 | 0           | 0   | 0     | 881    | 568    | 218    | -                  | 0         | 1,667     | 1,667  |
| 2016               | 0              | 372   | 12,687 | 4,342  | 1,036  | 0     | -                  | 1         | 18,437    | 18,438 | 0           | 0   | 0     | 15     | 0      | 0      | -                  | 1         | 15        | 16     |
| 2017               | 0              | 1,099 | 1,297  | 15,296 | 4,316  | 589   | -                  | 0         | 22,597    | 22,597 | 0           | 0   | 0     | 833    | 6,811  | 4,363  | -                  | 0         | 12,007    | 12,007 |
| 2018 <sup>a/</sup> | 0              | 521   | 9,216  | 7,952  | 1,604  | 397   | -                  | 0         | 19,690    | 19,690 | 0           | 0   | 12    | 1,559  | 4,781  | 3,972  | -                  | 0         | 10,324    | 10,324 |

TABLE A-15. Treaty Indian ocean troll Chinook and coho salmon landings in numbers of fish by catch area and month. (Page 2 of 3)

| Year or            | Total          |           |       |        |       |       |       |                    |           |           | Total       |           |       |       |        |       |       |                    |           |           |      |
|--------------------|----------------|-----------|-------|--------|-------|-------|-------|--------------------|-----------|-----------|-------------|-----------|-------|-------|--------|-------|-------|--------------------|-----------|-----------|------|
|                    | Avg.           | Jan.-Apr. | May   | June   | July  | Aug.  | Sept. | Oct. <sup>b/</sup> | Nov.-Dec. | May-Sept. | Year        | Jan.-Apr. | May   | June  | July   | Aug.  | Sept. | Oct. <sup>b/</sup> | Nov.-Dec. | May-Sept. | Year |
|                    | <b>CHINOOK</b> |           |       |        |       |       |       |                    |           |           | <b>COHO</b> |           |       |       |        |       |       |                    |           |           |      |
| <u>La Push</u>     |                |           |       |        |       |       |       |                    |           |           |             |           |       |       |        |       |       |                    |           |           |      |
| 1981-1985          | 0              | 243       | 321   | 827    | 508   | 212   | 0     | 0                  | 2,112     | 2,112     | 0           | 30        | 2,251 | 5,302 | 6,393  | 2,855 | 0     | 0                  | 16,832    | 16,832    |      |
| 1986-1990          | 0              | 1,062     | 944   | 2,044  | 744   | 259   | -     | -                  | 5,054     | 5,054     | 0           | 0         | 2,694 | 8,430 | 7,021  | 2,250 | -     | -                  | 20,395    | 20,395    |      |
| 1991-1995          | 0              | 61        | 278   | 465    | 601   | 22    | -     | -                  | 1,428     | 1,428     | 0           | 0         | 0     | 2,863 | 6,123  | 201   | -     | -                  | 9,187     | 9,187     |      |
| 1996-2000          | 0              | 0         | 16    | 0      | 40    | 7     | -     | -                  | 63        | 63        | 0           | 0         | 0     | 0     | 103    | 95    | -     | -                  | 198       | 198       |      |
| 2001-2005          | 0              | 52        | 10    | 70     | 40    | 15    | 23    | -                  | 186       | 204       | 0           | 0         | 0     | 12    | 84     | 12    | 66    | -                  | 109       | 162       |      |
| 2006               | 0              | 82        | 248   | 825    | 870   | 66    | 15    | -                  | 2,091     | 2,106     | 0           | 0         | 0     | 446   | 1,272  | 123   | 5     | -                  | 1,841     | 1,846     |      |
| 2007               | 0              | 0         | 1,773 | 60     | 234   | 5     | 0     | -                  | 2,072     | 2,072     | 0           | 0         | 0     | 248   | 1,099  | 52    | 0     | -                  | 1,399     | 1,399     |      |
| 2008               | 0              | 58        | 2,834 | 380    | 888   | 368   | 1     | -                  | 4,528     | 4,529     | 0           | 0         | 2     | 267   | 297    | 379   | 0     | -                  | 945       | 945       |      |
| 2009               | 0              | 83        | 99    | 20     | 158   | 0     | 25    | -                  | 360       | 385       | 0           | 0         | 0     | 102   | 3,060  | 15    | 15    | -                  | 3,177     | 3,192     |      |
| 2010               | 0              | 6         | 85    | 754    | 702   | 74    | 10    | -                  | 1,621     | 1,631     | 0           | 2         | 0     | 157   | 226    | 51    | 15    | -                  | 436       | 451       |      |
| 2011               | 0              | 0         | 457   | 0      | 69    | 46    | 0     | -                  | 572       | 572       | 0           | 0         | 0     | 0     | 29     | 482   | 0     | -                  | 511       | 511       |      |
| 2012               | 0              | 722       | 258   | 322    | 1,060 | 164   | 10    | -                  | 2,526     | 2,536     | 0           | 0         | 1     | 44    | 1,002  | 179   | 0     | -                  | 1,226     | 1,226     |      |
| 2013               | 0              | 954       | 2,694 | 1,197  | 207   | 794   | 0     | -                  | 5,846     | 5,846     | 0           | 0         | 7     | 370   | 1,176  | 127   | 0     | -                  | 1,680     | 1,680     |      |
| 2014               | 0              | 4,192     | 7,992 | 15,669 | 5,502 | 2,152 | 0     | -                  | 35,507    | 35,507    | 0           | 0         | 4     | 7,446 | 29,203 | 5,031 | 0     | -                  | 41,684    | 41,684    |      |
| 2015               | 0              | 1,868     | 1,371 | 14,068 | 1,999 | 524   | 0     | -                  | 19,830    | 19,830    | 0           | 0         | 0     | 1,008 | 383    | 298   | 0     | -                  | 1,689     | 1,689     |      |
| 2016               | 0              | 641       | 555   | 256    | 4     | 0     | 0     | -                  | 1,456     | 1,456     | 0           | 0         | 0     | 0     | 0      | 0     | 1     | -                  | 0         | 1         |      |
| 2017               | 0              | 0         | 10    | 5      | 4     | 30    | 0     | -                  | 49        | 49        | 0           | 0         | 0     | 8     | 14     | 167   | 0     | -                  | 189       | 189       |      |
| 2018 <sup>a/</sup> | 0              | 0         | 25    | 0      | 0     | 3     | 0     | -                  | 28        | 28        | 0           | 0         | 0     | 0     | 0      | 17    | 0     | -                  | 17        | 17        |      |
| <u>Westport</u>    |                |           |       |        |       |       |       |                    |           |           |             |           |       |       |        |       |       |                    |           |           |      |
| 1981-1985          | 0              | 321       | 123   | 310    | 105   | 6     | 0     | 0                  | 865       | 865       | 0           | 0         | 353   | 1,262 | 561    | 199   | 0     | 0                  | 2,376     | 2,376     |      |
| 1986-1990          | 0              | 671       | 949   | 1,283  | 783   | 241   | -     | -                  | 3,926     | 3,926     | 0           | 0         | 1,391 | 4,901 | 4,221  | 747   | -     | -                  | 11,260    | 11,260    |      |
| 1991-1995          | 0              | 15        | 231   | 188    | 656   | 74    | -     | -                  | 1,165     | 1,165     | 0           | 0         | 0     | 1,138 | 2,019  | 228   | -     | -                  | 3,385     | 3,385     |      |
| 1996-2000          | 0              | 18        | 91    | 67     | 286   | 46    | -     | -                  | 508       | 508       | 0           | 0         | 0     | 0     | 712    | 367   | -     | -                  | 1,079     | 1,079     |      |
| 2001-2005          | 0              | 355       | 92    | 49     | 222   | 125   | -     | -                  | 843       | 843       | 0           | 0         | 0     | 0     | 114    | 80    | -     | -                  | 194       | 194       |      |
| 2006               | 0              | 20        | 44    | 34     | 31    | 66    | -     | -                  | 195       | 195       | 0           | 0         | 0     | 5     | 36     | 123   | -     | -                  | 164       | 164       |      |
| 2007               | 0              | 0         | 0     | 94     | 79    | 13    | -     | -                  | 186       | 186       | 0           | 0         | 0     | 137   | 344    | 63    | -     | -                  | 544       | 544       |      |
| 2008               | 0              | 23        | 64    | 35     | 393   | 31    | -     | -                  | 546       | 546       | 0           | 0         | 0     | 6     | 674    | 65    | -     | -                  | 745       | 745       |      |
| 2009               | 0              | 128       | 118   | 101    | 144   | 0     | -     | -                  | 491       | 491       | 0           | 0         | 0     | 443   | 3,694  | 68    | -     | -                  | 4,205     | 4,205     |      |
| 2010               | 0              | 32        | 766   | 938    | 468   | 624   | -     | -                  | 2,828     | 2,828     | 0           | 0         | 50    | 448   | 249    | 1,390 | -     | -                  | 2,137     | 2,137     |      |
| 2011               | 0              | 0         | 286   | 253    | 1,610 | 13    | -     | -                  | 2,162     | 2,162     | 0           | 0         | 0     | 101   | 553    | 55    | -     | -                  | 709       | 709       |      |
| 2012               | 0              | 133       | 521   | 366    | 174   | 0     | -     | -                  | 1,194     | 1,194     | 0           | 0         | 71    | 359   | 809    | 0     | -     | -                  | 1,239     | 1,239     |      |
| 2013               | 0              | 3         | 153   | 56     | 331   | 25    | -     | -                  | 568       | 568       | 0           | 0         | 0     | 19    | 974    | 48    | -     | -                  | 1,041     | 1,041     |      |
| 2014               | 0              | 350       | 205   | 592    | 652   | 59    | -     | -                  | 1,858     | 1,858     | 0           | 0         | 15    | 95    | 265    | 249   | -     | -                  | 624       | 624       |      |
| 2015               | 0              | 109       | 691   | 1,634  | 744   | 0     | -     | -                  | 3,178     | 3,178     | 0           | 0         | 3     | 105   | 107    | 0     | -     | -                  | 215       | 215       |      |
| 2016               | 0              | 134       | 271   | 396    | 186   | 0     | -     | -                  | 987       | 987       | 0           | 0         | 0     | 6     | 5      | 0     | -     | -                  | 11        | 11        |      |
| 2017               | 0              | 86        | 20    | 19     | 229   | 34    | -     | -                  | 388       | 388       | 0           | 0         | 0     | 114   | 274    | 379   | -     | -                  | 767       | 767       |      |
| 2018 <sup>a/</sup> | 0              | 71        | 152   | 23     | 185   | 5     | -     | -                  | 436       | 436       | 0           | 0         | 0     | 0     | 509    | 296   | -     | -                  | 805       | 805       |      |

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TABLE A-15. Treaty Indian ocean troll Chinook and coho salmon landings in numbers of fish by catch area and month. (Page 3 of 3)

| Year or<br>Avg.        | Total          |        |        |        |        |       |                    |           |           |        | Total       |     |       |        |        |        |                    |           |           |        |  |
|------------------------|----------------|--------|--------|--------|--------|-------|--------------------|-----------|-----------|--------|-------------|-----|-------|--------|--------|--------|--------------------|-----------|-----------|--------|--|
|                        | Jan.-Apr.      | May    | June   | July   | Aug.   | Sept. | Oct. <sup>b/</sup> | Nov.-Dec. | May-Sept. | Year   | Jan.-Apr.   | May | June  | July   | Aug.   | Sept.  | Oct. <sup>b/</sup> | Nov.-Dec. | May-Sept. | Year   |  |
|                        | <b>CHINOOK</b> |        |        |        |        |       |                    |           |           |        | <b>COHO</b> |     |       |        |        |        |                    |           |           |        |  |
| <b>Statewide Total</b> |                |        |        |        |        |       |                    |           |           |        |             |     |       |        |        |        |                    |           |           |        |  |
| 1981-1985              | 13,109         | 2,150  | 1,883  | 3,636  | 1,336  | 1,018 | 198                | 834       | 10,023    | 24,164 | 42          | 283 | 7,435 | 16,406 | 24,484 | 16,666 | 54                 | 7         | 65,274    | 65,377 |  |
| 1986-1990              | 6,015          | 6,877  | 5,955  | 6,726  | 4,506  | 1,248 | 12                 | 2,677     | 25,312    | 34,016 | 9           | 3   | 4,256 | 32,310 | 35,942 | 11,051 | 7                  | 13        | 83,563    | 83,591 |  |
| 1991-1995              | 3,549          | 4,343  | 4,181  | 3,511  | 4,243  | 571   | 29                 | 1,084     | 16,849    | 21,511 | 2           | 1   | 1     | 17,220 | 26,038 | 5,275  | 103                | 8         | 48,535    | 48,647 |  |
| 1996-2000              | 695            | 2,580  | 6,524  | 446    | 3,806  | 1,893 | -                  | 49        | 15,249    | 15,994 | 0           | 0   | 0     | 15     | 11,063 | 8,533  | -                  | 0         | 19,611    | 19,611 |  |
| 2001-2005              | 905            | 5,461  | 14,660 | 9,462  | 6,271  | 3,260 | 23                 | 3,765     | 39,114    | 43,802 | 20          | 2   | 3     | 7,259  | 17,964 | 9,381  | 66                 | 30        | 34,611    | 34,714 |  |
| 2006                   | 163            | 2,821  | 8,341  | 7,736  | 6,690  | 4,957 | 15                 | 491       | 30,545    | 31,214 | 2           | 16  | 102   | 10,475 | 10,634 | 10,711 | 5                  | 0         | 31,938    | 31,945 |  |
| 2007                   | 2,218          | 316    | 14,629 | 3,349  | 4,579  | 70    | 0                  | 1,340     | 22,943    | 26,501 | 0           | 0   | 12    | 22,743 | 16,423 | 860    | 0                  | 5         | 40,038    | 40,043 |  |
| 2008                   | 538            | 358    | 8,864  | 2,099  | 6,007  | 3,579 | 1                  | 375       | 20,907    | 21,821 | 17          | 0   | 18    | 865    | 3,561  | 9,820  | 0                  | 0         | 14,264    | 14,281 |  |
| 2009                   | 464            | 1,491  | 5,828  | 2,329  | 2,566  | 12    | 25                 | 68        | 12,226    | 12,783 | 0           | 0   | 0     | 25,422 | 35,141 | 100    | 15                 | 0         | 60,663    | 60,678 |  |
| 2010                   | 1,722          | 1,926  | 12,150 | 6,943  | 9,693  | 1,664 | 10                 | 200       | 32,376    | 34,308 | 0           | 2   | 63    | 2,015  | 5,058  | 4,323  | 15                 | 12        | 11,461    | 11,488 |  |
| 2011                   | 2,883          | 1,120  | 8,817  | 14,761 | 6,708  | 418   | 0                  | 90        | 31,824    | 34,797 | 2           | 0   | 0     | 2,062  | 4,791  | 6,711  | 0                  | 2         | 13,564    | 13,568 |  |
| 2012                   | 1,216          | 4,465  | 20,696 | 10,144 | 14,650 | 4,834 | 10                 | 335       | 54,789    | 56,350 | 0           | 1   | 101   | 2,769  | 18,790 | 15,869 | 0                  | 4         | 37,530    | 37,534 |  |
| 2013                   | 1,661          | 11,929 | 19,103 | 9,310  | 7,916  | 2,902 | 0                  | 721       | 51,160    | 53,542 | 3           | 0   | 7     | 7,722  | 36,163 | 4,376  | 0                  | 11        | 48,268    | 48,282 |  |
| 2014                   | 3,316          | 12,608 | 17,002 | 20,643 | 8,793  | 2,715 | 0                  | 267       | 61,761    | 65,344 | 3           | 0   | 30    | 10,405 | 39,231 | 6,369  | 0                  | 0         | 56,035    | 56,038 |  |
| 2015                   | 3,249          | 7,315  | 23,697 | 23,110 | 4,031  | 786   | 0                  | 17        | 58,939    | 62,205 | 0           | 0   | 3     | 1,994  | 1,307  | 706    | 0                  | 2         | 4,010     | 4,012  |  |
| 2016                   | 244            | 2,905  | 13,752 | 5,129  | 1,310  | 5     | 0                  | 183       | 23,101    | 23,528 | 0           | 0   | 0     | 29     | 15     | 0      | 1                  | 1         | 44        | 46     |  |
| 2017                   | 1,343          | 1,253  | 2,039  | 15,772 | 4,605  | 745   | 0                  | 11        | 24,414    | 25,768 | 0           | 0   | 0     | 1,003  | 7,150  | 5,197  | 0                  | 0         | 13,350    | 13,350 |  |
| 2018 <sup>a/</sup>     | 798            | 1,319  | 11,756 | 8,486  | 1,883  | 459   | 0                  | 129       | 23,903    | 24,830 | 0           | 0   | 15    | 1,751  | 5,512  | 4,524  | 0                  | 0         | 11,802    | 11,802 |  |

a/ Preliminary.

b/ October landings beginning in 2002 occurred during Quileute ceremonial and subsistence fishery.

TABLE A-16. Treaty Indian ocean troll pink salmon landings (odd years only) in numbers of fish by catch area and month.  
(Page 1 of 2)

| Year or<br>Avg. <sup>a/</sup> | Jan.-Apr. | May | June | July  | Aug.  | Sept. | Oct. | Nov.-Dec. | Total     |       |
|-------------------------------|-----------|-----|------|-------|-------|-------|------|-----------|-----------|-------|
|                               |           |     |      |       |       |       |      |           | May-Sept. | Year  |
| <u>Area 4B</u>                |           |     |      |       |       |       |      |           |           |       |
| 1981-1985                     | 0         | 23  | 2    | 108   | 698   | 7     | 0    | 0         | 838       | 838   |
| 1987-1989                     | 0         | 0   | 0    | 1,395 | 643   | 142   | 0    | 0         | 2,179     | 2,179 |
| 1991-1995                     | 0         | 0   | 0    | 43    | 1,233 | 2     | 0    | 0         | 1,278     | 1,278 |
| 1997-1999                     | 0         | 0   | 0    | 0     | 550   | 7     | -    | 0         | 557       | 557   |
| 2001                          | 0         | 0   | 0    | 504   | 334   | 15    | -    | 0         | 853       | 853   |
| 2003                          | 0         | 0   | 0    | 0     | 0     | 0     | -    | 0         | 0         | 0     |
| 2005                          | 0         | 0   | 0    | 154   | 88    | 0     | -    | 0         | 242       | 242   |
| 2007                          | 0         | 0   | 0    | 82    | 141   | 0     | -    | 0         | 223       | 223   |
| 2009                          | 0         | 0   | 0    | 189   | 219   | 0     | -    | 0         | 408       | 408   |
| 2011                          | 0         | 0   | 3    | 55    | 15    | 0     | -    | 0         | 73        | 73    |
| 2013                          | 0         | 0   | 0    | 39    | 0     | 0     | -    | 0         | 39        | 39    |
| 2015                          | 0         | 0   | 2    | 0     | 2     | 0     | -    | 0         | 4         | 4     |
| 2017 <sup>b/</sup>            | 0         | 0   | 0    | 1     | 1     | 0     | -    | 0         | 2         | 2     |
| <u>Neah Bay</u>               |           |     |      |       |       |       |      |           |           |       |
| 1981-1985                     | 0         | 0   | 94   | 1,340 | 6,684 | 302   | 0    | 0         | 8,419     | 8,419 |
| 1987-1989                     | 0         | 2   | 4    | 6,553 | 2,901 | 377   | 0    | 0         | 9,837     | 9,837 |
| 1991-1995                     | 0         | 0   | 1    | 385   | 4,002 | 249   | 0    | 0         | 4,636     | 4,636 |
| 1997-1999                     | 0         | 0   | 0    | 0     | 1,023 | 74    | -    | 0         | 1,096     | 1,096 |
| 2001                          | 0         | 11  | 0    | 192   | 1,203 | 192   | -    | 0         | 1,598     | 1,598 |
| 2003                          | 0         | 0   | 0    | 172   | 41    | 23    | -    | 0         | 236       | 236   |
| 2005                          | 0         | 0   | 0    | 32    | 103   | 3     | -    | 0         | 138       | 138   |
| 2007                          | 0         | 0   | 7    | 244   | 96    | 0     | -    | 0         | 347       | 347   |
| 2009                          | 0         | 0   | 0    | 237   | 145   | 0     | -    | 0         | 382       | 382   |
| 2011                          | 0         | 0   | 3    | 659   | 310   | 16    | -    | 0         | 988       | 988   |
| 2013                          | 0         | 0   | 0    | 49    | 115   | 0     | -    | 0         | 164       | 164   |
| 2015                          | 0         | 0   | 4    | 0     | 16    | 0     | -    | 0         | 20        | 20    |
| 2017 <sup>b/</sup>            | 0         | 0   | 0    | 60    | 133   | 0     | -    | 0         | 193       | 193   |
| <u>La Push</u>                |           |     |      |       |       |       |      |           |           |       |
| 1981-1985                     | 0         | 7   | 100  | 654   | 418   | 12    | 0    | 0         | 1,191     | 1,191 |
| 1987-1989                     | 0         | 3   | 6    | 625   | 667   | 65    | -    | -         | 1,365     | 1,365 |
| 1991-1995                     | 0         | 0   | 0    | 65    | 277   | 10    | -    | -         | 353       | 353   |
| 1997-1999                     | 0         | 0   | 0    | 0     | 0     | 0     | -    | -         | 0         | 0     |
| 2001                          | 0         | 0   | 0    | 0     | 0     | 0     | -    | -         | 0         | 0     |
| 2003                          | 0         | 0   | 0    | 0     | 0     | 0     | 0    | -         | 0         | 0     |
| 2005                          | 0         | 0   | 0    | 0     | 1     | 0     | 0    | -         | 1         | 1     |
| 2007                          | 0         | 0   | 0    | 0     | 14    | 0     | 0    | -         | 14        | 14    |
| 2009                          | 0         | 0   | 0    | 1     | 4     | 0     | 0    | -         | 5         | 5     |
| 2011                          | 0         | 0   | 0    | 0     | 4     | 0     | 0    | -         | 4         | 4     |
| 2013                          | 0         | 0   | 0    | 1     | 5     | 0     | 0    | -         | 6         | 6     |
| 2015                          | 0         | 0   | 0    | 98    | 0     | 0     | 0    | -         | 98        | 98    |
| 2017 <sup>b/</sup>            | 0         | 0   | 0    | 0     | 0     | 0     | 0    | -         | 0         | 0     |

TABLE A-16. Treaty Indian ocean troll pink salmon landings (odd years only) in numbers of fish by catch area and month.  
(Page 2 of 2)

| Year or<br>Avg. <sup>a/</sup> | Jan.-Apr. | May | June | July  | Aug.  | Sept. | Oct. | Nov.-Dec. | Total     |        |
|-------------------------------|-----------|-----|------|-------|-------|-------|------|-----------|-----------|--------|
|                               |           |     |      |       |       |       |      |           | May-Sept. | Year   |
| <b>Westport</b>               |           |     |      |       |       |       |      |           |           |        |
| 1981-1985                     | 0         | 1   | 18   | 106   | 6     | 0     | 0    | 0         | 132       | 132    |
| 1987-1989                     | 0         | 0   | 0    | 419   | 44    | 8     | -    | -         | 471       | 471    |
| 1991-1995                     | 0         | 0   | 0    | 7     | 6     | 0     | -    | -         | 13        | 13     |
| 1997-1999                     | 0         | 0   | 0    | 0     | 0     | 0     | -    | -         | 0         | 0      |
| 2001                          | 0         | 0   | 0    | 0     | 0     | 0     | -    | -         | 0         | 0      |
| 2003                          | 0         | 0   | 0    | 0     | 0     | 0     | -    | -         | 0         | 0      |
| 2005                          | 0         | 0   | 0    | 0     | 6     | 0     | -    | -         | 6         | 6      |
| 2007                          | 0         | 0   | 0    | 0     | 0     | 0     | -    | -         | 0         | 0      |
| 2009                          | 0         | 0   | 0    | 4     | 1     | 0     | -    | -         | 5         | 5      |
| 2011                          | 0         | 0   | 0    | 4     | 5     | 0     | -    | -         | 9         | 9      |
| 2013                          | 0         | 0   | 0    | 0     | 0     | 0     | -    | -         | 0         | 0      |
| 2015                          | 0         | 0   | 0    | 0     | 0     | 0     | -    | -         | 0         | 0      |
| 2017 <sup>b/</sup>            | 0         | 0   | 0    | 0     | 0     | 0     | -    | -         | 0         | 0      |
| <b>Total Statewide</b>        |           |     |      |       |       |       |      |           |           |        |
| 1981-1985                     | 0         | 32  | 214  | 2,208 | 7,806 | 320   | 0    | 0         | 10,580    | 10,580 |
| 1987-1989                     | 0         | 5   | 10   | 8,991 | 4,254 | 591   | 0    | 0         | 13,851    | 13,851 |
| 1991-1995                     | 0         | 0   | 1    | 499   | 5,519 | 261   | 0    | 0         | 6,280     | 6,280  |
| 1997-1999                     | 0         | 0   | 0    | 0     | 1,573 | 81    | -    | 0         | 1,653     | 1,653  |
| 2001                          | 0         | 11  | 0    | 696   | 1,537 | 207   | -    | 0         | 2,451     | 2,451  |
| 2003                          | 0         | 0   | 0    | 172   | 41    | 23    | 0    | 0         | 236       | 236    |
| 2005                          | 0         | 0   | 0    | 186   | 198   | 3     | 0    | 0         | 387       | 387    |
| 2007                          | 0         | 0   | 7    | 326   | 251   | 0     | 0    | 0         | 584       | 584    |
| 2009                          | 0         | 0   | 0    | 431   | 369   | 0     | 0    | 0         | 800       | 800    |
| 2011                          | 0         | 0   | 6    | 718   | 334   | 16    | 0    | 0         | 1,074     | 1,074  |
| 2013                          | 0         | 0   | 0    | 89    | 120   | 0     | 0    | 0         | 209       | 209    |
| 2015                          | 0         | 0   | 6    | 98    | 18    | 0     | 0    | 0         | 122       | 122    |
| 2017 <sup>b/</sup>            | 0         | 0   | 0    | 61    | 134   | 0     | 0    | 0         | 195       | 195    |

a/ Odd year averages only.

b/ Preliminary.



TABLE A-17. Washington ocean recreational salmon fishing effort in angler trips by port and statistical month. (Page 1 of 2)

| Year or Avg.            | Apr. | May   | June   | July   | Aug.   | Sept. | Oct. | Season |
|-------------------------|------|-------|--------|--------|--------|-------|------|--------|
| <u>Neah Bay</u>         |      |       |        |        |        |       |      |        |
| 1981-1985               | 80   | 557   | 979    | 9,338  | 13,391 | 3,382 | 126  | 27,495 |
| 1991-1995 <sup>a/</sup> | -    | 431   | 491    | 13,953 | 7,341  | 2,193 | -    | 23,175 |
| 1996-2000 <sup>a/</sup> | -    | 1,258 | 4      | 12,553 | 9,455  | 994   | -    | 20,494 |
| 1996-2000               | -    | -     | -      | 3,462  | 5,345  | 1,098 | -    | 8,301  |
| 2001-2005               | -    | 576   | 1,447  | 10,063 | 7,081  | 1,199 | -    | 19,326 |
| 2006                    | -    | -     | 946    | 6,600  | 4,935  | 928   | -    | 13,409 |
| 2007                    | -    | -     | -      | 6,945  | 5,731  | 691   | -    | 13,367 |
| 2008                    | -    | -     | 1,066  | 2,475  | 2,582  | 247   | -    | 6,370  |
| 2009                    | -    | -     | 225    | 6,436  | 8,608  | 1,202 | -    | 16,471 |
| 2010                    | -    | -     | 1,239  | 5,701  | 3,803  | 807   | -    | 11,549 |
| 2011                    | -    | -     | 638    | 5,500  | 4,259  | 671   | -    | 11,069 |
| 2012                    | -    | -     | 1,204  | 7,324  | 3,641  | 1,268 | -    | 13,439 |
| 2013                    | -    | 815   | 1,714  | 7,399  | 5,044  | 391   | -    | 15,362 |
| 2014                    | -    | 827   | 2,334  | 8,102  | 3,547  | 1,706 | -    | 16,517 |
| 2015                    | -    | 370   | 2,371  | 8,761  | 2,345  | 919   | -    | 14,765 |
| 2016                    | -    | -     | -      | 7,504  | 751    | -     | -    | 8,255  |
| 2017                    | -    | -     | 386    | 7,874  | 2,037  | 494   | -    | 10,791 |
| 2018 <sup>b/</sup>      | -    | -     | 1,169  | 5,989  | 1,499  | 0     | -    | 8,657  |
| <u>La Push</u>          |      |       |        |        |        |       |      |        |
| 1981-1985               | -    | 0     | 77     | 1,119  | 2,075  | 231   | 239  | 3,332  |
| 1986-1990               | -    | 66    | 60     | 1,768  | 749    | 154   | 113  | 2,478  |
| 1991-1995               | -    | -     | -      | 2,236  | 548    | 480   | 8    | 2,587  |
| 1996-2000               | -    | -     | -      | 1,060  | 666    | 588   | -    | 1,537  |
| 2001-2005               | -    | 59    | 199    | 1,711  | 1,486  | 678   | 132  | 4,138  |
| 2006                    | -    | -     | 173    | 1,029  | 1,943  | 740   | 258  | 4,143  |
| 2007                    | -    | -     | -      | 989    | 1,640  | 639   | 0    | 3,268  |
| 2008                    | -    | -     | 281    | 535    | 709    | 508   | 38   | 2,071  |
| 2009                    | -    | -     | 102    | 1,462  | 2,700  | 601   | 212  | 5,077  |
| 2010                    | -    | -     | 390    | 838    | 1,940  | 513   | 154  | 3,836  |
| 2011                    | -    | -     | 194    | 1,406  | 1,946  | 676   | 16   | 4,237  |
| 2012                    | -    | -     | 236    | 1,190  | 1,379  | 768   | 353  | 3,926  |
| 2013                    | -    | 136   | 239    | 971    | 2,263  | 420   | 237  | 4,266  |
| 2014                    | -    | 36    | 352    | 1,422  | 2,007  | 883   | 365  | 5,064  |
| 2015                    | -    | 90    | 247    | 1,389  | 1,058  | 420   | 300  | 3,504  |
| 2016                    | -    | -     | -      | 702    | 387    | -     | -    | 1,089  |
| 2017                    | -    | -     | 82     | 465    | 1,005  | 348   | -    | 1,901  |
| 2018 <sup>b/</sup>      | -    | -     | 80     | 400    | 1,408  | 20    | -    | 1,908  |
| <u>Westport</u>         |      |       |        |        |        |       |      |        |
| 1981-1985               | -    | 3,607 | 20,142 | 34,172 | 23,472 | 2,602 | 208  | 78,766 |
| 1986-1990               | -    | 1,451 | 3,663  | 30,256 | 15,991 | 5,000 | 40   | 52,492 |
| 1991-1995               | -    | -     | 4,955  | 20,127 | 15,146 | 8,072 | 706  | 44,760 |
| 1996-2000               | -    | -     | -      | 7,529  | 8,354  | 1,951 | -    | 15,938 |
| 2001-2005               | -    | 1,861 | 4,425  | 18,150 | 15,487 | 6,189 | -    | 42,500 |
| 2006                    | -    | -     | -      | 8,857  | 13,802 | 1,883 | -    | 24,541 |
| 2007                    | -    | -     | -      | 9,548  | 14,143 | 2,225 | -    | 25,916 |
| 2008                    | -    | -     | 2,660  | 8,381  | 5,880  | 1,809 | -    | 18,731 |
| 2009                    | -    | -     | 777    | 10,217 | 21,238 | 5,599 | -    | 37,831 |
| 2010                    | -    | -     | 7,822  | 11,841 | 13,804 | 4,961 | -    | 38,428 |
| 2011                    | -    | -     | 4,705  | 10,428 | 14,973 | 3,440 | -    | 33,545 |
| 2012                    | -    | -     | 8,187  | 8,898  | 14,147 | 6,092 | -    | 37,325 |
| 2013                    | -    | -     | 7,020  | 7,641  | 16,639 | 4,589 | -    | 35,889 |
| 2014                    | -    | 780   | 7,645  | 19,006 | 18,838 | 7,500 | -    | 53,769 |
| 2015                    | -    | 981   | 6,356  | 18,629 | 12,162 | 7,327 | -    | 45,455 |
| 2016                    | -    | -     | -      | 9,587  | 8,253  | -     | -    | 17,840 |
| 2017                    | -    | -     | -      | 13,216 | 12,780 | -     | -    | 25,997 |
| 2018 <sup>b/</sup>      | -    | -     | -      | 8,019  | 14,110 | 390   | -    | 22,519 |

TABLE A-17. Washington ocean recreational salmon fishing effort in angler trips by port and statistical month. (Page 2 of 2)

| Year or Avg.                        | Apr. | May   | June   | July   | Aug.   | Sept.  | Oct. | Season  |
|-------------------------------------|------|-------|--------|--------|--------|--------|------|---------|
| <b>Ilwaco<sup>c/</sup></b>          |      |       |        |        |        |        |      |         |
| 1981-1985                           | -    | 921   | 7,560  | 23,249 | 21,383 | 3,652  | 721  | 53,751  |
| 1986-1990                           | -    | 298   | 1,641  | 19,733 | 19,450 | 1,782  | -    | 41,268  |
| 1991-1995                           | -    | -     | 1,660  | 17,100 | 11,766 | 7,412  | -    | 37,108  |
| 1996-2000                           | -    | -     | -      | 4,775  | 7,041  | 3,037  | -    | 12,683  |
| 2001-2005                           | -    | 215   | 781    | 12,573 | 23,125 | 7,773  | -    | 43,983  |
| 2006                                | -    | -     | 781    | 9,502  | 21,175 | 6,351  | -    | 37,539  |
| 2007                                | -    | -     | -      | 7,486  | 20,350 | 2,295  | -    | 30,132  |
| 2008                                | -    | -     | 777    | 4,506  | 5,156  | -      | -    | 10,439  |
| 2009                                | -    | -     | 193    | 10,271 | 30,247 | 1,470  | -    | 42,181  |
| 2010                                | -    | -     | 557    | 7,165  | 17,349 | 2,070  | -    | 27,141  |
| 2011                                | -    | -     | 674    | 5,358  | 15,127 | 3,586  | -    | 24,744  |
| 2012                                | -    | -     | 1,964  | 5,627  | 10,154 | 5,224  | -    | 22,970  |
| 2013                                | -    | -     | 2,843  | 4,833  | 13,381 | 3,438  | -    | 24,496  |
| 2014                                | -    | 36    | 2,575  | 11,306 | 22,617 | 7,735  | -    | 44,268  |
| 2015                                | -    | 207   | 2,347  | 8,520  | 15,497 | 6,819  | -    | 33,389  |
| 2016                                | -    | -     | -      | 7,666  | 16,587 | -      | -    | 24,254  |
| 2017                                | -    | -     | 388    | 8,532  | 13,844 | -      | -    | 22,765  |
| 2018 <sup>b/</sup>                  | -    | -     | 1,195  | 5,098  | 7,979  | 613    | -    | 14,884  |
| <b>Statewide Total<sup>c/</sup></b> |      |       |        |        |        |        |      |         |
| 1981-1985                           | 80   | 4,067 | 22,991 | 67,877 | 60,321 | 7,746  | 436  | 163,344 |
| 1986-1990                           | -    | 1,339 | 5,840  | 65,710 | 43,382 | 5,090  | 40   | 119,412 |
| 1991-1995                           | -    | 1,258 | 4,140  | 48,319 | 36,915 | 16,837 | 714  | 104,949 |
| 1996-2000                           | -    | -     | -      | 15,695 | 21,407 | 4,496  | -    | 38,459  |
| 2001-2005                           | -    | 2,711 | 6,245  | 42,497 | 47,179 | 14,601 | 132  | 109,947 |
| 2006                                | -    | -     | 1,119  | 22,226 | 36,159 | 5,501  | 258  | 65,263  |
| 2007                                | -    | -     | -      | 24,968 | 41,865 | 5,851  | 0    | 72,683  |
| 2008                                | -    | -     | 4,784  | 15,898 | 14,327 | 2,564  | 38   | 37,610  |
| 2009                                | -    | -     | 1,297  | 28,386 | 62,792 | 8,872  | 212  | 101,560 |
| 2010                                | -    | -     | 10,008 | 25,546 | 36,896 | 8,351  | 154  | 80,955  |
| 2011                                | -    | -     | 6,211  | 22,692 | 36,305 | 8,372  | 16   | 73,596  |
| 2012                                | -    | -     | 11,591 | 23,040 | 29,322 | 13,352 | 353  | 77,659  |
| 2013                                | -    | 951   | 11,816 | 20,844 | 37,328 | 8,838  | 237  | 80,014  |
| 2014                                | -    | 1,678 | 12,906 | 39,834 | 47,010 | 17,824 | 365  | 119,617 |
| 2015                                | -    | 1,648 | 11,320 | 37,299 | 31,063 | 15,484 | 300  | 97,114  |
| 2016                                | -    | -     | -      | 25,458 | 25,978 | -      | -    | 51,437  |
| 2017                                | -    | -     | 857    | 30,088 | 29,666 | 842    | -    | 61,453  |
| 2018 <sup>b/</sup>                  | -    | -     | 2,444  | 19,506 | 24,995 | 1,023  | -    | 47,968  |

a/ Includes effort from the Washington State waters Area 4B fishery (none in 1994 or 1999).

b/ Preliminary.

c/ Includes effort from the North Jetty when the ocean fishery was open; does not include effort reported as occurring inside the Columbia River mouth (North Jetty effort when the ocean fishery was closed and Buoy 10 was open).

TABLE A-18. Washington ocean recreational Chinook and coho salmon landings in numbers of fish by port of landing and statistical month. (Page 1 of 3)

| Year or Avg.            | Apr. | May | June  | July  | Aug.  | Sept. | Oct. | Season      | Apr. | May | June | July   | Aug.   | Sept. | Oct. | Season |
|-------------------------|------|-----|-------|-------|-------|-------|------|-------------|------|-----|------|--------|--------|-------|------|--------|
| <b>CHINOOK</b>          |      |     |       |       |       |       |      | <b>COHO</b> |      |     |      |        |        |       |      |        |
| <u>Neah Bay</u>         |      |     |       |       |       |       |      |             |      |     |      |        |        |       |      |        |
| 1981-1985               | 57   | 149 | 234   | 1,293 | 483   | 194   | 35   | 2,224       | 80   | 338 | 639  | 8,878  | 16,452 | 3,414 | 150  | 29,436 |
| 1986-1990 <sup>a/</sup> | -    | 114 | 143   | 2,587 | 358   | 35    | -    | 2,478       | -    | -   | 384  | 15,896 | 11,629 | 3,446 | -    | 29,747 |
| 1991-1995 <sup>b/</sup> | -    | 148 | -     | 1,443 | 232   | 62    | -    | 1,420       | -    | 40  | -    | 15,654 | 13,052 | 991   | -    | 25,804 |
| 1996-2000 <sup>b/</sup> | -    | -   | -     | 396   | 68    | 5     | -    | 267         | -    | -   | -    | 1,686  | 5,023  | 1,782 | -    | 7,103  |
| 2001-2005               | -    | 234 | 683   | 2,710 | 705   | 77    | -    | 3,949       | -    | -   | 573  | 8,391  | 7,468  | 1,039 | -    | 17,128 |
| 2006                    | -    | -   | 166   | 734   | 443   | 73    | -    | 1,417       | -    | -   | 380  | 3,763  | 1,570  | 309   | -    | 6,023  |
| 2007                    | -    | -   | -     | 1,179 | 245   | 47    | -    | 1,471       | -    | -   | -    | 4,981  | 4,997  | 631   | -    | 10,608 |
| 2008 <sup>b/</sup>      | -    | -   | 311   | 725   | 317   | 3     | -    | 1,357       | -    | -   | -    | 679    | 1,459  | 23    | -    | 2,161  |
| 2009                    | -    | -   | 51    | 1,277 | 1,071 | 47    | -    | 2,447       | -    | -   | 118  | 4,807  | 7,500  | 912   | -    | 13,336 |
| 2010                    | -    | -   | 144   | 1,573 | 1,453 | 129   | -    | 3,299       | -    | -   | 1    | 1,926  | 1,609  | 150   | -    | 3,687  |
| 2011                    | -    | -   | 257   | 1,382 | 1,330 | 14    | -    | 2,983       | -    | -   | 54   | 1,918  | 943    | 140   | -    | 3,054  |
| 2012                    | -    | -   | 812   | 3,524 | 1,173 | 42    | -    | 5,552       | -    | -   | 27   | 3,643  | 3,094  | 784   | -    | 7,548  |
| 2013                    | -    | 127 | 635   | 3,267 | 2,142 | 74    | -    | 6,245       | -    | -   | 257  | 3,082  | 2,934  | 233   | -    | 6,506  |
| 2014                    | -    | 158 | 948   | 3,975 | 806   | 48    | -    | 5,935       | -    | -   | 188  | 1,734  | 2,244  | 1,478 | -    | 5,643  |
| 2015                    | -    | 96  | 1,577 | 6,196 | 522   | 107   | -    | 8,498       | -    | -   | 214  | 2,137  | 1,274  | 4,140 | -    | 7,764  |
| 2016                    | -    | -   | -     | 3,011 | 255   | -     | -    | 3,266       | -    | -   | -    | 30     | 23     | -     | -    | 53     |
| 2017                    | -    | -   | 244   | 6,134 | 856   | 54    | -    | 7,287       | -    | -   | 45   | 1,767  | 1,214  | 507   | -    | 3,533  |
| 2018 <sup>c/</sup>      | -    | -   | 352   | 2,269 | 420   | -     | -    | 3,041       | -    | -   | 548  | 3,170  | 1,221  | -     | -    | 4,939  |
| <u>La Push</u>          |      |     |       |       |       |       |      |             |      |     |      |        |        |       |      |        |
| 1981-1985               | -    | 0   | 7     | 132   | 166   | 8     | -    | 304         | -    | 0   | 72   | 861    | 2,786  | 251   | -    | 3,791  |
| 1986-1990 <sup>a/</sup> | -    | 9   | 10    | 303   | 93    | 15    | -    | 391         | -    | -   | 37   | 2,129  | 1,026  | 125   | -    | 3,022  |
| 1991-1995               | -    | -   | -     | 215   | 31    | 29    | 2    | 207         | -    | -   | -    | 2,766  | 606    | 444   | 2    | 3,014  |
| 1996-2000               | -    | -   | -     | 188   | 125   | 54    | -    | 259         | -    | -   | -    | 894    | 732    | 704   | -    | 1,550  |
| 2001-2005               | -    | 7   | 96    | 740   | 541   | 195   | 51   | 1,586       | -    | -   | -    | 1,110  | 1,306  | 309   | 10   | 2,770  |
| 2006                    | -    | -   | 36    | 247   | 955   | 342   | 91   | 1,670       | -    | -   | 36   | 744    | 1,041  | 61    | 2    | 1,884  |
| 2007                    | -    | -   | -     | 132   | 348   | 116   | 0    | 595         | -    | -   | -    | 758    | 1,869  | 142   | 0    | 2,769  |
| 2008                    | -    | -   | 80    | 244   | 300   | 106   | 6    | 736         | -    | -   | -    | 102    | 273    | 165   | 1    | 541    |
| 2009                    | -    | -   | 7     | 194   | 329   | 53    | 97   | 680         | -    | -   | 165  | 1,944  | 4,317  | 377   | 92   | 6,896  |
| 2010                    | -    | -   | 38    | 294   | 715   | 86    | 45   | 1,177       | -    | -   | -    | 211    | 709    | 223   | 37   | 1,180  |
| 2011                    | -    | -   | 32    | 501   | 907   | 90    | 5    | 1,535       | -    | -   | 48   | 572    | 1,029  | 398   | 2    | 2,050  |
| 2012                    | -    | -   | 86    | 463   | 443   | 153   | 133  | 1,278       | -    | -   | -    | 473    | 1,052  | 698   | 21   | 2,243  |
| 2013                    | -    | 4   | 99    | 693   | 1,288 | 152   | 119  | 2,355       | -    | -   | 57   | 439    | 2,015  | 269   | 18   | 2,798  |
| 2014                    | -    | 0   | 227   | 725   | 406   | 115   | 110  | 1,584       | -    | -   | 102  | 922    | 2,265  | 1,121 | 199  | 4,608  |
| 2015                    | -    | 7   | 159   | 1,417 | 537   | 115   | 164  | 2,399       | -    | -   | 37   | 195    | 156    | 178   | 13   | 579    |
| 2016                    | -    | -   | -     | 221   | 34    | -     | -    | 255         | -    | -   | -    | 3      | 2      | -     | -    | 5      |
| 2017                    | -    | -   | 7     | 209   | 229   | 37    | -    | 482         | -    | -   | 13   | 159    | 1,155  | 423   | -    | 1,750  |
| 2018 <sup>c/</sup>      | -    | -   | 26    | 102   | 297   | 2     | -    | 427         | -    | -   | 25   | 94     | 814    | 21    | -    | 954    |

TABLE A-18. Washington ocean recreational Chinook and coho salmon landings in numbers of fish by port of landing and statistical month. (Page 2 of 3)

| Year or Avg.                | Apr.           | May   | June   | July   | Aug.   | Sept. | Oct. | Season | Apr.        | May   | June   | July   | Aug.   | Sept.  | Oct. | Season |
|-----------------------------|----------------|-------|--------|--------|--------|-------|------|--------|-------------|-------|--------|--------|--------|--------|------|--------|
|                             | <b>CHINOOK</b> |       |        |        |        |       |      |        | <b>COHO</b> |       |        |        |        |        |      |        |
| <u>Westport</u>             |                |       |        |        |        |       |      |        |             |       |        |        |        |        |      |        |
| 1981-1985                   | -              | 2,328 | 16,253 | 17,397 | 7,513  | 407   | 17   | 40,102 | -           | 2,457 | 11,790 | 27,665 | 22,997 | 3,371  | 34   | 63,289 |
| 1986-1990                   | -              | 667   | 1,539  | 10,334 | 5,012  | 1,692 | -    | 17,387 | -           | 19    | 2,220  | 40,125 | 23,296 | 7,004  | 45   | 69,421 |
| 1991-1995                   | -              | -     | 1,911  | 3,062  | 2,764  | 1,496 | 213  | 7,853  | -           | -     | 6,781  | 24,170 | 19,803 | 8,578  | 322  | 54,327 |
| 1996-2000                   | -              | -     | -      | 1,908  | 1,667  | 585   | -    | 3,544  | -           | -     | -      | 8,644  | 9,155  | 1,241  | -    | 17,062 |
| 2001-2005                   | -              | 1,020 | 3,199  | 3,859  | 5,020  | 897   | -    | 11,826 | -           | 4,793 | 8,346  | 21,570 | 22,062 | 7,395  | -    | 55,195 |
| 2006                        | -              | -     | -      | 2,293  | 3,125  | 398   | -    | 5,815  | -           | -     | -      | 2,008  | 5,675  | 1,096  | -    | 8,779  |
| 2007                        | -              | -     | -      | 2,494  | 2,545  | 208   | -    | 5,247  | -           | -     | -      | 7,289  | 14,055 | 1,648  | -    | 22,992 |
| 2008                        | -              | -     | 2,145  | 4,459  | 2,735  | 305   | -    | 9,644  | -           | -     | 30     | 2,550  | 3,383  | 1,564  | -    | 7,528  |
| 2009                        | -              | -     | 124    | 2,080  | 2,594  | 225   | -    | 5,023  | -           | -     | 539    | 10,745 | 33,181 | 9,403  | -    | 53,868 |
| 2010                        | -              | -     | 4,711  | 9,948  | 10,586 | 1,744 | -    | 26,989 | -           | -     | 45     | 3,680  | 3,957  | 4,925  | -    | 12,607 |
| 2011                        | -              | -     | 2,220  | 5,579  | 10,835 | 455   | -    | 19,089 | -           | -     | 229    | 4,499  | 6,723  | 2,392  | -    | 13,843 |
| 2012                        | -              | -     | 7,574  | 4,033  | 6,709  | 1,170 | -    | 19,486 | -           | -     | 184    | 3,124  | 3,375  | 5,241  | -    | 11,924 |
| 2013                        | -              | -     | 2,192  | 3,403  | 7,021  | 1,074 | -    | 13,689 | -           | -     | 379    | 3,097  | 12,233 | 4,668  | -    | 20,377 |
| 2014                        | -              | 427   | 3,935  | 8,190  | 9,944  | 970   | -    | 23,466 | -           | -     | 5,935  | 17,687 | 17,874 | 12,979 | -    | 54,474 |
| 2015                        | -              | 431   | 3,345  | 8,048  | 4,613  | 2,682 | -    | 19,120 | -           | -     | 2,357  | 12,753 | 7,358  | 8,216  | -    | 30,684 |
| 2016                        | -              | -     | -      | 4,198  | 4,232  | -     | -    | 8,430  | -           | -     | -      | 30     | 13     | -      | -    | 43     |
| 2017                        | -              | -     | -      | 4,247  | 2,358  | -     | -    | 6,605  | -           | -     | -      | 6,664  | 9,086  | -      | -    | 15,750 |
| 2018 <sup>cl</sup>          | -              | -     | -      | 2,537  | 2,307  | 32    | -    | 4,877  | -           | -     | -      | 1,638  | 13,496 | 236    | -    | 15,370 |
| <u>Illwaco<sup>dl</sup></u> |                |       |        |        |        |       |      |        |             |       |        |        |        |        |      |        |
| 1981-1985                   | -              | 214   | 3,364  | 4,545  | 4,505  | 279   | 40   | 12,031 | -           | 5,410 | 10,296 | 36,373 | 26,437 | 5,982  | 825  | 75,883 |
| 1986-1990                   | -              | 111   | 233    | 1,793  | 3,302  | 76    | -    | 5,334  | -           | -     | 2,638  | 32,864 | 27,048 | 2,114  | -    | 62,868 |
| 1991-1995                   | -              | -     | 86     | 704    | 736    | 194   | -    | 1,677  | -           | -     | 2,733  | 25,600 | 14,459 | 6,796  | -    | 48,220 |
| 1996-2000                   | -              | -     | -      | 356    | 561    | 129   | -    | 923    | -           | -     | -      | 7,157  | 8,380  | 2,707  | -    | 15,730 |
| 2001-2005                   | -              | 53    | 664    | 1,814  | 3,895  | 826   | -    | 6,944  | -           | -     | 522    | 18,205 | 29,244 | 8,022  | -    | 55,784 |
| 2006                        | -              | -     | -      | 478    | 1,148  | 140   | -    | 1,765  | -           | -     | -      | 6,533  | 12,222 | 646    | -    | 19,401 |
| 2007                        | -              | -     | -      | 292    | 1,225  | 114   | -    | 1,631  | -           | -     | -      | 12,170 | 32,559 | 2,689  | -    | 47,419 |
| 2008                        | -              | -     | 474    | 1,166  | 1,258  | -     | -    | 2,898  | -           | -     | 330    | 3,337  | 4,973  | -      | -    | 8,640  |
| 2009                        | -              | -     | 10     | 925    | 3,239  | 28    | -    | 4,202  | -           | -     | 334    | 17,246 | 45,207 | 1,605  | -    | 64,392 |
| 2010                        | -              | -     | 106    | 1,485  | 3,588  | 229   | -    | 5,409  | -           | -     | 1      | 6,430  | 11,725 | 650    | -    | 18,805 |
| 2011                        | -              | -     | 352    | 808    | 4,107  | 329   | -    | 5,596  | -           | -     | 289    | 5,104  | 12,678 | 2,564  | -    | 20,634 |
| 2012                        | -              | -     | 1,793  | 2,200  | 2,691  | 730   | -    | 7,414  | -           | -     | 196    | 3,057  | 4,421  | 2,045  | -    | 9,719  |
| 2013                        | -              | -     | 1,300  | 1,356  | 3,284  | 688   | -    | 6,629  | -           | -     | 2,287  | 4,007  | 8,599  | 1,566  | -    | 16,459 |
| 2014                        | -              | 44    | 917    | 2,570  | 5,019  | 491   | -    | 9,041  | -           | -     | 2,223  | 14,833 | 30,029 | 11,247 | -    | 58,332 |
| 2015                        | -              | 61    | 957    | 1,419  | 4,836  | 2,140 | -    | 9,414  | -           | -     | 2,607  | 12,325 | 15,756 | 5,022  | -    | 35,711 |
| 2016                        | -              | -     | -      | 2,088  | 2,868  | -     | -    | 4,957  | -           | -     | -      | 4,692  | 11,266 | -      | -    | 15,958 |
| 2017                        | -              | -     | 319    | 2,191  | 3,153  | -     | -    | 5,663  | -           | -     | 30     | 5,724  | 9,301  | -      | -    | 15,055 |
| 2018 <sup>cl</sup>          | -              | -     | 455    | 507    | 586    | 21    | -    | 1,569  | -           | -     | 258    | 4,679  | 8,422  | 88     | -    | 13,447 |

TABLE A-18. Washington ocean recreational Chinook and coho salmon landings in numbers of fish by port of landing and statistical month. (Page 3 of 3)

| Year or Avg.                        | Apr.           | May   | June   | July   | Aug.   | Sept. | Oct. | Season | Apr.        | May   | June   | July   | Aug.   | Sept.  | Oct. | Season  |
|-------------------------------------|----------------|-------|--------|--------|--------|-------|------|--------|-------------|-------|--------|--------|--------|--------|------|---------|
|                                     | <b>CHINOOK</b> |       |        |        |        |       |      |        | <b>COHO</b> |       |        |        |        |        |      |         |
| <b>Total Statewide<sup>d/</sup></b> |                |       |        |        |        |       |      |        |             |       |        |        |        |        |      |         |
| 1981-1985                           | 57             | 2,153 | 15,884 | 23,367 | 12,667 | 645   | 46   | 54,662 | 80          | 2,961 | 22,620 | 73,777 | 68,672 | 9,800  | 436  | 172,399 |
| 1986-1990 <sup>a/</sup>             | -              | 901   | 1,886  | 14,500 | 8,674  | 1,212 | -    | 25,590 | -           | 19    | 5,077  | 91,015 | 62,794 | 7,165  | 45   | 165,058 |
| 1991-1995 <sup>b/</sup>             | -              | 148   | 1,041  | 5,009  | 3,756  | 1,743 | 215  | 11,156 | -           | 40    | 6,124  | 63,585 | 47,920 | 16,697 | 324  | 131,364 |
| 1996-2000 <sup>b/</sup>             | -              | -     | -      | 2,603  | 2,407  | 564   | -    | 4,940  | -           | -     | -      | 17,736 | 23,289 | 3,967  | -    | 41,445  |
| 2001-2005                           | -              | 2,607 | 5,200  | 14,961 | 12,700 | 2,859 | 51   | 35,251 | -           | 5     | 1,795  | 40,606 | 52,131 | 15,016 | 10   | 109,200 |
| 2006                                | -              | -     | 202    | 3,751  | 5,670  | 953   | 91   | 10,667 | -           | -     | 416    | 13,047 | 20,509 | 2,112  | 2    | 36,087  |
| 2007                                | -              | -     | -      | 4,097  | 4,362  | 485   | 0    | 8,944  | -           | -     | -      | 25,198 | 53,479 | 5,110  | 0    | 83,788  |
| 2008 <sup>b/</sup>                  | -              | -     | 3,011  | 6,594  | 4,611  | 414   | 6    | 14,635 | -           | -     | 360    | 6,669  | 10,088 | 1,752  | 1    | 18,870  |
| 2009                                | -              | -     | 192    | 4,476  | 7,233  | 353   | 97   | 12,351 | -           | -     | 1,157  | 34,742 | 90,204 | 12,297 | 92   | 138,493 |
| 2010                                | -              | -     | 5,000  | 13,299 | 16,341 | 2,189 | 45   | 36,874 | -           | -     | 47     | 12,247 | 17,999 | 5,947  | 37   | 36,278  |
| 2011                                | -              | -     | 2,861  | 8,271  | 17,178 | 889   | 5    | 29,203 | -           | -     | 620    | 12,093 | 21,372 | 5,494  | 2    | 39,582  |
| 2012                                | -              | -     | 10,265 | 10,220 | 11,016 | 2,096 | 133  | 33,729 | -           | -     | 407    | 10,297 | 11,942 | 8,767  | 21   | 31,434  |
| 2013                                | -              | 131   | 4,226  | 8,719  | 13,734 | 1,989 | 119  | 28,918 | -           | -     | 2,980  | 10,626 | 25,782 | 6,735  | 18   | 46,140  |
| 2014                                | -              | 629   | 6,027  | 15,460 | 16,174 | 1,624 | 110  | 40,025 | -           | -     | 8,448  | 35,175 | 52,411 | 26,824 | 199  | 123,057 |
| 2015                                | -              | 595   | 6,039  | 17,081 | 10,509 | 5,043 | 164  | 39,431 | -           | -     | 5,215  | 27,410 | 24,544 | 17,555 | 13   | 74,737  |
| 2016                                | -              | -     | -      | 9,519  | 7,388  | -     | -    | 16,907 | -           | -     | -      | 4,755  | 11,304 | -      | -    | 16,059  |
| 2017                                | -              | -     | 569    | 12,781 | 6,596  | 91    | -    | 20,037 | -           | -     | 88     | 14,314 | 20,755 | 930    | -    | 36,087  |
| 2018 <sup>c/</sup>                  | -              | -     | 833    | 5,414  | 3,611  | 56    | -    | 9,913  | -           | -     | 832    | 9,581  | 23,952 | 345    | -    | 34,710  |

a/ Neah Bay and La Push statistics do not include estimates of 707 Chinook killed during Chinook nonretention fishery (July 19-August 20, 1987).

b/ Includes catch from the Washington State waters Area 4B fishery in 1991, 1992, 1993, 1996, 1997, 1998, 2000, and 2008.

c/ Preliminary.

d/ Includes catch from the North Jetty when the ocean fishery was open; does not include catch reported as occurring inside the Columbia River mouth (North Jetty catch when the ocean fishery was closed, and Buoy 10 was open).

TABLE A-19. Washington ocean recreational pink salmon landings in numbers of fish by port of landing and statistical month.  
(Page 1 of 2)

| Year or Avg. <sup>a/</sup> | Apr. | May | June | July  | Aug.  | Sept. | Oct. | Season |
|----------------------------|------|-----|------|-------|-------|-------|------|--------|
| <u>Neah Bay</u>            |      |     |      |       |       |       |      |        |
| 1981-1985                  | -    | 18  | 4    | 780   | 3,547 | 82    | 27   | 4,398  |
| 1987                       | -    | -   | 6    | 686   | 713   | -     | -    | 1,405  |
| 1989 <sup>b/</sup>         | -    | 0   | 0    | 1,443 | 295   | 202   | -    | 1,940  |
| 1991 <sup>b/</sup>         | -    | -   | -    | 479   | 1,543 | 0     | -    | 2,022  |
| 1993 <sup>b/</sup>         | -    | 0   | -    | 609   | 1,264 | 371   | -    | 2,244  |
| 1995                       | -    | -   | -    | -     | 2,578 | 30    | -    | 2,608  |
| 1997 <sup>b/</sup>         | -    | -   | -    | 79    | 498   | -     | -    | 577    |
| 1999                       | -    | -   | -    | 730   | 1,165 | 81    | -    | 1,976  |
| 2001                       | -    | -   | -    | 1,715 | 1,081 | 3     | -    | 2,799  |
| 2003                       | -    | -   | 6    | 2,863 | 5,136 | 120   | -    | 8,125  |
| 2005                       | -    | -   | -    | 1,456 | 1,375 | 62    | -    | 2,893  |
| 2007                       | -    | -   | -    | 1,268 | 2,766 | 0     | -    | 4,033  |
| 2009                       | -    | -   | 9    | 2,591 | 4,266 | 270   | -    | 7,136  |
| 2011                       | -    | -   | 33   | 3,320 | 3,960 | 159   | -    | 7,473  |
| 2013                       | -    | -   | 31   | 4,088 | 1,866 | 13    | -    | 5,997  |
| 2015                       | -    | -   | 803  | 4,984 | 593   | 5     | -    | 6,385  |
| 2017                       | -    | -   | 1    | 368   | 299   | 7     | -    | 676    |
| <u>La Push</u>             |      |     |      |       |       |       |      |        |
| 1981-1985                  | -    | 0   | 0    | 5     | 207   | 1     | -    | 213    |
| 1987                       | -    | -   | 0    | 12    | 37    | -     | -    | 49     |
| 1989                       | -    | 0   | 0    | 0     | -     | -     | -    | 0      |
| 1991                       | -    | -   | -    | 46    | -     | -     | -    | 46     |
| 1993                       | -    | -   | -    | 46    | 34    | 4     | -    | 84     |
| 1995                       | -    | -   | -    | -     | 78    | 11    | -    | 89     |
| 1997                       | -    | -   | -    | 195   | 0     | -     | -    | 195    |
| 1999                       | -    | -   | -    | 87    | 47    | 0     | -    | 134    |
| 2001                       | -    | -   | -    | 129   | 32    | -     | -    | 161    |
| 2003                       | -    | -   | 4    | 419   | 459   | 23    | 0    | 905    |
| 2005                       | -    | -   | -    | 41    | 167   | 2     | 0    | 210    |
| 2007                       | -    | -   | -    | 42    | 84    | 0     | 0    | 126    |
| 2009                       | -    | -   | 6    | 148   | 77    | 0     | 0    | 231    |
| 2011                       | -    | -   | 4    | 520   | 929   | 67    | 0    | 1,520  |
| 2013                       | -    | -   | 3    | 232   | 406   | 1     | 0    | 643    |
| 2015                       | -    | -   | 24   | 113   | 5     | 0     | 0    | 142    |
| 2017                       | -    | -   | 0    | 4     | 8     | 0     | 0    | 12     |
| <u>Westport</u>            |      |     |      |       |       |       |      |        |
| 1981-1985                  | -    | 16  | 60   | 497   | 541   | 3     | -    | 1,111  |
| 1987                       | -    | -   | 0    | 183   | 45    | -     | -    | 228    |
| 1989                       | -    | 0   | 0    | 28    | 45    | -     | -    | 73     |
| 1991                       | -    | -   | 0    | 43    | 33    | 4     | -    | 80     |
| 1993                       | -    | -   | -    | 33    | 35    | 2     | -    | 70     |
| 1995                       | -    | -   | -    | 40    | 51    | 2     | -    | 93     |
| 1997                       | -    | -   | -    | 520   | 96    | 22    | -    | 638    |
| 1999                       | -    | -   | -    | 35    | 40    | 0     | -    | 75     |
| 2001                       | -    | -   | -    | 782   | 136   | -     | -    | 918    |
| 2003                       | -    | -   | 12   | 3,559 | 756   | 32    | -    | 4,359  |
| 2005                       | -    | -   | 0    | 26    | 128   | 0     | -    | 154    |
| 2007                       | -    | -   | -    | 261   | 240   | 2     | -    | 503    |
| 2009                       | -    | -   | 51   | 79    | 131   | 0     | -    | 261    |
| 2011                       | -    | -   | 4    | 544   | 1,270 | 13    | -    | 1,832  |
| 2013                       | -    | -   | 5    | 648   | 372   | 0     | -    | 1,024  |
| 2015                       | -    | -   | 209  | 1,829 | 60    | 3     | -    | 2,101  |
| 2017                       | -    | -   | 0    | 36    | 9     | 0     | -    | 45     |

TABLE A-19. Washington ocean recreational pink salmon landings in numbers of fish by port of landing and statistical month.  
(Page 2 of 2)

| Year or Avg. <sup>a/</sup>                 | Apr. | May | June  | July  | Aug.  | Sept. | Oct. | Season |
|--|------|-----|-------|-------|-------|-------|------|--------|
| <b><u>Ilwaco<sup>c/</sup></u></b>          |      |     |       |       |       |       |      |        |
| 1981-1985                                  | -    | 1   | 1     | 36    | 155   | 0     | -    | 193    |
| 1987                                       | -    | -   | 0     | 110   | 9     | -     | -    | 119    |
| 1989                                       | -    | 0   | 0     | 11    | 12    | -     | -    | 23     |
| 1991                                       | -    | -   | 0     | 45    | 21    | 0     | -    | 66     |
| 1993                                       | -    | -   | -     | 7     | 11    | 0     | -    | 18     |
| 1995                                       | -    | -   | -     | 4     | 18    | 9     | -    | 31     |
| 1997                                       | -    | -   | -     | 0     | 0     | -     | -    | 0      |
| 1999                                       | -    | -   | -     | 0     | 3     | 0     | -    | 3      |
| 2001                                       | -    | -   | -     | 5     | 31    | 4     | -    | 40     |
| 2003                                       | -    | -   | 0     | 2     | 16    | 0     | -    | 18     |
| 2005                                       | -    | -   | -     | 3     | 0     | 0     | -    | 3      |
| 2007                                       | -    | -   | -     | 5     | 3     | 0     | -    | 8      |
| 2009                                       | -    | -   | 0     | 0     | 0     | 0     | -    | 0      |
| 2011                                       | -    | -   | 0     | 2     | 1     | 0     | -    | 3      |
| 2013                                       | -    | -   | 0     | 0     | 4     | 0     | -    | 4      |
| 2015                                       | -    | -   | 0     | 3     | 1     | 0     | -    | 4      |
| 2017                                       | -    | -   | 0     | 0     | 0     | 0     | -    | 0      |
| <b><u>Total Statewide<sup>c/</sup></u></b> |      |     |       |       |       |       |      |        |
| 1981-1985                                  | -    | 35  | 65    | 1,318 | 4,451 | 85    | 27   | 5,915  |
| 1987                                       | -    | -   | 6     | 991   | 804   | -     | -    | 1,801  |
| 1989 <sup>b/</sup>                         | -    | 0   | 0     | 1,482 | 352   | 202   | -    | 2,036  |
| 1991 <sup>b/</sup>                         | -    | -   | 0     | 613   | 1,597 | 4     | -    | 2,214  |
| 1993 <sup>b/</sup>                         | -    | 0   | -     | 695   | 1,344 | 377   | -    | 2,416  |
| 1995                                       | -    | -   | -     | 44    | 2,725 | 52    | -    | 2,821  |
| 1997 <sup>b/</sup>                         | -    | -   | -     | 794   | 594   | 22    | -    | 1,410  |
| 1999                                       | -    | -   | -     | 852   | 1,255 | 81    | -    | 2,188  |
| 2001                                       | -    | -   | -     | 2,631 | 1,280 | 7     | -    | 3,918  |
| 2003                                       | -    | -   | 22    | 6,843 | 6,367 | 175   | 0    | 13,407 |
| 2005                                       | -    | -   | 0     | 1,526 | 1,670 | 64    | 0    | 3,260  |
| 2007                                       | -    | -   | -     | 1,575 | 3,093 | 2     | 0    | 4,670  |
| 2009                                       | -    | -   | 65    | 2,818 | 4,474 | 270   | 0    | 7,627  |
| 2011                                       | -    | -   | 41    | 4,386 | 6,161 | 240   | 0    | 10,828 |
| 2013                                       | -    | -   | 39    | 4,967 | 2,648 | 14    | 0    | 7,668  |
| 2015                                       | -    | -   | 1,035 | 6,929 | 659   | 8     | 0    | 8,631  |
| 2017                                       | -    | -   | 1     | 407   | 316   | 7     | 0    | 732    |

a/ Odd year averages only.

b/ Includes catch from the Washington State waters Area 4B fishery.

c/ Includes catch from the North Jetty when the ocean fishery was open; does not include catch reported as occurring inside the Columbia River mouth (North Jetty catch when the ocean fishery was closed and Buoy 10 was open).

TABLE A-20. Cape Falcon to U.S./Mexico border commercial troll salmon fishing effort in days fished by region and month.  
(Page 1 of 2)

| Year or Avg.  | Mar. | Apr.  | May   | June  | July   | Aug.  | Sept. | Oct.  | Nov. | Dec. | Season |
|---|------|-------|-------|-------|--------|-------|-------|-------|------|------|--------|
| <u>Cape Falcon to Humbug Mt.<sup>a/</sup></u>       |      |       |       |       |        |       |       |       |      |      |        |
| 1981-1985   | -    | -     | 1,413 | 1,011 | 10,193 | 5,360 | 941   | 448   | 10   | -    | 19,377 |
| 1986-1990   | -    | -     | 3,745 | 4,494 | 14,033 | 8,093 | 3,214 | 2,162 | 257  | -    | 35,843 |
| 1991-1995   | -    | -     | 1,234 | 2,027 | 2,444  | 2,054 | 1,335 | 1,321 | 88   | -    | 8,674  |
| 1996-2000   | -    | -     | 1,282 | 1,573 | 960    | 1,532 | 973   | 636   | 114  | -    | 6,815  |
| 2001-2005   | 687  | 1,208 | 2,310 | 1,994 | 942    | 1,631 | 1,673 | 1,213 | 161  | 25   | 11,190 |
| 2006  | -    | -     | -     | 1,017 | 483    | 185   | 621   | 723   | 279  | 26   | 3,334  |
| 2007  | -    | 342   | 1,181 | 774   | 265    | 1,151 | 303   | 244   | 162  | -    | 4,422  |
| 2008  | -    | -     | -     | -     | -      | -     | 37    | 12    | 48   | -    | 97     |
| 2009  | -    | -     | -     | -     | -      | -     | 634   | 60    | -    | -    | 694    |
| 2010  | -    | -     | 1,015 | 987   | 568    | 719   | 37    | 157   | -    | -    | 3,483  |
| 2011  | -    | 316   | 888   | 1,080 | 100    | 207   | 122   | 226   | 235  | -    | 3,174  |
| 2012  | -    | 522   | 1,434 | 936   | 246    | 632   | 887   | 680   | 121  | -    | 5,458  |
| 2013  | -    | 1,029 | 1,134 | 771   | 518    | 2,147 | 1,345 | 893   | 155  | -    | 7,992  |
| 2014  | -    | 952   | 2,101 | 1,718 | 1,062  | 2,155 | 742   | 289   | 98   | -    | 9,117  |
| 2015  | -    | 1,755 | 1,562 | 1,249 | 1,275  | 788   | 367   | 237   | 158  | -    | 7,391  |
| 2016  | -    | 888   | 833   | 635   | 542    | 634   | 330   | 137   | 41   | -    | 4,040  |
| 2017  | -    | 106   | 183   | 391   | 655    | -     | 88    | 137   | 41   | -    | 1,601  |
| 2018 <sup>b/</sup>                                  | -    | -     | 351   | 430   | 281    | 668   | 77    | 102   | 83   | -    | 1,992  |
| <u>Humbug Mt. to Horse Mt. (KMZ)<sup>a/c/</sup></u> |      |       |       |       |        |       |       |       |      |      |        |
| 1981-1985   | -    | -     | 2,979 | 1,817 | 5,010  | 5,260 | 1,273 | 732   | 336  | -    | 17,408 |
| 1986-1990   | -    | -     | 326   | 1,889 | 756    | 1,406 | 551   | 160   | 217  | -    | 3,825  |
| 1991-1995   | -    | -     | 45    | -     | -      | 56    | 522   | 157   | -    | -    | 396    |
| 1996-2000   | -    | -     | 55    | -     | -      | 107   | 208   | 150   | -    | -    | 533    |
| 2001-2005   | -    | 17    | 41    | 82    | 110    | 166   | 388   | 110   | 13   | -    | 819    |
| 2006  | -    | -     | -     | -     | -      | -     | 6     | 151   | 27   | -    | 184    |
| 2007  | -    | 6     | 8     | 138   | 99     | 95    | 417   | 47    | 12   | -    | 822    |
| 2008  | -    | -     | -     | -     | -      | -     | -     | 51    | -    | -    | 51     |
| 2009  | -    | -     | -     | -     | -      | -     | -     | -     | -    | -    | -      |
| 2010  | -    | -     | 43    | -     | 26     | 40    | -     | 72    | -    | -    | 181    |
| 2011  | -    | -     | 60    | 60    | 160    | 135   | -     | 75    | -    | -    | 490    |
| 2012  | -    | 0     | 23    | 118   | 90     | 67    | 348   | 41    | -    | -    | 687    |
| 2013  | -    | 13    | 185   | 267   | 441    | 321   | 89    | 52    | -    | -    | 1,368  |
| 2014  | -    | 10    | 471   | 82    | 38     | 70    | 120   | 78    | -    | -    | 869    |
| 2015  | -    | 12    | 150   | 100   | 90     | 24    | 32    | 144   | -    | -    | 552    |
| 2016  | -    | 7     | 13    | 47    | 8      | -     | 59    | 52    | -    | -    | 186    |
| 2017  | -    | -     | -     | -     | -      | -     | -     | 109   | -    | -    | 109    |
| 2018 <sup>b/</sup>                                  | -    | -     | 168   | 351   | 283    | 257   | 0     | 116   | -    | -    | 1,175  |



TABLE A-20. Cape Falcon to U.S./Mexico border commercial troll salmon fishing effort in days fished by region and month.  
(Page 2 of 2)

| Year or Avg.  | Mar. | Apr.  | May    | June   | July   | Aug.   | Sept. | Oct.  | Nov. | Dec. | Season |
|---|------|-------|--------|--------|--------|--------|-------|-------|------|------|--------|
| <b><u>Horse Mt. to U.S./Mexico Border</u></b>         |      |       |        |        |        |        |       |       |      |      |        |
| 1981-1985   | -    | 2,037 | 10,225 | 7,881  | 15,092 | 8,601  | 4,766 | -     | -    | -    | 47,380 |
| 1986-1990   | -    | -     | 14,517 | 15,253 | 14,467 | 9,262  | 2,839 | -     | -    | -    | 56,337 |
| 1991-1995   | -    | -     | 7,860  | 5,620  | 5,160  | 4,320  | 2,620 | -     | -    | -    | 25,580 |
| 1996-2000   | -    | -     | 4,642  | 4,173  | 4,570  | 2,318  | 2,235 | -     | -    | -    | 18,082 |
| 2001-2005   | -    | -     | 4,248  | 2,367  | 4,540  | 2,963  | 2,396 | 293   | -    | -    | 16,807 |
| 2006  | -    | -     | 2,062  | 103    | 650    | 2,593  | 2,477 | 374   | -    | -    | 8,259  |
| 2007  | -    | 106   | 3,132  | 29     | 3,288  | 2,659  | 932   | 168   | -    | -    | 10,314 |
| 2008  | -    | -     | -      | -      | -      | -      | -     | -     | -    | -    | -      |
| 2009  | -    | -     | -      | -      | -      | -      | -     | -     | -    | -    | -      |
| 2010  | -    | -     | -      | -      | 1,105  | 870    | -     | -     | -    | -    | 1,975  |
| 2011  | -    | -     | 1,879  | 504    | 1,737  | 1,897  | 638   | 117   | -    | -    | 6,772  |
| 2012  | -    | -     | 3,738  | 1,593  | 4,406  | 2,650  | 1,361 | 469   | -    | -    | 14,217 |
| 2013  | -    | -     | 4,268  | 3,904  | 3,979  | 2,638  | 1,620 | 223   | -    | -    | 16,632 |
| 2014  | -    | -     | 3,011  | 2,682  | 3,281  | 2,987  | 1,759 | 575   | -    | -    | 14,295 |
| 2015  | -    | -     | 4,434  | 2,392  | 1,943  | 2,000  | 1,695 | 515   | -    | -    | 12,979 |
| 2016  | -    | -     | 1,662  | 1,290  | -      | 2,450  | 1,563 | 174   | -    | -    | 7,139  |
| 2017  | -    | -     | 874    | 1,210  | -      | 2,610  | 1,811 | 220   | -    | -    | 6,725  |
| 2018 <sup>b/</sup>                                    | -    | -     | 465    | 836    | 758    | 2,782  | 1,545 | 441   | -    | -    | 6,827  |
| <b><u>Total South of Cape Falcon<sup>a/</sup></u></b> |      |       |        |        |        |        |       |       |      |      |        |
| 1981-1985   | -    | 2,037 | 14,617 | 10,709 | 30,296 | 19,221 | 6,981 | 1,180 | 346  | -    | 84,165 |
| 1986-1990   | -    | -     | 18,589 | 21,258 | 28,802 | 18,198 | 6,604 | 2,322 | 292  | -    | 96,006 |
| 1991-1995   | -    | -     | 9,112  | 7,242  | 6,636  | 5,974  | 4,059 | 1,416 | 88   | -    | 34,492 |
| 1996-2000   | -    | -     | 5,979  | 5,752  | 4,953  | 3,957  | 3,416 | 786   | 116  | -    | 25,430 |
| 2001-2005   | 689  | 1,222 | 6,590  | 4,426  | 5,359  | 4,401  | 4,457 | 1,616 | 168  | 25   | 28,816 |
| 2006  | -    | -     | 2,062  | 1,120  | 1,133  | 2,778  | 3,104 | 1,248 | 306  | 26   | 11,777 |
| 2007  | -    | 454   | 4,321  | 941    | 3,652  | 3,905  | 1,652 | 459   | 174  | -    | 15,558 |
| 2008  | -    | -     | -      | -      | -      | -      | 37    | 63    | 48   | -    | 148    |
| 2009  | -    | -     | -      | -      | -      | -      | 634   | 60    | -    | -    | 694    |
| 2010  | -    | -     | 1,058  | 987    | 1,699  | 1,629  | 37    | 229   | -    | -    | 5,639  |
| 2011  | -    | 316   | 2,827  | 1,644  | 1,997  | 2,239  | 760   | 418   | 235  | -    | 10,436 |
| 2012  | -    | 522   | 5,195  | 2,647  | 4,742  | 3,349  | 2,596 | 1,190 | 121  | -    | 20,362 |
| 2013  | -    | 1,042 | 5,587  | 4,942  | 4,938  | 5,106  | 3,054 | 1,168 | 155  | -    | 25,992 |
| 2014  | -    | 962   | 5,583  | 4,482  | 4,381  | 5,212  | 2,621 | 942   | 98   | -    | 24,281 |
| 2015  | -    | 1,767 | 6,146  | 3,741  | 3,308  | 2,812  | 2,094 | 896   | 158  | -    | 20,922 |
| 2016  | -    | 895   | 2,508  | 1,972  | 550    | 3,084  | 1,952 | 363   | 41   | -    | 11,365 |
| 2017  | -    | 106   | 1,057  | 1,601  | 655    | 2,610  | 1,899 | 466   | 41   | -    | 8,435  |
| 2018 <sup>b/</sup>                                    | -    | -     | 984    | 1,617  | 1,322  | 3,707  | 1,622 | 659   | 83   | -    | 9,994  |

a/ Monthly totals for Oregon data are the sum of statistical weeks with closest fit to the calendar month.

b/ Preliminary.

c/ The current commercial KMZ boundaries are Humbug Mt. to Humboldt south jetty.

TABLE A-21. Cape Falcon to U.S./Mexico border commercial troll Chinook and coho salmon landings in numbers of fish by region and month. (Page 1 of 2)

| Year or Avg.  | Mar.   | Apr.   | May    | June   | July    | Aug.   | Sept.  | Oct.   | Nov.  | Dec. | Season  | Mar.        | Apr. | May   | June   | July    | Aug.   | Sept.  | Oct. | Nov. | Dec. | Season  |
|---|--------|--------|--------|--------|---------|--------|--------|--------|-------|------|---------|-------------|------|-------|--------|---------|--------|--------|------|------|------|---------|
| <b>CHINOOK</b>                                      |        |        |        |        |         |        |        |        |       |      |         | <b>COHO</b> |      |       |        |         |        |        |      |      |      |         |
| <u>Cape Falcon to Humbug Mt.<sup>a/</sup></u>       |        |        |        |        |         |        |        |        |       |      |         |             |      |       |        |         |        |        |      |      |      |         |
| 1981-1985   | -      | -      | 13,353 | 6,839  | 43,988  | 23,644 | 6,660  | 2,804  | 36    | -    | 97,325  | -           | -    | -     | -      | 260,127 | 85,249 | 5,803  | -    | -    | -    | 351,179 |
| 1986-1990   | -      | -      | 41,012 | 45,376 | 139,455 | 85,332 | 29,901 | 21,111 | 1,095 | -    | 363,282 | -           | -    | -     | 40     | 294,074 | 95,999 | 20,776 | -    | -    | -    | 410,889 |
| 1991-1995   | -      | -      | 12,499 | 18,016 | 19,956  | 36,499 | 16,827 | 14,191 | 453   | -    | 118,442 | -           | -    | -     | 91,249 | 105,911 | 8,382  | -      | 19   | -    | -    | 205,560 |
| 1996-2000   | -      | -      | 21,687 | 28,657 | 13,880  | 38,164 | 17,769 | 7,339  | 1,002 | -    | 128,498 | -           | -    | -     | 8      | -       | -      | -      | -    | -    | -    | 8       |
| 2001-2005   | 14,799 | 25,358 | 50,107 | 41,488 | 20,877  | 50,745 | 49,102 | 32,580 | 1,307 | 148  | 269,227 | -           | -    | -     | -      | -       | -      | -      | -    | -    | -    | -       |
| 2006  | -      | -      | -      | 9,550  | 3,616   | 962    | 4,367  | 3,449  | 1,555 | 131  | 23,630  | -           | -    | -     | -      | -       | -      | -      | -    | -    | -    | -       |
| 2007  | -      | 1,856  | 7,328  | 4,463  | 1,759   | 12,360 | 713    | 795    | 670   | 3    | 29,947  | -           | -    | -     | -      | -       | 5,036  | 519    | -    | -    | -    | 5,555   |
| 2008  | -      | -      | -      | -      | -       | -      | 64     | 12     | 208   | -    | 284     | -           | -    | -     | -      | -       | -      | -      | -    | -    | -    | -       |
| 2009  | -      | -      | -      | -      | -       | -      | 105    | 332    | -     | -    | 437     | -           | -    | -     | -      | -       | -      | 9,278  | -    | -    | -    | 9,278   |
| 2010  | -      | -      | 9,019  | 8,966  | 4,276   | 3,797  | 56     | 1,330  | -     | -    | 27,444  | -           | -    | -     | -      | -       | -      | -      | -    | -    | -    | -       |
| 2011  | -      | 4,481  | 7,901  | 10,401 | 699     | 1,012  | 337    | 1,093  | 1,995 | -    | 27,919  | -           | -    | -     | -      | -       | -      | -      | -    | -    | -    | -       |
| 2012  | -      | 3,633  | 14,533 | 7,357  | 1,785   | 8,771  | 13,677 | 8,756  | 701   | -    | 59,213  | -           | -    | -     | -      | -       | -      | -      | -    | -    | -    | -       |
| 2013  | -      | 7,373  | 9,093  | 5,987  | 5,331   | 38,535 | 28,251 | 8,424  | 1,002 | -    | 103,996 | -           | -    | -     | -      | -       | -      | -      | -    | -    | -    | -       |
| 2014  | -      | 15,501 | 35,389 | 28,560 | 18,326  | 66,600 | 8,851  | 2,072  | 469   | -    | 175,768 | -           | -    | -     | -      | -       | -      | 3,296  | -    | -    | -    | 3,296   |
| 2015  | -      | 16,381 | 13,140 | 19,803 | 27,250  | 7,457  | 2,006  | 1,954  | 1,163 | -    | 89,154  | -           | -    | -     | -      | -       | -      | -      | -    | -    | -    | -       |
| 2016  | -      | 6,585  | 5,989  | 4,736  | 11,243  | 8,627  | 1,812  | 717    | 182   | -    | 39,891  | -           | -    | -     | -      | -       | -      | -      | -    | -    | -    | -       |
| 2017  | -      | 553    | 1,229  | 3,174  | 13,019  | -      | 137    | 681    | 96    | -    | 18,889  | -           | -    | -     | -      | -       | -      | -      | -    | -    | -    | -       |
| 2018 <sup>b/</sup>                                  | -      | -      | 965    | 2,880  | 2,929   | 12,267 | 225    | 490    | 431   | -    | 20,187  | -           | -    | -     | 56     | -       | -      | -      | -    | -    | -    | -       |
| <u>Humbug Mt. to Horse Mt. (KMZ)<sup>a/c/</sup></u> |        |        |        |        |         |        |        |        |       |      |         |             |      |       |        |         |        |        |      |      |      |         |
| 1981-1985   | -      | -      | 31,261 | 13,370 | 26,577  | 44,460 | 10,089 | 3,495  | 1,113 | -    | 130,365 | -           | -    | 3,527 | 7,183  | 25,915  | 17,370 | 803    | 0    | -    | -    | 51,270  |
| 1986-1990   | -      | -      | 5,509  | 55,976 | 9,956   | 17,966 | 8,453  | 770    | 1,460 | -    | 100,090 | -           | -    | -     | 11,960 | 2,350   | 51     | 565    | 0    | -    | -    | 14,926  |
| 1991-1995   | -      | -      | 265    | -      | 1,682   | 234    | 4,510  | 927    | -     | -    | 7,618   | -           | -    | -     | -      | -       | -      | 3      | 0    | -    | -    | 3       |
| 1996-2000   | -      | -      | 1,064  | -      | -       | 1,589  | 3,232  | 696    | -     | -    | 6,580   | -           | -    | -     | -      | -       | -      | 6,580  | -    | -    | -    | -       |
| 2001-2005   | 25     | 656    | 446    | 1,182  | 3,363   | 6,874  | 7,582  | 661    | 66    | -    | 17,645  | -           | -    | -     | -      | -       | -      | -      | -    | -    | -    | -       |
| 2006  | -      | -      | -      | -      | -       | -      | 12     | 590    | 136   | -    | 738     | -           | -    | -     | -      | -       | -      | -      | -    | -    | -    | -       |
| 2007  | -      | 15     | 25     | 727    | 1,150   | 1,524  | 9,162  | 209    | 47    | -    | 12,859  | -           | -    | -     | -      | -       | -      | -      | -    | -    | -    | -       |
| 2008  | -      | -      | -      | -      | -       | -      | -      | 236    | -     | -    | 236     | -           | -    | -     | -      | -       | -      | -      | -    | -    | -    | -       |
| 2009  | -      | -      | -      | -      | -       | -      | -      | -      | -     | -    | -       | -           | -    | -     | -      | -       | -      | -      | -    | -    | -    | -       |
| 2010  | -      | -      | 164    | -      | 51      | 125    | -      | 529    | -     | -    | 869     | -           | -    | -     | -      | -       | -      | -      | -    | -    | -    | -       |
| 2011  | -      | -      | 601    | 254    | 1,611   | 1,144  | -      | 107    | -     | -    | 3,717   | -           | -    | -     | -      | -       | -      | -      | -    | -    | -    | -       |
| 2012  | -      | 0      | 371    | 1,287  | 1,456   | 1,328  | 6,115  | 118    | -     | -    | 10,675  | -           | -    | -     | -      | -       | -      | -      | -    | -    | -    | -       |
| 2013  | -      | 50     | 2,695  | 4,374  | 5,545   | 3,856  | 319    | 155    | -     | -    | 16,994  | -           | -    | -     | -      | -       | -      | -      | -    | -    | -    | -       |
| 2014  | -      | 53     | 13,352 | 1,349  | 492     | 403    | 674    | 443    | -     | -    | 16,766  | -           | -    | -     | -      | -       | -      | -      | -    | -    | -    | -       |
| 2015  | -      | 39     | 1,146  | 1,528  | 779     | 92     | 46     | 639    | -     | -    | 4,269   | -           | -    | -     | -      | -       | -      | -      | -    | -    | -    | -       |
| 2016  | -      | 12     | 34     | 179    | 21      | -      | 196    | 152    | -     | -    | 594     | -           | -    | -     | -      | -       | -      | -      | -    | -    | -    | -       |
| 2017  | -      | -      | -      | -      | -       | -      | -      | 329    | -     | -    | 329     | -           | -    | -     | -      | -       | -      | -      | -    | -    | -    | -       |
| 2018 <sup>b/</sup>                                  | -      | -      | 1,210  | 4,005  | 2,942   | 4,391  | -      | 316    | -     | -    | 12,864  | -           | -    | -     | -      | -       | -      | -      | -    | -    | -    | -       |

TABLE A-21. Cape Falcon to U.S./Mexico border commercial troll Chinook and coho salmon landings in numbers of fish by region and month. (Page 2 of 2)

| Year or Avg.                                   | Mar.           | Apr.   | May     | June    | July    | Aug.    | Sept.  | Oct.   | Nov.  | Dec. | Season    | Mar.        | Apr. | May   | June   | July    | Aug.   | Sept. | Oct. | Nov. | Dec. | Season  |   |
|--|----------------|--------|---------|---------|---------|---------|--------|--------|-------|------|-----------|-------------|------|-------|--------|---------|--------|-------|------|------|------|---------|---|
|  | <b>CHINOOK</b> |        |         |         |         |         |        |        |       |      |           | <b>COHO</b> |      |       |        |         |        |       |      |      |      |         |   |
| <u>Horse Mt. to U.S./Mexico Border</u>         |                |        |         |         |         |         |        |        |       |      |           |             |      |       |        |         |        |       |      |      |      |         |   |
| 1981-1985                                      | -              | 31,016 | 95,110  | 63,197  | 128,909 | 57,751  | 17,536 | -      | -     | -    | 393,519   | -           | 37   | 503   | 5,765  | 14,913  | 2,219  | 276   | 0    | -    | -    | 23,173  |   |
| 1986-1990                                      | -              | -      | 239,714 | 226,495 | 193,068 | 71,735  | 17,365 | -      | -     | -    | 748,377   | -           | -    | -     | 15,505 | 17,802  | 3,427  | 163   | 0    | -    | -    | 36,897  |   |
| 1991-1995                                      | -              | -      | 121,373 | 73,940  | 80,950  | 42,707  | 22,018 | -      | -     | -    | 340,988   | -           | -    | -     | 25,850 | 12,250  | 2,825  | -     | -    | -    | -    | 40,925  |   |
| 1996-2000                                      | -              | -      | 121,717 | 101,679 | 88,632  | 24,057  | 25,378 | -      | -     | -    | 361,464   | -           | -    | -     | -      | -       | -      | -     | -    | -    | -    | -       |   |
| 2001-2005                                      | -              | -      | 81,370  | 73,618  | 122,399 | 52,345  | 39,885 | 1,905  | -     | -    | 371,521   | -           | -    | -     | -      | -       | -      | -     | -    | -    | -    | -       |   |
| 2006   | -              | -      | 9,911   | 391     | 16,783  | 18,589  | 22,982 | 1,072  | -     | -    | 69,728    | -           | -    | -     | -      | -       | -      | -     | -    | -    | -    | -       |   |
| 2007   | -              | 748    | 36,598  | 156     | 41,808  | 23,212  | 2,505  | 352    | -     | -    | 105,379   | -           | -    | -     | -      | -       | -      | -     | -    | -    | -    | -       |   |
| 2008   | -              | -      | -       | -       | -       | -       | -      | -      | -     | -    | -         | -           | -    | -     | -      | -       | -      | -     | -    | -    | -    | -       |   |
| 2009   | -              | -      | -       | -       | -       | -       | -      | -      | -     | -    | -         | -           | -    | -     | -      | -       | -      | -     | -    | -    | -    | -       |   |
| 2010   | -              | -      | -       | -       | 8,906   | 6,182   | -      | -      | -     | -    | 15,088    | -           | -    | -     | -      | -       | -      | -     | -    | -    | -    | -       |   |
| 2011   | -              | -      | 11,732  | 4,189   | 30,085  | 19,494  | 1,820  | 317    | -     | -    | 67,637    | -           | -    | -     | -      | -       | -      | -     | -    | -    | -    | -       |   |
| 2012   | -              | -      | 58,857  | 19,385  | 92,842  | 28,266  | 7,691  | 3,313  | -     | -    | 210,354   | -           | -    | -     | -      | -       | -      | -     | -    | -    | -    | -       |   |
| 2013   | -              | -      | 74,828  | 81,625  | 95,896  | 23,249  | 10,910 | 941    | -     | -    | 287,449   | -           | -    | -     | -      | -       | -      | -     | -    | -    | -    | -       |   |
| 2014   | -              | -      | 34,946  | 39,581  | 54,568  | 24,085  | 11,498 | 2,985  | -     | -    | 167,663   | -           | -    | -     | -      | -       | -      | -     | -    | -    | -    | -       |   |
| 2015   | -              | -      | 53,561  | 19,489  | 12,920  | 11,467  | 10,407 | 2,617  | -     | -    | 110,461   | -           | -    | -     | -      | -       | -      | -     | -    | -    | -    | -       |   |
| 2016   | -              | -      | 13,367  | 13,428  | -       | 18,334  | 9,271  | 589    | -     | -    | 54,989    | -           | -    | -     | -      | -       | -      | -     | -    | -    | -    | -       |   |
| 2017   | -              | -      | 5,588   | 6,891   | -       | 18,336  | 10,232 | 1,279  | -     | -    | 42,326    | -           | -    | -     | -      | -       | -      | -     | -    | -    | -    | -       |   |
| 2018 <sup>b/</sup>                             | -              | -      | 4,545   | 14,819  | 12,074  | 25,047  | 11,000 | 2,035  | -     | -    | 69,520    | -           | -    | -     | -      | -       | -      | -     | -    | -    | -    | -       |   |
| <u>Total South of Cape Falcon<sup>a/</sup></u> |                |        |         |         |         |         |        |        |       |      |           |             |      |       |        |         |        |       |      |      |      |         |   |
| 1981-1985                                      | -              | 31,016 | 139,724 | 83,407  | 199,475 | 125,855 | 34,284 | 6,299  | 1,149 | -    | 621,208   | -           | 37   | 4,029 | 12,948 | 248,929 | 70,738 | 2,240 | 0    | -    | -    | 334,855 |   |
| 1986-1990                                      | -              | -      | 286,235 | 316,652 | 336,505 | 167,846 | 55,719 | 21,881 | 1,642 | -    | 1,186,481 | -           | -    | -     | 27,490 | 313,756 | 80,277 | 4,883 | 0    | -    | -    | 426,405 |   |
| 1991-1995                                      | -              | -      | 133,977 | 88,353  | 93,260  | 71,953  | 39,747 | 14,748 | 453   | -    | 442,491   | -           | -    | -     | 71,475 | 118,161 | 10,265 | 3     | 12   | -    | -    | 199,916 |   |
| 1996-2000                                      | -              | -      | 144,468 | 130,783 | 94,184  | 63,810  | 46,379 | 8,035  | 1,002 | -    | 488,661   | -           | -    | -     | 8      | -       | -      | -     | -    | -    | -    | -       | 8 |
| 2001-2005                                      | 14,823         | 25,883 | 131,834 | 116,052 | 141,118 | 98,440  | 96,569 | 35,145 | 1,347 | 148  | 658,393   | -           | -    | -     | -      | -       | -      | -     | -    | -    | -    | -       |   |
| 2006   | -              | -      | 9,911   | 9,941   | 20,399  | 19,551  | 27,361 | 5,111  | 1,691 | 131  | 94,096    | -           | -    | -     | -      | -       | -      | -     | -    | -    | -    | -       |   |
| 2007   | -              | 2,619  | 43,951  | 5,346   | 44,717  | 37,096  | 12,380 | 1,356  | 717   | 3    | 148,185   | -           | -    | -     | -      | -       | 5,036  | 519   | -    | -    | -    | 5,555   |   |
| 2008   | -              | -      | -       | -       | -       | -       | 64     | 248    | 208   | -    | 520       | -           | -    | -     | -      | -       | -      | -     | -    | -    | -    | -       |   |
| 2009   | -              | -      | -       | -       | -       | -       | 105    | 332    | -     | -    | 437       | -           | -    | -     | -      | -       | -      | 9,278 | -    | -    | -    | 9,278   |   |
| 2010   | -              | -      | 9,183   | 8,966   | 13,233  | 10,104  | 56     | 1,859  | -     | -    | 43,401    | -           | -    | -     | -      | -       | -      | -     | -    | -    | -    | -       |   |
| 2011   | -              | 4,481  | 20,234  | 14,844  | 32,395  | 21,650  | 2,157  | 1,517  | 1,995 | -    | 99,273    | -           | -    | -     | -      | -       | -      | -     | -    | -    | -    | -       |   |
| 2012   | -              | 3,633  | 73,761  | 28,029  | 96,083  | 38,365  | 27,483 | 12,187 | 701   | -    | 280,242   | -           | -    | -     | -      | -       | -      | -     | -    | -    | -    | -       |   |
| 2013   | -              | 7,423  | 86,616  | 91,986  | 106,772 | 65,640  | 39,480 | 9,520  | 1,002 | -    | 408,439   | -           | -    | -     | -      | -       | -      | -     | -    | -    | -    | -       |   |
| 2014   | -              | 15,554 | 83,687  | 69,490  | 73,386  | 91,088  | 21,023 | 5,500  | 469   | -    | 360,197   | -           | -    | -     | -      | -       | -      | 3,296 | -    | -    | -    | 3,296   |   |
| 2015   | -              | 16,420 | 67,847  | 40,820  | 40,949  | 19,016  | 12,459 | 5,210  | 1,163 | -    | 203,884   | -           | -    | -     | -      | -       | -      | -     | -    | -    | -    | -       |   |
| 2016   | -              | 6,597  | 19,390  | 18,343  | 11,264  | 26,961  | 11,279 | 1,458  | 182   | -    | 95,474    | -           | -    | -     | -      | -       | -      | -     | -    | -    | -    | -       |   |
| 2017   | -              | 553    | 6,817   | 10,065  | 13,019  | 18,336  | 10,369 | 2,289  | 96    | -    | 61,544    | -           | -    | -     | -      | -       | -      | -     | -    | -    | -    | -       |   |
| 2018 <sup>b/</sup>                             | -              | -      | 6,720   | 21,704  | 17,945  | 41,705  | 11,225 | 2,841  | 431   | -    | 102,571   | -           | -    | -     | 56     | -       | -      | -     | -    | -    | -    | -       |   |

a/ Monthly totals for Oregon data are the sum of statistical weeks with closest fit to the calendar month.

b/ Preliminary.

c/ The current commercial KMZ boundaries are Humbug Mt. to Humboldt south jetty.

TABLE A-22. Cape Falcon to U.S/Mexico border ocean recreational fishing effort in salmon angler trips by region and month.  
(Page 1 of 2)

| Year or Avg.                                      | Feb. | Mar. | Apr. | May   | June   | July   | Aug.   | Sept.  | Oct.  | Nov. | Season  |
|---|------|------|------|-------|--------|--------|--------|--------|-------|------|---------|
| <u>Cape Falcon to Humbug Mt.<sup>a/</sup></u>     |      |      |      |       |        |        |        |        |       |      |         |
| 1981-1985   | -    | -    | -    | 5,279 | 21,790 | 78,019 | 61,312 | 10,677 | 1,603 | --   | 151,116 |
| 1986-1990   | -    | -    | -    | 2,054 | 18,538 | 82,564 | 51,012 | 11,171 | --    | --   | 164,930 |
| 1991-1995   | -    | -    | -    | 1,817 | 11,249 | 63,162 | 22,523 | 5,191  | 4,948 | 396  | 64,187  |
| 1996-2000   | -    | -    | -    | 708   | 596    | 9,570  | 4,388  | 3,527  | 2,933 | 170  | 21,804  |
| 2001-2005   | -    | 63   | 212  | 1,460 | 12,416 | 37,987 | 18,656 | 8,798  | 3,531 | 182  | 83,279  |
| 2006  | -    | 24   | 92   | 803   | 4,918  | 18,334 | 3,817  | 9,995  | 5,368 | 98   | 43,449  |
| 2007  | -    | 36   | 75   | 1,244 | 7,828  | 22,067 | 25,908 | 5,227  | 2,341 | 40   | 64,766  |
| 2008  | -    | -    | -    | -     | 3,253  | 7,681  | 5,052  | 3,635  | 2,348 | --   | 21,969  |
| 2009  | -    | -    | -    | -     | 4,144  | 33,012 | 23,429 | 3,743  | 2,009 | --   | 66,337  |
| 2010  | -    | -    | -    | 863   | 2,960  | 9,116  | 16,794 | 6,334  | 1,048 | --   | 37,115  |
| 2011  | -    | 22   | 75   | 433   | 2,965  | 10,835 | 10,173 | 9,354  | 1,240 | 16   | 35,113  |
| 2012  | -    | 23   | 380  | 1,622 | 3,778  | 9,872  | 12,531 | 13,720 | 1,705 | 18   | 43,649  |
| 2013  | -    | 479  | 693  | 911   | 3,970  | 11,214 | 25,977 | 11,833 | 4,214 | --   | 59,291  |
| 2014  | -    | 87   | 136  | 2,235 | 5,251  | 32,802 | 25,863 | 24,388 | 1,421 | --   | 92,183  |
| 2015  | -    | 60   | 152  | 1,382 | 2,350  | 18,025 | 7,526  | 16,586 | 2,374 | --   | 48,455  |
| 2016  | -    | 82   | 18   | 1,037 | 2,799  | 6,382  | 4,835  | 14,579 | 612   | --   | 30,344  |
| 2017  | -    | 17   | 60   | 500   | 1,916  | 10,057 | 9,383  | 9,343  | 453   | --   | 31,729  |
| 2018 <sup>b/</sup>                                | -    | 54   | 19   | 657   | 1,120  | 9,566  | 22,219 | 14,596 | 899   | --   | 49,130  |
| <u>Humbug Mt. to Horse Mt. (KMZ)<sup>a/</sup></u> |      |      |      |       |        |        |        |        |       |      |         |
| 1981-1985   | 0    | 0    | 1    | 3,481 | 14,938 | 49,198 | 26,922 | 4,354  | 3,416 | 138  | 102,448 |
| 1986-1990   | 0    | 0    | -    | 5,291 | 33,539 | 62,718 | 27,347 | 5,042  | 3,353 | -    | 135,949 |
| 1991-1995   | -    | -    | -    | 6,722 | 16,127 | 28,644 | 7,901  | 7,727  | 2,879 | -    | 51,816  |
| 1996-2000   | -    | -    | -    | 3,271 | 9,150  | 5,570  | 12,832 | 3,266  | 2,766 | -    | 36,854  |
| 2001-2005   | -    | -    | -    | 4,566 | 8,748  | 6,208  | 12,157 | 4,617  | 2,983 | -    | 39,279  |
| 2006  | -    | -    | -    | 4,887 | 8,619  | 3,174  | -      | 7,320  | 3,081 | -    | 27,081  |
| 2007  | -    | -    | -    | 2,346 | 6,223  | 7,541  | 10,178 | 2,004  | 3,263 | -    | 31,555  |
| 2008  | -    | -    | -    | -     | 712    | 2,317  | 701    | -      | 1,065 | -    | 4,795   |
| 2009  | -    | -    | -    | -     | 268    | 2,329  | 3,269  | 5,424  | -     | -    | 11,290  |
| 2010  | -    | -    | -    | 665   | 771    | 1,280  | 2,493  | 2,700  | 2,270 | -    | 10,179  |
| 2011  | -    | -    | -    | 2,244 | 2,974  | 5,059  | 6,554  | 2,621  | 1,757 | -    | 21,209  |
| 2012  | -    | -    | -    | 3,619 | 9,514  | 14,645 | 15,183 | 3,576  | 3,666 | -    | 50,203  |
| 2013  | -    | -    | -    | 3,501 | 10,773 | 15,914 | 15,379 | 822    | 3,547 | -    | 49,936  |
| 2014  | -    | -    | -    | 5,588 | 6,409  | 12,723 | 7,475  | 868    | 4,639 | -    | 37,702  |
| 2015  | -    | -    | -    | 2,946 | 1,679  | 3,974  | 2,927  | 1,328  | 5,040 | -    | 17,894  |
| 2016  | -    | -    | -    | 1,682 | 2,622  | 3,273  | 2,134  | 1,558  | 1,872 | -    | 13,141  |
| 2017  | -    | -    | -    | -     | -      | -      | -      | -      | 2,012 | -    | 2,012   |
| 2018 <sup>b/</sup>                                | -    | -    | -    | 508   | 3,715  | 4,144  | 3,855  | 51     | 2,102 | -    | 14,375  |

TABLE A-22. Cape Falcon to U.S./Mexico Border ocean recreational fishing effort in salmon angler trips by region and month.  
(Page 2 of 2)

| Year or Avg.  | Feb.  | Mar.   | Apr.   | May    | June   | July    | Aug.    | Sept.  | Oct.   | Nov.  | Season  |
|---|-------|--------|--------|--------|--------|---------|---------|--------|--------|-------|---------|
| <b><u>Horse Mt. to U.S./Mexico Border</u></b>         |       |        |        |        |        |         |         |        |        |       |         |
| 1981-1985   | 5,107 | 7,945  | 8,771  | 8,898  | 14,341 | 22,038  | 16,941  | 9,593  | 5,648  | 1,426 | 100,709 |
| 1986-1990   | 8,272 | 17,094 | 24,034 | 13,831 | 23,693 | 36,170  | 22,631  | 10,893 | 5,029  | 1,563 | 163,209 |
| 1991-1995   | 1,263 | 15,054 | 23,079 | 22,180 | 30,007 | 51,595  | 26,483  | 11,093 | 5,939  | 302   | 186,873 |
| 1996-2000   | 32    | 14,341 | 25,245 | 21,784 | 31,874 | 42,867  | 25,997  | 9,463  | 4,144  | 610   | 176,094 |
| 2001-2005   | 371   | 2,645  | 27,879 | 23,256 | 24,370 | 41,406  | 23,848  | 10,068 | 4,148  | 1,148 | 159,140 |
| 2006  | 289   | 298    | 19,198 | 17,128 | 25,376 | 31,705  | 9,684   | 4,102  | 1,827  | 448   | 110,055 |
| 2007  | 249   | 855    | 15,043 | 13,297 | 19,620 | 21,548  | 8,532   | 3,091  | 1,817  | 1,394 | 85,446  |
| 2008  | 206   | 185    | -      | -      | -      | -       | -       | -      | -      | -     | 391     |
| 2009  | -     | -      | -      | -      | -      | -       | -       | -      | -      | -     | -       |
| 2010  | -     | -      | 16,774 | 6,770  | 2,736  | 8,310   | 7,883   | 1,965  | -      | -     | 44,438  |
| 2011  | -     | -      | 15,565 | 5,943  | 6,937  | 20,300  | 14,387  | 10,164 | 3,431  | -     | 76,727  |
| 2012  | -     | -      | 21,466 | 18,077 | 21,974 | 28,417  | 14,620  | 7,914  | 3,588  | 569   | 116,625 |
| 2013  | -     | -      | 19,602 | 15,187 | 18,315 | 36,160  | 20,012  | 5,521  | 2,245  | 426   | 117,468 |
| 2014  | -     | -      | 20,226 | 8,522  | 7,675  | 23,892  | 22,999  | 10,443 | 5,193  | 723   | 99,673  |
| 2015  | -     | -      | 11,085 | 7,401  | 9,210  | 16,244  | 15,118  | 10,293 | 3,483  | 5     | 72,839  |
| 2016  | -     | -      | 8,006  | 8,281  | 4,284  | 16,521  | 13,188  | 8,500  | 2,366  | 0     | 61,146  |
| 2017  | -     | -      | 10,105 | 5,000  | 6,574  | 22,590  | 19,358  | 8,496  | 1,851  | 0     | 73,974  |
| 2018 <sup>b/</sup>                                    | -     | -      | 8,122  | 2,021  | 12,296 | 34,227  | 18,397  | 8,940  | 5,048  | -     | 89,051  |
| <b><u>Total South of Cape Falcon<sup>a/</sup></u></b> |       |        |        |        |        |         |         |        |        |       |         |
| 1981-1985   | 5,107 | 7,945  | 8,772  | 14,491 | 42,353 | 149,255 | 92,912  | 22,489 | 9,385  | 1,564 | 354,272 |
| 1986-1990   | 8,272 | 17,094 | 24,034 | 20,765 | 75,770 | 181,452 | 100,990 | 27,107 | 7,041  | 1,563 | 464,088 |
| 1991-1995   | 1,263 | 15,054 | 23,079 | 29,374 | 54,157 | 106,679 | 41,813  | 20,897 | 10,221 | 425   | 302,876 |
| 1996-2000   | 32    | 14,341 | 25,258 | 25,763 | 41,620 | 58,007  | 43,217  | 16,256 | 9,843  | 723   | 234,753 |
| 2001-2005   | 371   | 2,683  | 28,091 | 29,281 | 45,533 | 85,601  | 54,662  | 23,483 | 10,662 | 1,330 | 281,698 |
| 2006  | 289   | 322    | 19,290 | 22,818 | 38,913 | 53,213  | 13,501  | 21,417 | 10,276 | 546   | 180,585 |
| 2007  | 249   | 891    | 15,118 | 16,887 | 33,671 | 51,156  | 44,618  | 10,322 | 7,421  | 1,434 | 181,767 |
| 2008  | 206   | 185    | -      | -      | 3,965  | 9,998   | 5,753   | 3,635  | 3,413  | --    | 27,155  |
| 2009  | -     | -      | -      | -      | 4,412  | 35,341  | 26,698  | 9,167  | 2,009  | --    | 77,627  |
| 2010  | -     | -      | 16,774 | 8,298  | 6,467  | 18,706  | 27,170  | 10,999 | 3,318  | --    | 91,732  |
| 2011  | -     | 22     | 15,640 | 8,620  | 12,876 | 36,194  | 31,114  | 22,139 | 6,428  | 16    | 133,049 |
| 2012  | -     | 23     | 21,846 | 23,318 | 35,266 | 52,934  | 42,334  | 25,210 | 8,959  | 587   | 210,477 |
| 2013  | -     | 479    | 20,295 | 19,599 | 33,058 | 63,288  | 61,368  | 18,176 | 10,006 | 426   | 226,695 |
| 2014  | -     | 87     | 20,362 | 16,345 | 19,335 | 69,417  | 56,337  | 35,699 | 11,253 | 723   | 229,558 |
| 2015  | -     | 60     | 11,237 | 11,729 | 13,239 | 38,243  | 25,571  | 28,207 | 10,897 | 5     | 139,188 |
| 2016  | -     | 82     | 8,024  | 11,000 | 9,705  | 26,176  | 20,157  | 24,637 | 4,850  | 0     | 104,631 |
| 2017  | -     | 17     | 10,165 | 5,500  | 8,490  | 32,647  | 28,741  | 17,839 | 4,316  | 0     | 107,715 |
| 2018 <sup>b/</sup>                                    | -     | 54     | 8,141  | 3,186  | 17,131 | 47,937  | 44,471  | 23,587 | 8,049  | 0     | 152,556 |

a/ Monthly totals for Oregon data are the sum of statistical weeks with closest fit to the calendar month.

b/ Preliminary.

TABLE A-23. Cape Falcon to U.S./Mexico border ocean recreational salmon landings in numbers of fish by region and month. (Page 1 of 2)

| Year or Avg.                                      | Feb. | Mar. | Apr. | May   | June   | July   | Aug.   | Sept. | Oct.  | Nov. | Season | Feb. | Mar. | Apr. | May   | June   | July   | Aug.   | Sept.  | Oct. | Nov. | Season  |
|---|------|------|------|-------|--------|--------|--------|-------|-------|------|--------|------|------|------|-------|--------|--------|--------|--------|------|------|---------|
| CHINOOK   |      |      |      |       |        |        |        |       |       |      |        | COHO |      |      |       |        |        |        |        |      |      |         |
| <u>Cape Falcon to Humbug Mt. <sup>a/</sup></u>    |      |      |      |       |        |        |        |       |       |      |        |      |      |      |       |        |        |        |        |      |      |         |
| 1981-1985   | -    | -    | -    | 55    | 787    | 6,327  | 3,518  | 642   | 42    | --   | 11,326 | -    | -    | -    | 2,321 | 18,010 | 62,626 | 40,922 | 4,706  | -    | -    | 119,511 |
| 1986-1990   | -    | -    | -    | 150   | 1,678  | 7,128  | 4,099  | 1,639 | --    | --   | 14,664 | -    | -    | -    | 1,136 | 21,865 | 97,505 | 45,530 | 6,824  | -    | -    | 171,268 |
| 1991-1995   | -    | -    | -    | 146   | 1,144  | 3,030  | 1,044  | 465   | 1,254 | 42   | 4,230  | -    | -    | -    | 522   | 21,985 | 87,767 | 25,734 | 3,192  | -    | -    | 97,169  |
| 1996-2000   | -    | -    | -    | 107   | 142    | 1,987  | 1,233  | 738   | 503   | 36   | 4,726  | -    | -    | -    | -     | -      | 8,452  | 42     | 12     | 1    | -    | 5,127   |
| 2001-2005   | -    | 3    | 61   | 266   | 3,544  | 13,052 | 7,832  | 4,085 | 1,338 | 31   | 30,212 | -    | -    | -    | 8     | 6,461  | 28,005 | 7,878  | 163    | 21   | -    | 42,529  |
| 2006  | -    | 2    | 4    | 68    | 540    | 3,755  | 982    | 1,863 | 2,024 | 49   | 9,287  | -    | -    | -    | -     | 469    | 8,346  | 36     | 634    | -    | -    | 9,485   |
| 2007  | -    | 3    | 0    | 72    | 255    | 804    | 1,076  | 597   | 474   | 16   | 3,297  | -    | -    | -    | 2     | 4,734  | 19,223 | 16,417 | 311    | -    | -    | 40,687  |
| 2008  | -    | -    | -    | -     | 9      | 6      | 3      | 262   | 201   | --   | 481    | -    | -    | -    | -     | 770    | 2,811  | 4,131  | 45     | 3    | -    | 7,760   |
| 2009  | -    | -    | -    | -     | 9      | 36     | 47     | 92    | 226   | --   | 410    | -    | -    | -    | -     | 4,859  | 38,001 | 25,325 | 799    | 6    | -    | 68,990  |
| 2010  | -    | -    | -    | 75    | 207    | 380    | 1,108  | 439   | 122   | --   | 2,331  | -    | -    | -    | -     | 368    | 2,181  | 8,336  | 1,242  | -    | -    | 12,127  |
| 2011  | -    | 0    | 7    | 56    | 161    | 493    | 623    | 1,056 | 207   | 6    | 2,609  | -    | -    | -    | -     | 556    | 3,568  | 2,011  | 6,623  | -    | -    | 12,758  |
| 2012  | -    | 21   | 108  | 530   | 687    | 858    | 2,258  | 2,791 | 506   | 8    | 7,767  | -    | -    | -    | -     | 55     | 2,251  | 4,927  | 6,965  | -    | -    | 14,198  |
| 2013  | -    | 257  | 196  | 191   | 1,397  | 1,477  | 11,886 | 1,671 | 792   | --   | 17,867 | -    | -    | -    | -     | 9      | 4,748  | 2,650  | 2,658  | 19   | -    | 10,084  |
| 2014  | -    | 10   | 32   | 266   | 826    | 2,973  | 3,241  | 1,870 | 137   | --   | 9,355  | -    | -    | -    | 1     | 3,530  | 32,851 | 19,275 | 26,494 | 49   | -    | 82,200  |
| 2015  | -    | 30   | 8    | 151   | 267    | 401    | 376    | 2,814 | 1,454 | --   | 5,501  | -    | -    | -    | -     | 458    | 11,841 | 2,557  | 4,426  | 22   | -    | 19,304  |
| 2016  | -    | 32   | 9    | 128   | 237    | 238    | 692    | 1,140 | 76    | --   | 2,552  | -    | -    | -    | -     | 245    | 1,180  | 79     | 4,178  | 22   | -    | 5,704   |
| 2017  | -    | 0    | 6    | 89    | 139    | 508    | 807    | 592   | 39    | --   | 2,180  | -    | -    | -    | -     | 363    | 5,772  | 3,940  | 4,590  | -    | -    | 14,665  |
| 2018 <sup>b/</sup>                                | -    | 0    | 4    | 48    | 138    | 655    | 1,167  | 623   | 74    | --   | 2,709  | -    | -    | -    | -     | 31     | 2,978  | 8,581  | 6,934  | -    | -    | 18,524  |
| <u>Humbug Mt. to Horse Mt. (KMZ)<sup>a/</sup></u> |      |      |      |       |        |        |        |       |       |      |        |      |      |      |       |        |        |        |        |      |      |         |
| 1981-1985   | -    | 0    | 1    | 2,463 | 4,949  | 17,196 | 7,185  | 703   | 515   | 9    | 33,021 | --   | --   | 0    | 378   | 5,668  | 17,700 | 5,744  | 354    | 1    | 0    | 29,844  |
| 1986-1990   | -    | 0    | -    | 1,782 | 14,924 | 21,557 | 8,664  | 1,935 | 581   | -    | 49,211 | --   | --   | -    | 1,081 | 12,458 | 32,289 | 7,650  | 877    | 10   | -    | 54,361  |
| 1991-1995   | -    | -    | -    | 2,752 | 6,005  | 4,480  | 1,559  | 1,849 | 653   | -    | 13,312 | -    | -    | -    | 186   | 8,173  | 15,356 | 2,224  | 900    | 2    | -    | 18,580  |
| 1996-2000   | -    | -    | -    | 1,298 | 3,637  | 2,596  | 5,622  | 709   | 702   | -    | 14,564 | -    | -    | -    | 33    | 63     | 55     | 98     | 22     | 9    | -    | 244     |
| 2001-2005   | -    | -    | -    | 3,369 | 5,979  | 3,107  | 6,313  | 3,409 | 469   | -    | 22,646 | -    | -    | -    | 54    | 201    | 182    | 117    | 38     | 8    | -    | 588     |
| 2006  | -    | -    | -    | 4,620 | 6,199  | 2,515  | -      | 4,464 | 397   | -    | 18,195 | -    | -    | -    | 93    | 503    | 150    | -      | 169    | 7    | -    | 922     |
| 2007  | -    | -    | -    | 841   | 5,290  | 5,001  | 8,064  | 2,215 | 535   | -    | 21,946 | -    | -    | -    | -     | 245    | 745    | 917    | 60     | 3    | -    | 1,970   |
| 2008  | -    | -    | -    | -     | -      | -      | -      | -     | 280   | -    | 280    | -    | -    | -    | -     | 449    | 1,273  | 409    | -      | 3    | -    | 2,134   |
| 2009  | -    | -    | -    | -     | -      | 9      | 325    | 533   | -     | -    | 867    | -    | -    | -    | -     | 6      | 1,123  | 59     | 17     | -    | -    | 1,205   |
| 2010  | -    | -    | -    | 24    | 160    | 40     | 501    | 278   | 541   | -    | 1,544  | -    | -    | -    | -     | -      | 19     | 75     | 16     | -    | -    | 110     |
| 2011  | -    | -    | -    | 814   | 970    | 4,391  | 4,018  | 497   | 233   | -    | 10,923 | -    | -    | -    | 5     | 10     | 62     | 37     | 12     | -    | -    | 126     |
| 2012  | -    | -    | -    | 3,911 | 11,769 | 14,139 | 14,502 | 3,912 | 534   | -    | 48,767 | -    | -    | -    | -     | 50     | 176    | 48     | -      | 2    | -    | 276     |
| 2013  | -    | -    | -    | 2,585 | 12,329 | 16,247 | 11,996 | 459   | 814   | -    | 44,430 | -    | -    | -    | -     | 65     | 360    | 245    | -      | 6    | -    | 676     |
| 2014  | -    | -    | -    | 4,413 | 5,756  | 7,784  | 3,259  | 319   | 1,115 | -    | 22,646 | -    | -    | -    | 22    | 119    | 696    | 9      | 3      | -    | -    | 849     |
| 2015  | -    | -    | -    | 930   | 376    | 1,237  | 1,454  | 85    | 792   | -    | 4,874  | -    | -    | -    | -     | 13     | 122    | 5      | 4      | 6    | -    | 150     |
| 2016  | -    | -    | -    | 1,454 | 1,025  | 1,506  | 649    | 582   | 287   | -    | 5,503  | -    | -    | -    | -     | 29     | 45     | 3      | 2      | -    | -    | 79      |
| 2017  | -    | -    | -    | -     | -      | -      | -      | -     | 506   | -    | 506    | -    | -    | -    | -     | -      | -      | -      | -      | -    | -    | -       |
| 2018 <sup>b/</sup>                                | -    | -    | -    | 105   | 1,863  | 1,320  | 1,583  | 31    | 429   | -    | 5,331  | -    | -    | -    | -     | 52     | 23     | 45     | -      | -    | -    | 120     |

TABLE A-23. Cape Falcon to U.S./Mexico border ocean recreational salmon landings in numbers of fish by region and month. (Page 2 of 2)

| Year or Avg.                                    | Feb.  | Mar.   | Apr.   | May    | June   | July   | Aug.   | Sept.  | Oct.  | Nov.  | Season  | Feb.        | Mar. | Apr. | May   | June   | July    | Aug.   | Sept.  | Oct. | Nov. | Season  |
|---|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|---------|-------------|------|------|-------|--------|---------|--------|--------|------|------|---------|
| <b>CHINOOK</b>                                  |       |        |        |        |        |        |        |        |       |       |         | <b>COHO</b> |      |      |       |        |         |        |        |      |      |         |
| <b>Horse Mt. to U.S./Mexico Border</b>          |       |        |        |        |        |        |        |        |       |       |         |             |      |      |       |        |         |        |        |      |      |         |
| 1981-1985                                       | 5,947 | 7,266  | 7,238  | 7,654  | 13,303 | 18,990 | 16,587 | 8,530  | 5,546 | 1,410 | 92,471  | 0           | 1    | 21   | 149   | 680    | 903     | 303    | 40     | 29   | 0    | 2,125   |
| 1986-1990                                       | 5,630 | 15,288 | 26,365 | 10,037 | 18,925 | 28,491 | 17,858 | 7,834  | 4,240 | 1,319 | 135,987 | 0           | 1    | 56   | 212   | 1,300  | 2,384   | 772    | 153    | 12   | 0    | 4,890   |
| 1991-1995                                       | 484   | 11,136 | 21,564 | 15,561 | 27,663 | 53,815 | 17,807 | 8,925  | 4,451 | 159   | 161,502 | 0           | 9    | 23   | 260   | 3,128  | 5,839   | 733    | 142    | 25   | --   | 10,159  |
| 1996-2000                                       | 6     | 14,184 | 23,734 | 17,596 | 29,070 | 40,667 | 17,615 | 5,878  | 2,977 | 982   | 149,280 | -           | -    | 3    | 11    | 112    | 91      | 59     | 16     | 6    | -    | 283     |
| 2001-2005                                       | 196   | 1,767  | 22,222 | 17,031 | 24,567 | 41,719 | 15,500 | 6,749  | 2,248 | 395   | 132,355 | -           | -    | 3    | 118   | 179    | 340     | 66     | 22     | -    | -    | 713     |
| 2006  | 55    | 109    | 9,408  | 14,233 | 24,099 | 26,657 | 4,023  | 982    | 256   | 67    | 79,889  | -           | -    | -    | 108   | 640    | 588     | 49     | -      | -    | -    | 1,385   |
| 2007  | 48    | 200    | 3,152  | 6,405  | 8,613  | 8,080  | 1,154  | 390    | 441   | 325   | 28,808  | -           | -    | -    | 53    | 104    | 149     | 25     | 14     | -    | -    | 345     |
| 2008  | 0     | 6      | -      | -      | -      | -      | -      | -      | -     | -     | 6       | -           | -    | -    | -     | -      | -       | -      | -      | -    | -    | -       |
| 2009  | -     | -      | -      | -      | -      | -      | -      | -      | -     | -     | -       | -           | -    | -    | -     | -      | -       | -      | -      | -    | -    | -       |
| 2010  | -     | -      | 5,265  | 2,408  | 630    | 2,568  | 2,823  | 395    | -     | -     | 14,089  | -           | -    | 8    | 7     | 68     | 15      | 19     | 8      | -    | -    | 125     |
| 2011  | -     | -      | 5,522  | 1,919  | 2,434  | 12,498 | 9,410  | 6,794  | 1,258 | -     | 39,835  | -           | -    | 8    | 10    | 62     | 116     | 17     | -      | 5    | -    | 218     |
| 2012  | -     | -      | 18,786 | 11,146 | 17,027 | 23,897 | 6,987  | 4,385  | 2,094 | 160   | 84,482  | -           | -    | -    | 3     | 14     | 14      | -      | 3      | -    | -    | 34      |
| 2013  | -     | -      | 13,656 | 11,337 | 15,729 | 29,204 | 8,554  | 2,167  | 1,359 | 87    | 82,093  | -           | -    | -    | -     | 34     | 86      | 4      | -      | -    | -    | 124     |
| 2014  | -     | -      | 13,924 | 3,912  | 2,699  | 15,235 | 13,642 | 6,403  | 3,073 | 125   | 59,013  | -           | -    | -    | 4     | 30     | 163     | -      | -      | -    | -    | 197     |
| 2015  | -     | -      | 3,024  | 1,893  | 3,154  | 8,510  | 7,435  | 8,197  | 1,577 | 0     | 33,790  | -           | -    | -    | 5     | 4      | 15      | 5      | -      | -    | -    | 29      |
| 2016  | -     | -      | 2,030  | 4,239  | 1,522  | 11,549 | 7,101  | 5,933  | 638   | 0     | 33,012  | -           | -    | -    | -     | -      | 35      | 8      | -      | -    | -    | 43      |
| 2017  | -     | -      | 4,298  | 2,305  | 5,433  | 26,241 | 18,809 | 4,260  | 851   | 0     | 62,197  | -           | -    | -    | 3     | -      | 418     | 44     | -      | -    | -    | 465     |
| 2018 <sup>b/</sup>                              | -     | -      | 3,929  | 476    | 13,054 | 41,502 | 13,450 | 6,745  | 4,148 | -     | 83,304  | -           | -    | -    | -     | 5      | 76      | 4      | 8      | -    | -    | 93      |
| <b>Total South of Cape Falcon <sup>a/</sup></b> |       |        |        |        |        |        |        |        |       |       |         |             |      |      |       |        |         |        |        |      |      |         |
| 1981-1985                                       | 5,947 | 7,266  | 7,239  | 10,162 | 19,039 | 42,513 | 27,290 | 9,875  | 6,070 | 1,419 | 136,819 | 0           | 1    | 21   | 1,919 | 17,153 | 81,228  | 46,969 | 4,158  | 30   | 0    | 151,479 |
| 1986-1990                                       | 5,630 | 15,288 | 26,365 | 11,939 | 35,527 | 57,176 | 30,621 | 11,409 | 4,588 | 1,319 | 199,862 | 0           | 1    | 56   | 2,202 | 35,623 | 132,177 | 53,953 | 6,489  | 18   | 0    | 230,519 |
| 1991-1995                                       | 484   | 11,136 | 21,564 | 17,908 | 33,611 | 58,321 | 19,472 | 10,960 | 5,475 | 140   | 179,043 | 0           | 9    | 23   | 722   | 22,857 | 67,713  | 12,805 | 2,319  | 26   | --   | 106,474 |
| 1996-2000                                       | 2     | 11,347 | 23,735 | 19,001 | 32,850 | 45,250 | 24,470 | 7,326  | 4,181 | 678   | 168,570 | -           | -    | 3    | 22    | 175    | 5,218   | 199    | 42     | 9    | -    | 5,655   |
| 2001-2005                                       | 157   | 1,769  | 22,283 | 20,665 | 34,090 | 57,878 | 29,645 | 14,243 | 4,055 | 427   | 185,213 | -           | -    | 3    | 176   | 6,841  | 28,528  | 8,062  | 202    | 25   | -    | 43,830  |
| 2006  | 55    | 111    | 9,412  | 18,921 | 30,838 | 32,927 | 5,005  | 7,309  | 2,677 | 116   | 107,371 | -           | -    | -    | 201   | 1,612  | 9,084   | 85     | 803    | 7    | -    | 11,792  |
| 2007  | 48    | 203    | 3,152  | 7,318  | 14,158 | 13,885 | 10,294 | 3,202  | 1,450 | 341   | 54,051  | -           | -    | -    | 55    | 5,083  | 20,117  | 17,359 | 385    | 3    | -    | 43,002  |
| 2008  | 0     | 6      | -      | -      | 9      | 6      | 3      | 262    | 481   | --    | 767     | -           | -    | -    | -     | 1,219  | 4,084   | 4,540  | 45     | 6    | -    | 9,894   |
| 2009  | -     | -      | -      | -      | 9      | 45     | 372    | 625    | 226   | --    | 1,277   | -           | -    | -    | -     | 4,865  | 39,124  | 25,384 | 816    | 6    | -    | 70,195  |
| 2010  | -     | -      | 5,265  | 2,507  | 997    | 2,988  | 4,432  | 1,112  | 663   | --    | 17,964  | -           | -    | 8    | 7     | 436    | 2,215   | 8,430  | 1,266  | -    | -    | 12,362  |
| 2011  | -     | 0      | 5,529  | 2,789  | 3,565  | 17,382 | 14,051 | 8,347  | 1,698 | 6     | 53,367  | -           | -    | 8    | 15    | 628    | 3,746   | 2,065  | 6,635  | 5    | -    | 13,102  |
| 2012  | -     | 21     | 18,894 | 15,587 | 29,483 | 38,894 | 23,747 | 11,088 | 3,134 | 168   | 141,016 | -           | -    | -    | 3     | 119    | 2,441   | 4,975  | 6,968  | 2    | -    | 14,508  |
| 2013  | -     | 257    | 13,852 | 14,113 | 29,455 | 46,928 | 32,436 | 4,297  | 2,965 | 87    | 144,390 | -           | -    | -    | -     | 108    | 5,194   | 2,899  | 2,658  | 25   | -    | 10,884  |
| 2014  | -     | 10     | 13,956 | 8,591  | 9,281  | 25,992 | 20,142 | 8,592  | 4,325 | 125   | 91,014  | -           | -    | -    | 27    | 3,679  | 33,710  | 19,284 | 26,497 | 49   | -    | 83,246  |
| 2015  | -     | 30     | 3,032  | 2,974  | 3,797  | 10,148 | 9,265  | 11,096 | 3,823 | 0     | 44,165  | -           | -    | -    | 5     | 475    | 11,978  | 2,567  | 4,430  | 28   | -    | 19,483  |
| 2016  | -     | 32     | 2,039  | 5,821  | 2,784  | 13,293 | 8,442  | 7,655  | 1,001 | 0     | 41,067  | -           | -    | -    | -     | 274    | 1,260   | 90     | 4,180  | 22   | -    | 5,826   |
| 2017  | -     | 0      | 4,304  | 2,394  | 5,572  | 26,749 | 19,616 | 4,852  | 1,396 | 0     | 64,883  | -           | -    | -    | 3     | 363    | 6,190   | 3,984  | 4,590  | -    | -    | 15,130  |
| 2018 <sup>b/</sup>                              | -     | 0      | 3,933  | 629    | 15,055 | 43,477 | 16,200 | 7,399  | 4,651 | 0     | 91,344  | -           | -    | -    | -     | 88     | 3,077   | 8,630  | 6,942  | -    | -    | 18,737  |

a/ Monthly totals for Oregon data are the sum of statistical weeks with closest fit to the calendar month.

b/ Preliminary.

TABLE A-24. U.S./Canada border to Cape Falcon commercial troll salmon fishing effort in days fished by area and month.<sup>a/</sup>  
(Page 1 of 3)

| Year or Avg.   | May   | June  | July  | Aug.  | Sept. | Oct. | Season |
|--|-------|-------|-------|-------|-------|------|--------|
| <b>U.S./Canada Border to Leadbetter Pt. - Non-Indian</b>                 |       |       |       |       |       |      |        |
| 1981-1985  | 2,700 | 309   | 5,650 | 2,388 | 14    | -    | 9,858  |
| 1986-1990  | 2,255 | 830   | 438   | 750   | 15    | -    | 3,847  |
| 1991-1995  | 1,578 | 1,054 | 775   | 635   | 304   | -    | 3,224  |
| 1996-2000  | 221   | 124   | 158   | 129   | 5     | -    | 419    |
| 2001-2005  | 402   | 141   | 357   | 294   | 80    | -    | 1,242  |
| 2006   | 359   | 381   | 99    | 296   | 169   | -    | 1,304  |
| 2007   | 445   | 253   | 354   | 114   | 8     | -    | 1,174  |
| 2008   | 246   | 353   | 223   | 213   | 60    | -    | 1,095  |
| 2009   | 467   | 551   | 432   | 320   | 134   | -    | 1,904  |
| 2010   | 511   | 858   | 501   | 428   | 46    | -    | 2,344  |
| 2011   | 606   | 656   | 448   | 208   | 54    | -    | 1,972  |
| 2012   | 364   | 633   | 452   | 306   | 198   | -    | 1,953  |
| 2013   | 721   | 498   | 471   | 405   | 83    | -    | 2,178  |
| 2014   | 589   | 188   | 397   | 337   | 117   | -    | 1,628  |
| 2015   | 818   | 484   | 491   | 450   | 127   | -    | 2,370  |
| 2016   | 647   | 359   | 248   | 186   | -     | -    | 1,440  |
| 2017   | 762   | 606   | 380   | 411   | 121   | -    | 2,280  |
| 2018 <sup>b/</sup>   | 741   | 674   | 422   | 189   | 69    | -    | 2,095  |
| <b>U.S./Canada Border to Leadbetter Pt. - Treaty Indian<sup>c/</sup></b> |       |       |       |       |       |      |        |
| 1981-1985  | 79    | 141   | 284   | 313   | 146   | 17   | 963    |
| 1986-1990  | 138   | 168   | 434   | 460   | 161   | 2    | 1,360  |
| 1991-1995  | 69    | 71    | 182   | 311   | 48    | 10   | 682    |
| 1996-2000  | 31    | 38    | 11    | 96    | 53    | -    | 229    |
| 2001-2005  | 47    | 66    | 100   | 116   | 69    | -    | 397    |
| 2006   | 96    | 285   | 167   | 140   | 117   | 5    | 805    |
| 2007   | 22    | 205   | 189   | 167   | 7     | 0    | 590    |
| 2008   | 30    | 125   | 102   | 231   | 92    | 1    | 580    |
| 2009   | 82    | 238   | 233   | 269   | 5     | 4    | 827    |
| 2010   | 155   | 335   | 155   | 150   | 62    | 4    | 857    |
| 2011   | 92    | 192   | 152   | 140   | 24    | 1    | 600    |
| 2012   | 144   | 269   | 214   | 229   | 104   | 4    | 960    |
| 2013   | 279   | 206   | 369   | 583   | 159   | 0    | 1,596  |
| 2014   | 196   | 295   | 465   | 419   | 152   | 0    | 1,527  |
| 2015   | 324   | 380   | 389   | 261   | 104   | 0    | 1,458  |
| 2016   | 204   | 233   | 141   | 90    | 2     | 0    | 670    |
| 2017   | 27    | 90    | 317   | 357   | 172   | 0    | 963    |
| 2018 <sup>b/</sup>   | 99    | 255   | 272   | 145   | 110   | 0    | 881    |
| <b>U.S./Canada Border to Leadbetter Pt. - Total<sup>c/</sup></b>         |       |       |       |       |       |      |        |
| 1981-1985  | 2,779 | 388   | 4,804 | 2,701 | 149   | 17   | 10,821 |
| 1986-1990  | 2,393 | 832   | 609   | 1,210 | 164   | 2    | 5,207  |
| 1991-1995  | 1,016 | 704   | 492   | 819   | 230   | 10   | 3,260  |
| 1996-2000  | 208   | 137   | 74    | 173   | 55    | -    | 648    |
| 2001-2005  | 449   | 207   | 457   | 411   | 117   | -    | 1,639  |
| 2006   | 455   | 666   | 266   | 436   | 286   | 5    | 2,109  |
| 2007   | 467   | 458   | 543   | 281   | 15    | 0    | 1,764  |
| 2008   | 276   | 478   | 325   | 444   | 152   | 1    | 1,675  |
| 2009   | 549   | 789   | 665   | 589   | 139   | 4    | 2,731  |
| 2010   | 666   | 1,193 | 656   | 578   | 108   | 4    | 3,201  |
| 2011   | 698   | 848   | 600   | 348   | 78    | 1    | 2,572  |
| 2012   | 508   | 902   | 666   | 535   | 302   | 4    | 2,913  |
| 2013   | 1,000 | 704   | 840   | 988   | 242   | 0    | 3,774  |
| 2014   | 785   | 483   | 862   | 756   | 269   | 0    | 3,155  |
| 2015   | 1,142 | 864   | 880   | 711   | 231   | 0    | 3,828  |
| 2016   | 851   | 592   | 389   | 276   | 2     | 0    | 2,110  |
| 2017   | 789   | 696   | 697   | 768   | 293   | 0    | 3,243  |
| 2018 <sup>b/</sup>   | 840   | 929   | 694   | 334   | 179   | 0    | 2,976  |



TABLE A-24. U.S./Canada border to Cape Falcon commercial troll salmon fishing effort in days fished by area and month. <sup>a/</sup>  
(Page 2 of 3)

| Year or Avg.  | May   | June  | July  | Aug.  | Sept. | Oct. | Season |
|---|-------|-------|-------|-------|-------|------|--------|
| <u>Leadbetter Pt. to Cape Falcon - Non-Indian</u>                           |       |       |       |       |       |      |        |
| 1981-1985   | 969   | 58    | 977   | 906   | 146   | 0    | 3,057  |
| 1986-1990   | 343   | 87    | 467   | 1,162 | 850   | 22   | 1,530  |
| 1991-1995   | 153   | 52    | 113   | 326   | 155   | -    | 709    |
| 1996-2000   | 2     | 2     | -     | 294   | 29    | -    | 85     |
| 2001-2005   | 93    | 33    | 114   | 181   | 86    | -    | 472    |
| 2006  | 587   | 350   | 1     | 81    | 99    | -    | 1,118  |
| 2007  | 99    | 73    | 50    | 184   | 24    | -    | 430    |
| 2008  | 306   | 362   | 36    | 66    | 13    | -    | 783    |
| 2009  | 79    | 98    | 259   | 178   | 13    | -    | 627    |
| 2010  | 91    | 310   | 164   | 136   | 23    | -    | 724    |
| 2011  | 127   | 167   | 42    | 27    | 18    | -    | 381    |
| 2012  | 63    | 299   | 51    | 27    | 83    | -    | 523    |
| 2013  | 111   | 170   | 47    | 56    | 33    | -    | 417    |
| 2014  | 705   | 128   | 203   | 100   | 74    | -    | 1,210  |
| 2015  | 708   | 114   | 59    | 87    | 125   | -    | 1,093  |
| 2016  | 149   | 130   | 51    | 83    | -     | -    | 413    |
| 2017  | 98    | 116   | 26    | 119   | 76    | -    | 435    |
| 2018 <sup>b/</sup>  | 29    | 67    | 18    | 36    | 2     | -    | 152    |
| <u>U.S./Canada Border to Cape Falcon - Non-Indian Total</u>                 |       |       |       |       |       |      |        |
| 1981-1985   | 3,669 | 305   | 5,497 | 3,294 | 149   | 1    | 12,915 |
| 1986-1990   | 2,598 | 895   | 671   | 1,447 | 858   | 22   | 5,377  |
| 1991-1995   | 1,731 | 1,106 | 888   | 879   | 407   | -    | 3,756  |
| 1996-2000   | 223   | 126   | 158   | 227   | 19    | -    | 487    |
| 2001-2005   | 495   | 173   | 470   | 475   | 166   | -    | 1,713  |
| 2006  | 946   | 731   | 100   | 377   | 268   | -    | 2,422  |
| 2007  | 544   | 326   | 404   | 298   | 32    | -    | 1,604  |
| 2008  | 552   | 715   | 259   | 279   | 73    | -    | 1,878  |
| 2009  | 546   | 649   | 691   | 498   | 147   | -    | 2,531  |
| 2010  | 602   | 1,168 | 665   | 564   | 69    | -    | 3,068  |
| 2011  | 733   | 823   | 490   | 235   | 72    | -    | 2,353  |
| 2012  | 427   | 932   | 503   | 333   | 281   | -    | 2,476  |
| 2013  | 832   | 668   | 518   | 461   | 116   | -    | 2,595  |
| 2014  | 1,294 | 316   | 600   | 437   | 191   | -    | 2,838  |
| 2015  | 1,526 | 598   | 550   | 537   | 252   | -    | 3,463  |
| 2016  | 796   | 489   | 299   | 269   | -     | -    | 1,853  |
| 2017  | 860   | 722   | 406   | 530   | 197   | -    | 2,715  |
| 2018 <sup>b/</sup>  | 770   | 741   | 440   | 225   | 71    | -    | 2,247  |
| <u>U.S./Canada Border to Cape Falcon - Treaty Indian Total<sup>c/</sup></u> |       |       |       |       |       |      |        |
| 1981-1985   | 79    | 141   | 284   | 313   | 146   | 17   | 963    |
| 1986-1990   | 138   | 168   | 434   | 460   | 161   | 2    | 1,360  |
| 1991-1995   | 69    | 71    | 182   | 311   | 48    | 10   | 682    |
| 1996-2000   | 31    | 38    | 11    | 96    | 53    | -    | 229    |
| 2001-2005   | 47    | 66    | 100   | 116   | 69    | -    | 397    |
| 2006  | 96    | 285   | 167   | 140   | 117   | 5    | 805    |
| 2007  | 22    | 205   | 189   | 167   | 7     | 0    | 590    |
| 2008  | 30    | 125   | 102   | 231   | 92    | 1    | 580    |
| 2009  | 82    | 238   | 233   | 269   | 5     | 4    | 827    |
| 2010  | 155   | 335   | 155   | 150   | 62    | 4    | 857    |
| 2011  | 92    | 192   | 152   | 140   | 24    | 1    | 600    |
| 2012  | 144   | 269   | 214   | 229   | 104   | 4    | 960    |
| 2013  | 279   | 206   | 369   | 583   | 159   | 0    | 1,596  |
| 2014  | 196   | 295   | 465   | 419   | 152   | 0    | 1,527  |
| 2015  | 324   | 380   | 389   | 261   | 104   | 0    | 1,458  |
| 2016  | 204   | 233   | 141   | 90    | 2     | 0    | 670    |
| 2017  | 27    | 90    | 317   | 357   | 172   | 0    | 963    |
| 2018 <sup>b/</sup>  | 99    | 255   | 272   | 145   | 110   | 0    | 881    |

TABLE A-24. U.S./Canada border to Cape Falcon commercial troll salmon fishing effort in days fished by area and month.<sup>a/</sup>  
(Page 3 of 3)

| Year or Avg.   | May   | June  | July  | Aug.  | Sept. | Oct. | Season |
|--|-------|-------|-------|-------|-------|------|--------|
| <b>U.S./Canada Border to Cape Falcon - Total Treaty Indian and Non-Indian<sup>c/</sup></b> |       |       |       |       |       |      |        |
| 1981-1985  | 3,748 | 446   | 5,781 | 3,607 | 295   | 17   | 13,878 |
| 1986-1990  | 2,736 | 884   | 702   | 1,907 | 504   | 6    | 6,737  |
| 1991-1995  | 1,108 | 735   | 537   | 1,014 | 292   | 10   | 3,686  |
| 1996-2000  | 210   | 139   | 74    | 232   | 61    | -    | 716    |
| 2001-2005  | 541   | 239   | 570   | 592   | 168   | 10   | 2,111  |
| 2006   | 1,042 | 1,016 | 267   | 517   | 385   | 5    | 3,227  |
| 2007   | 566   | 531   | 593   | 465   | 39    | 0    | 2,194  |
| 2008   | 582   | 840   | 361   | 510   | 165   | 1    | 2,458  |
| 2009   | 628   | 887   | 924   | 767   | 152   | 4    | 3,358  |
| 2010   | 757   | 1,503 | 820   | 714   | 131   | 4    | 3,925  |
| 2011   | 825   | 1,015 | 642   | 375   | 96    | 1    | 2,953  |
| 2012   | 571   | 1,201 | 717   | 562   | 385   | 4    | 3,436  |
| 2013   | 1,111 | 874   | 887   | 1,044 | 275   | 0    | 4,191  |
| 2014   | 1,490 | 611   | 1,065 | 856   | 343   | 0    | 4,365  |
| 2015   | 1,850 | 978   | 939   | 798   | 356   | 0    | 4,921  |
| 2016   | 1,000 | 722   | 440   | 359   | 2     | 0    | 2,523  |
| 2017   | 887   | 812   | 723   | 887   | 369   | 0    | 3,678  |
| 2018 <sup>b/</sup>   | 869   | 996   | 712   | 370   | 181   | 0    | 3,128  |

a/ Monthly totals for Oregon data are the sum of statistical weeks with closest fit to the calendar month. Washington data are summarized by statistical month.

b/ Preliminary.

c/ Treaty troll effort in number of landings, which closely approximates days fished because treaty Indian fishers do not usually make multi-day trips. Season totals do not include January-April, October, or November-December treaty troll effort.

TABLE A-25. U.S./Canada border to Cape Falcon ocean troll Chinook and coho landings in number of fish by catch area and month.<sup>a/</sup> (Page 1 of 4)

| Year or Avg.   | May    | June   | July   | Aug.   | Sept. | Oct. | Season      | May | June  | July    | Aug.   | Sept.  | Oct. | Season  |
|--|--------|--------|--------|--------|-------|------|-------------|-----|-------|---------|--------|--------|------|---------|
| <b>CHINOOK</b>   |        |        |        |        |       |      | <b>COHO</b> |     |       |         |        |        |      |         |
| <u>U.S./Canada Border to Leadbetter Pt. - Non-Indian</u>                 |        |        |        |        |       |      |             |     |       |         |        |        |      |         |
| 1981-1985  | 25,195 | 3,442  | 24,381 | 4,671  | 31    | -    | 52,131      | -   | -     | 117,950 | 25,994 | 100    | -    | 120,394 |
| 1986-1990  | 27,081 | 11,294 | 8,914  | 1,811  | 11    | -    | 41,133      | -   | -     | 18,447  | 34,981 | 16     | -    | 35,367  |
| 1991-1995  | 15,857 | 11,859 | 3,929  | 1,279  | 1,118 | -    | 24,589      | -   | -     | 7,119   | 13,592 | 8,242  | -    | 23,332  |
| 1996-2000  | 5,247  | 2,897  | 4,030  | 1,456  | 3     | -    | 9,880       | -   | -     | 3,905   | 5,207  | 193    | -    | 7,939   |
| 2001-2005  | 15,314 | 6,072  | 9,697  | 7,328  | 1,057 | -    | 39,045      | -   | -     | 1,864   | 2,234  | 2,906  | -    | 5,468   |
| 2006   | 4,735  | 3,548  | 1,073  | 3,458  | 1,831 | -    | 14,645      | -   | -     | 122     | 816    | 253    | -    | 1,191   |
| 2007   | 5,693  | 3,868  | 3,459  | 721    | 27    | -    | 13,768      | -   | -     | 1,944   | 1,043  | 34     | -    | 3,021   |
| 2008   | 1,451  | 3,350  | 1,173  | 1,161  | 259   | -    | 7,394       | -   | -     | 351     | 917    | 361    | -    | 1,629   |
| 2009   | 5,545  | 4,095  | 1,615  | 680    | 120   | -    | 12,055      | -   | -     | 4,857   | 9,281  | 3,663  | -    | 17,801  |
| 2010   | 8,219  | 22,332 | 6,113  | 7,267  | 282   | -    | 44,213      | -   | -     | 1,085   | 744    | 124    | -    | 1,953   |
| 2011   | 7,682  | 9,315  | 6,015  | 2,520  | 338   | -    | 25,870      | -   | -     | 1,630   | 892    | 493    | -    | 3,015   |
| 2012   | 10,366 | 10,371 | 5,312  | 6,398  | 2,158 | -    | 34,605      | -   | -     | 746     | 1,116  | 1,317  | -    | 3,179   |
| 2013   | 10,487 | 11,848 | 7,816  | 8,689  | 690   | -    | 39,530      | -   | -     | 1,892   | 3,764  | 258    | -    | 5,914   |
| 2014   | 12,788 | 2,557  | 8,098  | 5,664  | 620   | -    | 29,727      | -   | -     | 2,907   | 6,050  | 4,211  | -    | 13,168  |
| 2015   | 12,922 | 14,408 | 12,610 | 9,831  | 1,517 | -    | 51,288      | -   | -     | 687     | 998    | 497    | -    | 2,182   |
| 2016   | 6,434  | 3,964  | 3,325  | 1,962  | -     | -    | 15,685      | -   | -     | -       | -      | -      | -    | -       |
| 2017   | 13,356 | 7,246  | 5,706  | 5,285  | 766   | -    | 32,359      | -   | -     | 217     | 719    | 301    | -    | 1,237   |
| 2018 <sup>b/</sup>   | 6,653  | 8,942  | 5,438  | 1,683  | 709   | -    | 23,425      | -   | -     | 415     | 456    | 388    | -    | 1,259   |
| <u>U.S./Canada Border to Leadbetter Pt. - Treaty Indian<sup>c/</sup></u> |        |        |        |        |       |      |             |     |       |         |        |        |      |         |
| 1981-1985  | 2,150  | 1,883  | 3,636  | 1,336  | 1,018 | 198  | 10,023      | 283 | 7,435 | 16,406  | 24,484 | 16,666 | 54   | 65,274  |
| 1986-1990  | 6,877  | 5,955  | 6,726  | 4,506  | 1,248 | 12   | 25,312      | 3   | 4,256 | 32,310  | 35,942 | 11,051 | 7    | 83,563  |
| 1991-1995  | 4,343  | 4,181  | 3,511  | 4,243  | 571   | 29   | 16,849      | 1   | 1     | 17,220  | 26,038 | 5,275  | 103  | 48,535  |
| 1996-2000  | 2,580  | 6,524  | 446    | 3,806  | 1,893 | -    | 15,249      | 0   | 0     | 15      | 11,063 | 8,533  | -    | 19,611  |
| 2001-2005  | 5,461  | 14,660 | 9,462  | 6,271  | 3,260 | 23   | 39,114      | 2   | 3     | 7,259   | 17,964 | 9,381  | 66   | 34,611  |
| 2006   | 2,821  | 8,341  | 7,736  | 6,690  | 4,957 | 15   | 30,545      | 16  | 102   | 10,475  | 10,634 | 10,711 | 5    | 31,938  |
| 2007   | 316    | 14,629 | 3,349  | 4,579  | 70    | 0    | 22,943      | 0   | 12    | 22,743  | 16,423 | 860    | 0    | 40,038  |
| 2008   | 358    | 8,864  | 2,099  | 6,007  | 3,579 | 1    | 20,907      | 0   | 18    | 865     | 3,561  | 9,820  | 0    | 14,264  |
| 2009   | 1,491  | 5,828  | 2,329  | 2,566  | 12    | 25   | 12,226      | 0   | 0     | 25,422  | 35,141 | 100    | 15   | 60,663  |
| 2010   | 1,926  | 12,150 | 6,943  | 9,693  | 1,664 | 10   | 32,376      | 2   | 63    | 2,015   | 5,058  | 4,323  | 15   | 11,461  |
| 2011   | 1,120  | 8,817  | 14,761 | 6,708  | 418   | 0    | 31,824      | 0   | 0     | 2,062   | 4,791  | 6,711  | 0    | 13,564  |
| 2012   | 4,465  | 20,696 | 10,144 | 14,650 | 4,834 | 10   | 54,789      | 1   | 101   | 2,769   | 18,790 | 15,869 | 0    | 37,530  |
| 2013   | 11,929 | 19,103 | 9,310  | 7,916  | 2,902 | 0    | 51,160      | 0   | 7     | 7,722   | 36,163 | 4,376  | 0    | 48,268  |
| 2014   | 12,608 | 17,002 | 20,643 | 8,793  | 2,715 | 0    | 61,761      | 0   | 30    | 10,405  | 39,231 | 6,369  | 0    | 56,035  |
| 2015   | 7,315  | 23,697 | 23,110 | 4,031  | 786   | 0    | 58,939      | 0   | 3     | 1,994   | 1,307  | 706    | 0    | 4,010   |
| 2016   | 2,905  | 13,752 | 5,129  | 1,310  | 5     | 0    | 23,101      | 0   | 0     | 29      | 15     | 0      | 1    | 44      |
| 2017   | 1,253  | 2,039  | 15,772 | 4,605  | 745   | 0    | 24,414      | 0   | 0     | 1,003   | 7,150  | 5,197  | 0    | 13,350  |
| 2018 <sup>b/</sup>   | 1,319  | 11,756 | 8,486  | 1,883  | 459   | 0    | 23,903      | 0   | 15    | 1,751   | 5,512  | 4,524  | 0    | 11,802  |

TABLE A-25. U.S./Canada border to Cape Falcon ocean troll Chinook and coho landings in number of fish by catch area and month.<sup>al</sup> (Page 2 of 4)

| Year or Avg.   | May    | June   | July   | Aug.   | Sept. | Oct. | Season      | May | June  | July    | Aug.   | Sept.  | Oct. | Season  |
|--|--------|--------|--------|--------|-------|------|-------------|-----|-------|---------|--------|--------|------|---------|
| <b>CHINOOK</b>   |        |        |        |        |       |      | <b>COHO</b> |     |       |         |        |        |      |         |
| <b>U.S./Canada Border to Leadbetter Pt. - Total<sup>cl</sup></b> |        |        |        |        |       |      |             |     |       |         |        |        |      |         |
| 1981-1985  | 27,345 | 4,637  | 23,141 | 6,007  | 1,024 | 198  | 62,154      | 283 | 7,435 | 110,766 | 50,478 | 16,706 | 54   | 185,667 |
| 1986-1990  | 33,958 | 14,990 | 10,291 | 5,955  | 1,250 | 12   | 66,445      | 3   | 4,256 | 39,689  | 63,927 | 11,054 | 7    | 118,930 |
| 1991-1995  | 13,857 | 11,297 | 5,082  | 5,266  | 1,018 | 29   | 36,520      | 1   | 1     | 20,068  | 36,911 | 10,220 | 103  | 67,200  |
| 1996-2000  | 6,778  | 8,842  | 1,252  | 4,389  | 1,893 | -    | 23,153      | 0   | 0     | 1,577   | 14,187 | 8,610  | -    | 24,375  |
| 2001-2005  | 20,775 | 20,732 | 19,159 | 13,599 | 3,895 | 23   | 78,159      | 2   | 3     | 8,751   | 20,198 | 11,125 | 66   | 40,079  |
| 2006   | 7,556  | 11,889 | 8,809  | 10,148 | 6,788 | 15   | 45,190      | 16  | 102   | 10,597  | 11,450 | 10,964 | 5    | 33,129  |
| 2007   | 6,009  | 18,497 | 6,808  | 5,300  | 97    | 0    | 36,711      | 0   | 12    | 24,687  | 17,466 | 894    | 0    | 43,059  |
| 2008   | 1,809  | 12,214 | 3,272  | 7,168  | 3,838 | 1    | 28,301      | 0   | 18    | 1,216   | 4,478  | 10,181 | 0    | 15,893  |
| 2009   | 7,036  | 9,923  | 3,944  | 3,246  | 132   | 25   | 24,281      | 0   | 0     | 30,279  | 44,422 | 3,763  | 15   | 78,464  |
| 2010   | 10,145 | 34,482 | 13,056 | 16,960 | 1,946 | 10   | 76,589      | 2   | 63    | 3,100   | 5,802  | 4,447  | 15   | 13,414  |
| 2011   | 8,802  | 18,132 | 20,776 | 9,228  | 756   | 0    | 57,694      | 0   | 0     | 3,692   | 5,683  | 7,204  | 0    | 16,579  |
| 2012   | 14,831 | 31,067 | 15,456 | 21,048 | 6,992 | 10   | 89,394      | 1   | 101   | 3,515   | 19,906 | 17,186 | 0    | 40,709  |
| 2013   | 22,416 | 30,951 | 17,126 | 16,605 | 3,592 | 0    | 90,690      | 0   | 7     | 9,614   | 39,927 | 4,634  | 0    | 54,182  |
| 2014   | 25,396 | 19,559 | 28,741 | 14,457 | 3,335 | 0    | 91,488      | 0   | 30    | 13,312  | 45,281 | 10,580 | 0    | 69,203  |
| 2015   | 20,237 | 38,105 | 35,720 | 13,862 | 2,303 | 0    | 110,227     | 0   | 3     | 2,681   | 2,305  | 1,203  | 0    | 6,192   |
| 2016   | 9,339  | 17,716 | 8,454  | 3,272  | 5     | 0    | 38,786      | 0   | 0     | 29      | 15     | 0      | 1    | 44      |
| 2017   | 14,609 | 9,285  | 21,478 | 9,890  | 1,511 | 0    | 56,773      | 0   | 0     | 1,220   | 7,869  | 5,498  | 0    | 14,587  |
| 2018 <sup>bl</sup>   | 7,972  | 20,698 | 13,924 | 3,566  | 1,168 | 0    | 47,328      | 0   | 15    | 2,166   | 5,968  | 4,912  | 0    | 13,061  |
| <b>Leadbetter Pt. to Cape Falcon - Non-Indian</b>                |        |        |        |        |       |      |             |     |       |         |        |        |      |         |
| 1981-1985  | 11,202 | 758    | 1,884  | 775    | 107   | 2    | 14,728      | -   | -     | 48,629  | 26,289 | 15,916 | -    | 53,392  |
| 1986-1990  | 4,789  | 1,264  | 3,549  | 2,691  | 1,702 | 71   | 8,566       | -   | -     | 18,234  | 41,121 | 19,306 | 304  | 45,128  |
| 1991-1995  | 1,465  | 357    | 134    | 344    | 103   | -    | 2,323       | -   | -     | 911     | 12,674 | 3,937  | -    | 15,906  |
| 1996-2000  | 9      | 64     | -      | 2,464  | 89    | -    | 710         | -   | -     | -       | 7,021  | 1,043  | -    | 7,542   |
| 2001-2005  | 3,031  | 1,512  | 1,802  | 2,684  | 599   | -    | 9,388       | -   | -     | 1,802   | 2,877  | 3,932  | -    | 6,678   |
| 2006   | 8,913  | 3,532  | 1      | 62     | 105   | -    | 12,613      | -   | -     | 17      | 944    | 527    | -    | 1,488   |
| 2007   | 950    | 600    | 158    | 213    | 22    | -    | 1,943       | -   | -     | 1,400   | 12,736 | 283    | -    | 14,419  |
| 2008   | 2,977  | 3,355  | 136    | 185    | 23    | -    | 6,676       | -   | -     | 53      | 421    | 37     | -    | 511     |
| 2009   | 265    | 281    | 260    | 163    | 4     | -    | 973         | -   | -     | 9,648   | 5,125  | 165    | -    | 14,938  |
| 2010   | 790    | 6,882  | 2,289  | 1,894  | 151   | -    | 12,006      | -   | -     | 736     | 406    | 49     | -    | 1,191   |
| 2011   | 1,529  | 1,943  | 115    | 251    | 30    | -    | 3,868       | -   | -     | 235     | 172    | 95     | -    | 502     |
| 2012   | 1,297  | 7,053  | 276    | 149    | 1,919 | -    | 10,694      | -   | -     | 61      | 37     | 615    | -    | 713     |
| 2013   | 534    | 1,062  | 178    | 298    | 433   | -    | 2,505       | -   | -     | 67      | 375    | 137    | -    | 579     |
| 2014   | 20,242 | 1,278  | 2,880  | 472    | 290   | -    | 25,162      | -   | -     | 2,962   | 2,392  | 4,587  | -    | 9,941   |
| 2015   | 9,487  | 2,177  | 1,389  | 1,037  | 817   | -    | 14,907      | -   | -     | 369     | 582    | 1,952  | -    | 2,903   |
| 2016   | 1,175  | 1,089  | 428    | 1,025  | -     | -    | 3,717       | -   | -     | -       | -      | -      | -    | -       |
| 2017   | 1,228  | 874    | 124    | 632    | 343   | -    | 3,201       | -   | -     | 30      | 355    | 216    | -    | 601     |
| 2018 <sup>bl</sup>   | 36     | 337    | 30     | 57     | 4     | -    | 464         | -   | -     | 40      | 85     | -      | -    | 125     |

TABLE A-25. U.S./Canada border to Cape Falcon ocean troll Chinook and coho landings in number of fish by catch area and month.<sup>af</sup> (Page 3 of 4)

| Year or Avg.  | May    | June   | July   | Aug.   | Sept. | Oct. | Season      | May | June  | July    | Aug.   | Sept.  | Oct. | Season  |
|---|--------|--------|--------|--------|-------|------|-------------|-----|-------|---------|--------|--------|------|---------|
| <b>CHINOOK</b>  |        |        |        |        |       |      | <b>COHO</b> |     |       |         |        |        |      |         |
| <u>U.S./Canada Border to Cape Falcon - Non-Indian</u>                 |        |        |        |        |       |      |             |     |       |         |        |        |      |         |
| 1981-1985   | 36,397 | 3,511  | 21,389 | 5,446  | 113   | 2    | 66,859      | -   | -     | 154,422 | 47,025 | 5,372  | -    | 173,785 |
| 1986-1990   | 31,870 | 12,242 | 10,688 | 3,829  | 1,708 | 71   | 49,699      | -   | -     | 27,564  | 65,822 | 19,314 | 304  | 71,470  |
| 1991-1995   | 17,321 | 12,216 | 4,063  | 1,537  | 1,220 | -    | 26,331      | -   | -     | 8,030   | 23,097 | 10,866 | -    | 35,261  |
| 1996-2000   | 5,255  | 2,961  | 4,030  | 2,688  | 92    | -    | 10,590      | -   | -     | 3,905   | 9,887  | 715    | -    | 12,967  |
| 2001-2005   | 18,345 | 7,584  | 11,499 | 10,012 | 1,656 | -    | 48,433      | -   | -     | 3,666   | 5,111  | 6,838  | -    | 12,146  |
| 2006  | 13,648 | 7,080  | 1,074  | 3,520  | 1,936 | -    | 27,258      | -   | -     | 139     | 1,760  | 780    | -    | 2,679   |
| 2007  | 6,643  | 4,468  | 3,617  | 934    | 49    | -    | 15,711      | -   | -     | 3,344   | 13,779 | 317    | -    | 17,440  |
| 2008  | 4,428  | 6,705  | 1,309  | 1,346  | 282   | -    | 14,070      | -   | -     | 404     | 1,338  | 398    | -    | 2,140   |
| 2009  | 5,810  | 4,376  | 1,875  | 843    | 124   | -    | 13,028      | -   | -     | 14,505  | 14,406 | 3,828  | -    | 32,739  |
| 2010  | 9,009  | 29,214 | 8,402  | 9,161  | 433   | -    | 56,219      | -   | -     | 1,821   | 1,150  | 173    | -    | 3,144   |
| 2011  | 9,211  | 11,258 | 6,130  | 2,771  | 368   | -    | 29,738      | -   | -     | 1,865   | 1,064  | 588    | -    | 3,517   |
| 2012  | 11,663 | 17,424 | 5,588  | 6,547  | 4,077 | -    | 45,299      | -   | -     | 807     | 1,153  | 1,932  | -    | 3,892   |
| 2013  | 11,021 | 12,910 | 7,994  | 8,987  | 1,123 | -    | 42,035      | -   | -     | 1,959   | 4,139  | 395    | -    | 6,493   |
| 2014  | 33,030 | 3,835  | 10,978 | 6,136  | 910   | -    | 54,889      | -   | -     | 5,869   | 8,442  | 8,798  | -    | 23,109  |
| 2015  | 22,409 | 16,585 | 13,999 | 10,868 | 2,334 | -    | 66,195      | -   | -     | 1,056   | 1,580  | 2,449  | -    | 5,085   |
| 2016  | 7,609  | 5,053  | 3,753  | 2,987  | -     | -    | 19,402      | -   | -     | -       | -      | -      | -    | -       |
| 2017  | 14,584 | 8,120  | 5,830  | 5,917  | 1,109 | -    | 35,560      | -   | -     | 247     | 1,074  | 517    | -    | 1,838   |
| 2018 <sup>bf</sup>  | 6,689  | 9,279  | 5,468  | 1,740  | 713   | -    | 23,889      | -   | -     | 455     | 541    | 388    | -    | 1,384   |
| <u>U.S./Canada Border to Cape Falcon - Treaty Indian<sup>cf</sup></u> |        |        |        |        |       |      |             |     |       |         |        |        |      |         |
| 1981-1985   | 2,150  | 1,883  | 3,636  | 1,336  | 1,018 | 198  | 10,023      | 283 | 7,435 | 16,406  | 24,484 | 16,666 | 54   | 65,274  |
| 1986-1990   | 6,877  | 5,955  | 6,726  | 4,506  | 1,248 | 12   | 25,312      | 3   | 4,256 | 32,310  | 35,942 | 11,051 | 7    | 83,563  |
| 1991-1995   | 4,343  | 4,181  | 3,511  | 4,243  | 571   | 29   | 16,849      | 1   | 1     | 17,220  | 26,038 | 5,275  | 103  | 48,535  |
| 1996-2000   | 2,580  | 6,524  | 446    | 3,806  | 1,893 | -    | 15,249      | 0   | 0     | 15      | 11,063 | 8,533  | -    | 19,611  |
| 2001-2005   | 5,461  | 14,660 | 9,462  | 6,271  | 3,260 | -    | 39,114      | 2   | 3     | 7,259   | 17,964 | 9,381  | -    | 34,611  |
| 2006  | 2,821  | 8,341  | 7,736  | 6,690  | 4,957 | 15   | 30,545      | 16  | 102   | 10,475  | 10,634 | 10,711 | 5    | 31,938  |
| 2007  | 316    | 14,629 | 3,349  | 4,579  | 70    | 0    | 22,943      | 0   | 12    | 22,743  | 16,423 | 860    | 0    | 40,038  |
| 2008  | 358    | 8,864  | 2,099  | 6,007  | 3,579 | 1    | 20,907      | 0   | 18    | 865     | 3,561  | 9,820  | 0    | 14,264  |
| 2009  | 1,491  | 5,828  | 2,329  | 2,566  | 12    | 25   | 12,226      | 0   | 0     | 25,422  | 35,141 | 100    | 15   | 60,663  |
| 2010  | 1,926  | 12,150 | 6,943  | 9,693  | 1,664 | 10   | 32,376      | 2   | 63    | 2,015   | 5,058  | 4,323  | 15   | 11,461  |
| 2011  | 1,120  | 8,817  | 14,761 | 6,708  | 418   | 0    | 31,824      | 0   | 0     | 2,062   | 4,791  | 6,711  | 0    | 13,564  |
| 2012  | 4,465  | 20,696 | 10,144 | 14,650 | 4,834 | 10   | 54,789      | 1   | 101   | 2,769   | 18,790 | 15,869 | 0    | 37,530  |
| 2013  | 11,929 | 19,103 | 9,310  | 7,916  | 2,902 | 0    | 51,160      | 0   | 7     | 7,722   | 36,163 | 4,376  | 0    | 48,268  |
| 2014  | 12,608 | 17,002 | 20,643 | 8,793  | 2,715 | 0    | 61,761      | 0   | 30    | 10,405  | 39,231 | 6,369  | 0    | 56,035  |
| 2015  | 7,315  | 23,697 | 23,110 | 4,031  | 786   | 0    | 58,939      | 0   | 3     | 1,994   | 1,307  | 706    | 0    | 4,010   |
| 2016  | 2,905  | 13,752 | 5,129  | 1,310  | 5     | 0    | 23,101      | 0   | 0     | 29      | 15     | 0      | 1    | 44      |
| 2017  | 1,253  | 2,039  | 15,772 | 4,605  | 745   | 0    | 24,414      | 0   | 0     | 1,003   | 7,150  | 5,197  | 0    | 13,350  |
| 2018 <sup>bf</sup>  | 1,319  | 11,756 | 8,486  | 1,883  | 459   | 0    | 23,903      | 0   | 15    | 1,751   | 5,512  | 4,524  | 0    | 11,802  |

TABLE A-25. U.S./Canada border to Cape Falcon ocean troll Chinook and coho landings in number of fish by catch area and month.<sup>a/</sup> (Page 4 of 4)

| Year or Avg.   | May    | June   | July   | Aug.   | Sept. | Oct. | Season      | May | June  | July    | Aug.   | Sept.  | Oct. | Season  |
|--|--------|--------|--------|--------|-------|------|-------------|-----|-------|---------|--------|--------|------|---------|
| <b>CHINOOK</b>   |        |        |        |        |       |      | <b>COHO</b> |     |       |         |        |        |      |         |
| <b>U.S./Canada Border to Cape Falcon - Total Treaty Indian and Non-Indian<sup>c/</sup></b> |        |        |        |        |       |      |             |     |       |         |        |        |      |         |
| 1981-1985  | 38,547 | 5,395  | 25,025 | 6,782  | 1,131 | 201  | 76,882      | 283 | 7,435 | 139,943 | 71,509 | 19,889 | 54   | 239,059 |
| 1986-1990  | 38,747 | 15,749 | 11,001 | 7,570  | 1,931 | 26   | 75,011      | 3   | 4,256 | 43,336  | 88,600 | 18,777 | 68   | 155,033 |
| 1991-1995  | 14,736 | 11,511 | 5,136  | 5,472  | 1,059 | 29   | 37,914      | 1   | 1     | 20,432  | 44,516 | 11,795 | 103  | 76,744  |
| 1996-2000  | 6,784  | 8,892  | 1,252  | 4,881  | 1,911 | -    | 23,721      | 0   | 0     | 1,577   | 16,996 | 8,819  | -    | 27,392  |
| 2001-2005  | 23,805 | 22,244 | 20,961 | 16,283 | 4,254 | -    | 87,547      | 2   | 3     | 10,192  | 23,075 | 13,484 | -    | 46,757  |
| 2006   | 16,469 | 15,421 | 8,810  | 10,210 | 6,893 | 15   | 57,803      | 16  | 102   | 10,614  | 12,394 | 11,491 | 5    | 34,617  |
| 2007   | 6,959  | 19,097 | 6,966  | 5,513  | 119   | 0    | 38,654      | 0   | 12    | 26,087  | 30,202 | 1,177  | 0    | 57,478  |
| 2008   | 4,786  | 15,569 | 3,408  | 7,353  | 3,861 | 1    | 34,977      | 0   | 18    | 1,269   | 4,899  | 10,218 | 0    | 16,404  |
| 2009   | 7,301  | 10,204 | 4,204  | 3,409  | 136   | 25   | 25,254      | 0   | 0     | 39,927  | 49,547 | 3,928  | 15   | 93,402  |
| 2010   | 10,935 | 41,364 | 15,345 | 18,854 | 2,097 | 10   | 88,595      | 2   | 63    | 3,836   | 6,208  | 4,496  | 15   | 14,605  |
| 2011   | 10,331 | 20,075 | 20,891 | 9,479  | 786   | 0    | 61,562      | 0   | 0     | 3,927   | 5,855  | 7,299  | 0    | 17,081  |
| 2012   | 16,128 | 38,120 | 15,732 | 21,197 | 8,911 | 10   | 100,088     | 1   | 101   | 3,576   | 19,943 | 17,801 | 0    | 41,422  |
| 2013   | 22,950 | 32,013 | 17,304 | 16,903 | 4,025 | 0    | 93,195      | 0   | 7     | 9,681   | 40,302 | 4,771  | 0    | 54,761  |
| 2014   | 45,638 | 20,837 | 31,621 | 14,929 | 3,625 | 0    | 116,650     | 0   | 30    | 16,274  | 47,673 | 15,167 | 0    | 79,144  |
| 2015   | 29,724 | 40,282 | 37,109 | 14,899 | 3,120 | 0    | 125,134     | 0   | 3     | 3,050   | 2,887  | 3,155  | 0    | 9,095   |
| 2016   | 10,514 | 18,805 | 8,882  | 4,297  | 5     | 0    | 42,503      | 0   | 0     | 29      | 15     | 0      | 1    | 44      |
| 2017   | 15,837 | 10,159 | 21,602 | 10,522 | 1,854 | 0    | 59,974      | 0   | 0     | 1,250   | 8,224  | 5,714  | 0    | 15,188  |
| 2018 <sup>b/</sup>   | 8,008  | 21,035 | 13,954 | 3,623  | 1,172 | 0    | 47,792      | 0   | 15    | 2,206   | 6,053  | 4,912  | 0    | 13,186  |

a/ Monthly totals for Oregon data are the sum of statistical weeks with closest fit to the calendar month. Washington data are summarized by statistical month.

b/ Preliminary.

c/ Season totals do not include January-April, October, or November-December treaty troll catches.

TABLE A-26. U.S./Canada border to Cape Falcon ocean troll pink salmon landings in numbers of fish by catch area and month (odd-year averages).<sup>a/</sup> (Page 1 of 2)

| Year or Avg.  | May | June | July   | Aug.   | Sept. | Oct. | Season  |
|---|-----|------|--------|--------|-------|------|---------|
| <u>U.S./Canada Border to Leadbetter Pt. - Non-Indian</u>              |     |      |        |        |       |      |         |
| 1981-1985   | 230 | 33   | 50,591 | 86,991 | 415   | -    | 138,123 |
| 1986-1990   | 115 | 182  | 2,642  | 36,286 | -     | -    | 19,670  |
| 1991-1995   | 10  | 9    | 88     | 25,340 | 390   | -    | 25,772  |
| 1997-2001   | 1   | 4    | 26     | 11     | 0     | -    | 29      |
| 2003  | 0   | 0    | 142    | 63     | 10    | -    | 215     |
| 2005  | 4   | 0    | 2      | 2      | -     | -    | 8       |
| 2007  | 8   | 19   | 119    | 1      | 0     | -    | 147     |
| 2009  | 1   | 14   | 82     | 37     | 1     | -    | 135     |
| 2011  | 0   | 0    | 3      | 118    | 93    | -    | 215     |
| 2013  | 0   | 2    | 0      | 101    | 37    | -    | 141     |
| 2015  | 0   | 1    | 20     | 47     | 0     | -    | 68      |
| 2017  | 0   | 0    | 0      | 0      | 0     | -    | 0       |
| <u>U.S./Canada Border to Cape Falcon - Treaty Indian<sup>b/</sup></u> |     |      |        |        |       |      |         |
| 1981-1985   | 32  | 214  | 2,208  | 7,806  | 320   | 0    | 10,580  |
| 1986-1990   | 5   | 10   | 8,991  | 4,254  | 591   | 0    | 13,851  |
| 1991-1995   | 0   | 1    | 499    | 5,519  | 261   | 0    | 6,280   |
| 1997-2001   | 4   | 0    | 232    | 1,561  | 123   | 0    | 1,919   |
| 2003  | 0   | 0    | 172    | 41     | 23    | 0    | 236     |
| 2005  | 0   | 0    | 186    | 198    | 3     | 0    | 387     |
| 2007  | 0   | 7    | 326    | 251    | 0     | 0    | 584     |
| 2009  | 0   | 0    | 431    | 369    | 0     | 0    | 800     |
| 2011  | 0   | 6    | 718    | 334    | 16    | 0    | 1,074   |
| 2013  | 0   | 0    | 89     | 120    | 0     | 0    | 209     |
| 2015  | 0   | 6    | 98     | 18     | 0     | 0    | 122     |
| 2017  | 0   | 0    | 61     | 134    | 0     | 0    | 195     |
| <u>U.S./Canada Border to Cape Falcon - Total<sup>b/</sup></u>         |     |      |        |        |       |      |         |
| 1981-1985   | 262 | 247  | 52,799 | 94,798 | 597   | 0    | 148,703 |
| 1986-1990   | 120 | 101  | 10,312 | 22,397 | 591   | 0    | 33,520  |
| 1991-1995   | 7   | 7    | 528    | 30,859 | 651   | 0    | 32,052  |
| 1997-2001   | 5   | 4    | 249    | 1,568  | 123   | 0    | 1,948   |
| 2003  | 0   | 0    | 314    | 104    | 33    | 0    | 451     |
| 2005  | 4   | 0    | 188    | 200    | 3     | 0    | 395     |
| 2007  | 8   | 26   | 445    | 252    | 0     | 0    | 731     |
| 2009  | 1   | 14   | 513    | 406    | 1     | 0    | 935     |
| 2011  | 0   | 6    | 721    | 452    | 109   | 1    | 1,289   |
| 2013  | 0   | 2    | 89     | 221    | 37    | 1    | 350     |
| 2015  | 0   | 7    | 118    | 65     | 0     | 0    | 190     |
| 2017  | 0   | 0    | 61     | 134    | 0     | 0    | 195     |
| <u>Leadbetter Pt. to Cape Falcon - Non-Indian</u>                     |     |      |        |        |       |      |         |
| 1981-1985   | 5   | 4    | 842    | 2,327  | 0     | 0    | 3,178   |
| 1986-1990   | 0   | 0    | 109    | 1      | 1     | -    | 111     |
| 1991-1995   | 0   | 0    | 0      | 55     | 0     | -    | 55      |
| 1997-2001   | 65  | 17   | 17     | 17     | 0     | -    | 115     |
| 2003  | 0   | 2    | 43     | 16     | 0     | -    | 61      |
| 2005  | 0   | 0    | 1      | 1      | 1     | -    | 3       |
| 2007  | 65  | 0    | 4      | 11     | 0     | -    | 80      |
| 2009  | 0   | 0    | 2      | 8      | 8     | -    | 18      |
| 2011  | 0   | 36   | 5      | 8      | 0     | -    | 49      |
| 2013  | 0   | 0    | 0      | 0      | 0     | -    | 0       |
| 2015  | 0   | 0    | 0      | 0      | 0     | -    | 0       |
| 2017  | 0   | 0    | 0      | 0      | 0     | -    | 0       |

TABLE A-26. U.S./Canada border to Cape Falcon ocean troll pink salmon landings in numbers of fish by catch area and month (odd-year averages).<sup>a/</sup> (Page 2 of 2)

| Year or Avg.  | May | June | July   | Aug.   | Sept. | Oct. | Season  |
|---|-----|------|--------|--------|-------|------|---------|
| <b>U.S./Canada Border to Cape Falcon - Non-Indian</b>                 |     |      |        |        |       |      |         |
| 1981-1985   | 235 | 37   | 51,434 | 89,318 | 277   | -    | 141,301 |
| 1986-1990   | 115 | 91   | 1,430  | 18,144 | 1     | -    | 19,781  |
| 1991-1995   | 7   | 6    | 29     | 25,395 | 390   | -    | 25,827  |
| 1997-2001   | 66  | 21   | 34     | 24     | 0     | -    | 145     |
| 2003  | 0   | 2    | 185    | 79     | 10    | -    | 276     |
| 2005  | 4   | 0    | 3      | 3      | 1     | -    | 11      |
| 2007  | 73  | 19   | 123    | 12     | 0     | -    | 227     |
| 2009  | 1   | 14   | 84     | 45     | 9     | -    | 153     |
| 2011  | 0   | 36   | 8      | 126    | 93    | 1    | 264     |
| 2013  | 0   | 2    | 0      | 101    | 37    | 1    | 141     |
| 2015  | 0   | 1    | 20     | 47     | 0     | 0    | 68      |
| 2017  | 0   | 0    | 0      | 0      | 0     | 0    | 0       |
| <b>U.S./Canada Border to Cape Falcon - Treaty Indian<sup>b/</sup></b> |     |      |        |        |       |      |         |
| 1981-1985   | 32  | 214  | 2,208  | 7,806  | 320   | 0    | 10,580  |
| 1986-1990   | 5   | 10   | 8,991  | 4,254  | 591   | 0    | 13,851  |
| 1991-1995   | 0   | 1    | 499    | 5,519  | 261   | 0    | 6,280   |
| 1997-2001   | 4   | 0    | 232    | 1,561  | 123   | 0    | 1,919   |
| 2003  | 0   | 0    | 172    | 41     | 23    | 0    | 236     |
| 2005  | 0   | 0    | 186    | 198    | 3     | 0    | 387     |
| 2007  | 0   | 7    | 326    | 251    | 0     | 0    | 584     |
| 2009  | 0   | 0    | 431    | 369    | 0     | 0    | 800     |
| 2011  | 0   | 6    | 718    | 334    | 16    | 0    | 1,074   |
| 2013  | 0   | 0    | 89     | 120    | 0     | 0    | 209     |
| 2015  | 0   | 6    | 98     | 18     | 0     | 0    | 122     |
| 2017  | 0   | 0    | 61     | 134    | 0     | 0    | 195     |
| <b>U.S./Canada Border to Cape Falcon - Total<sup>b/</sup></b>         |     |      |        |        |       |      |         |
| 1981-1985   | 267 | 251  | 53,641 | 97,124 | 597   | 0    | 151,881 |
| 1986-1990   | 120 | 101  | 10,421 | 22,398 | 592   | 0    | 33,631  |
| 1991-1995   | 7   | 7    | 528    | 30,914 | 651   | 0    | 32,107  |
| 1997-2001   | 70  | 21   | 266    | 1,585  | 123   | 0    | 2,064   |
| 2003  | 0   | 2    | 357    | 120    | 33    | 0    | 512     |
| 2005  | 4   | 0    | 189    | 201    | 4     | 0    | 398     |
| 2007  | 73  | 26   | 449    | 263    | 0     | 0    | 811     |
| 2009  | 1   | 14   | 515    | 414    | 9     | 0    | 953     |
| 2011  | 0   | 42   | 726    | 460    | 109   | 1    | 1,338   |
| 2013  | 0   | 2    | 89     | 221    | 37    | 1    | 350     |
| 2015  | 0   | 7    | 118    | 65     | 0     | 0    | 190     |
| 2017  | 0   | 0    | 61     | 134    | 0     | 0    | 195     |

a/ Monthly totals for Oregon data are the sum of statistical weeks with closest fit to the calendar month. Washington data are summarized by statistical month.

b/ Season totals do not include October treaty troll catches.



TABLE A-27. U.S./Canada border to Cape Falcon ocean recreational fishing effort in salmon angler trips by area and month.<sup>a/</sup>

| Year or Avg.   | Apr. | May   | June   | July   | Aug.   | Sept.  | Oct. | Season <sup>b/</sup> |
|--|------|-------|--------|--------|--------|--------|------|----------------------|
| <u>U.S./Canada Border to Leadbetter Pt.<sup>c/</sup></u> |      |       |        |        |        |        |      |                      |
| 1981-1985  | 80   | 3,331 | 16,943 | 44,629 | 38,938 | 5,555  | 196  | 109,593              |
| 1986-1990  | -    | 1,190 | 4,199  | 45,977 | 23,931 | 4,377  | 40   | 78,144               |
| 1991-1995  | -    | 1,258 | 4,959  | 31,219 | 25,149 | 9,425  | 714  | 67,841               |
| 1996-2000  | -    | -     | -      | 10,921 | 14,366 | 2,674  | -    | 25,776               |
| 2001-2005  | -    | 2,496 | 5,660  | 29,924 | 24,054 | 6,828  | 132  | 65,964               |
| 2006   | -    | -     | 1,119  | 16,486 | 20,679 | 3,551  | 258  | 42,093               |
| 2007   | -    | -     | -      | 17,482 | 21,514 | 3,555  | 0    | 42,551               |
| 2008   | -    | -     | 4,007  | 11,392 | 9,171  | 2,564  | 38   | 27,171               |
| 2009   | -    | -     | 1,104  | 18,115 | 32,546 | 7,402  | 212  | 59,379               |
| 2010   | -    | -     | 9,451  | 18,380 | 19,546 | 6,282  | 154  | 53,813               |
| 2011   | -    | -     | 5,537  | 17,334 | 21,178 | 4,787  | 16   | 48,852               |
| 2012   | -    | -     | 9,627  | 17,413 | 19,168 | 8,128  | 353  | 54,689               |
| 2013   | -    | 951   | 8,973  | 16,010 | 23,946 | 5,400  | 237  | 55,518               |
| 2014   | -    | 1,643 | 10,331 | 28,529 | 24,393 | 10,089 | 365  | 75,349               |
| 2015   | -    | 1,441 | 8,974  | 28,779 | 15,566 | 8,666  | 300  | 63,725               |
| 2016   | -    | -     | -      | 17,792 | 9,391  | -      | -    | 27,183               |
| 2017   | -    | -     | 468    | 21,556 | 15,822 | 842    | -    | 38,688               |
| 2018 <sup>d/</sup>                                       | -    | -     | 1,249  | 14,408 | 17,017 | 410    | -    | 33,084               |
| <u>Leadbetter Pt. to Cape Falcon</u>                     |      |       |        |        |        |        |      |                      |
| 1981-1985  | -    | 1,165 | 10,828 | 35,085 | 31,281 | 4,835  | 721  | 79,973               |
| 1986-1990  | -    | 444   | 2,751  | 28,624 | 27,098 | 2,493  | -    | 59,008               |
| 1991-1995  | -    | -     | 2,408  | 23,781 | 18,461 | 9,495  | -    | 52,941               |
| 1996-2000  | -    | -     | -      | 7,231  | 9,950  | 3,983  | -    | 18,125               |
| 2001-2005  | -    | 370   | 1,040  | 17,361 | 33,383 | 9,814  | 6    | 61,257               |
| 2006   | -    | -     | -      | 7,451  | 21,249 | 2,712  | -    | 31,412               |
| 2007   | -    | -     | -      | 10,034 | 29,199 | 3,284  | -    | 42,518               |
| 2008   | -    | 66    | 1,275  | 6,381  | 6,371  | -      | -    | 14,093               |
| 2009   | -    | -     | 278    | 15,969 | 36,344 | 1,840  | -    | 54,431               |
| 2010   | -    | -     | 863    | 9,376  | 24,345 | 2,811  | -    | 37,395               |
| 2011   | -    | -     | 1,133  | 6,760  | 19,772 | 4,463  | -    | 32,127               |
| 2012   | -    | -     | 2,645  | 7,419  | 12,108 | 5,635  | -    | 27,808               |
| 2013   | -    | -     | 4,436  | 6,162  | 16,293 | 3,740  | -    | 30,632               |
| 2014   | -    | 78    | 3,283  | 14,885 | 28,896 | 9,382  | -    | 56,523               |
| 2015   | -    | 269   | 3,046  | 11,243 | 18,589 | 8,872  | -    | 42,018               |
| 2016   | -    | -     | -      | 9,586  | 18,999 | -      | -    | 28,586               |
| 2017   | -    | -     | 975    | 11,229 | 19,128 | -      | -    | 31,333               |
| 2018 <sup>d/</sup>                                       | -    | -     | 1,575  | 6,937  | 13,311 | 761    | -    | 22,583               |
| <u>U.S./Canada Border to Cape Falcon<sup>c/</sup></u>    |      |       |        |        |        |        |      |                      |
| 1981-1985  | 80   | 4,263 | 25,606 | 79,714 | 70,218 | 9,423  | 436  | 189,565              |
| 1986-1990  | -    | 1,412 | 6,950  | 74,600 | 51,029 | 5,374  | 40   | 137,152              |
| 1991-1995  | -    | 1,258 | 4,888  | 55,000 | 43,610 | 18,921 | 714  | 120,782              |
| 1996-2000  | -    | -     | -      | 18,152 | 24,315 | 5,064  | -    | 43,901               |
| 2001   | -    | 2,866 | 6,440  | 47,285 | 57,436 | 16,642 | 133  | 127,222              |
| 2006   | -    | -     | 1,119  | 23,937 | 41,928 | 6,263  | 258  | 73,505               |
| 2007   | -    | -     | -      | 27,516 | 50,714 | 6,840  | 0    | 85,069               |
| 2008   | -    | 66    | 5,282  | 17,773 | 15,542 | 2,564  | 38   | 41,264               |
| 2009   | -    | -     | 1,382  | 34,084 | 68,889 | 9,242  | 212  | 113,810              |
| 2010   | -    | -     | 10,314 | 27,757 | 43,892 | 9,092  | 154  | 91,209               |
| 2011   | -    | -     | 6,670  | 24,094 | 40,950 | 9,249  | 16   | 80,979               |
| 2012   | -    | -     | 12,272 | 24,832 | 31,276 | 13,763 | 353  | 82,497               |
| 2013   | -    | 951   | 13,409 | 22,173 | 40,240 | 9,140  | 237  | 86,150               |
| 2014   | -    | 1,720 | 13,614 | 43,413 | 53,289 | 19,471 | 365  | 131,872              |
| 2015   | -    | 1,710 | 12,019 | 40,022 | 34,155 | 17,537 | 300  | 105,743              |
| 2016   | -    | -     | -      | 27,378 | 28,390 | -      | -    | 55,769               |
| 2017   | -    | -     | 1,444  | 32,785 | 34,950 | 842    | -    | 70,021               |
| 2018 <sup>d/</sup>                                       | -    | -     | 2,824  | 21,345 | 30,327 | 1,171  | -    | 55,667               |

a/ Monthly totals for Oregon data are the sum of statistical weeks with closest fit to the calendar month. Washington data are summarized by statistical month.

b/ Includes minor effort from November in some years.

c/ Includes catch from the Washington State waters Area 4B fishery in 1991, 1992, 1993, 1996, 1997, 1998, 2000, and 2008.

d/ Preliminary.

TABLE A-28. U.S./Canada border to Cape Falcon ocean recreational Chinook and coho salmon landings in numbers of fish by area and month.<sup>a/</sup> (Page 1 of 2)

| Year or Avg.   | April | May   | June   | July   | Aug.   | Sept. | Oct. | Season <sup>b/</sup> | April | May   | June   | July   | Aug.   | Sept.  | Oct. | Season  |
|--|-------|-------|--------|--------|--------|-------|------|----------------------|-------|-------|--------|--------|--------|--------|------|---------|
| <b>CHINOOK</b>   |       |       |        |        |        |       |      | <b>COHO</b>          |       |       |        |        |        |        |      |         |
| <u>U.S./Canada Border to Leadbetter Pt.<sup>c/</sup></u> |       |       |        |        |        |       |      |                      |       |       |        |        |        |        |      |         |
| 1981-1985  | 57    | 1,982 | 13,193 | 18,822 | 8,162  | 505   | 26   | 42,631               | 80    | 1,157 | 12,324 | 37,404 | 42,235 | 6,211  | 161  | 96,516  |
| 1986-1990  | -     | 790   | 1,653  | 12,706 | 5,373  | 1,161 | -    | 20,256               | -     | 19    | 2,439  | 58,151 | 35,746 | 6,320  | 45   | 102,190 |
| 1991-1995  | -     | 148   | 1,911  | 4,305  | 3,020  | 1,549 | 215  | 9,479                | -     | 40    | 6,781  | 37,985 | 33,461 | 9,902  | 324  | 83,144  |
| 1996-2000  | -     | -     | -      | 2,246  | 1,846  | 467   | -    | 4,016                | -     | -     | -      | 10,579 | 14,909 | 2,343  | -    | 25,715  |
| 2001-2005  | -     | -     | -      | 13,147 | 8,805  | 2,033 | 51   | 28,307               | -     | -     | -      | 22,401 | 22,887 | 6,994  | 10   | 53,416  |
| 2006   | -     | -     | 202    | 3,274  | 4,522  | 813   | 91   | 8,902                | -     | -     | 416    | 6,514  | 8,287  | 1,466  | 2    | 16,686  |
| 2007   | -     | -     | -      | 3,804  | 3,138  | 371   | 0    | 7,313                | -     | -     | -      | 13,028 | 20,920 | 2,421  | 0    | 36,369  |
| 2008   | -     | -     | 2,537  | 5,428  | 3,352  | 414   | 6    | 11,737               | -     | -     | 30     | 3,332  | 5,115  | 1,752  | 1    | 10,230  |
| 2009   | -     | -     | 182    | 3,551  | 3,994  | 325   | 97   | 8,149                | -     | -     | 823    | 17,496 | 44,998 | 10,692 | 92   | 74,101  |
| 2010   | -     | -     | 4,893  | 11,814 | 12,753 | 1,960 | 45   | 31,465               | -     | -     | 46     | 5,817  | 6,275  | 5,297  | 37   | 17,473  |
| 2011   | -     | -     | 2,509  | 7,462  | 13,071 | 559   | 5    | 23,607               | -     | -     | 331    | 6,989  | 8,694  | 2,931  | 2    | 18,947  |
| 2012   | -     | -     | 8,472  | 8,020  | 8,325  | 1,366 | 133  | 26,315               | -     | -     | 211    | 7,240  | 7,521  | 6,722  | 21   | 21,715  |
| 2013   | -     | 131   | 2,927  | 7,363  | 10,450 | 1,300 | 119  | 22,289               | -     | -     | 693    | 6,619  | 17,182 | 5,169  | 18   | 29,681  |
| 2014   | -     | 585   | 5,110  | 12,890 | 11,155 | 1,133 | 110  | 30,984               | -     | -     | 6,225  | 20,342 | 22,382 | 15,578 | 199  | 64,725  |
| 2015   | -     | 534   | 5,081  | 15,662 | 5,672  | 2,903 | 164  | 30,017               | -     | -     | 2,608  | 15,085 | 8,787  | 12,533 | 13   | 39,027  |
| 2016   | -     | -     | -      | 7,431  | 4,520  | -     | -    | 11,951               | -     | -     | -      | 63     | 38     | -      | -    | 101     |
| 2017   | -     | -     | 250    | 10,590 | 3,442  | 91    | -    | 14,374               | -     | -     | 58     | 8,590  | 11,454 | 930    | -    | 21,032  |
| 2018 <sup>d/</sup>                                       | -     | -     | 378    | 4,908  | 3,025  | 34    | -    | 8,344                | -     | -     | 574    | 4,902  | 15,530 | 257    | -    | 21,262  |
| <u>Leadbetter Pt. to Cape Falcon</u>                     |       |       |        |        |        |       |      |                      |       |       |        |        |        |        |      |         |
| 1981-1985  | -     | 221   | 4,286  | 6,972  | 6,406  | 672   | 40   | 17,395               | -     | 7,109 | 14,759 | 52,828 | 37,648 | 7,241  | 825  | 109,663 |
| 1986-1990  | -     | 140   | 360    | 2,747  | 4,469  | 120   | -    | 7,580                | -     | -     | 4,463  | 48,084 | 38,613 | 2,767  | -    | 91,374  |
| 1991-1995  | -     | -     | 126    | 928    | 1,038  | 257   | -    | 2,286                | -     | -     | 3,938  | 36,431 | 24,351 | 9,127  | -    | 57,502  |
| 1996-2000  | -     | -     | -      | 553    | 783    | 167   | -    | 1,326                | -     | -     | -      | 10,932 | 12,055 | 3,643  | -    | 22,986  |
| 2001-2005  | -     | -     | -      | 2,588  | 5,500  | 1,068 | 3    | 9,648                | -     | -     | 663    | 25,195 | 43,314 | 10,042 | -    | 78,949  |
| 2006   | -     | -     | -      | 559    | 1,518  | 198   | -    | 2,274                | -     | -     | -      | 8,149  | 15,782 | 881    | -    | 24,812  |
| 2007   | -     | -     | -      | 373    | 1,682  | 170   | -    | 2,225                | -     | -     | -      | 15,982 | 46,366 | 3,467  | -    | 65,816  |
| 2008   | -     | 17    | 626    | 1,509  | 1,563  | -     | -    | 3,715                | -     | -     | 431    | 4,445  | 5,955  | -      | -    | 10,831  |
| 2009   | -     | -     | 14     | 1,347  | 3,782  | 39    | -    | 5,182                | -     | -     | 472    | 26,839 | 54,537 | 1,963  | -    | 83,811  |
| 2010   | -     | -     | 143    | 1,873  | 4,909  | 295   | -    | 7,221                | -     | -     | 13     | 7,909  | 16,129 | 863    | -    | 24,913  |
| 2011   | -     | -     | 481    | 955    | 5,371  | 408   | -    | 7,215                | -     | -     | 467    | 6,085  | 16,810 | 3,319  | -    | 26,680  |
| 2012   | -     | -     | 2,371  | 2,850  | 3,122  | 775   | -    | 9,118                | -     | -     | 282    | 3,672  | 5,161  | 2,276  | -    | 11,391  |
| 2013   | -     | -     | 2,031  | 1,679  | 4,076  | 760   | -    | 8,547                | -     | -     | 3,430  | 4,998  | 10,305 | 1,739  | -    | 20,472  |
| 2014   | -     | 65    | 1,067  | 3,198  | 6,421  | 596   | -    | 11,347               | -     | -     | 2,614  | 19,863 | 38,532 | 14,063 | -    | 75,072  |
| 2015   | -     | 89    | 1,216  | 1,853  | 5,866  | 3,146 | -    | 12,171               | -     | -     | 3,339  | 16,089 | 18,628 | 6,494  | -    | 44,551  |
| 2016   | -     | -     | -      | 2,741  | 3,255  | -     | -    | 5,997                | -     | -     | -      | 5,607  | 13,005 | -      | -    | 18,612  |
| 2017   | -     | -     | 649    | 2,758  | 4,164  | -     | -    | 7,571                | -     | -     | 43     | 7,973  | 13,609 | -      | -    | 21,625  |
| 2018 <sup>d/</sup>                                       | -     | -     | 575    | 657    | 1,001  | 25    | -    | 2,258                | -     | -     | 294    | 6,072  | 14,102 | 107    | -    | 20,575  |

TABLE A-28. U.S./Canada border to Cape Falcon ocean recreational Chinook and coho salmon landings in numbers of fish by area and month.<sup>a/</sup> (Page 2 of 2)

| Year or Avg.  | April          | May   | June   | July   | Aug.   | Sept. | Oct. | Season <sup>b/</sup> | April       | May   | June   | July    | Aug.   | Sept.  | Oct. | Season  |
|---|----------------|-------|--------|--------|--------|-------|------|----------------------|-------------|-------|--------|---------|--------|--------|------|---------|
|   | <b>CHINOOK</b> |       |        |        |        |       |      |                      | <b>COHO</b> |       |        |         |        |        |      |         |
| <u>U.S./Canada Border to Cape Falcon<sup>c/</sup></u> |                |       |        |        |        |       |      |                      |             |       |        |         |        |        |      |         |
| 1981-1985   | 57             | 2,159 | 16,622 | 25,794 | 14,568 | 1,009 | 46   | 60,026               | 80          | 3,527 | 27,083 | 90,232  | 79,883 | 12,003 | 436  | 206,178 |
| 1986-1990   | -              | 930   | 2,014  | 15,453 | 9,841  | 1,241 | -    | 27,836               | -           | 19    | 6,902  | 106,235 | 74,359 | 7,427  | 45   | 193,564 |
| 1991-1995   | -              | 148   | 1,082  | 5,233  | 4,058  | 1,806 | 215  | 11,765               | -           | 40    | 7,328  | 74,416  | 57,812 | 19,029 | 324  | 124,017 |
| 1996-2000   | -              | -     | -      | 2,799  | 2,629  | 592   | -    | 5,342                | -           | -     | -      | 21,511  | 26,964 | 4,529  | -    | 48,702  |
| 2001-2005   | -              | 2,640 | 5,295  | 15,735 | 14,305 | 3,100 | 51   | 37,955               | -           | 5     | 1,900  | 47,596  | 66,201 | 17,036 | 10   | 132,365 |
| 2006  | -              | -     | 202    | 3,832  | 6,040  | 1,011 | 91   | 11,176               | -           | -     | 416    | 14,663  | 24,069 | 2,347  | 2    | 41,498  |
| 2007  | -              | -     | -      | 4,178  | 4,819  | 541   | 0    | 9,538                | -           | -     | -      | 29,010  | 67,286 | 5,888  | 0    | 102,185 |
| 2008  | -              | 17    | 3,163  | 6,937  | 4,916  | 414   | 6    | 15,452               | -           | -     | 461    | 7,777   | 11,070 | 1,752  | 1    | 21,061  |
| 2009  | -              | -     | 196    | 4,898  | 7,776  | 364   | 97   | 13,331               | -           | -     | 1,295  | 44,335  | 99,534 | 12,655 | 92   | 157,912 |
| 2010  | -              | -     | 5,037  | 13,687 | 17,662 | 2,255 | 45   | 38,686               | -           | -     | 59     | 13,726  | 22,403 | 6,160  | 37   | 42,386  |
| 2011  | -              | -     | 2,990  | 8,418  | 18,442 | 968   | 5    | 30,822               | -           | -     | 798    | 13,074  | 25,504 | 6,249  | 2    | 45,628  |
| 2012  | -              | -     | 10,843 | 10,870 | 11,447 | 2,141 | 133  | 35,433               | -           | -     | 493    | 10,912  | 12,682 | 8,998  | 21   | 33,106  |
| 2013  | -              | 131   | 4,957  | 9,042  | 14,526 | 2,061 | 119  | 30,836               | -           | -     | 4,123  | 11,617  | 27,488 | 6,908  | 18   | 50,153  |
| 2014  | -              | 650   | 6,177  | 16,088 | 17,576 | 1,729 | 110  | 42,331               | -           | -     | 8,839  | 40,205  | 60,914 | 29,640 | 199  | 139,797 |
| 2015  | -              | 623   | 6,298  | 17,515 | 11,539 | 6,049 | 164  | 42,188               | -           | -     | 5,947  | 31,174  | 27,416 | 19,027 | 13   | 83,577  |
| 2016  | -              | -     | -      | 10,172 | 7,775  | -     | -    | 17,947               | -           | -     | -      | 5,670   | 13,043 | -      | -    | 18,713  |
| 2017  | -              | -     | 899    | 13,348 | 7,607  | 91    | -    | 21,945               | -           | -     | 101    | 16,563  | 25,063 | 930    | -    | 42,657  |
| 2018 <sup>d/</sup>                                    | -              | -     | 953    | 5,564  | 4,026  | 60    | -    | 10,602               | -           | -     | 868    | 10,974  | 29,632 | 364    | -    | 41,838  |

a/ Monthly totals for Oregon data are the sum of statistical weeks with closest fit to the calendar month. Washington data are summarized by statistical month.

b/ Includes minor effort in November in some years.

c/ Includes catch from the Washington State waters Area 4B fishery in 1991, 1992, 1993, 1996, 1997, 1998, 2000, and 2008.

d/ Preliminary.

**APPENDIX B  
HISTORICAL RECORD OF ESCAPEMENTS TO  
INLAND FISHERIES AND SPAWNING AREAS**

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TABLE B-1. Sacramento River fall Chinook salmon escapement in numbers of fish.<sup>a/b/</sup>

| Year or Average    | Upper Sacramento                |        | Lower Sacramento Natural Areas <sup>c/</sup> |        |            |       | Natural Area                 |        | Sacramento Hatcheries |        |                      |        |                     |        | Hatchery Totals     |                     | Sacramento Totals    |        |                       |        |
|--------------------|---------------------------------|--------|--|--------|------------|-------|------------------------------|--------|-----------------------|--------|----------------------|--------|---------------------|--------|---------------------|---------------------|----------------------|--------|-----------------------|--------|
|                    | Natural Areas <sup>c/d/e/</sup> |        | Feather River                                |        | Yuba River |       | American River <sup>f/</sup> |        | Totals <sup>c/</sup>  |        | Coleman              |        | Feather River       |        | Nimbus              |                     | Adults <sup>g/</sup> | Jacks  | Adults                | Jacks  |
|                    | Adults                          | Jacks  | Adults                                       | Jacks  | Adults     | Jacks | Adults                       | Jacks  | Adults                | Jacks  | Adults               | Jacks  | Adults              | Jacks  | Adults              | Jacks               |                      |        |                       |        |
| 1981-1985          | 57,913                          | 22,432 | 36,252                                       | 5,243  | 12,825     | 5,146 | 32,803                       | 5,142  | 139,793               | 37,963 | 11,557               | 3,734  | 6,845               | 884    | 10,072              | 2,257               | 29,832               | 7,689  | 169,625               | 45,651 |
| 1986-1990          | 87,396                          | 17,244 | 38,709                                       | 6,426  | 9,261      | 2,444 | 25,663                       | 3,917  | 161,029               | 30,031 | 11,507               | 2,288  | 5,837               | 1,947  | 5,685               | 1,349               | 23,028               | 5,584  | 184,057               | 35,616 |
| 1991-1995          | 60,151                          | 11,496 | 32,578                                       | 4,355  | 8,309      | 2,131 | 29,804                       | 4,367  | 130,842               | 22,350 | 11,948               | 2,295  | 10,537              | 2,762  | 6,414               | 1,447               | 28,899               | 6,505  | 159,741               | 28,855 |
| 1996-2000          | 153,777                         | 8,383  | 54,225 <sup>h/</sup>                         | 6,806  | 20,233     | 4,600 | 62,613                       | 10,061 | 290,848               | 29,851 | 29,965               | 3,001  | 13,342              | 1,497  | 7,795               | 1,407               | 51,102               | 5,905  | 341,949               | 35,756 |
| 2001               | 179,198                         | 11,853 | 169,588                                      | 9,114  | 21,567     | 1,825 | 169,023                      | 16,144 | 539,376               | 38,936 | 23,710               | 988    | 24,001              | 871    | 9,688               | 1,956               | 57,399               | 3,815  | 596,775               | 42,751 |
| 2002               | 474,812 <sup>i/</sup>           | 11,259 | 93,766                                       | 11,397 | 18,406     | 4,796 | 97,242                       | 15,195 | 684,226               | 42,647 | 61,895               | 4,029  | 17,516              | 2,991  | 6,231               | 3,586               | 85,642               | 10,606 | 769,868               | 53,253 |
| 2003               | 164,802                         | 4,402  | 85,578                                       | 4,369  | 26,820     | 1,489 | 137,444                      | 13,647 | 414,644               | 23,907 | 82,882               | 5,352  | 13,615              | 1,352  | 11,875              | 3,012               | 108,372              | 9,716  | 523,016               | 33,623 |
| 2004               | 70,548                          | 7,220  | 48,580                                       | 5,591  | 9,260      | 5,208 | 77,842                       | 21,505 | 206,230               | 39,524 | 52,145               | 17,027 | 15,769              | 5,535  | 12,741              | 13,659              | 80,655               | 36,221 | 286,885               | 75,745 |
| 2005               | 96,716                          | 3,267  | 43,738                                       | 4,848  | 16,251     | 987   | 58,155                       | 4,499  | 214,860               | 13,601 | 139,979              | 2,694  | 20,597              | 1,787  | 20,569              | 1,780               | 181,145              | 6,261  | 396,005               | 19,862 |
| 2006               | 89,933                          | 2,874  | 75,545                                       | 1,869  | 7,891      | 230   | 23,120                       | 1,420  | 196,489               | 6,393  | 56,819               | 1,013  | 13,400              | 634    | 8,322               | 406                 | 78,541               | 2,053  | 275,030               | 8,446  |
| 2007               | 36,079                          | 978    | 21,541                                       | 321    | 2,523      | 81    | 9,929                        | 144    | 70,072                | 1,524  | 11,543               | 201    | 5,169               | 172    | 4,590               | 7                   | 21,302               | 380    | 91,374                | 1,904  |
| 2008               | 36,274                          | 2,074  | 5,703  | 236    | 3,084      | 424   | 2,255                        | 259    | 47,316                | 2,993  | 10,181               | 458    | 5,031               | 323    | 2,836               | 348                 | 18,048               | 1,129  | 65,364                | 4,122  |
| 2009               | 12,277                          | 1,624  | 3,950  | 897    | 3,992      | 803   | 4,729                        | 1,047  | 24,948                | 4,371  | 5,433                | 719    | 6,240               | 3,723  | 4,252               | 654                 | 15,925               | 5,096  | 40,873                | 9,467  |
| 2010               | 25,688                          | 6,872  | 40,981                                       | 3,933  | 12,074     | 1,023 | 12,383                       | 2,305  | 91,126                | 14,133 | 8,666                | 8,572  | 17,215              | 2,757  | 7,269               | 1,826               | 33,150               | 13,155 | 124,276               | 27,288 |
| 2011               | 20,466                          | 15,096 | 35,656                                       | 11,633 | 6,917      | 2,204 | 14,815                       | 10,422 | 77,854                | 39,355 | 19,312               | 23,068 | 15,925              | 16,691 | 6,251               | 6,429               | 41,488               | 46,188 | 119,342               | 85,543 |
| 2012               | 67,190                          | 7,125  | 57,507                                       | 6,142  | 6,009      | 1,722 | 35,527                       | 3,296  | 166,233               | 18,285 | 77,318               | 8,198  | 33,628              | 8,533  | 8,250               | 1,007               | 119,196              | 17,738 | 285,429               | 36,023 |
| 2013               | 90,119                          | 6,253  | 145,650                                      | 5,559  | 13,830     | 1,050 | 56,036                       | 2,192  | 305,635               | 15,054 | 67,758               | 2,103  | 25,152              | 2,470  | 8,301               | 775                 | 101,211              | 5,348  | 406,846               | 20,402 |
| 2014               | 80,056                          | 7,359  | 55,480                                       | 5,241  | 9,885      | 1,819 | 22,895                       | 3,580  | 168,316               | 17,999 | 18,280               | 976    | 18,824              | 4,596  | 7,048               | 1,295               | 44,152               | 6,867  | 212,468               | 24,866 |
| 2015               | 40,687                          | 3,350  | 18,069                                       | 2,497  | 4,131      | 3,419 | 11,895                       | 3,844  | 74,782                | 13,110 | 13,819               | 1,895  | 18,081              | 2,707  | 7,403               | 2,419               | 39,303               | 7,021  | 114,085               | 20,131 |
| 2016               | 10,563                          | 803    | 34,054                                       | 4,727  | 2,143      | 1,422 | 9,537                        | 4,936  | 56,297                | 11,888 | 8,306                | 225    | 17,594              | 2,962  | 7,502               | 1,922               | 33,402               | 5,109  | 89,699                | 16,997 |
| 2017               | 1,526                           | 4,015  | 8,120  | 2,414  | 1,145      | 471   | 7,170                        | 2,716  | 17,961                | 9,616  | 1,316                | 5,080  | 15,736              | 8,009  | 7,701 <sup>k/</sup> | 1,661 <sup>k/</sup> | 24,753               | 14,750 | 42,714                | 24,366 |
| 2018 <sup>j/</sup> | 17,824                          | 11,414 | 39,210                                       | 6,616  | 2,024      | 1,032 | 12,866                       | 8,225  | 71,924                | 27,287 | 8,780                | 5,393  | 20,549              | 6,778  | 4,486               | 1,726               | 33,815               | 13,897 | 105,739               | 41,184 |
| GOALS              | -                               | -      | -  | -      | -          | -     | -                            | -      | -                     | -      | 12,000 <sup>l/</sup> | -      | 6,000 <sup>l/</sup> | -      | 4,000 <sup>l/</sup> | -                   | 22,000 <sup>l/</sup> | -      | 122,000 <sup>m/</sup> | -      |

a/ In 2004, CDFW reviewed and updated 1971-2003 escapement estimates to reflect final project reports.

b/ Chinook spawning during the fall; may include spring run fish in some survey areas.

c/ Most natural area estimates based on carcass surveys with a jack length cut-off.

d/ Upper Sacramento mainstem estimates generally based on carcass surveys with a jack length cut-off, however, jack estimates from Red Bluff Diversion Dam (RBDD) reports have occasionally been used. Early (pre-2001) mainstem Sacramento River adult and jack estimates based on RBDD passage.

e/ Upper Sacramento River escapement includes Sacramento River mainstem; Battle, Clear, Mill, Deer, Butte, Cottonwood, and Cow creeks; and other small tributaries when surveys were conducted. Specific escapement estimates by tributary can be found at [www.calfish.org](http://www.calfish.org).

f/ American River adult and jack escapement estimates include fish taken at Nimbus Weir, 1979-current. In previous versions of this table, fish taken at Nimbus Weir were included in the Nimbus Fish Hatchery counts.

g/ Total adults in Sacramento hatcheries include Tehama-Colusa Fish Facility escapements, 1971-1985.

h/ Survey methodology was variable for 1998-99; may not be comparable to other surveys.

i/ Change in estimation methodology due to extremely high Battle Creek escapement.

j/ Preliminary.

k/ Nimbus Fish Hatchery opened three weeks early to collect anticipated stray Chinook originating from Coleman National Fish Hatchery. During this time, 2,886 fish were collected.

l/ Current hatchery-specific goals, not PFMC goals.

m/ Sacramento River fall Chinook  $S_{MSY}$ .

TABLE B-2. San Joaquin River fall Chinook salmon escapement in numbers of fish.<sup>a/</sup>

| Year or<br>Average  | San Joaquin Natural Areas <sup>b/</sup> |       |                  |       |                |       |              |       |                                   |     | San Joaquin Hatcheries |        |                     |        |              |       | San Joaquin<br>Totals |        |        |        |
|---------------------|---|-------|------------------|-------|----------------|-------|--------------|-------|-----------------------------------|-----|------------------------|--------|---------------------|--------|--------------|-------|-----------------------|--------|--------|--------|
|                     | Mokelumne River                         |       | Stanislaus River |       | Tuolumne River |       | Merced River |       | Other Tributaries <sup>c/d/</sup> |     | Totals                 |        | Mokelumne River     |        | Merced River |       | Totals                |        | Adults | Jacks  |
| 1981-1985           | 7,346                                   | 394   | 4,649            | 633   | 12,902         | 5,143 | 9,749        | 4,551 | 284                               | 0   | 34,930                 | 10,721 | 759                 | 734    | 797          | 449   | 1,556                 | 1,183  | 36,486 | 11,904 |
| 1986-1990           | 1,294                                   | 162   | 4,174            | 824   | 2,951          | 2,910 | 2,414        | 480   | 20                                | 0   | 10,853                 | 4,377  | 278                 | 286    | 299          | 140   | 577                   | 426    | 11,430 | 4,803  |
| 1991-1995           | 865                                     | 281   | 472              | 123   | 264            | 139   | 1,026        | 360   | 0                                 | 0   | 2,626                  | 904    | 1,077               | 554    | 239          | 233   | 1,316                 | 788    | 3,943  | 1,691  |
| 1996-2000           | 2,334                                   | 791   | 3,536            | 802   | 7,144          | 2,160 | 3,838        | 873   | 0                                 | 0   | 16,853                 | 4,626  | 3,413               | 1,052  | 769          | 525   | 4,182                 | 1,576  | 21,035 | 6,203  |
| 2001                | 1,755                                   | 467   | 6,140            | 719   | 7,852          | 1,369 | 8,084        | 1,133 | 0                                 | 0   | 23,831                 | 3,688  | 4,467               | 1,427  | 1,137        | 523   | 5,604                 | 1,950  | 29,435 | 5,638  |
| 2002                | 2,244                                   | 596   | 5,848            | 952   | 6,192          | 1,008 | 7,568        | 1,232 | 0                                 | 0   | 21,852                 | 3,788  | 5,800               | 2,119  | 1,250        | 588   | 7,050                 | 2,707  | 28,902 | 6,495  |
| 2003                | 1,571                                   | 552   | 6,707            | 889   | 2,620          | 234   | 3,621        | 489   | 0                                 | 0   | 14,519                 | 2,164  | 5,108               | 3,009  | 392          | 157   | 5,500                 | 3,166  | 20,019 | 5,330  |
| 2004                | 1,175                                   | 413   | 2,848            | 1,220 | 1,029          | 605   | 2,197        | 1,073 | 0                                 | 0   | 7,250                  | 3,310  | 5,477               | 4,879  | 456          | 594   | 5,933                 | 5,473  | 13,183 | 8,783  |
| 2005                | 9,574                                   | 832   | 2,984            | 332   | 647            | 72    | 1,900        | 211   | 738                               | 130 | 15,843                 | 1,577  | 5,035               | 528    | 346          | 75    | 5,381                 | 603    | 21,224 | 2,180  |
| 2006                | 1,555                                   | 177   | 1,718            | 205   | 457            | 105   | 1,262        | 167   | 630                               | 15  | 5,622                  | 669    | 2,801               | 1,338  | 130          | 20    | 2,931                 | 1,358  | 8,553  | 2,027  |
| 2007                | 461                                     | 9     | 368              | 75    | 193            | 31    | 446          | 49    | 53                                | 0   | 1,521                  | 164    | 1,004               | 40     | 70           | 9     | 1,074                 | 49     | 2,595  | 213    |
| 2008                | 83                                      | 90    | 1,253            | 139   | 358            | 14    | 316          | 73    | 0                                 | 0   | 2,010                  | 316    | 116                 | 123    | 39           | 37    | 155                   | 160    | 2,165  | 476    |
| 2009                | 320                                     | 360   | 554              | 194   | 130            | 70    | 390          | 64    | 0                                 | 0   | 1,394                  | 688    | 730                 | 823    | 109          | 137   | 839                   | 960    | 2,233  | 1,648  |
| 2010                | 1,640                                   | 280   | 793              | 293   | 329            | 211   | 501          | 150   | 740                               | 0   | 4,003                  | 934    | 3,543               | 1,733  | 115          | 31    | 3,658                 | 1,764  | 7,661  | 2,698  |
| 2011                | 705                                     | 1,962 | 433              | 630   | 231            | 647   | 640          | 975   | 518                               | 0   | 2,527                  | 4,214  | 2,409               | 13,513 | 99           | 338   | 2,508                 | 13,851 | 5,035  | 18,065 |
| 2012                | 3,836                                   | 1,635 | 3,550            | 456   | 485            | 298   | 1,947        | 310   | 1,034                             | 149 | 10,852                 | 2,848  | 4,430               | 2,190  | 628          | 372   | 5,058                 | 2,562  | 15,910 | 5,410  |
| 2013                | 5,806                                   | 1,265 | 2,562            | 283   | 1,798          | 128   | 2,673        | 153   | 0                                 | 0   | 12,839                 | 1,829  | 3,698               | 1,483  | 918          | 180   | 4,616                 | 1,663  | 17,455 | 3,492  |
| 2014                | 1,973                                   | 1,324 | 1,837            | 1,227 | 150            | 56    | 611          | 249   | 401                               | 0   | 4,972                  | 2,856  | 4,417               | 4,403  | 229          | 582   | 4,646                 | 4,985  | 9,618  | 7,841  |
| 2015                | 3,090                                   | 1,514 | 4,050            | 2,086 | 42             | 71    | 860          | 387   | 180                               | 0   | 8,222                  | 4,058  | 5,170               | 3,128  | 556          | 642   | 5,726                 | 3,770  | 13,948 | 7,828  |
| 2016                | 1,279                                   | 705   | 5,231            | 3,961 | 661            | 696   | 1,232        | 2,099 | 986                               | 262 | 9,389                  | 7,723  | 3,314               | 3,573  | 1,995        | 970   | 5,309                 | 4,543  | 14,698 | 12,266 |
| 2017                | 4,626                                   | 1,018 | 2,225            | 1,274 | 690            | 428   | 2,349        | 832   | 575                               | 95  | 10,465                 | 3,647  | 4,651               | 9,668  | 602          | 1,099 | 5,253                 | 10,767 | 15,718 | 14,414 |
| 2018 <sup>e/</sup>  | 6,609                                   | 3,685 | 2,026            | 361   | 738            | 346   | 347          | 528   | 630                               | 158 | 10,350                 | 5,078  | 4,778               | 2,403  | 264          | 639   | 5,042                 | 3,042  | 15,392 | 8,120  |
| GOALS <sup>f/</sup> | -                                       | -     | -                | -     | -              | -     | -            | -     | -                                 | -   | -                      | -      | 3,000 <sup>g/</sup> | -      | 1,000        | -     | 4,000                 | -      | -      | -      |

a/ In 2004, CDFW review ed and updated 1971-2003 escapement estimates to reflect final project reports.

b/ Most natural area estimates based on carcass surveys w ith a jack length cut-off.

c/ Other San Joaquin tributary escapement includes Cosumnes and Calaveras Rivers w hen surveys w ere conducted. In some years no survey w as conducted due to logistical or environmental limitations.

d/ Calculating jack proportions w as not possible in some years due to sampling and/or environmental limitations. In those years jacks are included in the adult escapement values.

e/ Preliminary.

f/ Current hatchery-specific goals, not PFMC goals.

g/ Due to modernization of the hatchery facility and improved efficiencies, the Mokelumne Hatchery escapement goal w as reduced from 5,000 to 3,000 adults in 2010.

TABLE B-3. Sacramento River late-fall, winter, and spring Chinook salmon spawning escapement in numbers of fish.

| Year or<br>Average | Upper Sacramento River      |                     |                        |        |                     |        |                         |                                  |        |                             |                     |                   |
|--------------------|-----------------------------|---------------------|------------------------|--------|---------------------|--------|-------------------------|----------------------------------|--------|-----------------------------|---------------------|-------------------|
|                    | Late-Fall <sup>a/b/c/</sup> |                     | Winter <sup>c/d/</sup> |        |                     |        | Spring                  |                                  |        |                             |                     |                   |
|                    | Adults                      | Jacks               | RBDD <sup>a/</sup>     |        | Carcass Survey      |        | Tributary <sup>e/</sup> | Sacramento River <sup>a/f/</sup> |        | Feather River <sup>g/</sup> |                     |                   |
|                    |                             | Adults              | Jacks                  | Adults | Jacks               | Adults | Jacks                   | Adults and Jacks <sup>h/</sup>   | Adults | Jacks                       | Adults              | Jacks             |
| 1981-1985          | 8,102                       | 1,746               | 5,027                  | 921    | --                  | --     | --                      | 1,061                            | 9,798  | 4,241                       | 1,446               | 133               |
| 1986-1990          | 10,047                      | 1,761               | 1,369                  | 390    | --                  | --     | --                      | 1,658                            | 8,795  | 1,930                       | 2,884               | 406               |
| 1991-1995          | 3,844 <sup>i/</sup>         | 383 <sup>i/</sup>   | 586                    | 78     | --                  | --     | --                      | 2,813                            | 410    | 165                         | 3,441               | 465               |
| 1996-2000          | 16,061 <sup>i/</sup>        | 2,478 <sup>i/</sup> | 940                    | 1,032  | --                  | --     | --                      | 7,768                            | 242    | 160                         | 4,393               | 503               |
| 2001               | 20,614                      | 1,199               | 1,696                  | 3,827  | 7,443               | 781    | --                      | 21,623 <sup>i/</sup>             | 981    | 0 <sup>h/</sup>             | 4,052               | 83                |
| 2002               | 39,818                      | 765                 | 7,614                  | 1,555  | 7,047               | 417    | --                      | 20,198 <sup>i/</sup>             | 430    | 53                          | 3,982               | 207               |
| 2003               | 8,122                       | 613                 | 6,172                  | 3,585  | 7,675               | 543    | --                      | 21,798 <sup>i/</sup>             | 0      | 0                           | 8,373               | 389               |
| 2004               | 12,458                      | 1,574               | 2,588                  | 4,604  | 5,786               | 2,083  | --                      | 12,556 <sup>i/</sup>             | 763    | 326                         | 3,630               | 572               |
| 2005               | 14,047                      | 2,141               | 3,521                  | 1,778  | 14,684              | 1,155  | --                      | 21,319 <sup>i/</sup>             | 21     | 9                           | 1,811 <sup>k/</sup> | 24 <sup>k/</sup>  |
| 2006               | 14,709                      | 351                 | 4,792                  | 2,623  | 16,911              | 379    | --                      | 10,669 <sup>i/</sup>             | 0      | 0                           | 2,052 <sup>k/</sup> | 9 <sup>k/</sup>   |
| 2007               | 11,954                      | 714                 | 3,004                  | 3,140  | 2,402               | 139    | --                      | 8,951 <sup>i/</sup>              | 226    | 22                          | 2,669 <sup>k/</sup> | 5 <sup>k/</sup>   |
| 2008               | 9,946                       | 381                 | 1,504                  | 2,131  | 2,623               | 207    | --                      | 11,943 <sup>i/</sup>             | 0      | 0                           | 1,056 <sup>k/</sup> | 10 <sup>k/</sup>  |
| 2009               | 9,515                       | 460                 | l/                     | l/     | 4,483               | 54     | --                      | 3,517 <sup>i/</sup>              | l/     | l/                          | 867 <sup>k/</sup>   | 122 <sup>k/</sup> |
| 2010               | 8,894                       | 1,001               | l/                     | l/     | 1,554               | 42     | --                      | 2,951 <sup>i/</sup>              | l/     | l/                          | 1,655 <sup>k/</sup> | 6 <sup>k/</sup>   |
| 2011               | 7,129                       | 1,161               | l/                     | l/     | 637                 | 187    | --                      | 5,547 <sup>i/</sup>              | l/     | l/                          | 1,831 <sup>k/</sup> | 138 <sup>k/</sup> |
| 2012               | 5,153                       | 909                 | m/                     | m/     | 2,527               | 144    | --                      | 18,694 <sup>i/</sup>             | m/     | m/                          | 3,510 <sup>k/</sup> | 228 <sup>k/</sup> |
| 2013               | 8,365                       | 644                 | m/                     | m/     | 5,622 <sup>n/</sup> | 462    | --                      | 18,507 <sup>i/</sup>             | m/     | m/                          | 4,247 <sup>k/</sup> | 44 <sup>k/</sup>  |
| 2014               | 11,792                      | 1,453               | m/                     | m/     | 2,688               | 327    | --                      | 7,127 <sup>i/</sup>              | m/     | m/                          | 2,599 <sup>k/</sup> | 177 <sup>k/</sup> |
| 2015               | 9,271                       | 135                 | m/                     | m/     | 3,382               | 57     | --                      | 1,039 <sup>i/</sup>              | m/     | m/                          | 3,280 <sup>k/</sup> | 51 <sup>k/</sup>  |
| 2016               | 4,621                       | 959                 | m/                     | m/     | 924                 | 622    | --                      | 6,458 <sup>i/</sup>              | m/     | m/                          | 1,595 <sup>k/</sup> | 55 <sup>k/</sup>  |
| 2017               | 4,466                       | 389                 | m/                     | m/     | 490                 | 485    | --                      | 1,055 <sup>i/</sup>              | m/     | m/                          | 317 <sup>k/</sup>   | 375 <sup>k/</sup> |
| 2018 <sup>o/</sup> | 2,032                       | 3,199               | m/                     | m/     | 1,884               | 754    | --                      | 3,130 <sup>i/</sup>              | m/     | m/                          | 1,870 <sup>k/</sup> | 240 <sup>k/</sup> |

a/ Jacks and adults based on sampling at Red Bluff Diversion Dam (RBDD) from unpublished CDFW data. Beginning in 1987 for late-fall and winter run, estimates based on historical run patterns and partial counts at RBDD due to raising of dam gates during the last part of the late-fall run and first part of the winter run.

b/ Since 1998, late-fall adult and jack estimates are based on carcass counts of natural spawners plus fish spawned at Coleman National Fish Hatchery.

c/ Estimates of late-fall and winter run includes Chinook trapped at Keswick Dam for use as broodstock at Coleman or Livingston Stone National Fish Hatcheries.

d/ RBDD and carcass survey estimates represent alternative methods for determining winter run Chinook escapement.

e/ Natural spawning spring run which are isolated from fall run; primarily Mill Creek, Deer Creek, and Butte Creek escapement.

f/ Sacramento River spring run estimates are the total RBDD counts minus the spring run numbers in the upper Sacramento tributaries. If this number is less than or equal to zero, the upper Sacramento River spring run estimates are zero.

g/ Feather River spring run estimates are primarily fish returning to Feather River Hatchery. Spring run are not distinguished from fall run in the natural spawning surveys and are reported in the fall run natural escapement numbers.

h/ Jack proportion could not be determined.

i/ Primarily number of spawners at Coleman National Fish Hatchery 1991-97. No data available for natural spawners, RBDD gates were raised during time coinciding with the late-fall run.

j/ Methodology change from using snorkel survey to carcass survey for Butte Creek spring run estimates.

k/ Methodology change for distinguishing spring run Chinook at Feather River Hatchery in 2005. Fish arriving prior to the spring Chinook spawning period were tagged and returned to the river. Spring Chinook escapement estimate is the number of these tagged fish that subsequently returned during the spring Chinook spawning period.

l/ RBDD did not go into operation until June 15, a month later than normal; thus RBDD winter and spring run estimates are unavailable.

m/ RBDD gates were permanently removed on September 1, 2012; thus RBDD winter and spring run estimates are no longer available.

n/ Includes 47 adults that were transferred from the Colusa Basin Drain to Livingston Stone National Fish Hatchery for use as broodstock.

o/ Preliminary.



TABLE B-4. Summary of Klamath River fall Chinook salmon estimates in numbers of adults and jacks.

| Year or Average         | Category | Total Inriver Run | Inriver Harvest |        |         | Nonlanded Fishery Mortality | Spawning Escapement |         |         |               |         |        |          |         |                         |
|-------------------------|----------|-------------------|-----------------|--------|---------|-----------------------------|---------------------|---------|---------|---------------|---------|--------|----------|---------|-------------------------|
|                         |          |                   | Indian          | Sport  | Total   |                             | Klamath River       |         |         | Trinity River |         |        | Total    |         |                         |
|                         |          |                   |                 |        |         |                             | Hatchery            | Natural | Total   | Hatchery      | Natural | Total  | Hatchery | Natural | Total                   |
| 1981-1985               | Adults   | 63,230            | 17,128          | 5,096  | 22,224  | 1,593                       | 8,812               | 16,313  | 25,125  | 2,934         | 11,354  | 14,288 | 11,746   | 27,667  | 39,413                  |
|                         | Jacks    | 29,811            | 1,287           | 6,447  | 7,734   | 243                         | 1,162               | 6,227   | 7,389   | 4,888         | 9,556   | 14,444 | 6,050    | 15,783  | 21,833                  |
| 1986-1990               | Adults   | 151,203           | 36,669          | 15,145 | 51,814  | 3,498                       | 13,194              | 21,543  | 34,737  | 11,912        | 49,242  | 61,154 | 25,106   | 70,785  | 95,891                  |
|                         | Jacks    | 20,227            | 446             | 4,924  | 5,370   | 139                         | 1,009               | 3,460   | 4,469   | 2,285         | 7,964   | 10,248 | 3,294    | 11,423  | 14,718                  |
| 1991-1995               | Adults   | 80,666            | 10,574          | 3,094  | 13,668  | 983                         | 12,980              | 26,594  | 39,574  | 5,104         | 21,339  | 26,442 | 18,084   | 47,932  | 66,016                  |
|                         | Jacks    | 12,038            | 291             | 2,741  | 3,032   | 81                          | 1,140               | 3,216   | 4,356   | 1,134         | 3,435   | 4,569  | 2,274    | 6,651   | 8,925                   |
| 1996-2000 <sup>a/</sup> | Adults   | 123,856           | 24,565          | 6,817  | 31,382  | 2,275                       | 24,549              | 32,279  | 56,828  | 11,421        | 21,950  | 33,371 | 35,970   | 54,229  | 90,199                  |
|                         | Jacks    | 10,332            | 170             | 1,805  | 1,976   | 52                          | 1,413               | 2,628   | 4,042   | 872           | 3,391   | 4,262  | 2,285    | 6,019   | 8,304                   |
| 2001-2005               | Adults   | 136,848           | 25,414          | 7,659  | 33,074  | 2,366                       | 23,476              | 34,971  | 58,447  | 15,476        | 21,375  | 36,851 | 38,952   | 56,346  | 95,298                  |
|                         | Jacks    | 7,271             | 161             | 1,391  | 1,552   | 43                          | 785                 | 2,000   | 2,785   | 596           | 1,894   | 2,490  | 1,381    | 3,894   | 5,275                   |
| 2006                    | Adults   | 61,374            | 10,283          | 62     | 10,345  | 1,344                       | 11,604              | 14,264  | 25,868  | 7,918         | 15,899  | 23,817 | 19,522   | 30,163  | 49,685                  |
|                         | Jacks    | 26,935            | 415             | 5,527  | 5,942   | 149                         | 2,386               | 6,516   | 8,902   | 4,076         | 7,866   | 11,942 | 6,462    | 14,382  | 20,844                  |
| 2007                    | Adults   | 132,131           | 27,573          | 6,312  | 33,885  | 2,526                       | 16,969              | 21,292  | 38,261  | 18,081        | 39,378  | 57,459 | 35,050   | 60,670  | 95,720                  |
|                         | Jacks    | 1,684             | 21              | 369    | 390     | 10                          | 180                 | 232     | 412     | 33            | 839     | 872    | 213      | 1,071   | 1,284                   |
| 2008                    | Adults   | 70,554            | 22,259          | 1,919  | 24,178  | 1,974                       | 9,101               | 19,020  | 28,121  | 4,451         | 11,830  | 16,281 | 13,552   | 30,850  | 44,402                  |
|                         | Jacks    | 25,247            | 641             | 4,308  | 4,949   | 144                         | 2,130               | 9,425   | 11,555  | 801           | 7,798   | 8,599  | 2,931    | 17,223  | 20,154                  |
| 2009                    | Adults   | 100,644           | 28,387          | 5,651  | 34,038  | 2,583                       | 12,263              | 27,743  | 40,006  | 7,351         | 16,666  | 24,017 | 19,614   | 44,409  | 64,023                  |
|                         | Jacks    | 11,914            | 178             | 2,214  | 2,392   | 60                          | 1,229               | 1,948   | 3,177   | 143           | 6,142   | 6,285  | 1,372    | 8,090   | 9,462                   |
| 2010                    | Adults   | 90,860            | 29,887          | 3,035  | 32,922  | 2,661                       | 10,278              | 15,170  | 25,448  | 7,774         | 22,055  | 29,829 | 18,052   | 37,225  | 55,277                  |
|                         | Jacks    | 16,640            | 428             | 1,831  | 2,259   | 74                          | 1,069               | 1,811   | 2,880   | 1,432         | 9,995   | 11,427 | 2,501    | 11,806  | 14,307                  |
| 2011                    | Adults   | 101,977           | 26,353          | 4,147  | 30,500  | 2,377                       | 8,490               | 17,973  | 26,463  | 13,847        | 28,790  | 42,637 | 22,337   | 46,763  | 69,100                  |
|                         | Jacks    | 84,895            | 1,322           | 9,981  | 11,303  | 319                         | 9,549               | 24,746  | 34,295  | 1,875         | 37,103  | 38,978 | 11,424   | 61,849  | 73,273                  |
| 2012                    | Adults   | 295,322           | 95,386          | 13,876 | 109,262 | 8,578                       | 38,478              | 72,786  | 111,264 | 17,461        | 48,757  | 66,218 | 55,939   | 121,543 | 177,482                 |
|                         | Jacks    | 21,433            | 177             | 3,875  | 4,052   | 94                          | 1,537               | 8,289   | 9,826   | 92            | 7,369   | 7,461  | 1,629    | 15,658  | 17,287                  |
| 2013                    | Adults   | 165,025           | 63,036          | 19,800 | 82,836  | 5,885                       | 13,431              | 31,711  | 45,142  | 3,717         | 27,445  | 31,162 | 17,148   | 59,156  | 76,304                  |
|                         | Jacks    | 14,356            | 259             | 2,260  | 2,519   | 69                          | 1,323               | 3,274   | 4,597   | 135           | 7,036   | 7,171  | 1,458    | 10,310  | 11,768                  |
| 2014                    | Adults   | 160,396           | 25,967          | 5,386  | 31,353  | 2,392                       | 24,300              | 70,709  | 95,009  | 6,975         | 24,395  | 31,370 | 31,276   | 95,104  | 126,380                 |
|                         | Jacks    | 22,321            | 348             | 3,364  | 3,712   | 100                         | 1,039               | 10,520  | 11,559  | 221           | 6,719   | 6,940  | 1,259    | 17,239  | 18,498                  |
| 2015                    | Adults   | 77,821            | 28,048          | 7,842  | 35,890  | 2,611                       | 7,956               | 23,273  | 31,229  | 3,129         | 4,839   | 7,968  | 11,085   | 28,112  | 39,197                  |
|                         | Jacks    | 6,094             | 496             | 1,605  | 2,101   | 76                          | 220                 | 748     | 968     | 224           | 2,724   | 2,948  | 444      | 3,472   | 3,916                   |
| 2016                    | Adults   | 24,582            | 5,160           | 1,310  | 6,470   | 486                         | 2,436               | 10,376  | 12,812  | 1,142         | 3,561   | 4,703  | 3,578    | 13,937  | 17,515                  |
|                         | Jacks    | 2,787             | 160             | 162    | 322     | 17                          | 151                 | 554     | 705     | 401           | 1,340   | 1,741  | 552      | 1,894   | 2,446                   |
| 2017                    | Adults   | 33,232            | 1,880           | 71     | 1,951   | 164                         | 7,443               | 13,832  | 21,275  | 3,770         | 6,072   | 9,842  | 11,213   | 19,904  | 31,117                  |
|                         | Jacks    | 20,318            | 266             | 42     | 308     | 17                          | 3,193               | 10,621  | 13,814  | 1,863         | 4,316   | 6,179  | 5,056    | 14,937  | 19,993                  |
| 2018 <sup>c/</sup>      | Adults   | 92,293            | 14,769          | 4,075  | 18,844  | 1,261                       | 11,425              | 37,503  | 48,928  | 7,139         | 16,121  | 23,260 | 18,564   | 53,624  | 72,188                  |
|                         | Jacks    | 11,114            | 308             | 2,206  | 2,514   | 57                          | 435                 | 3,490   | 3,925   | 171           | 4,447   | 4,618  | 606      | 7,937   | 8,543                   |
| GOAL                    | Adults   |                   |                 |        |         |                             |                     |         |         |               |         |        |          |         | ≥40,700 <sup>d/e/</sup> |

a/ Total inriver run includes an estimated 30,550 fish that died prior to spawning in September 2002.

b/ Total inriver run includes fish collected from the Klamath and Trinity rivers by the Yurok and Hoopa Valley tribes, respectively, to test for the presence of the parasite *Ichthyophthirius multifiliis* during the following years: 2014 - 282 fish; 2015 - 124 fish; 2016 - 113 fish.

c/ Preliminary.

d/ In December 2011, Amendment 16 to the Salmon Fishery Management Plan was approved, which replaced the 35,000 spawning escapement floor with an  $S_{MSY}$  management objective of 40,700 natural area adult spawners. The 35,000 spawner floor was in effect from 1989-2007 and in 2011. In 2008-2010, fisheries were managed for a natural area spawning escapement of 40,700 adults under requirements of a rebuilding plan.

e/ Annual escapement goals may be more or less than  $S_{MSY}$  in some years due to meeting  $S_{ACL}$  requirements and de minimis fishing provisions.

TABLE B-5. Estimates of Yurok and Hoopa Valley reservation Indian gillnet Chinook harvest in numbers of fish.

| Year               | Area <sup>a/</sup>          | Spring Run |       |       | Fall Run |        |        |
|--------------------|-----------------------------|------------|-------|-------|----------|--------|--------|
|                    |                             | Jack       | Adult | Total | Jack     | Adult  | Total  |
| 2013               | Commercial:Estuary          | 0          | 962   | 962   | 0        | 52,046 | 52,046 |
|                    | Middle Klamath              | 0          | 9     | 9     | 0        | 64     | 64     |
|                    | Subsistence:Estuary         | 7          | 2,327 | 2,334 | 205      | 5,458  | 5,663  |
|                    | Middle Klamath              | 0          | 110   | 110   | 13       | 843    | 856    |
|                    | Upper Klamath               | 0          | 336   | 336   | 25       | 1,606  | 1,631  |
|                    | Trinity River               | 19         | 1,202 | 1,221 | 16       | 3,019  | 3,035  |
|                    | Total                       | 26         | 4,946 | 4,972 | 259      | 63,036 | 63,295 |
| 2014               | Commercial:Estuary          | 0          | 0     | 0     | 0        | 11,431 | 11,431 |
|                    | Middle Klamath              | 0          | 0     | 0     | 0        | 401    | 401    |
|                    | Subsistence:Estuary         | 7          | 2,438 | 2,445 | 153      | 8,665  | 8,818  |
|                    | Middle Klamath              | 0          | 64    | 64    | 72       | 1,584  | 1,656  |
|                    | Upper Klamath <sup>b/</sup> | 10         | 658   | 668   | 68       | 1,719  | 1,787  |
|                    | Trinity River               | 85         | 1,733 | 1,818 | 65       | 2,440  | 2,504  |
|                    | Total                       | 102        | 4,893 | 4,995 | 358      | 26,240 | 26,597 |
| 2015               | Commercial:Estuary          | 0          | 0     | 0     | 0        | 16,899 | 16,899 |
|                    | Middle Klamath              | 0          | 0     | 0     | 0        | 163    | 163    |
|                    | Subsistence:Estuary         | 0          | 1,816 | 1,816 | 405      | 5,609  | 6,014  |
|                    | Middle Klamath              | 0          | 133   | 133   | 10       | 642    | 652    |
|                    | Upper Klamath <sup>b/</sup> | 17         | 628   | 645   | 35       | 2,818  | 2,853  |
|                    | Trinity River <sup>c/</sup> | 15         | 1,087 | 1,102 | 47       | 2,040  | 2,087  |
|                    | Total                       | 32         | 3,664 | 3,696 | 497      | 28,171 | 28,668 |
| 2016               | Commercial:Estuary          | 0          | 0     | 0     | 0        | 0      | 0      |
|                    | Middle Klamath              | 0          | 0     | 0     | 0        | 0      | 0      |
|                    | Subsistence:Estuary         | 1          | 619   | 620   | 121      | 3,185  | 3,306  |
|                    | Middle Klamath              | 1          | 264   | 265   | 7        | 405    | 412    |
|                    | Upper Klamath <sup>b/</sup> | 1          | 115   | 116   | 14       | 930    | 944    |
|                    | Trinity River               | 14         | 679   | 693   | 20       | 751    | 771    |
|                    | Total                       | 17         | 1,677 | 1,694 | 162      | 5,271  | 5,433  |
| 2017               | Commercial:Estuary          | 0          | 0     | 0     | 0        | 0      | 0      |
|                    | Middle Klamath              | 0          | 0     | 0     | 0        | 0      | 0      |
|                    | Subsistence:Estuary         | 0          | 243   | 243   | 66       | 208    | 274    |
|                    | Middle Klamath              | 0          | 339   | 339   | 0        | 2      | 2      |
|                    | Upper Klamath               | 3          | 304   | 307   | 6        | 10     | 16     |
|                    | Trinity River               | 8          | 412   | 420   | 194      | 1,660  | 1,854  |
|                    | Total                       | 11         | 1,298 | 1,309 | 266      | 1,880  | 2,146  |
| 2018 <sup>d/</sup> | Commercial:Estuary          | 0          | 0     | 0     | 0        | 0      | 0      |
|                    | Middle Klamath              | 0          | 0     | 0     | 0        | 0      | 0      |
|                    | Subsistence:Estuary         | 3          | 1,109 | 1,112 | 86       | 8,665  | 8,751  |
|                    | Middle Klamath              | 0          | 62    | 62    | 17       | 1,518  | 1,535  |
|                    | Upper Klamath               | 2          | 135   | 137   | 25       | 2,261  | 2,286  |
|                    | Trinity River               | 49         | 481   | 530   | 180      | 2,325  | 2,505  |
|                    | Total                       | 54         | 1,787 | 1,841 | 308      | 14,769 | 15,077 |

a/ Klamath River tribal fishing areas are defined as follows: Estuary: mouth to Highway 101 bridge; Middle Klamath: Highway 101 bridge to Surpur Creek; Upper Klamath: Surpur Creek to Weitchpec.

b/ Harvest includes fish collected from the Upper Klamath by the Yurok Tribe to test for the presence of the parasite *Ichthyophthirius multifiliis* during the following years: 2014 - 17 spring run and 282 fall run; 2015 - 26 spring run and 104 fall run; 2016 - 113 fall run.

c/ Harvest includes 20 fall run collected from the Trinity River by the Hoopa Valley Tribe to test for the presence of the parasite *Ichthyophthirius multifiliis*.

d/ Preliminary.

TABLE B-6. Shasta, Scott, and Salmon rivers fall Chinook salmon spawning escapement estimates in numbers of fish.

| Year                    | Shasta River <sup>a/</sup> |        | Scott River <sup>b/</sup> |       | Salmon River <sup>c/</sup> |       |
|-------------------------|----------------------------|--------|---------------------------|-------|----------------------------|-------|
|                         | Adults                     | Jacks  | Adults                    | Jacks | Adults                     | Jacks |
| 1931-1940 <sup>d/</sup> | 31,820                     | 10,457 | -                         | -     | -                          | -     |
| 1941-1950               | 6,191                      | 1,817  | -                         | -     | -                          | -     |
| 1951-1960               | 3,608                      | 683    | -                         | -     | -                          | -     |
| 1961-1970               | 12,819                     | 2,899  | -                         | -     | -                          | -     |
| 1971-1975               | 6,297                      | 2,866  | -                         | -     | -                          | -     |
| 1976-1980 <sup>e/</sup> | 6,506                      | 3,194  | 2,950                     | 1,527 | 1,467                      | 583   |
| 1981-1985 <sup>f/</sup> | 4,560                      | 1,942  | 3,373                     | 1,929 | 1,287                      | 389   |
| 1986-1990 <sup>g/</sup> | 2,403                      | 318    | 4,010                     | 1,512 | 3,361                      | 537   |
| 1991-1995               | 3,751                      | 539    | 4,497                     | 1,032 | 2,510                      | 552   |
| 1996                    | 1,404                      | 46     | 11,952                    | 145   | 5,189                      | 274   |
| 1997                    | 1,667                      | 334    | 8,284                     | 277   | 5,783                      | 217   |
| 1998                    | 2,466                      | 76     | 3,061                     | 266   | 1,337                      | 116   |
| 1999                    | 1,296                      | 1,901  | 3,021                     | 563   | 670                        | 110   |
| 2000                    | 11,025                     | 1,271  | 5,729                     | 524   | 1,544                      | 228   |
| 2001                    | 8,452                      | 2,641  | 5,398                     | 744   | 2,607                      | 743   |
| 2002                    | 6,432                      | 386    | 4,261                     | 47    | 2,669                      | 78    |
| 2003                    | 4,134                      | 155    | 11,988                    | 65    | 3,302                      | 73    |
| 2004                    | 833                        | 129    | 445                       | 22    | 282                        | 51    |
| 2005                    | 2,018                      | 37     | 698                       | 58    | 401                        | 105   |
| 2006                    | 789                        | 1,395  | 3,007                     | 1,953 | 1,278                      | 791   |
| 2007                    | 2,009                      | 27     | 4,494                     | 11    | 1,377                      | 55    |
| 2008                    | 2,741                      | 3,621  | 3,445                     | 1,228 | 1,749                      | 650   |
| 2009                    | 6,145                      | 151    | 2,167                     | 44    | 2,204                      | 516   |
| 2010                    | 1,259                      | 87     | 2,114                     | 394   | 2,478                      | 356   |
| 2011                    | 213                        | 11,175 | 3,019                     | 2,502 | 3,674                      | 1,819 |
| 2012                    | 27,600                     | 1,944  | 7,569                     | 1,783 | 3,561                      | 829   |
| 2013                    | 6,925                      | 1,096  | 4,036                     | 588   | 2,240                      | 240   |
| 2014                    | 14,412                     | 3,945  | 10,419                    | 2,051 | 2,706                      | 527   |
| 2015                    | 6,612                      | 133    | 2,092                     | 21    | 1,978                      | 92    |
| 2016                    | 2,754                      | 135    | 1,376                     | 139   | 1,032                      | 26    |
| 2017                    | 3,287                      | 6,618  | 2,269                     | 307   | 1,338                      | 327   |
| 2018 <sup>h/</sup>      | 18,673                     | 2,016  | 1,208                     | 71    | 1,228                      | 285   |

a/ 1930-1937, 1957-1987 and 1991-present, Shasta River weir counts were made near the river mouth. 1938-1955, weir counts were made 6.5 miles upstream from the mouth; considerable spawning occurred downstream from the weir in these years. In 1956, there were no weir counts conducted. 1988-1990, escapements were estimated from mark-recapture data (spawning surveys).

b/ 1991, estimates were from weir counts. 1992-2007, estimates were from carcass surveys. 2008-2013, estimates were from a combination of video weir counts and carcass surveys. 2014, estimates were from a combination of video weir counts, carcass surveys, and redd counts.

c/ 1991, estimates were from weir counts. 1992-2004 and 2006, estimates were from carcass surveys. 2005 and 2007-2010, estimates were generated from redd counts. 2011-present, estimates were from a combination of carcass surveys and redd counts.

d/ Commercial fishing in lower Klamath River closed by the state after the 1933 season.

e/ Gillnetting resumed in lower 20 miles of Klamath River by Hoopa Valley Indian Reservation fishers in 1976.

f/ Shasta adults include 276 females taken to Iron Gate Hatchery in 1981.

g/ Low water conditions appeared to hinder entry into the Shasta River in 1988.

h/ Preliminary.

TABLE B-7. Summary of California North Coast salmon spawning stock surveys in numbers of fish or redd counts. (Page 1 of 2)

| Year                      | CHINOOK                        |                            |  |   |  |   |                                | COHO   |   |   |
|---------------------------|--------------------------------|----------------------------|--|---|--|---|--------------------------------|--|---|---|
|                           | Redwood <sup>a/</sup><br>Creek | Mad <sup>a/</sup><br>River | Cañon Creek <sup>b/c/d/</sup><br>(tributary of<br>Mad River) | Sprowl Creek <sup>b/c/e/</sup><br>(tributary of Eel<br>River) | Tomki Creek <sup>f/</sup><br>(tributary of<br>Eel River) | Mattole <sup>g/</sup><br>River<br>(Redds) | Russian <sup>h/</sup><br>River | Cañon Creek <sup>b/c/d/</sup><br>(tributary of<br>Mad River) | Sprowl Creek <sup>b/c/e/</sup><br>(tributary of Eel<br>River) | Lagunitas <sup>i/</sup><br>Watershed<br>(Redds) |
| 1990-1991                 | -                              | -                          | 0  | 0   | -  | -   | -                              | 3  | 0   | -   |
| 1991-1992 <sup>j/</sup>   | -                              | -                          | 8  | 159   | 3  | -   | -                              | 0  | 0   | -   |
| 1992-1993 <sup>j/</sup>   | -                              | -                          | 57   | 142   | 15   | -   | -                              | 1  | 2   | -   |
| 1993-1994                 | -                              | -                          | 20   | 171   | 5  | -   | -                              | 0  | 36  | -   |
| 1994-1995                 | -                              | -                          | 33   | 52  | 21   | -   | -                              | 3  | 0   | -   |
| 1995-1996 <sup>j/</sup>   | -                              | -                          | 93   | 136   | 69   | -   | -                              | 4  | 8   | 86  |
| 1996-1997                 | -                              | -                          | 129  | 106   | 84   | -   | -                              | 4  | 8   | 254   |
| 1997-1998                 | -                              | -                          | 55   | 97  | 39   | -   | -                              | 1  | 0   | 253   |
| 1998-1999                 | -                              | -                          | 66   | 79  | 45   | -   | -                              | 0  | 11  | 184   |
| 1999-2000 <sup>j/</sup>   | -                              | -                          | 162  | 34  | 24   | -   | -                              | 1  | 1   | 203   |
| 2000-2001 <sup>j/</sup>   | -                              | -                          | 79   | 12  | 50   | -   | 1,445                          | 3  | 0   | 204   |
| 2001-2002                 | -                              | -                          | 45   | 136   | 162  | -   | 1,383                          | 6  | 25  | 286   |
| 2002-2003                 | -                              | -                          | 402  | 267   | 5  | -   | 5,474                          | 1  | 17  | 158   |
| 2003-2004 <sup>j/</sup>   | -                              | -                          | 79   | 106   | 137  | -   | 6,103                          | 1  | 8   | 383   |
| 2004-2005 <sup>j/</sup>   | -                              | -                          | 86   | 199   | 115  | -   | 4,788                          | 0  | 36  | 496   |
| 2005-2006                 | -                              | -                          | 270  | 201   | 77   | -   | 2,572                          | 0  | 13  | 190   |
| 2006-2007 <sup>k/</sup>   | -                              | -                          | 152  | 37  | 20   | -   | 3,410                          | 2  | 9   | 338   |
| 2007-2008 <sup>k/</sup>   | -                              | -                          | 99   | 70  | 69   | -   | 1,963                          | 1  | 19  | 148   |
| 2008-2009 <sup>k/</sup>   | -                              | -                          | 65   | 158   | 17   | -   | 1,125                          | 0  | 40  | 26  |
| 2009-2010 <sup>k/</sup>   | 2,438                          | -                          | 36   | 314   | 15   | -   | 1,801                          | 0  | 2   | 51  |
| 2010-2011 <sup>k/</sup>   | l/                             | -                          | 131  | 273   | 151  | -   | 2,516                          | 2  | 60  | 80  |
| 2011-2012 <sup>j/k/</sup> | 1,455                          | -                          | 108  | 60  | 101  | -   | 3,172                          | 1  | 221   | 130   |
| 2012-2013 <sup>k/</sup>   | 3,401                          | -                          | 77   | 280   | 226  | 418                                       | 6,713                          | 1  | 29  | 217   |
| 2013-2014 <sup>k/m/</sup> | 3,487                          | 2,169 <sup>n/</sup>        | 11   | 16  | 6  | 988                                       | 3,145                          | 10   | 130   | 188   |
| 2014-2015 <sup>k/</sup>   | l/                             | 7,489                      | 161  | 174   | 82   | 535                                       | 1,420 <sup>o/</sup>            | 5  | 24  | 140   |
| 2015-2016 <sup>k/</sup>   | 1,839 <sup>p/</sup>            | 5,786                      | 124  | 81  | 0  | 331                                       | 4,119 <sup>o/</sup>            | 4  | 31  | 226   |
| 2016-2017                 | 3,191                          | 7,186                      | q/   | r/  | 71   | 929                                       | 1,062 <sup>s/</sup>            | q/   | r/  | 158   |
| 2017-2018                 | 4,372                          | t/                         | q/   | r/  | 40   | 2,202                                     | 2,063                          | q/   | r/  | 103   |
| 2018-2019 <sup>u/</sup>   | 3,648                          | t/                         | q/   | r/  | 10   | t/  | 1,152                          | q/   | r/  | 267   |

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TABLE B-7. Summary of California North Coast salmon spawning stock surveys in numbers of fish or redd counts. (Page 2 of 2)

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- a/ Escapement estimate from sonar fish counts.
- b/ Survey frequency variable from year to year (between 1 and 10 surveys annually).
- c/ Numbers reflect maximum annual counts of live fish and carcasses with adults and jacks combined. Counts are not shown in years where visibility is too poor to conduct surveys.
- d/ Survey area was from mouth to falls (2 miles).
- e/ Survey area was the mainstem and West Fork (4.5 miles).
- f/ Total run size estimate including jacks and adults. Survey methodology changed in 2000-2001 to using index sites, and subsequent estimates are not comparable to previous estimates.
- g/ Expanded redd counts based on sampled reaches.
- h/ Video counts of combined adults and jacks made at Mirabel Dam. Image quality may be affected by turbidity.
- i/ Numbers reported are redd counts. Olema Creek is excluded.
- j/ Low flows appeared to increase mainstem spawning and decrease tributary spawning for Cañon, Sprowl, and Tomki creeks.
- k/ Cañon and Sprowl creek totals exclude fish unidentifiable to species due to poor visibility or advanced decomposition.
- l/ No data available.
- m/ Extremely low flows created passage barriers that precluded or severely limited salmon access to surveyed tributaries.
- n/ Minimum count; sonar installed mid-season.
- o/ Minimum count that is not comparable to other years. Mirabel Dam video counts were unavailable due to construction of a new counting facility. The number recorded is the sum of counts made at two facilities upstream of Mirabel Dam.
- p/ Minimum abundance due to unexpanded, missing data.
- q/ Survey discontinued due to lack of funding.
- r/ Previous survey methodology discontinued.
- s/ Minimum count that is not comparable to other years. Monitoring at the Mirabel Dam was complicated by operational challenges associated with implementation of a new counting facility in addition to adverse environmental conditions. Atypical sampling techniques and shortened periods of operation limited estimates of passage.
- t/ Estimates not yet available; data analysis in process.
- u/ Preliminary.

TABLE B-8. Peak spawning counts in index areas for selected south/local migrating Oregon coastal fall Chinook stocks.

| Year or Avg.       | Deep Creek<br>(Pistol River)<br>(0.4 mile) |       | Big Emily Creek<br>(Chetco River)<br>(1.0 mile) |       | Bear Creek<br>(Winchuck River)<br>(0.8 mile) |       | Index (fish per mile) |       |
|--------------------|--|-------|---|-------|--|-------|-----------------------|-------|
|                    | Adults                                     | Jacks | Adults  | Jacks | Adults                                       | Jacks | Adults                | Jacks |
|                    | 1961-1965                                  | 6     | 1   | -     | -  | 22    | 1                     | -     |
| 1966-1970          | 31   | 3     | -   | -     | 36   | 2     | -                     | -     |
| 1971-1975          | 5  | 0     | 211   | 12    | 25   | 2     | 130                   | 7     |
| 1976-1980          | 2  | 1     | 124   | 32    | 18   | 1     | 65                    | 14    |
| 1981-1985          | 24   | 2     | 62  | 10    | 13   | 1     | 45                    | 6     |
| 1986-1990          | 11 <sup>a/</sup>                           | 2     | 58  | 12    | 10   | 2     | 35                    | 7     |
| 1991-1995          | 12   | 9     | 74  | 10    | 16   | 2     | 46                    | 10    |
| 1996               | 81   | 9     | 79  | 7     | 27   | 5     | 85                    | 10    |
| 1997               | 17   | 1     | 60  | 5     | 14   | 1     | 41                    | 3     |
| 1998               | 46   | 11    | 52  | 3     | 19   | 2     | 53                    | 7     |
| 1999               | 58   | 3     | 12  | 1     | 10   | 0     | 36                    | 2     |
| 2000               | 26   | 3     | 63  | 6     | 11   | 1     | 45                    | 5     |
| 2001               | 25   | 2     | 49  | 2     | 9  | 3     | 38                    | 3     |
| 2002               | 62   | 7     | 70  | 3     | 15   | 9     | 67                    | 9     |
| 2003               | 20   | 7     | 28  | 5     | 12   | 1     | 27                    | 6     |
| 2004               | 97   | 19    | 29  | 4     | 11   | 1     | 62                    | 11    |
| 2005               | 15   | 2     | 16  | 3     | 1  | 0     | 15                    | 2     |
| 2006               | 22   | 3     | 24  | 2     | 5  | 1     | 23                    | 3     |
| 2007               | 44   | 0     | 14  | 4     | 6  | 1     | 29                    | 2     |
| 2008               | 10   | 1     | 15  | 29    | 3  | 5     | 13                    | 16    |
| 2009               | 20   | 1     | 91  | 11    | 35   | 9     | 66                    | 10    |
| 2010               | 14   | 2     | 75  | 5     | 26   | 2     | 52                    | 4     |
| 2011               | 12   | 2     | 49  | 6     | 17   | 3     | 35                    | 5     |
| 2012               | 8  | 2     | 72  | 11    | 5  | 2     | 39                    | 7     |
| 2013               | 10   | 5     | 38  | 11    | 3  | 1     | 23                    | 8     |
| 2014               | 11   | 2     | 52  | 9     | 12   | 3     | 34                    | 6     |
| 2015               | 34   | 1     | 77  | 7     | 22   | 2     | 60                    | 5     |
| 2016               | 5  | 1     | 42  | 5     | 27   | 2     | 34                    | 4     |
| 2017               | 9  | 3     | 34  | 7     | 15   | 2     | 26                    | 5     |
| 2018 <sup>b/</sup> | 4  | 3     | 16  | 10    | 11   | 7     | 14                    | 9     |

a/ Pistol River was subject to several "slope failures" in 1986 resulting in severe short-term alterations in gravel bars and spawning index areas. Considerable debris and siltation severely limited Chinook surveys resulting in "0" counts in Deep Creek index areas through December.

b/ Preliminary.

TABLE B-9. Counts of natural and hatchery spring Chinook salmon at Gold Ray Dam on the Rogue River and at Winchester Dam on the North Umpqua River in thousands of fish.

| Year or Avg.       | Gold Ray Dam, Rogue River <sup>a/</sup> |          |       |                     | Winchester Dam, Umpqua River <sup>a/</sup> |          |       |                     |
|--------------------|---|----------|-------|---------------------|--|----------|-------|---------------------|
|                    | Natural <sup>b/</sup>                   | Hatchery | Total | Jacks <sup>c/</sup> | Natural                                    | Hatchery | Total | Jacks <sup>c/</sup> |
| 1942-1945          | 35.1                                    | -        | 35.1  | 4.9                 | -  | -        | -     | -                   |
| 1946-1950          | 24.7                                    | -        | 24.7  | 3.0                 | 2.7  | -        | 2.7   | 0.5                 |
| 1951-1955          | 21.4                                    | -        | 21.4  | 4.2                 | 4.2  | 0.9      | 4.9   | 1.0                 |
| 1956-1960          | 19.8                                    | -        | 19.8  | 3.4                 | 4.4  | 0.9      | 5.4   | 0.7                 |
| 1961-1965          | 37.7                                    | -        | 37.7  | 6.4                 | 6.4  | 1.8      | 8.2   | 1.8                 |
| 1966-1970          | 33.9                                    | -        | 33.9  | 5.5                 | 7.2  | 4.5      | 11.8  | 3.2                 |
| 1971-1975          | 26.0                                    | 0.8      | 26.8  | 5.0                 | 7.3  | 6.2      | 13.5  | 3.8                 |
| 1976-1980          | 25.8                                    | 6.3      | 32.1  | 7.0                 | 5.8  | 3.9      | 9.7   | 3.2                 |
| 1981-1985          | 16.4                                    | 6.2      | 22.6  | 7.3                 | 5.2  | 3.5      | 8.7   | 2.5                 |
| 1986-1990          | 28.5                                    | 39.2     | 67.7  | 14.9                | 7.5  | 4.1      | 11.6  | 2.5                 |
| 1991-1995          | 9.7                                     | 18.4     | 28.0  | 3.9                 | 3.5  | 2.5      | 6.0   | 1.1                 |
| 1996               | 10.3                                    | 26.3     | 36.6  | 3.4                 | 4.3  | 2.2      | 6.5   | 1.0                 |
| 1997               | 9.6                                     | 32.2     | 41.8  | 2.8                 | 3.3  | 2.5      | 5.8   | 16.0                |
| 1998               | 3.7                                     | 12.3     | 16.0  | 2.8                 | 4.0  | 2.9      | 6.9   | 1.5                 |
| 1999               | 6.0                                     | 15.0     | 21.0  | 1.9                 | 2.8  | 4.6      | 7.4   | 3.1                 |
| 2000               | 3.4                                     | 26.8     | 30.2  | 3.1                 | 3.4  | 9.2      | 12.6  | 4.6                 |
| 2001               | 9.3                                     | 23.9     | 33.2  | 2.3                 | 6.1  | 14.6     | 20.7  | 4.7                 |
| 2002               | 7.0                                     | 40.8     | 47.8  | 3.2                 | 6.8  | 17.4     | 24.2  | 3.1                 |
| 2003               | 19.3                                    | 22.6     | 41.9  | 3.0                 | 7.9  | 12.3     | 20.2  | 4.1                 |
| 2004               | 13.3                                    | 26.0     | 39.3  | 3.8                 | 5.4  | 10.1     | 15.4  | 2.5                 |
| 2005               | 5.8                                     | 12.3     | 18.1  | 1.3                 | 3.6  | 5.5      | 9.0   | 1.3                 |
| 2006               | 4.8                                     | 7.0      | 11.7  | 2.2                 | 2.6  | 3.5      | 6.1   | 1.7                 |
| 2007               | 3.5                                     | 7.7      | 11.2  | 1.6                 | 2.4  | 4.2      | 6.6   | 1.7                 |
| 2008               | 4.0                                     | 8.6      | 12.5  | 3.8                 | 2.6  | 5.1      | 7.7   | 2.7                 |
| 2009               | 5.2                                     | 8.3      | 13.6  | 2.3                 | 5.3  | 9.0      | 14.3  | 4.8                 |
| 2010               | 9.6                                     | 11.5     | 21.1  | 1.9                 | 6.1  | 7.8      | 13.9  | 3.8                 |
| 2011               | 9.9                                     | NA       | NA    | NA                  | 8.9  | 7.7      | 16.6  | 5.4                 |
| 2012               | 14.4                                    | NA       | NA    | NA                  | 8.2  | 8.4      | 16.7  | 3.6                 |
| 2013               | 12.1                                    | NA       | NA    | NA                  | 7.2  | 7.9      | 15.2  | 2.6                 |
| 2014               | 5.6                                     | NA       | NA    | NA                  | 6.4  | 8.2      | 14.6  | 4.5                 |
| 2015               | 15.3                                    | NA       | NA    | NA                  | 4.8  | 4.8      | 9.6   | 1.9                 |
| 2016               | 9.6                                     | NA       | NA    | NA                  | 4.3  | 4.4      | 8.7   | 2.6                 |
| 2017               | 10.2                                    | NA       | NA    | NA                  | 4.0  | 2.7      | 6.8   | 1.1                 |
| 2018 <sup>d/</sup> | 10.4                                    | NA       | NA    | NA                  | 3.3  | 2.0      | 5.3   | 2.7                 |

a/ Jacks included in natural, hatchery, and total counts.

b/ Gold Ray Dam removed October, 2010. Natural estimate derived using relationship of 2004-2010 spawning ground surveys to Gold Ray Dam passage. Estimate includes an unknown number of jacks.

c/ Jacks include all Chinook less than 20 inches prior to 1978 and all Chinook less than 24 inches beginning in 1978.

d/ Preliminary.

TABLE B-10. Rogue River fall Chinook carcass counts and Huntley Park passage of naturally produced fish.

| Year or Avg.       | Carcass Counts <sup>a/</sup> |       |        | Huntley Park Passage |        |         |
|--------------------|------------------------------|-------|--------|----------------------|--------|---------|
|                    | Adults                       | Jacks | Total  | Adults               | Jacks  | Total   |
| 1977               | 1,356                        | 2,389 | 3,745  | 25,780               | 53,836 | 79,615  |
| 1978               | 9,174                        | 1,019 | 10,193 | 155,242              | 30,079 | 185,321 |
| 1979               | 8,272                        | 195   | 8,467  | 163,992              | 9,289  | 173,281 |
| 1980               | 2,221                        | 411   | 2,632  | 54,512               | 28,498 | 83,010  |
| 1981               | 5,228                        | 1,171 | 6,399  | 75,294               | 26,135 | 101,429 |
| 1982               | 2,812                        | 708   | 3,520  | 97,821               | 36,863 | 134,684 |
| 1983               | 2,737                        | 271   | 3,008  | 38,712               | 6,729  | 45,441  |
| 1984               | 3,267                        | 396   | 3,663  | 32,474               | 9,781  | 42,255  |
| 1985               | 5,486                        | 2,500 | 7,986  | 35,233               | 48,908 | 84,141  |
| 1986               | 17,177                       | 3,223 | 20,400 | 144,089              | 85,768 | 229,858 |
| 1987               | 25,918                       | 2,532 | 28,450 | 116,876              | 31,068 | 147,944 |
| 1988               | 31,613                       | 1,352 | 32,965 | 67,723               | 11,355 | 79,078  |
| 1989               | 7,408                        | 481   | 7,889  | 73,958               | 15,186 | 89,144  |
| 1990               | 1,868                        | 46    | 1,914  | 19,531               | 4,385  | 23,915  |
| 1991               | 2,799                        | 157   | 2,956  | 14,991               | 3,372  | 18,364  |
| 1992               | 2,366                        | 464   | 2,830  | 44,738               | 31,718 | 76,456  |
| 1993               | 5,447                        | 257   | 5,704  | 36,026               | 10,642 | 46,668  |
| 1994               | 7,366                        | 529   | 7,895  | 67,480               | 13,227 | 80,707  |
| 1995               | 3,958                        | 173   | 4,131  | 64,210               | 18,536 | 82,745  |
| 1996               | 2,448                        | 121   | 2,569  | 48,763               | 15,682 | 64,445  |
| 1997               | 1,643                        | 68    | 1,711  | 41,072               | 17,788 | 58,860  |
| 1998               | 3,601                        | 40    | 3,641  | 40,939               | 6,793  | 47,732  |
| 1999               | 2,493                        | 157   | 2,650  | 37,587               | 18,763 | 56,350  |
| 2000               | 3,366                        | 226   | 3,592  | 87,783               | 12,918 | 100,701 |
| 2001               | 6,380                        | 772   | 7,152  | 76,376               | 26,650 | 103,026 |
| 2002               | 11,836                       | 905   | 12,741 | 154,143              | 42,806 | 196,948 |
| 2003               | 14,620                       | 983   | 15,603 | 204,793              | 19,347 | 224,139 |
| 2004               | 5,326 <sup>b/</sup>          | 250   | 5,576  | 132,296              | 19,785 | 152,081 |
| 2005               | -                            | -     | -      | 56,474               | 4,849  | 61,323  |
| 2006               | -                            | -     | -      | 35,075               | 6,770  | 41,845  |
| 2007               | -                            | -     | -      | 43,493               | 3,284  | 46,778  |
| 2008               | -                            | -     | -      | 24,309               | 15,186 | 39,495  |
| 2009               | -                            | -     | -      | 60,223               | 13,660 | 73,883  |
| 2010               | -                            | -     | -      | 49,390               | 14,459 | 63,849  |
| 2011               | -                            | -     | -      | 67,750               | 30,125 | 97,875  |
| 2012               | -                            | -     | -      | 69,060               | 10,400 | 79,460  |
| 2013               | -                            | -     | -      | 81,655               | 23,027 | 104,682 |
| 2014               | -                            | -     | -      | 53,546               | 11,901 | 65,447  |
| 2015               | -                            | -     | -      | 30,462               | 7,841  | 38,303  |
| 2016               | -                            | -     | -      | 27,278               | 16,762 | 44,040  |
| 2017               | -                            | -     | -      | 91,977               | 24,068 | 116,045 |
| 2018 <sup>c/</sup> | -                            | -     | -      | 39,497               | 23,921 | 63,418  |

a/ Surveys were discontinued in 2005.

b/ In 2004, one of the standard survey sections was not sampled. In the previous two years, this section accounted for 33 percent of the total adult carcass counts.

c/ Preliminary.



TABLE B-11. Peak counts for north migrating Oregon coastal Chinook stocks on selected fall Chinook spawning index stream surveys.

| Year or<br>Average | River Tributaries                 |       |                         |       |                                     |       |                                    |       |                                  |       |                            |       |                              |       |  |       |                                    |       |                        |       |        |
|--------------------|-----------------------------------|-------|-------------------------|-------|-------------------------------------|-------|------------------------------------|-------|----------------------------------|-------|----------------------------|-------|------------------------------|-------|--|-------|------------------------------------|-------|------------------------|-------|--------|
|                    | Humbug<br>(Nehalem)<br>(1.0 mile) |       | Tillamook<br>(1.8 mile) |       | Niagara<br>(Nestucca)<br>(0.4 mile) |       | Sunshine<br>(Siletz)<br>(1.2 mile) |       | Grant<br>(Yaquina)<br>(1.7 mile) |       | Buck (Alsea)<br>(1.0 mile) |       | Siuslaw (Lake)<br>(0.8 mile) |       | W.F. Millicoma<br>(Coos) (0.5<br>mile) |       | Salmon<br>(Coquille)<br>(0.8 mile) |       | Index Fish Per<br>Mile |       |        |
|                    | Adults                            | Jacks | Adults                  | Jacks | Adults                              | Jacks | Adults                             | Jacks | Adults                           | Jacks | Adults                     | Jacks | Adults                       | Jacks | Adults                                 | Jacks | Adults                             | Jacks | Adults                 | Jacks | Adults |
| 1981-1985          | 163                               | 18    | 95                      | 9     | 78                                  | 6     | 55                                 | 2     | 178                              | 24    | 47                         | 6     | 149                          | 31    | 6                                      | 2     | 45                                 | 7     | 89                     | 11    |        |
| 1986-1990          | 136                               | 4     | 154                     | 8     | 118                                 | 3     | 54                                 | 2     | 240                              | 24    | 100                        | 6     | 427                          | 44    | 15                                     | 5     | 49                                 | 6     | 141                    | 11    |        |
| 1991-1995          | 65                                | 2     | 92                      | 6     | 103                                 | 3     | 60                                 | 2     | 153                              | 10    | 44                         | 4     | 395                          | 18    | 49                                     | 7     | 86                                 | 5     | 116                    | 6     |        |
| 1996               | 86                                | 2     | 60                      | 0     | 40                                  | 0     | 122                                | 0     | a/                               | a/    | 62                         | 2     | 614                          | 29    | 92                                     | 3     | 29                                 | 3     | 147                    | 5     |        |
| 1997               | 162                               | 1     | 47                      | 1     | 24                                  | 1     | 60                                 | 0     | a/                               | a/    | 49                         | 3     | 325                          | 9     | 12                                     | 0     | 108                                | 3     | 105                    | 2     |        |
| 1998               | 93                                | 2     | 42                      | 1     | 42                                  | 0     | 83                                 | 3     | a/                               | a/    | 78                         | 0     | 176                          | 2     | 33                                     | 10    | 193                                | 7     | 99                     | 3     |        |
| 1999               | 116                               | 3     | 38                      | 1     | 60                                  | 2     | 36                                 | 3     | a/                               | a/    | 55                         | 5     | 478                          | 14    | 14                                     | 3     | 136                                | 8     | 124                    | 5     |        |
| 2000               | 175                               | 3     | 40                      | 3     | 32                                  | 2     | 63                                 | 1     | a/                               | a/    | 38                         | 3     | 205                          | 18    | 5                                      | 0     | 83                                 | 9     | 85                     | 5     |        |
| 2001               | 220                               | 4     | 62                      | 6     | 53                                  | 7     | 195                                | 3     | a/                               | a/    | 95                         | 6     | 711                          | 49    | 30                                     | 5     | 153                                | 22    | 203                    | 14    |        |
| 2002               | 311                               | 1     | 137                     | 3     | 124                                 | 1     | 221                                | 1     | a/                               | a/    | 118                        | 6     | 834                          | 22    | 51                                     | 12    | 218                                | 9     | 269                    | 7     |        |
| 2003               | 215                               | 6     | 135                     | 5     | 27                                  | 1     | 120                                | 3     | 341                              | 7     | 145                        | 1     | 1,230                        | 37    | 209                                    | 31    | 147                                | 2     | 279                    | 10    |        |
| 2004               | 196                               | 3     | 71                      | 2     | 76                                  | 1     | 19                                 | 0     | 238                              | 11    | 91                         | 5     | 988                          | 16    | 40                                     | 4     | 101                                | 5     | 198                    | 5     |        |
| 2005               | 124                               | 3     | a/                      | a/    | 74                                  | 2     | 54                                 | 1     | a/                               | a/    | 40                         | 1     | 302                          | 5     | 17                                     | 2     | 61                                 | 2     | 118                    | 3     |        |
| 2006               | 31                                | 0     | 65                      | 0     | 67                                  | 0     | 82                                 | 0     | a/                               | a/    | 22                         | 0     | 165                          | 0     | 7                                      | 1     | 129                                | 8     | 76                     | 1     |        |
| 2007               | 91                                | 1     | 34                      | 2     | 20                                  | 0     | 6                                  | 0     | a/                               | a/    | 17                         | 1     | 132                          | 2     | 14                                     | 3     | 2                                  | 0     | 42                     | 1     |        |
| 2008               | 73                                | 1     | 15                      | 2     | 13                                  | 0     | 8                                  | 0     | a/                               | a/    | 11                         | 2     | 135                          | 15    | 20                                     | 5     | 28                                 | 8     | 40                     | 4     |        |
| 2009               | 92                                | 13    | 17                      | 0     | 2                                   | 0     | 32                                 | 2     | a/                               | a/    | 50                         | 0     | 179                          | 26    | 34                                     | 9     | a/                                 | a/    | 61                     | 7     |        |
| 2010               | 57                                | 0     | 24                      | 1     | 27                                  | 2     | 56                                 | 3     | a/                               | a/    | 75                         | 6     | 301                          | 7     | 46                                     | 14    | a/                                 | a/    | 87                     | 5     |        |
| 2011               | 164                               | 5     | 96                      | 4     | 15                                  | 1     | 29                                 | 0     | a/                               | a/    | 46                         | 2     | 329                          | 21    | 53                                     | 1     | a/                                 | a/    | 109                    | 5     |        |
| 2012               | 144                               | 3     | 38                      | 2     | 34                                  | 0     | 57                                 | 3     | a/                               | a/    | 56                         | 4     | 611                          | 17    | 38                                     | 1     | a/                                 | a/    | 146                    | 4     |        |
| 2013               | 384                               | 10    | 89                      | 2     | 78                                  | 3     | 47                                 | 2     | 166                              | 9     | 41                         | 3     | 625                          | 6     | 156                                    | 20    | a/                                 | a/    | 189                    | 7     |        |
| 2014               | 176                               | 2     | 55                      | 0     | 54                                  | 2     | 109                                | 1     | 216                              | 40    | 60                         | 7     | 556                          | 21    | 92                                     | 6     | a/                                 | a/    | 157                    | 9     |        |
| 2015               | 237                               | 1     | a/                      | a/    | 31                                  | 1     | 122                                | 1     | 391                              | 3     | 130                        | 2     | 625                          | 2     | 93                                     | 3     | a/                                 | a/    | 247                    | 3     |        |
| 2016               | 154                               | 2     | a/                      | a/    | 24                                  | 0     | 162                                | 3     | 159                              | 9     | 39                         | 1     | 224                          | 1     | 19                                     | 0     | a/                                 | a/    | 118                    | 2     |        |
| 2017               | 132                               | 1     | a/                      | a/    | 39                                  | 1     | 109                                | 1     | 126                              | 5     | 47                         | 4     | 282                          | 3     | 20                                     | 1     | a/                                 | a/    | 114                    | 2     |        |
| 2018 <sup>b/</sup> | 107                               | 6     | a/                      | a/    | 11                                  | 0     | 86                                 | 2     | 220                              | 11    | 31                         | 3     | 94                           | 5     | 57                                     | 5     | a/                                 | a/    | 92                     | 5     |        |

a/ Surveys were not conducted.

b/ Preliminary.

TABLE B-12. Estimates of minimum inriver run size, catch, and escapement in numbers of Columbia River adult spring Chinook destined for areas below Bonneville Dam.

| Year or<br>Average | Minimum<br>Inriver Run<br>Size | Tributary Runs                  |       |            |                              |   |          |                       |                     |        |                          |
|--------------------|--------------------------------|---------------------------------|-------|------------|------------------------------|---|----------|-----------------------|---------------------|--------|--------------------------|
|                    |                                | Lower River Catch <sup>a/</sup> |       | Willamette |                              |   | Hatchery |                       |                     |        |                          |
|                    |                                | Commercial                      | Sport | Run Size   | L. Willamette<br>Sport Catch | Will. Falls<br>Escapement <sup>b/</sup> | Sandy    | Cowlitz <sup>c/</sup> | Lewis <sup>c/</sup> | Kalama | Escapement <sup>d/</sup> |
| 1981-1985          | 93,220                         | 6,680                           | 1,840 | 67,700     | 15,620                       | 35,580                                  | 1,940    | 19,960                | 4,220               | 3,740  | 28,840                   |
| 1986-1990          | 123,834                        | 11,980                          | 4,330 | 103,100    | 21,140                       | 58,760                                  | 2,425    | 10,691                | 11,340              | 1,877  | 32,460                   |
| 1991-1995          | 85,837                         | 3,680                           | 2,300 | 66,039     | 18,180                       | 32,580                                  | 4,920    | 6,801                 | 5,870               | 1,976  | 23,700                   |
| 1996-2000          | 54,552                         | 409                             | 60    | 43,953     | 5,060                        | 31,239                                  | 3,803    | 1,797                 | 1,961               | 787    | 21,380                   |
| 2001-2005          | 137,416                        | 5,080                           | 6,040 | 104,933    | 9,940                        | 70,811                                  | 7,439    | 9,721                 | 4,664               | 3,383  | 48,866                   |
| 2006               | 90,417                         | 3,000                           | 2,900 | 59,311     | 7,200                        | 36,851                                  | 4,382    | 6,963                 | 7,301               | 5,458  | 38,623                   |
| 2007               | 68,796                         | 1,900                           | 2,600 | 39,943     | 5,700                        | 22,818                                  | 2,813    | 3,975                 | 7,596               | 8,030  | 27,756                   |
| 2008               | 42,740                         | 100                             | 700   | 26,615     | 4,600                        | 14,151                                  | 5,994    | 2,986                 | 2,215               | 1,623  | 18,407                   |
| 2009               | 48,907                         | 300                             | 2,000 | 35,432     | 4,500                        | 25,795                                  | 2,429    | 6,034                 | 1,493               | 404    | 22,496                   |
| 2010               | 150,374                        | 3,300                           | 6,200 | 107,675    | 22,700                       | 65,293                                  | 7,652    | 8,887                 | 2,347               | 977    | 42,646                   |
| 2011               | 98,605                         | 2,300                           | 2,500 | 76,549     | 22,800                       | 43,748                                  | 5,721    | 5,860                 | 1,310               | 776    | 31,030                   |
| 2012               | 92,142                         | 2,300                           | 3,700 | 63,037     | 15,800                       | 35,899                                  | 5,038    | 12,645                | 1,895               | 889    | 32,106                   |
| 2013               | 66,729                         | 1,800                           | 1,798 | 44,880     | 7,400                        | 27,897                                  | 5,700    | 8,656                 | 1,574               | 1,014  | 26,892                   |
| 2014               | 69,006                         | 1,300                           | 2,700 | 49,765     | 7,900                        | 30,071                                  | 5,971    | 8,957                 | 1,482               | 1,013  | 27,783                   |
| 2015               | 131,394                        | 2,649                           | 4,266 | 84,532     | 13,552                       | 53,088                                  | 4,000    | 23,933                | 1,006               | 3,149  | 52,237                   |
| 2016               | 87,976                         | 1,200                           | 2,600 | 47,225     | 6,000                        | 30,317                                  | 4,179    | 22,478                | 473                 | 3,980  | 31,303                   |
| 2017               | 96,060                         | 1,300                           | 1,800 | 50,774     | 7,400                        | 34,186                                  | 7,803    | 14,639                | 2,338               | 3,515  | 25,445                   |
| 2018 <sup>e/</sup> | 62,880                         | 500                             | 1,600 | 37,441     | 6,200                        | 24,543                                  | 4,733    | 4,076                 | 3,454               | 2,371  | 16,501                   |

a/ Includes some upriver origin spring Chinook through 1980. Beginning in 1981, the lower river catch of lower river spring Chinook is based on mark recoveries rather than the timing of the catch, as in previous years. Since 1986, GSI and VSI techniques have been used for stock composition analysis. Commercial catch includes Select Area fisheries. Sport catch is mainstem Columbia River, does not include tributaries. Catch may include small numbers of jacks. Sport fishery closed in 1995 to 1997.

b/ Prior to 1988, the escapement goal at Willamette Falls was 30,000 to 35,000. Beginning in 1988, the goal was dependent on run size under the Willamette Basin Fish Management Plan. Since 2001, hatchery escapement targets are set in the Fisheries Management and Evaluation Plan developed by ODFW. Lower Willamette sport catch may include small numbers of jacks.

c/ Includes hatchery escapement, tributary recreational catch, and natural spawning escapement for 1975 to present. The years 1971-1973 are based on using the 1975-1976 Cowlitz River recreational fishery adult harvest rates.

d/ Includes hatcheries operated by all agencies. Values are included in the totals for the tributary runs.

e/ Preliminary.

TABLE B-13. Estimates of inriver run size, catch, and escapement in numbers of Columbia River adult spring Chinook destined for areas above Bonneville Dam<sup>a/</sup> (Includes Snake River summer Chinook.)

| Year or Avg.       | Inriver Run Size | Lower River Catch <sup>b/</sup> |        | Bonneville       |                                | Mainstem Treaty Indian Catch |                         |                      | Snake River Escapement <sup>f/</sup> |          | Rock Island Dam Count |        | Hatchery Escapement <sup>g/</sup> |
|--------------------|------------------|---------------------------------|--------|------------------|--------------------------------|------------------------------|-------------------------|----------------------|--------------------------------------|----------|-----------------------|--------|-----------------------------------|
|                    |                  | Commercial                      | Sport  | Dam (BONN) Count | Above BONN Sport <sup>c/</sup> | Commercial <sup>d/e/</sup>   | Ceremonial/ Subsistence | Hatchery             | Wild                                 | Hatchery | Wild                  |        |                                   |
| 1981-1985          | 70,440           | 1,706                           | 393    | 68,342           | 925                            | 3,255                        | 3,947                   | 7,508                | 10,787                               | 4,853    | 3,217                 | 11,599 |                                   |
| 1986-1990          | 108,167          | 2,378                           | 1,356  | 104,433          | 3,366                          | 6,011                        | 10,269                  | 19,648               | 10,192                               | 5,928    | 3,042                 | 19,384 |                                   |
| 1991-1995          | 63,404           | 511                             | 710    | 62,183           | 1,227                          | 2,550                        | 8,628                   | 7,097                | 7,015                                | 5,750    | 1,422                 | 11,522 |                                   |
| 1996-2000          | 90,793           | 81                              | 36     | 90,676           | 4,163                          | 3,298                        | 10,408                  | 16,577               | 5,500                                | 4,995    | 504                   | 13,725 |                                   |
| 2001-2005          | 269,346          | 4,941                           | 14,594 | 249,812          | 28,474                         | 23,638                       | 21,831                  | 68,988               | 27,895                               | 16,928   | 2,341                 | 31,273 |                                   |
| 2006               | 132,583          | 2,238                           | 4,187  | 126,158          | 5,256                          | 5,081                        | 18,303                  | 20,248               | 9,483                                | 10,461   | 1,120                 | 16,998 |                                   |
| 2007               | 86,247           | 1,491                           | 3,927  | 80,829           | 6,925                          | 4,127                        | 11,347                  | 23,308               | 7,100                                | 10,170   | 782                   | 15,858 |                                   |
| 2008               | 178,629          | 6,292                           | 19,612 | 151,895          | 22,145                         | 19,681                       | 14,951                  | 55,587               | 17,587                               | 19,737   | 1,127                 | 35,468 |                                   |
| 2009               | 169,296          | 4,543                           | 15,246 | 147,489          | 18,608                         | 8,523                        | 27,414                  | 49,836               | 14,957                               | 17,000   | 1,620                 | 31,064 |                                   |
| 2010               | 315,345          | 9,281                           | 23,535 | 277,389          | 43,398                         | 34,375                       | 38,282                  | 97,770               | 26,643                               | 23,134   | 2,105                 | 52,647 |                                   |
| 2011               | 221,158          | 3,930                           | 9,506  | 205,431          | 28,526                         | 8,925                        | 29,482                  | 72,262               | 24,562                               | 15,400   | 3,055                 | 29,808 |                                   |
| 2012               | 203,090          | 4,821                           | 10,422 | 186,448          | 24,936                         | 10,512                       | 28,858                  | 54,701               | 25,681                               | 11,573   | 3,294                 | 23,152 |                                   |
| 2013               | 123,136          | 1,853                           | 5,343  | 112,934          | 8,626                          | 4,175                        | 13,977                  | 29,538               | 14,588                               | 7,041    | 1,637                 | 15,603 |                                   |
| 2014               | 242,635          | 4,098                           | 13,572 | 224,946          | 28,340                         | 19,934                       | 22,770                  | 62,627               | 32,124                               | 9,647    | 2,263                 | 24,188 |                                   |
| 2015               | 288,994          | 6,818                           | 15,689 | 265,558          | 40,401                         | 28,454                       | 22,591                  | 97,921               | 21,910                               | 25,658   | 6,090                 | 35,315 |                                   |
| 2016               | 187,816          | 3,508                           | 10,167 | 172,614          | 24,274                         | 9,839                        | 25,244                  | 58,214               | 15,946                               | 17,455   | 1,191                 | 25,406 |                                   |
| 2017               | 115,821          | 1,083                           | 7,198  | 107,524          | 5,445                          | 3,993                        | 15,148                  | 31,944               | 4,365                                | 6,528    | 1,552                 | 16,285 |                                   |
| 2018 <sup>h/</sup> | 115,081          | 692                             | 5,868  | 108,045          | 5,028                          | 4,386                        | 19,129                  | 31,913               | 6,552                                | 6,737    | 1,217                 | 6,988  |                                   |
| GOAL               |                  |                                 |        | 115,000          |                                |                              |                         | 35,000 <sup>i/</sup> | 25,000 <sup>i/</sup>                 |          |                       |        |                                   |

a/ Spring Chinook accounting ends on June 15. Chinook formerly managed separately as Snake River summer Chinook are now grouped with all upriver spring Chinook because of overlap in run timing. Snake River summer Chinook have been moved from Table B-14 to this table.

b/ Includes some lower river origin spring Chinook through 1980. Beginning in 1981, the lower river catch of upriver spring Chinook is based on mark recoveries rather than timing of the catch as in previous years. Since 1986, GSI techniques have been used for stock composition analysis. Commercial catch includes estimated miscellaneous fishery-related impacts from test fisheries, commercial shad fisheries, and Select Area commercial gillnet fisheries beginning in 1979 and catch and release mortalities from selective fisheries beginning in 2001. Sport catch includes mainstem fisheries between Buoy 10 and Bonneville Dam.

c/ Includes mainstem and tributary Col R fisheries upstream of Bonneville Dam, plus Snake River fisheries.

d/ Spring season fishery closed in 1975, 1976, and from 1978 to 2000. Spring Chinook landed during those years were from the winter season fishery.

e/ Includes below Bonneville Dam C&S starting in 2008.

f/ Snake River escapement at Lower Granite relative to escapement goals. Wild escapement goal includes Snake Basin harvest below Lower Granite Dam, Lower Granite count of wild escapement, and Tucannon wild return. Hatchery escapement goal includes Lower Granite count of hatchery escapement only.

g/ Hatchery rack and trap returns above Lower Granite Dam plus Tucannon and hatchery returns above Priest Rapids Dam (Wenatchee, Entiat, and Methow) plus Ringold. Does not include Leavenworth or East Bank.

h/ Preliminary.

i/ U.S. v. Oregon goal; not an FMP goal: wild escapement goal includes Snake Basin harvest below Lower Granite Dam, Lower Granite count of wild escapement, and Tucannon wild return. Hatchery escapement goal includes Lower Granite count of hatchery escapement only.

TABLE B-14. Estimates of inriver run size, catch, and escapement in numbers of Columbia River adult upper Columbia summer Chinook destined for areas above Bonneville Dam<sup>a/</sup> (Excludes Snake River summer Chinook.)

| Year or Avg.       | Inriver Run Size     | Lower River Catch <sup>b/</sup> |       | Mainstem Treaty Indian Catch |              |                          |                         | Sport Catch Upstream of Priest Rapids Dam | Tribal Catch upstream of McNary Dam (Wanapum & ) |        |
|--------------------|----------------------|---------------------------------|-------|------------------------------|--------------|--------------------------|-------------------------|---|--|--------|
|                    |                      | Commercial <sup>c/</sup>        | Sport | Bonneville Dam Count         | Zone 6 Sport | Commercial <sup>d/</sup> | Ceremonial/ Subsistence | Rock Island Dam Count                     |  |        |
| 1981-1985          | 16,709               | 55                              | 0     | 16,654                       | -            | 304                      | 669                     | 10,010                                    | 0  | 0      |
| 1986-1990          | 21,036               | 71                              | 8     | 20,957                       | -            | 708                      | 194                     | 14,563                                    | 0  | 0      |
| 1991-1995          | 12,984               | 30                              | 15    | 12,939                       | -            | 0                        | 227                     | 10,748                                    | 0  | 0      |
| 1996-2000          | 17,957               | 5                               | 29    | 17,924                       | -            | 0                        | 317                     | 13,902                                    | 218  | 96     |
| 2001-2005          | 70,287               | 611                             | 1,264 | 68,412                       | 265          | 3,646                    | 978                     | 66,711                                    | 4,429  | 2,202  |
| 2006               | 77,573               | 4,828                           | 4,926 | 67,819                       | 295          | 15,771                   | 548                     | 61,821                                    | 3,864  | 1,556  |
| 2007               | 37,035               | 1,122                           | 2,214 | 33,699                       | 148          | 4,564                    | 811                     | 28,222                                    | 3,900  | 1,364  |
| 2008               | 55,532               | 1,429                           | 2,140 | 51,963                       | 997          | 8,317                    | 712                     | 38,171                                    | 2,597  | 2,049  |
| 2009               | 53,881               | 2,546                           | 2,341 | 48,994                       | 265          | 10,441                   | 1,209                   | 44,295                                    | 2,458  | 1,375  |
| 2010               | 72,116               | 4,740                           | 2,738 | 64,638                       | 886          | 15,569                   | e/                      | 47,220                                    | 2,481  | 3,572  |
| 2011               | 80,574               | 5,004                           | 5,576 | 69,994                       | 389          | 20,645                   | e/                      | 44,432                                    | 5,546  | 1,263  |
| 2012               | 58,300               | 1,715                           | 3,281 | 53,304                       | 296          | 7,824                    | e/                      | 52,184                                    | 3,980  | 3,423  |
| 2013               | 67,603               | 1,987                           | 2,058 | 63,508                       | 324          | 13,272                   | e/                      | 68,380                                    | 2,899  | 3,692  |
| 2014               | 78,254               | 2,788                           | 2,385 | 72,871                       | 453          | 19,179                   | e/                      | 77,982                                    | 2,875  | 3,724  |
| 2015               | 126,882              | 4,043                           | 6,152 | 116,657                      | 786          | 37,733                   | 30                      | 88,691                                    | 4,823  | 10,694 |
| 2016               | 91,048               | 3,050                           | 3,706 | 84,192                       | 565          | 20,415                   | 100                     | 79,253                                    | 4,214  | 4,199  |
| 2017               | 68,204               | 47                              | 3,853 | 64,144                       | 136          | 16,168                   | 160                     | 56,265                                    | 4,451  | 1,736  |
| 2018 <sup>f/</sup> | 42,120               | 24                              | 1,140 | 40,906                       | 134          | 9,448                    | 50                      | 38,816                                    | 3,385  | 1,336  |
| GOAL               | 29,000 <sup>g/</sup> |                                 |       |                              |              |                          |                         | 12,143 <sup>h/</sup>                      |  |        |

a/ Summer Chinook accounting begins on June 16. Chinook managed as Snake River summer Chinook prior to 2004 are now grouped with all upriver spring Chinook because of overlap in run timing. As of 2004, Snake River summer Chinook have been moved from this table to Table B-13.

b/ Includes estimated miscellaneous fishery-related impacts from mainstem recreational fisheries, test fisheries, commercial shad fisheries, and terminal area commercial gillnet fisheries beginning in 1979. Includes release mortality in selective fisheries beginning in 2002.

c/ No directed commercial summer Chinook fishery from 1964 to 2003, 2017, 2018. Landings during those years are bycatch from commercial shad and sockeye fisheries.

d/ No directed commercial summer Chinook fishery from 1965 to 2003. Landings during those years are bycatch from commercial sockeye fishery.

e/ No ceremonial and subsistence permits issued, sales of platform and hook-and-line subsistence catch allowed and included in commercial catch.

f/ Preliminary.

g/ Comanager goal established in 2004 associated with regrouping Snake River summer Chinook with Snake River spring Chinook.

h/ MSY spawning escapement objective adopted in 2011 under Amendment 16 based on Chinook Technical Committee Report 99-3.

TABLE B-15. Estimates of inriver run size, catch, and escapement in numbers of Columbia River adult Spring Creek Hatchery (SCH) stock fall Chinook.<sup>a/</sup>

| Year or Average    | Inriver Run Size | Harvest                 |  |                          |       |         |                        | Escapement |  |
|--------------------|------------------|-------------------------|--|--------------------------|-------|---------|------------------------|------------|--|
|                    |                  | Bonneville Dam<br>Count | Treaty Indian<br>Commercial and<br>Subsistence | Non-Indian               |       | Natural | Hatchery <sup>c/</sup> |            |  |
|                    |                  |                         |  | Commercial <sup>b/</sup> | Sport |         |                        |            |  |
| 1981-1985          | 63,342           | 49,780                  | 24,637   | 9,747                    | 580   | 2,711   | 15,955                 |            |  |
| 1986-1990          | 16,673           | 10,200                  | 6,080  | 2,920                    | 820   | 1,500   | 4,600                  |            |  |
| 1991-1995          | 30,192           | 25,564                  | 11,360   | 2,067                    | 1,280 | 1,460   | 9,700                  |            |  |
| 1996-2000          | 30,278           | 27,180                  | 14,824   | 659                      | 1,990 | 3,213   | 8,071                  |            |  |
| 2001-2005          | 148,523          | 137,108                 | 51,618   | 6,540                    | 5,256 | 11,955  | 52,389                 |            |  |
| 2006               | 27,917           | 21,197                  | 13,400   | 1,774                    | 654   | 1,931   | 9,889                  |            |  |
| 2007               | 14,549           | 13,072                  | 5,034  | 474                      | 306   | 2,870   | 5,899                  |            |  |
| 2008               | 93,860           | 82,331                  | 43,933   | 7,100                    | 3,526 | 2,765   | 33,722                 |            |  |
| 2009               | 48,970           | 40,268                  | 21,622   | 5,262                    | 1,523 | 4,103   | 13,680                 |            |  |
| 2010               | 130,767          | 114,666                 | 58,824   | 11,236                   | 3,299 | 4,843   | 45,279                 |            |  |
| 2011               | 70,096           | 53,655                  | 28,801   | 12,196                   | 1,242 | 10,283  | 17,092                 |            |  |
| 2012               | 56,947           | 44,076                  | 14,223   | 7,983                    | 3,386 | 5,063   | 26,255                 |            |  |
| 2013               | 86,707           | 62,525                  | 29,746   | 15,823                   | 3,200 | 10,074  | 16,307                 |            |  |
| 2014               | 127,000          | 81,030                  | 54,740   | 22,813                   | 5,536 | 16,655  | 24,112                 |            |  |
| 2015               | 166,370          | 111,900                 | 67,922   | 22,767                   | 8,669 | 22,319  | 43,246                 |            |  |
| 2016               | 44,554           | 31,663                  | 19,256   | 8,745                    | 2,377 | 5,064   | 9,037                  |            |  |
| 2017               | 48,227           | 38,012                  | 21,332   | 4,949                    | 5,973 | 1,547   | 12,443                 |            |  |
| 2018 <sup>d/</sup> | 37,900           | 27,000                  | 17,741   | 3,850                    | 3,670 | 2,645   | 10,397                 |            |  |
| GOAL               |                  |                         |  |                          |       |         | 7,000 <sup>e/</sup>    |            |  |

a/ Based on Columbia River fall Chinook database, WDFW, unpublished.

b/ Includes Select Area fisheries.

c/ Does not include strays to hatcheries below Bonneville Dam. Includes fall Chinook tules trapped at Bonneville Dam, 1986-1994 and 1998.

d/ Preliminary estimates based on inseason run updates.

e/ Escapement goal was changed from 8,200 fish to 7,000 fish, or 4,000 females, in 1994.

TABLE B-16. Estimates of inriver run size, catch, and escapement in numbers of Columbia River adult lower river hatchery (LRH) stock fall Chinook.<sup>a/</sup>

| Year or Average    | Inriver Run Size | Harvest  |                          |                     | Escapement |                        |
|--------------------|------------------|--|--------------------------|---------------------|------------|------------------------|
|                    |                  | Treaty Indian<br>Commercial and<br>Subsistence | Non-Indian               |                     | Natural    | Hatchery <sup>d/</sup> |
|                    |                  |  | Commercial <sup>b/</sup> | Sport <sup>c/</sup> |            |                        |
| 1981-1985          | 107,163          | 851  | 25,604                   | 4,486               | 37,755     | 36,846                 |
| 1986-1990          | 199,938          | 655  | 93,794                   | 17,420              | 38,774     | 48,821                 |
| 1991-1995          | 55,519           | 238  | 2,871                    | 4,998               | 19,915     | 27,419                 |
| 1996-2000          | 49,017           | 72   | 2,041                    | 5,239               | 17,310     | 24,319                 |
| 2001-2005          | 118,621          | 188  | 9,183                    | 11,804              | 60,838     | 36,549                 |
| 2006               | 58,319           | 237  | 5,919                    | 9,449               | 26,633     | 15,957                 |
| 2007               | 32,689           | 0  | 1,308                    | 6,123               | 10,208     | 15,050                 |
| 2008               | 61,559           | 502  | 5,701                    | 6,543               | 21,528     | 27,265                 |
| 2009               | 76,738           | 0  | 10,259                   | 11,295              | 23,746     | 31,436                 |
| 2010               | 102,955          | 0  | 14,981                   | 13,046              | 33,962     | 40,964                 |
| 2011               | 108,961          | 223  | 15,417                   | 17,248              | 28,334     | 47,735                 |
| 2012               | 84,978           | 457  | 16,340                   | 16,362              | 21,556     | 30,259                 |
| 2013               | 104,777          | 574  | 10,578                   | 19,420              | 40,411     | 33,662                 |
| 2014               | 101,906          | 135  | 12,810                   | 16,347              | 33,264     | 39,333                 |
| 2015               | 128,705          | 42   | 15,146                   | 15,142              | 34,588     | 63,784                 |
| 2016               | 81,860           | 78   | 11,050                   | 11,418              | 21,974     | 37,340                 |
| 2017               | 64,627           | 198  | 7,917                    | 8,831               | 19,737     | 27,929                 |
| 2018 <sup>e/</sup> | 63,900           | NA   | NA                       | NA                  | NA         | NA                     |
| GOAL               |                  |  |                          |                     |            | Hatchery<br>Production |

a/ Based on Columbia River fall Chinook database, WDFW, unpublished.

b/ Includes Select Area fisheries.

c/ Includes tributary catches.

d/ Does not include strays to hatcheries above Bonneville Dam or fish trapped at Bonneville Dam.

e/ Preliminary estimates based on preseason expectations and inseason data.

TABLE B-17. Estimates of inriver run size, catch, and escapement in numbers of Columbia River adult lower river wild (LRW) stock fall Chinook.<sup>a/</sup>

| Year or Average    | Inriver Run Size | Harvest  |            |                     | Escapement          |          |
|--------------------|------------------|--|------------|---------------------|---------------------|----------|
|                    |                  | Treaty Indian<br>Commercial and<br>Subsistence | Non-Indian |                     | Natural             | Hatchery |
|                    |                  |  | Commercial | Sport <sup>b/</sup> |                     |          |
| 1981-1985          | 16,287           | 0  | 1,940      | 1,320               | 12,480              | 480      |
| 1986-1990          | 32,600           | 60   | 10,689     | 3,251               | 18,383              | 181      |
| 1991-1995          | 14,761           | 0  | 2,159      | 2,433               | 10,101              | 68       |
| 1996-2000          | 9,545            | 0  | 189        | 397                 | 8,865               | 94       |
| 2001-2005          | 21,201           | 32   | 2,231      | 3,041               | 15,801              | 44       |
| 2006               | 18,105           | 0  | 2,546      | 2,801               | 12,758              | 0        |
| 2007               | 4,276            | 0  | 258        | 138                 | 3,857               | 23       |
| 2008               | 7,120            | 0  | 0          | 937                 | 6,183               | 0        |
| 2009               | 7,533            | 0  | 293        | 347                 | 6,893               | 0        |
| 2010               | 10,898           | 0  | 0          | 237                 | 10,661              | 0        |
| 2011               | 15,180           | 0  | 674        | 3,636               | 10,601              | 269      |
| 2012               | 12,112           | 0  | 1,880      | 766                 | 9,407               | 59       |
| 2013               | 25,841           | 0  | 2,095      | 5,071               | 18,675              | 0        |
| 2014               | 25,774           | 0  | 767        | 2,107               | 22,900              | 0        |
| 2015               | 32,403           | 0  | 3,126      | 2,106               | 27,169              | 2        |
| 2016               | 13,034           | 0  | 906        | 2,713               | 9,414               | 1        |
| 2017               | 7,838            | 0  | 0          | 1,255               | 6,583               | 0        |
| 2018 <sup>c/</sup> | 7,900            | NA   | NA         | NA                  | NA                  | NA       |
| GOAL               |                  |  |            |                     | 5,700 <sup>d/</sup> |          |

a/ Based on Columbia River fall Chinook database, WDFW, unpublished.

b/ Includes tributary catches.

c/ Preliminary estimates based on preseason expectations and inseason data.

d/ Escapement objective is for North Lewis River, but escapement numbers include other fish. The escapement objective for the North Lewis River was met for all years except 1998, 1999, 2007, 2008, and 2009.

TABLE B-18. Estimates of inriver run size, catch, and escapement in numbers of Columbia River adult upriver bright (URB) stock fall Chinook destined for areas above McNary Dam and the Deschutes River.<sup>a/</sup>

| Year or<br>Average | Inriver<br>Run Size | Bonneville<br>Dam Count | Harvest   |            |                     | Escapement                    |   |          |                                |                      |                               |                                    |   |
|--------------------|---------------------|-------------------------|---|------------|---------------------|-------------------------------|---|----------|--------------------------------|----------------------|-------------------------------|------------------------------------|---|
|                    |                     |                         | Treaty Indian<br>Commercial<br>and<br>Subsistence | Non-Indian |                     | Natural<br>Esc. <sup>c/</sup> | Upper<br>Columbia<br>Esc. <sup>d/</sup> | Hatchery | Deschutes<br>above/below       |                      | Ice<br>Harbor<br>Dam<br>Count | Total<br>Lower<br>Granite<br>Count | SRW<br>L. Granite<br>Dam<br>Count <sup>f/</sup> |
|                    |                     |                         |   | Commercial | Sport <sup>b/</sup> |                               |   |          | Sheares<br>Falls <sup>e/</sup> | McNary<br>Dam Count  |                               |                                    |   |
| 1981-1985          | 111,873             | 94,120                  | 26,700  | 13,880     | 3,020               | 46,060                        | NA                                      | 8,100    | NA                             | 51,042               | 1,583                         | 586                                | 450   |
| 1986-1990          | 291,407             | 222,337                 | 100,379   | 61,499     | 13,613              | 90,709                        | NA                                      | 13,231   | 7,081                          | 107,252              | 4,369                         | 691                                | 289   |
| 1991-1995          | 105,302             | 99,028                  | 20,813  | 5,000      | 5,095               | 51,424                        | NA                                      | 9,419    | 7,342                          | 61,362               | 3,352                         | 903                                | 473   |
| 1996-2000          | 153,790             | 145,362                 | 36,318  | 2,720      | 10,856              | 59,534                        | NA                                      | 17,786   | 11,745                         | 69,929               | 4,775                         | 2,330                              | 759   |
| 2001-2005          | 305,482             | 282,285                 | 46,846  | 11,837     | 22,095              | 131,229                       | 108,019                                 | 19,447   | 13,274                         | 146,873              | 17,127                        | 11,826                             | 3,344   |
| 2006               | 230,390             | 132,632                 | 44,565  | 8,757      | 14,515              | 79,852                        | 62,567                                  | 15,197   | 10,955                         | 89,081               | 10,272                        | 8,048                              | 2,483   |
| 2007               | 114,065             | 105,626                 | 18,878  | 2,833      | 10,860              | 51,004                        | 34,201                                  | 7,267    | 6,361                          | 57,268               | 13,408                        | 10,195                             | 2,016   |
| 2008               | 197,295             | 183,242                 | 39,988  | 7,574      | 14,323              | 75,421                        | 51,757                                  | 23,468   | 6,908                          | 101,869              | 21,896                        | 16,628                             | 2,222   |
| 2009               | 212,047             | 190,695                 | 58,616  | 11,601     | 17,310              | 87,585                        | 62,428                                  | 15,762   | 6,429                          | 104,544              | 24,824                        | 15,167                             | 1,431   |
| 2010               | 324,908             | 300,319                 | 59,115  | 13,536     | 24,624              | 163,998                       | 114,230                                 | 28,684   | 9,275                          | 146,924              | 46,541                        | 41,815                             | 9,583   |
| 2011               | 322,233             | 280,377                 | 80,288  | 22,215     | 34,172              | 119,959                       | 93,510                                  | 44,136   | 17,117                         | 161,191              | 31,405                        | 25,249                             | 7,895   |
| 2012               | 294,947             | 255,420                 | 61,422  | 16,895     | 39,338              | 122,576                       | 94,925                                  | 51,326   | 17,624                         | 173,472              | 38,830                        | 34,688                             | 12,797  |
| 2013               | 784,116             | 702,503                 | 162,964   | 47,636     | 67,186              | 344,625                       | 305,445                                 | 89,647   | 18,068                         | 454,991              | 57,850                        | 56,565                             | 20,425  |
| 2014               | 684,228             | 599,580                 | 153,685   | 53,296     | 62,766              | 268,962                       | 233,934                                 | 122,189  | 17,933                         | 410,786              | 61,389                        | 60,687                             | 14,172  |
| 2015               | 795,915             | 706,440                 | 159,717   | 38,375     | 88,531              | 367,234                       | 323,276                                 | 76,458   | 17,074                         | 396,580              | 62,978                        | 59,299                             | 16,212  |
| 2016               | 406,572             | 364,840                 | 90,054  | 32,608     | 46,716              | 198,025                       | 151,373                                 | 33,924   | 11,628                         | 239,791              | 36,713                        | 34,714                             | 9,772   |
| 2017               | 297,123             | 243,950                 | 77,280  | 12,670     | 47,424              | 129,109                       | 97,789                                  | 19,093   | 4,943                          | 156,927              | 26,393                        | 26,431                             | 6,966   |
| 2018 <sup>g/</sup> | 140,500             | 128,693                 | 26,796  | 3,030      | 14,340              | 57,678                        | 30,105                                  | 17,252   | NA                             | 100,801              | 16,980                        | 16,904                             | 6,133   |
| GOAL               |                     |                         |   |            |                     |                               | 39,625 <sup>h/</sup>                    |          |                                | 60,000 <sup>i/</sup> |                               |                                    |   |

a/ Based on Columbia River fall Chinook database, WDFW, unpublished. Does not include hatchery URB Chinook reared and released below McNary Dam.

b/ Includes tributary and mainstem catches between Bonneville and Priest Rapids dams.

c/ Includes Deschutes, Yakima, Upper Columbia, and Snake River escapements.

d/ Upper Columbia escapement only: Yakima River, Hanford Reach, and Priest Rapids Dam count.

e/ Deschutes esc. time series revised in 2010 to match Deschutes R. Chinook Spawner Esc. Goal using U.S. v. OR Tech. Advisory Comm. Data (Sharma et al. 2009).

f/ Snake River wild; adjusted for stray hatchery fish. Includes wild fish hauled to Lyons Ferry Hatchery.

g/ Preliminary based on inseason run update.

h/ MSY spawning escapement objective adopted in FMP Amendment 16 in 2011.

i/ The U.S. v. Oregon parties managed for a McNary Dam esc. of 60,000 beginning in 2008. Starting in 1994, inriver fisheries were managed for ESA consultation standards.



TABLE B-19. Estimates of inriver run size, catch, and escapement in numbers of Columbia River adult mid-Columbia bright (MCB) stock fall Chinook destined for areas below McNary Dam, not including the Deschutes River.<sup>a/</sup>

| Year or<br>Average | Inriver Run Size | Bonneville Dam<br>Count | Harvest  |            |                     | Escapement |                        |
|--------------------|------------------|-------------------------|--|------------|---------------------|------------|------------------------|
|                    |                  |                         | Treaty Indian<br>Commercial and<br>Subsistence | Non-Indian |                     | Natural    | Hatchery <sup>c/</sup> |
|                    |                  |                         |  | Commercial | Sport <sup>b/</sup> |            |                        |
| 1982-1985          | 10,275           | 4,925                   | 1,875  | 1,675      | 100                 | 0          | 3,450                  |
| 1986-1990          | 60,894           | 24,780                  | 16,288   | 26,547     | 2,277               | 4,253      | 9,194                  |
| 1991-1995          | 32,352           | 19,360                  | 6,014  | 4,151      | 1,622               | 7,327      | 10,631                 |
| 1996-2000          | 48,787           | 34,120                  | 9,475  | 2,994      | 5,007               | 14,052     | 11,059                 |
| 2001-2005          | 111,515          | 68,642                  | 23,112   | 10,532     | 11,403              | 24,372     | 23,405                 |
| 2006               | 80,470           | 31,402                  | 22,705   | 4,577      | 3,567               | 12,501     | 19,745                 |
| 2007               | 47,556           | 29,029                  | 13,369   | 6,665      | 2,528               | 5,559      | 13,053                 |
| 2008               | 76,297           | 44,210                  | 23,260   | 10,349     | 5,648               | 6,813      | 21,409                 |
| 2009               | 73,069           | 41,298                  | 21,213   | 8,508      | 7,433               | 9,320      | 22,003                 |
| 2010               | 78,937           | 50,878                  | 22,009   | 3,719      | 5,960               | 7,904      | 33,391                 |
| 2011               | 87,262           | 58,775                  | 27,569   | 7,596      | 10,275              | 12,399     | 24,923                 |
| 2012               | 63,363           | 44,306                  | 15,682   | 5,841      | 11,340              | 12,860     | 17,052                 |
| 2013               | 243,508          | 187,748                 | 55,876   | 16,947     | 27,383              | 65,999     | 58,045                 |
| 2014               | 203,734          | 154,971                 | 81,605   | 20,902     | 26,401              | 34,996     | 34,075                 |
| 2015               | 170,620          | 123,722                 | 62,520   | 14,536     | 25,947              | 31,305     | 30,744                 |
| 2016               | 88,299           | 59,300                  | 158,579  | 9,460      | 12,980              | 19,290     | 15,806                 |
| 2017               | 47,367           | 33,820                  | 18,956   | 1,087      | 11,261              | 6,261      | 7,750                  |
| 2018 <sup>d/</sup> | 24,800           | 22,307                  | 10,929   | 400        | 1,450               | 1,662      | 4,122                  |
| GOAL               |                  |                         |  |            |                     |            |                        |

a/ Based on Columbia River fall Chinook database, WDFW, unpublished. Does not include URB Chinook destined for areas above McNary Dam or the Deschutes River.

b/ Includes tributary and mainstem catches.

c/ Little White Salmon and Bonneville Hatcheries.

d/ Preliminary.

TABLE B-20. Estimates of minimum inriver run size and catch in numbers of adult spring, summer, and fall Chinook from the Columbia River. (Page 1 of 3)

| Year or Avg.                         | Minimum Inriver Run Size | Below Bonneville Dam    |           |                        |                           |          |                       | Above Bonneville Dam |                         |                                   |                           |  |         | Non-Indian Total |         | Total Treaty Indian & Non-Indian |
|--------------------------------------|--------------------------|-------------------------|-----------|------------------------|---------------------------|----------|-----------------------|----------------------|-------------------------|-----------------------------------|---------------------------|--|---------|------------------|---------|----------------------------------|
|                                      |                          | Non-Indian Sport        |           |                        | Non-Indian Commercial     |          |                       | Non-Indian Sport     |                         |                                   | Treaty Indian             |  |         |                  |         |                                  |
|                                      |                          | Tributary <sup>h/</sup> | Buoy 10   | Mainstem <sup>h/</sup> | Select Area <sup>g/</sup> | Mainstem | Bonneville Dam Counts | Mainstem             | Tributary <sup>d/</sup> | Ticketed Commercial <sup>g/</sup> | Non-Ticketed Public Sales | Ceremonial & Subsistence <sup>f/</sup> | Sport   | Commercial       |         |                                  |
| <b>Spring Chinook<sup>g/</sup></b>   |                          |                         |           |                        |                           |          |                       |                      |                         |                                   |                           |  |         |                  |         |                                  |
| '81-'85                              | 163,660                  | 19,568                  | <i>h/</i> | 2,233                  | -                         | 8,197    | 68,342                | -                    | 513                     | 1,024                             | --                        | 3,633                                  | 22,726  | 8,197            | 35,580  |                                  |
| '86-'90                              | 232,001                  | 39,688                  | <i>h/</i> | 5,685                  | -                         | 14,138   | 104,433               | -                    | 2,615                   | 186                               | --                        | 9,323                                  | 48,740  | 14,138           | 72,387  |                                  |
| '91-'95                              | 149,241                  | 33,201                  | <i>h/</i> | 3,010                  | 301                       | 4,042    | 62,183                | -                    | 453                     | 15                                | --                        | 7,433                                  | 37,437  | 4,343            | 49,228  |                                  |
| '96-'00                              | 145,345                  | 12,669                  | <i>h/</i> | 93                     | 2,664                     | 430      | 90,676                | -                    | 3,923                   | 279                               | --                        | 8,346                                  | 16,925  | 3,094            | 28,644  |                                  |
| '01-'05                              | 406,762                  | 25,933                  | <i>h/</i> | 20,621                 | 8,348                     | 9,496    | 249,812               | -                    | 26,143                  | 9,041                             | 6,795                     | 19,433                                 | 75,027  | 17,844           | 128,141 |                                  |
| 2006                                 | 223,000                  | 18,623                  | <i>h/</i> | 7,087                  | 7,245                     | 5,106    | 126,158               | 1,564                | 3,692                   | 0                                 | --                        | 14,983                                 | 30,966  | 12,351           | 58,300  |                                  |
| 2007                                 | 155,043                  | 14,608                  | <i>h/</i> | 6,527                  | 6,774                     | 3,336    | 80,829                | 1,857                | 5,068                   | 3                                 | --                        | 9,847                                  | 28,060  | 10,110           | 48,021  |                                  |
| 2008                                 | 221,369                  | 7,284                   | <i>h/</i> | 20,312                 | 4,486                     | 6,007    | 151,895               | 2,625                | 19,520                  | 12,314                            | --                        | 13,241                                 | 49,741  | 10,493           | 85,789  |                                  |
| 2009                                 | 218,203                  | 10,257                  | <i>h/</i> | 17,246                 | 4,175                     | 4,521    | 147,489               | 1,237                | 17,371                  | 0                                 | --                        | 22,836                                 | 46,111  | 8,696            | 77,643  |                                  |
| 2010                                 | 465,719                  | 35,987                  | <i>h/</i> | 29,735                 | 24,892                    | 10,807   | 277,389               | 5,789                | 37,609                  | 25,008                            | --                        | 29,703                                 | 109,120 | 35,699           | 199,530 |                                  |
| 2011                                 | 319,763                  | 32,008                  | <i>h/</i> | 12,006                 | 11,101                    | 5,759    | 205,431               | 4,517                | 24,009                  | 7                                 | --                        | 22,874                                 | 72,540  | 16,860           | 112,280 |                                  |
| 2012                                 | 295,232                  | 28,293                  | <i>h/</i> | 14,122                 | 10,057                    | 6,618    | 186,448               | 3,597                | 21,339                  | 820                               | --                        | 21,669                                 | 67,351  | 16,675           | 106,515 |                                  |
| 2013                                 | 189,865                  | 15,116                  | <i>h/</i> | 7,141                  | 8,064                     | 3,297    | 112,934               | 1,428                | 7,198                   | 0                                 | --                        | 8,870                                  | 30,882  | 11,361           | 51,113  |                                  |
| 2014                                 | 311,641                  | 15,456                  | <i>h/</i> | 16,272                 | 4,643                     | 4,664    | 224,946               | 3,607                | 24,732                  | 13,807                            | --                        | 18,001                                 | 60,067  | 9,307            | 101,182 |                                  |
| 2015                                 | 420,388                  | 27,244                  | <i>h/</i> | 19,955                 | 13,669                    | 8,373    | 265,558               | 3,102                | 37,299                  | 20,327                            | --                        | 10,854                                 | 87,600  | 22,042           | 140,823 |                                  |
| 2016                                 | 275,792                  | 19,488                  | <i>h/</i> | 12,767                 | 10,496                    | 4,154    | 172,614               | 2,480                | 21,794                  | 1,993                             | --                        | 15,073                                 | 56,529  | 14,650           | 88,245  |                                  |
| 2017                                 | 211,881                  | 19,687                  | <i>h/</i> | 8,998                  | 17,597                    | 1,763    | 107,524               | 84                   | 5,561                   | 0                                 | --                        | 8,109                                  | 34,130  | 19,360           | 61,599  |                                  |
| 2018                                 | 177,961                  | 11,614                  | <i>h/</i> | 7,468                  | 17,598                    | 811      | 108,045               | 1,345                | 3,683                   | 0                                 | 1                         | 10,892                                 | 24,110  | 18,409           | 53,412  |                                  |
| <b>Summer Chinook<sup>g/f/</sup></b> |                          |                         |           |                        |                           |          |                       |                      |                         |                                   |                           |  |         |                  |         |                                  |
| '79-'80                              | 22,320                   | -                       | -         | -                      | -                         | 81       | 22,239                | -                    | -                       | 38                                | --                        | 1,047                                  | 0       | 81               | 1,165   |                                  |
| '81-'85                              | 16,709                   | -                       | -         | -                      | -                         | 55       | 16,654                | -                    | -                       | 304                               | --                        | 669                                    | 0       | 55               | 1,028   |                                  |
| '86-'90                              | 21,036                   | -                       | -         | 8                      | -                         | 71       | 20,957                | -                    | -                       | 708                               | --                        | 194                                    | 8       | 71               | 980     |                                  |
| '91-'95                              | 12,984                   | -                       | -         | 15                     | -                         | 30       | 12,939                | -                    | -                       | -                                 | --                        | 227                                    | 15      | 30               | 271     |                                  |
| '96-'00                              | 17,957                   | -                       | -         | 29                     | -                         | 5        | 17,924                | -                    | -                       | -                                 | --                        | 317                                    | 343     | 5                | 665     |                                  |
| '01-'05                              | 70,287                   | 0                       | 0         | 1,264                  | 8                         | 603      | 68,412                | 242                  | 6,653                   | 3,646                             | --                        | 978                                    | 8,160   | 611              | 13,394  |                                  |
| 2006                                 | 77,573                   | 0                       | 0         | 4,926                  | 9                         | 4,819    | 67,819                | 276                  | 5,439                   | 15,771                            | 0                         | 548                                    | 10,641  | 4,828            | 31,788  |                                  |
| 2007                                 | 37,035                   | 0                       | 0         | 2,214                  | 0                         | 1,122    | 33,699                | 136                  | 5,276                   | 4,564                             | 0                         | 811                                    | 7,626   | 1,122            | 14,123  |                                  |
| 2008                                 | 55,532                   | 0                       | 0         | 2,140                  | 59                        | 1,370    | 51,963                | 942                  | 4,701                   | 8,317                             | 0                         | 712                                    | 7,783   | 1,429            | 18,241  |                                  |
| 2009                                 | 53,881                   | 0                       | 0         | 2,341                  | 22                        | 2,524    | 48,994                | 175                  | 3,923                   | 10,441                            | 0                         | 1,209                                  | 6,439   | 2,546            | 20,635  |                                  |
| 2010                                 | 72,116                   | 0                       | 0         | 2,738                  | 20                        | 4,720    | 64,638                | 435                  | 6,504                   | 15,569                            | 0                         | 230                                    | 9,677   | 4,740            | 30,216  |                                  |
| 2011                                 | 80,574                   | 0                       | 0         | 5,576                  | 0                         | 5,004    | 69,994                | 303                  | 6,894                   | 20,645                            | 0                         | 0                                      | 12,773  | 5,004            | 38,422  |                                  |
| 2012                                 | 58,300                   | 0                       | 0         | 3,281                  | 23                        | 1,692    | 53,304                | 231                  | 7,468                   | 7,824                             | 0                         | 0                                      | 10,980  | 1,715            | 20,519  |                                  |
| 2013                                 | 67,603                   | 0                       | 0         | 2,058                  | 33                        | 1,954    | 63,508                | 173                  | 6,739                   | 13,272                            | 0                         | 125                                    | 8,970   | 1,987            | 24,354  |                                  |
| 2014                                 | 78,254                   | 0                       | 0         | 2,385                  | 45                        | 2,793    | 72,871                | 308                  | 6,745                   | 19,179                            | 0                         | 210                                    | 9,437   | 2,838            | 31,664  |                                  |
| 2015                                 | 126,882                  | 0                       | 0         | 6,152                  | 105                       | 3,938    | 116,657               | 609                  | 15,693                  | 37,733                            | 0                         | 30                                     | 22,454  | 4,043            | 64,260  |                                  |
| 2016                                 | 91,048                   | 0                       | 0         | 3,706                  | 60                        | 2,990    | 84,192                | 361                  | 8,617                   | 20,415                            | 0                         | 100                                    | 12,683  | 3,050            | 36,248  |                                  |
| 2017                                 | 68,204                   | 0                       | 0         | 3,853                  | 47                        | 0        | 64,144                | 136                  | 6,187                   | 16,168                            | 0                         | 160                                    | 10,176  | 47               | 26,551  |                                  |
| 2018                                 | 42,120                   | 0                       | 0         | 1,140                  | 24                        | 0        | 40,906                | 12                   | 4,843                   | 9,448                             | 0                         | 50                                     | 5,995   | 24               | 15,517  |                                  |



TABLE B-20. Estimates of minimum inriver run size and catch in numbers of adult spring, summer, and fall Chinook from the Columbia River. (Page 3 of 3)

- a/ For spring Chinook: includes lower and upper Willamette, Clackamas, Clackamas, Cowitz, Kalama, Lewis, and Sandy Rivers. Sandy River harvest not available before 1990. Catch estimates may include small numbers of Jacks. Does not include SAFE sport. For summer Chinook: all tributaries are closed. For fall Chinook: all tributaries downstream from Bonneville Dam.
- b/ Includes Select Area catch.
- c/ Youngs Bay Select Area began in 1992. Tongue Point and Blind Slough began in 1998. Select Area test fisheries began in 1991. Other Select Areas include Knappa in Oregon and Deep River in Washington.
- d/ Includes tributaries between Bonneville and McNary Dams, the Snake and Yakima rivers, Icicle and Ringold creeks. For Spring Chinook, this is Ringold creeks and tributaries above Lower Granite Dam. For summer Chinook, this is Wanapum and Hanford Reach.
- e/ Primarily mainstem fisheries between Bonneville and McNary dams, but also includes fish caught in miscellaneous commercial Indian fisheries such as Klickitat dip net and mainstem fisheries upstream from McNary Dam. Spring season fishery closed in 1975, 1976, and from 1978 to 2000. Spring Chinook landed during those years were from the winter season fishery. Summer season fishery closed from 1974 to 1982, 1989 to 2000. Summer Chinook landed during those years are bycatch from shad and sockeye fishery.
- f/ Primarily mainstem fisheries between Bonneville and McNary dams. Significant subsistence fisheries also occur in tributaries throughout the Columbia and Snake River basin, especially for spring Chinook, which are not included in these estimates.
- g/ Upriver spring Chinook accounting ends on June 15 and summer Chinook accounting begins on June 16.
- h/ Spring Chinook Buoy 10 area catch is included in mainstem sport.
- i/ Preliminary. Fall Chinook estimates are from inseason run updates.
- j/ Summer Chinook retention was prohibited for all mainstem non-Indian and treaty Indian fisheries until 2003. Small non-Indian incidental mortalities prior to 2003 are associated with recreational Steelhead fisheries and commercial shad and Sockeye fisheries. A few stray summer Chinook are caught in Select Area (terminal) fisheries that are open for late returning spring Chinook and early returning fall Chinook. Prior to 2003, Treaty Indians could retain summer Chinook for subsistence purposes.
- k/ No ceremonial and subsistence permits issued, sales of platform and hook-and-line subsistence catch allowed and included in commercial catch or non-ticked public sales.
- l/ Fall Chinook minimum run size includes LRH, LRW, SCH, URB, and MCB. Does not include Select Area Bright (SAB) stock.

TABLE B-21. Estimates of minimum inriver run size, catch, and escapement in thousands of adult coho entering the Columbia River.<sup>a/</sup>

| Year or<br>Average | Minimum<br>Inriver Run<br>Size | Below Bonneville Dam |              |                        |                        |                                       | Above Bonneville Dam                   |                            |                                    |
|--------------------|--------------------------------|----------------------|--------------|------------------------|------------------------|---------------------------------------|--|----------------------------|------------------------------------|
|                    |                                | Lower River Catch    |              |                        | Lower River Escapement |                                       | Bonneville<br>Dam Counts <sup>e/</sup> | Mainstem                   |                                    |
|                    |                                | Commercial           | Recreational |                        | Hatchery <sup>c/</sup> | Tributary Dam<br>Counts <sup>d/</sup> |  | Commercial<br>Treaty Catch | Zone 6<br>Escapement <sup>f/</sup> |
|                    |                                |                      | Buoy 10      | Mainstem <sup>b/</sup> |                        |                                       |  |                            |                                    |
| 1981-1985          | 305.3                          | 132.1                | 30.6         | 11.4                   | 101.0                  | 4.6                                   | 31.9                                   | 2.6                        | 29.2                               |
| 1986-1990          | 705.0                          | 392.2                | 82.3         | 13.9                   | 147.6                  | 5.8                                   | 46.3                                   | 5.5                        | 40.7                               |
| 1991-1995          | 315.1                          | 115.8                | 55.9         | 10.7                   | 96.0                   | 3.7                                   | 23.6                                   | 2.0                        | 21.6                               |
| 1996-2000          | 259.4                          | 63.4                 | 11.7         | 16.0                   | 126.6                  | 2.4                                   | 42.5                                   | 2.3                        | 40.3                               |
| 2001-2005          | 639.1                          | 177.6                | 42.9         | 30.6                   | 221.9                  | 6.4                                   | 134.5                                  | 5.6                        | 128.9                              |
| 2006               | 409.7                          | 63.4                 | 3.7          | 16.5                   | 191.1                  | 9.5                                   | 102.1                                  | 8.1                        | 94.1                               |
| 2007               | 349.0                          | 40.3                 | 8.4          | 24.2                   | 161.0                  | 10.5                                  | 92.5                                   | 8.0                        | 84.5                               |
| 2008               | 520.8                          | 60.4                 | 8.6          | 43.2                   | 240.9                  | 6.2                                   | 135.5                                  | 21.6                       | 113.9                              |
| 2009               | 760.2                          | 124.2                | 48.1         | 40.5                   | 260.4                  | 32.3                                  | 244.9                                  | 8.9                        | 236.0                              |
| 2010               | 466.5                          | 76.3                 | 8.0          | 24.0                   | 189.3                  | 22.3                                  | 102.7                                  | 7.1                        | 95.6                               |
| 2011               | 378.1                          | 62.3                 | 7.6          | 18.0                   | 108.3                  | 8.7                                   | 146.5                                  | 33.3                       | 113.2                              |
| 2012               | 152.4                          | 17.1                 | 7.4          | 4.7                    | 41.9                   | 9.1                                   | 55.0                                   | 6.4                        | 48.6                               |
| 2013               | 252.8                          | 48.4                 | 7.6          | 10.7                   | 81.9                   | 21.6                                  | 59.6                                   | 8.8                        | 50.8                               |
| 2014               | 1,019.5                        | 237.3                | 57.7         | 52.2                   | 292.2                  | 32.2                                  | 279.7                                  | 39.2                       | 240.5                              |
| 2015               | 169.5                          | 31.1                 | 36.9         | 7.8                    | 43.4                   | 4.6                                   | 37.4                                   | 2.3                        | 35.1                               |
| 2016               | 205.0                          | 31.4                 | 9.2          | 12.1                   | 84.3                   | 4.8                                   | 42.0                                   | 5.3                        | 36.7                               |
| 2017               | 236.3                          | 37.8                 | 18.8         | 11.2                   | 60.0                   | 12.5                                  | 75.9                                   | 7.0                        | 68.9                               |
| 2018 <sup>g/</sup> | 138.4                          | 11.4                 | 6.8          | 6.7                    | 42.3                   | 6.0                                   | 40.9                                   | 3.6                        | 37.3                               |
| GOAL               |                                | Hatchery Production  |              |                        |                        |                                       |  |                            |                                    |

a/ These numbers match OPI databases. Adjustments were made to the escapement figures and catches.

b/ Mainstem recreational catches listed in this table include tributary catches and catches in the Chinook/Hammond area of 3,195 in 1989, 28 in 1990, and 1,151 in 1991.

c/ Includes hatcheries operated by all agencies.

d/ Willamette Falls, Clackamas River (North Fork Dam) and Sandy River (Marmot Dam).

e/ Includes additional small adults counted as jacks for 1983-1984 and 1986-1989.

f/ Bonneville Dam count minus Zone 6 mainstem commercial treaty Indian harvest.

g/ Preliminary.

TABLE B-22. Estimated catch and effort in the Buoy 10 fishery.<sup>a/</sup>

| Year                      | Angler Trips | Catch <sup>b/</sup> |        | Catch Per Trip |
|---------------------------|--------------|---------------------|--------|----------------|
|                           |              | Chinook             | Coho   |                |
| 1982-1985                 | 30,996       | 4,040               | 30,547 | 0.97           |
| 1986-1990 <sup>c/d/</sup> | 130,633      | 22,107              | 82,910 | 0.78           |
| 1991-1995 <sup>e/</sup>   | 79,475       | 5,689               | 55,895 | 0.50           |
| 1996-2000                 | 45,171       | 7,256               | 11,682 | 0.40           |
| 2001-2005                 | 84,634       | 14,754              | 42,952 | 0.60           |
| 2006                      | 40,688       | 1,706               | 3,687  | 0.13           |
| 2007                      | 36,064       | 3,776               | 8,356  | 0.34           |
| 2008                      | 32,467       | 8,349               | 8,573  | 0.52           |
| 2009                      | 72,803       | 5,940               | 48,127 | 0.74           |
| 2010                      | 52,300       | 6,807               | 7,980  | 0.28           |
| 2011                      | 49,409       | 10,919              | 7,614  | 0.38           |
| 2012                      | 65,070       | 18,550              | 7,385  | 0.40           |
| 2013                      | 65,767       | 22,594              | 7,620  | 0.46           |
| 2014                      | 107,522      | 26,788              | 57,744 | 0.79           |
| 2015                      | 108,319      | 36,535              | 36,920 | 0.68           |
| 2016                      | 94,950       | 17,780              | 9,182  | 0.28           |
| 2017                      | 93,547       | 28,398              | 18,834 | 0.50           |
| 2018 <sup>f/</sup>        | 67,318       | 11,620              | 6,761  | 0.27           |

a/ Prior to 1982, Buoy 10 area catches were not estimated separately and are included in the Columbia River marine area (Cape Falcon to Leadbetter Pt.) recreational catches. Estimates include bank anglers fishing from Clatsop Spit in Oregon and from the North Jetty in Washington. Effort and catch for the North Jetty fishery applied to the ocean quota for the Columbia River area until the ocean fishery closed. Beginning in 2000, includes catch and effort from the Astoria-Megler Bridge upstream to the new boundary from Tongue Point, Oregon to Rocky Point, Washington.

b/ Includes adults and jacks as determined by CWT analysis.

c/ 1989 includes catch and effort data for the Chinook/Hammond fishery occurring during weeks 32 and 33. A total of 7,922 angler trips produced catches of 492 Chinook, 3,195 coho, and a catch rate of 0.47 fish per trip. Catches in this fishery were counted against the Buoy 10 quota.

d/ 1990 includes catch and effort data for the Chinook/Hammond fishery occurring during weeks 31 and 32. A total of 3,225 angler trips produced catches of 54 Chinook, 28 coho, and a catch rate of 0.03 fish per trip.

e/ 1991 includes catch and effort data for the Chinook/Hammond fishery occurring during weeks 31 and 32. A total of 2,759 angler trips produced catches of 39 Chinook, 1,151 coho, and a catch rate of 0.43 fish per trip.

f/ Preliminary.

TABLE B-23. Willapa Bay fall Chinook terminal run size, catch, and spawning escapement in numbers of fish.

| Year or Average      | Non-local Stocks            | Terminal Catch |                      | Spawning Escapement   |                     | Terminal Run Size <sup>g/</sup> |
|----------------------|-----------------------------|----------------|----------------------|-----------------------|---------------------|---------------------------------|
|                      | Gillnet Catch <sup>a/</sup> | Gillnet        | Sport <sup>b/d</sup> | Natural <sup>c/</sup> | Hatchery            |                                 |
| 1981-1985            | 672                         | 7,675          | 589                  | 1,588                 | 5,398               | 14,906                          |
| 1986-1990            | 2,167                       | 18,483         | 1,578                | 5,576                 | 22,458              | 47,805                          |
| 1991-1995            | 1,121                       | 28,252         | 2,823                | 2,819                 | 17,086              | 50,981                          |
| 1996-2000            | -                           | 12,449         | 2,182                | 2,564                 | 9,168               | 26,363                          |
| 2001-2005            | 76                          | 6,604          | 3,323                | 2,288                 | 15,588              | 27,803                          |
| 2006                 | -                           | 12,318         | 5,551                | 3,739                 | 24,209              | 45,817                          |
| 2007                 | -                           | 4,108          | 2,579                | 1,907                 | 13,400              | 21,994                          |
| 2008                 | -                           | 3,595          | 2,988                | 1,544                 | 14,891              | 23,018                          |
| 2009                 | -                           | 6,929          | 4,623                | 2,345                 | 19,831              | 33,728                          |
| 2010 <sup>e/</sup>   | 81                          | 8,032          | 3,309                | 4,499                 | 21,565              | 37,405                          |
| 2011 <sup>e/</sup>   | 778                         | 18,129         | 8,348                | 3,811                 | 21,838              | 52,126                          |
| 2012 <sup>e/</sup>   | 932                         | 8,762          | 5,933                | 2,677                 | 14,134              | 31,506                          |
| 2013 <sup>e/</sup>   | 1,080                       | 12,886         | 5,815                | 1,904                 | 14,483              | 35,088                          |
| 2014 <sup>e</sup>    | 1,178                       | 12,838         | 7,368                | 2,075                 | 18,367              | 40,648                          |
| 2015 <sup>e/</sup>   | 1,159                       | 3,681          | 12,101               | 2,824                 | 26,584              | 45,190                          |
| 2016 <sup>e/</sup>   | 713                         | 2,429          | 7,867                | 1,887                 | 12,898              | 25,081                          |
| 2017 <sup>e/f/</sup> | 405                         | 2,537          | 5,588                | 3,078                 | 19,700              | 30,903                          |
| 2018 <sup>e/f/</sup> | 347                         | 1,187          | NA                   | NA                    | NA                  | NA                              |
| GOAL                 |                             |                |                      | 3,393 <sup>g/</sup>   | 9,800 <sup>h/</sup> |                                 |

a/ Non-local gillnet is catch prior to Aug. 16. In 2010-13, 42% were considered non-local. In 2014, 28% were non-local based on genetic data samples. In 2015, non-local stock contribution based on genetic sampling throughout the duration of the commercial fishery.

b/ Adults. Sport catch since 1991 includes marine areas within Willapa Bay (e.g., Washaway Beach).

c/ Escapement estimates after 1984 are based on revised spawning habitat estimates. Natural = adult returns assumed to be from natural origin parents.

d/ Does not include catch of non-local stocks.

e/ To calculate total gillnet catch, combine Non-local Stocks Gillnet Catch (column 1) and Terminal Catch Gillnet (column 2).

f/ Preliminary.

g/ MSY spawning escapement objective established in FMP Amendment 16; WDFW goal is 4,350.

h/ WDFW goal; not an FMP goal.

TABLE B-24. Willapa Bay coho terminal run size, catch, and spawning escapement in numbers of fish.

| Year or Average    | Terminal Catch |                     | Spawning Escapement   |                        | Terminal Run Size <sup>d/</sup> |
|--------------------|----------------|---------------------|-----------------------|------------------------|---------------------------------|
|                    | Gillnet        | Sport <sup>a/</sup> | Natural <sup>b/</sup> | Hatchery <sup>c/</sup> |                                 |
| 1976-1980          | 15,031         | 2,842               | 5,800                 | 14,328                 | 38,001                          |
| 1981-1985          | 39,007         | 2,181               | 3,567                 | 26,640                 | 69,968                          |
| 1986-1990          | 68,969         | 2,591               | NA                    | 35,811                 | 107,371                         |
| 1991-1995          | 34,255         | 2,802               | 4,582                 | 27,205                 | 65,178                          |
| 1996-2000          | 13,756         | 2,065               | 20,438                | 22,531                 | 58,790                          |
| 2001-2005          | 44,656         | 4,695               | 40,820                | 49,171                 | 139,342                         |
| 2006               | 19,948         | 811                 | 12,918                | 7,437                  | 41,114                          |
| 2007               | 8,189          | 955                 | 14,766                | 10,345                 | 34,255                          |
| 2008               | 16,692         | 1,227               | 16,512                | 10,832                 | 45,263                          |
| 2009               | 75,095         | 6,461               | 46,398                | 21,759                 | 149,713                         |
| 2010               | 29,072         | 5,053               | 73,985                | 34,387                 | 142,497                         |
| 2011               | 47,985         | 5,717               | 27,308                | 22,022                 | 103,032                         |
| 2012               | 25,783         | 5,052               | 18,880                | 14,609                 | 64,324                          |
| 2013               | 11,560         | 4,235               | 22,834                | 13,490                 | 52,119                          |
| 2014               | 77,475         | 21,221              | 47,154                | 83,059                 | 228,909                         |
| 2015               | 1,926          | 11,096              | 10,790                | 21,297                 | 45,109                          |
| 2016               | 19,324         | 5,239               | 25,290                | 21,868                 | 71,721                          |
| 2017 <sup>e/</sup> | 4,615          | 3,203               | 9,091                 | 10,006                 | 26,915                          |
| 2018 <sup>e/</sup> | 7,253          | NA                  | NA                    | NA                     | NA                              |
| GOAL               |                |                     | 17,200 <sup>f/</sup>  | 6,100 <sup>f/</sup>    |                                 |

a/ Adults. Sport catch since 1991 includes marine areas within Willapa Bay (e.g., Washaway Beach).

b/ Natural spawning escapement estimates were not made in 1984-1994; estimates in 1996, 1997, and 1998 do not include adult fish released upstream of hatchery racks. Estimates from 1996 to present include both wild and naturally spawning hatchery fish.

c/ Hatchery rack number includes fish released upstream.

d/ Does not include natural spawning escapement between 1984 and 1994.

e/ Preliminary.

f/ Willapa Bay Coho were added to the FMP in 2011; the STT finalized the new FMP goal for use beginning in 2016.



TABLE B-25. Grays Harbor Chinook terminal catch, spawning escapement, and run size in numbers of fish. (Page 1 of 2)

| Year or Average       | Terminal Catch        |                    |                       |                         |                     | Spawning Escapement   |                        | Terminal Run Size <sup>d/</sup> |
|-----------------------|-----------------------|--------------------|-----------------------|-------------------------|---------------------|-----------------------|------------------------|---------------------------------|
|                       | Early Non-local Catch | Non-Indian Gillnet | Treaty Indian Gillnet | Chehalis Tribal Gillnet | Sport <sup>a/</sup> | Natural <sup>b/</sup> | Hatchery <sup>c/</sup> |                                 |
| <b>SPRING Chinook</b> |                       |                    |                       |                         |                     |                       |                        |                                 |
| 1981-1985             | -                     | -                  | -                     | 57                      | 5                   | 924                   | -                      | 963                             |
| 1986-1990             | -                     | -                  | e/                    | 143                     | 6                   | 1,875                 | -                      | 2,024                           |
| 1991-1995             | -                     | -                  | 0                     | 94                      | 15                  | 1,566                 | -                      | 1,675                           |
| 1996-2000             | -                     | -                  | 36                    | 165                     | 100                 | 3,146 <sup>f/</sup>   | -                      | 3,447                           |
| 2001-2005             | -                     | -                  | 46                    | 249                     | 132                 | 2,905                 | -                      | 3,332                           |
| 2006                  | -                     | -                  | 5                     | 249                     | 128                 | 2,481                 | -                      | 2,863                           |
| 2007                  | -                     | -                  | 5                     | 205                     | 54                  | 651                   | -                      | 915                             |
| 2008                  | -                     | -                  | 2                     | 0                       | 0                   | 995                   | -                      | 997                             |
| 2009                  | -                     | -                  | 18                    | 0                       | 0                   | 1,132                 | -                      | 1,150                           |
| 2010                  | -                     | -                  | 0                     | 0                       | 0                   | 3,495                 | -                      | 3,495                           |
| 2011                  | -                     | -                  | 10                    | 0                       | 0                   | 2,563                 | -                      | 2,573                           |
| 2012                  | -                     | -                  | 6                     | 201                     | 66                  | 878                   | -                      | 1,151                           |
| 2013                  | -                     | -                  | 31                    | NA                      | 148                 | 2,459                 | -                      | 2,638                           |
| 2014                  | -                     | -                  | 14                    | NA                      | 62                  | 1,583                 | -                      | 1,659                           |
| 2015                  | -                     | -                  | 32                    | 156                     | 36                  | 1,841                 | -                      | 2,065                           |
| 2016                  | -                     | -                  | 7                     | 104                     | 19                  | 926                   | -                      | 1,056                           |
| 2017 <sup>g/</sup>    | -                     | -                  | 1                     | 6                       | 0                   | 1,384                 | -                      | 1,391                           |
| 2018 <sup>g/</sup>    | -                     | -                  | 0                     | 26                      | 7                   | 493                   | -                      | 526                             |
| GOAL                  |                       |                    |                       |                         |                     | 1,400                 |                        |                                 |

TABLE B-25. Grays Harbor Chinook terminal catch, spawning escapement, and run size in numbers of fish. (Page 2 of 2)

| Year or Average     | Early Non-local Catch | Terminal Catch     |                       |                         |                     | Spawning Escapement   |                        | Terminal Run Size <sup>d/</sup> |
|---------------------|-----------------------|--------------------|-----------------------|-------------------------|---------------------|-----------------------|------------------------|---------------------------------|
|                     |                       | Non-Indian Gillnet | Treaty Indian Gillnet | Chehalis Tribal Gillnet | Sport <sup>a/</sup> | Natural <sup>b/</sup> | Hatchery <sup>c/</sup> |                                 |
| <b>FALL Chinook</b> |                       |                    |                       |                         |                     |                       |                        |                                 |
| 1981-1985           | 602                   | 964                | 3,524                 | 465                     | 268                 | 10                    | 742                    | 5,973                           |
| 1986-1990           | 694                   | 4,122              | 10,414                | 597                     | 1,340               | 20,730                | 1,319                  | 38,522 <sup>h/i/</sup>          |
| 1991-1995           | 206                   | 5,000              | 7,750                 | 901                     | 3,794               | 14,276                | 3,006                  | 34,728 <sup>h/i/</sup>          |
| 1996-2000           | 170                   | 1,048              | 4,010                 | 74                      | 2,977               | 14,134                | 2,184                  | 24,426 <sup>h/i/</sup>          |
| 2001-2005           | 8                     | 684                | 2,291                 | 10                      | 2,687               | 18,534                | 761                    | 24,968 <sup>i/</sup>            |
| 2006                | 0                     | 256                | 3,738                 | 0                       | 1,629               | 17,428                | 1,941                  | 24,992 <sup>i/</sup>            |
| 2007                | 0                     | 529                | 2,472                 | 19                      | 1,698               | 13,117                | 583                    | 18,418 <sup>i/</sup>            |
| 2008                | 0                     | 779                | 1,878                 | 0                       | 0                   | 15,391                | 500                    | 18,548 <sup>i/</sup>            |
| 2009                | 0                     | 1,231              | 2,485                 | 0                       | 860                 | 9,290                 | 666                    | 14,532 <sup>i/</sup>            |
| 2010                | 0                     | 1,638              | 3,403                 | 0                       | 2,005               | 18,158                | 650                    | 25,854 <sup>i/</sup>            |
| 2011                | 0                     | 2,298              | 6,402                 | 0                       | 3,086               | 22,870                | 1,363                  | 36,019 <sup>i/</sup>            |
| 2012                | 0                     | 1,731              | 3,988                 | 3                       | 4,490               | 14,032                | 862                    | 25,106 <sup>i/</sup>            |
| 2013                | 0                     | 103                | 2,875                 | 0                       | 3,618               | 12,503                | 701                    | 19,800 <sup>i/</sup>            |
| 2014                | 0                     | 73                 | 5,094                 | 2                       | 1,124               | 11,893                | 1,676                  | 19,862                          |
| 2015                | 0                     | 166                | 10,496                | 0                       | 3,644               | 17,305                | 2,182                  | 33,793                          |
| 2016                | 0                     | 36                 | 2,060                 | 2                       | 2,837               | 11,248                | 990                    | 17,173                          |
| 2017 <sup>g/</sup>  | 0                     | 31                 | 3,578                 | 0                       | 2,781               | 17,145                | 2,404                  | 25,939                          |
| 2018 <sup>g/</sup>  | 0                     | 45                 | 2,608                 | 0                       | NA                  | NA                    | NA                     | NA                              |
| GOAL                |                       |                    |                       |                         |                     | 13,326 <sup>e/</sup>  |                        |                                 |

a/ Age-3 and older.

b/ Age-3 and older, including hatchery fish spawning naturally.

c/ Includes fish taken from the spawning grounds for broodstock.

d/ Minimum estimate due to incomplete estimates of river recreational catch. Does not include non-local catch.

e/ Fewer than 50 fish.

f/ In 1996 and 1997 WDFW not able to differentiate spawning time and believes this includes fall Chinook.

g/ Preliminary.

h/ Rec. catch estimates by WDFW reflect a catch record card bias correction factor of 0.833. Quinault Indian Nation does not believe this factor is appropriate. Unadjusted catch estimates are 1,000 for 1987; 2,400 for 1988; 2,500 for 1989; 2,400 for 1990; 4,500 for 1991; 2,600 for 1992; 4,200 for 1993; 4,300 for 1994; 6,500 for 1995; 6,800 for 1996; 3,400 for 1997; 3,500 for 1998; and 100 for 1999; terminal run sizes would be adjusted accordingly.

i/ November 2014: Council adopted new spawning escapement objective. The SMSY estimate of 13,326 was accepted as an escapement goal by the Pacific Salmon Commission, PFMC and the co-managers. Previous objectives used for preseason planning were 1,400 (spring) and 14,600 (fall).

TABLE B-26. Grays Harbor coho terminal catch, spawning escapement, and run size estimates in numbers of fish.

| Year or<br>Average | Terminal Catch        |                          |                            |                     | Spawning Escapement <sup>b/</sup> |          | Terminal Run Size <sup>c/</sup> |          |                     |
|--------------------|-----------------------|--------------------------|----------------------------|---------------------|-----------------------------------|----------|---------------------------------|----------|---------------------|
|                    | Non-Indian<br>Gillnet | Treaty<br>Indian Gillnet | Chehalis<br>Tribal Gillnet | Sport <sup>a/</sup> | Natural                           | Hatchery | Natural                         | Hatchery | Total <sup>d/</sup> |
|                    | 1981-1985             | 5,299                    | 15,614                     | 2,865               | 5,012                             | 36,847   | 17,253                          | 49,162   | 32,882              |
| 1986-1990          | 7,715                 | 30,109                   | 1,817                      | 5,355               | 44,116                            | 29,963   | 58,835                          | 60,298   | 119,133             |
| 1991-1995          | 12,502                | 29,166                   | 2,609                      | 10,503              | 35,826                            | 31,304   | 46,949                          | 76,403   | 123,352             |
| 1996-2000          | 3,535                 | 18,701                   | 635                        | 6,829               | 38,467                            | 27,673   | 42,897                          | 53,683   | 96,580              |
| 2001-2005          | 5,006                 | 16,527                   | 1,155                      | 13,349              | 74,821                            | 60,708   | 82,110                          | 90,248   | 172,358             |
| 2006               | 649                   | 8,685                    | 127                        | 2,151               | 17,767                            | 17,223   | 21,779                          | 25,142   | 46,921              |
| 2007               | 1,687                 | 8,926                    | 1,108                      | 4,450               | 25,121                            | 15,236   | 26,833                          | 30,080   | 56,913              |
| 2008               | 7,766                 | 10,204                   | 869                        | 3,266               | 34,054                            | 20,039   | 41,999                          | 34,808   | 76,807              |
| 2009               | 567                   | 28,513                   | 2,519                      | 16,288              | 69,222                            | 55,864   | 80,867                          | 93,334   | 174,201             |
| 2010               | 4,090                 | 25,163                   | 1,542                      | 12,455              | 102,237                           | 74,069   | 112,930                         | 107,644  | 220,574             |
| 2011               | 3,517                 | 28,267                   | 742                        | 14,569              | 64,403                            | 23,757   | 80,488                          | 55,886   | 136,374             |
| 2012               | 10,279                | 30,670                   | 2,470                      | 18,069              | 66,836                            | 22,301   | 94,191                          | 58,048   | 152,239             |
| 2013               | 5,935                 | 21,957                   | 2,515                      | 21,246              | 56,785                            | 26,732   | 73,263                          | 62,936   | 136,198             |
| 2014               | 5,504                 | 67,252                   | 7,322                      | 28,595              | 105,039                           | 59,840   | 140,428                         | 134,341  | 274,769             |
| 2015               | 1,540                 | 12,544                   | 610                        | 8,172               | 21,278                            | 9,646    | 28,953                          | 24,825   | 53,778              |
| 2016               | 232                   | 2,063                    | 891                        | 3,868               | 38,595                            | 24,464   | 33,284                          | 36,248   | 69,532              |
| 2017               | 1,180                 | 10,554                   | 927                        | 10,721              | 26,907                            | 22,617   | 36,260                          | 36,646   | 72,906              |
| 2018 <sup>e/</sup> | 799                   | 8,969                    | NA                         | NA                  | NA                                | 15,626   | NA                              | NA       | NA                  |
| GOAL               |                       |                          |                            |                     | 24,426 <sup>f/</sup>              |          |                                 |          |                     |

a/ Beginning in 1987, estimates provided by WDFW for recreational catch reflect punch card bias correction factor.

b/ "Natural" includes hatchery fish spawning in wild. "Hatchery" includes wild fish taken for brood stock.

c/ Terminal run size numbers from 1981 to present are under co-manager review.

d/ The combined natural and hatchery run size total may not add to the sum of the catch and escapements due to hatchery total run size including on-station and off-station escapements.

e/ Preliminary.

f/ Council adopted a new  $S_{MSY}$  of 24,426 under FMP Amendment 16. Previously, the escapement goal of 35,400 was designated as the 'conservation objective -- failure to meet this would trigger a 'conservataion alert'. The co-manager escapement goal and conservation objective remains 35,400.

TABLE B-27. Treaty Indian gillnet catch of Chinook, chum, and sockeye salmon in the Quinault River in numbers of fish.

| Year or Average    | Spring/Summer Chinook <sup>a/</sup> | Fall Chinook <sup>a/</sup> | Chum  | Sockeye |
|--------------------|-------------------------------------|----------------------------|-------|---------|
| 1981-1985          | 114                                 | 5,100                      | 4,720 | 12,600  |
| 1986-1990          | 338                                 | 8,822                      | 4,686 | 11,218  |
| 1991-1995          | 98                                  | 6,293                      | 2,505 | 9,523   |
| 1996-2000          | 29                                  | 4,446                      | 1,536 | 1,458   |
| 2001-2005          | 60                                  | 6,848                      | 2,220 | 12,235  |
| 2006               | 16                                  | 7,044                      | 862   | 8       |
| 2007               | 20                                  | 2,126                      | 1,173 | 1       |
| 2008               | 10                                  | 3,682                      | 1,171 | 0       |
| 2009               | 43                                  | 5,455                      | 1,156 | 1,441   |
| 2010               | 8                                   | 4,521                      | 2,037 | 1,856   |
| 2011               | 26                                  | 5,998                      | 7,421 | 9,177   |
| 2012               | 15                                  | 5,090                      | 3,426 | 1,193   |
| 2013               | 20                                  | 7,148                      | 3,834 | 969     |
| 2014               | 11                                  | 12,349                     | 1,250 | 4,313   |
| 2015               | 6                                   | 11,574                     | 4,879 | 16,639  |
| 2016               | 41                                  | 5,137                      | 7,294 | 4,312   |
| 2017               | 59                                  | 6,813                      | 2,986 | 3,524   |
| 2018 <sup>b/</sup> | 1                                   | 4,420                      | 3,852 | 3       |

a/ Stock separation under review .

b/ Preliminary.

TABLE B-28. Estimated inriver run size, catch and escapement for Quinault River coho in numbers of fish.

| Year or<br>Average | Terminal Catch <sup>a/</sup> |                             |             | Escapement |          | Terminal Run Size |          |         |
|--------------------|------------------------------|-----------------------------|-------------|------------|----------|-------------------|----------|---------|
|                    | Gillnet                      | Ceremonial &<br>Subsistence | River Sport | Natural    | Hatchery | Natural           | Hatchery | Total   |
| 1981-1985          | 10,700                       | --                          | --          | 3,237      | 6,239    | 7,809             | 12,657   | 20,466  |
| 1986-1990          | 13,777                       | --                          | --          | 3,185      | 4,239    | 8,024             | 13,200   | 21,224  |
| 1991-1995          | 7,963                        | --                          | --          | 4,319      | 8,046    | 6,205             | 13,472   | 19,678  |
| 1996-2000          | 9,617                        | --                          | --          | 8,067      | 7,566    | 12,608            | 12,353   | 24,961  |
| 2001-2005          | 21,600                       | --                          | --          | 9,262      | 16,945   | 15,147            | 32,368   | 47,515  |
| 2006               | 9,785                        | 336                         | 325         | 1,107      | 3,198    | 3,429             | 11,023   | 14,452  |
| 2007               | 11,498                       | 415                         | 412         | 2,999      | 3,333    | 6,376             | 12,258   | 18,634  |
| 2008               | 25,227                       | 961                         | 978         | 14,920     | 14,959   | 26,544            | 29,774   | 56,318  |
| 2009               | 54,882                       | 2,036                       | 2,047       | 27,303     | 29,190   | 48,324            | 66,095   | 114,419 |
| 2010               | 41,726                       | 1,449                       | 1,450       | 17,286     | 15,433   | 34,209            | 41,680   | 75,889  |
| 2011               | 38,431                       | 1,481                       | 1,570       | 5,814      | 2,738    | 23,538            | 24,474   | 48,012  |
| 2012               | 19,166                       | 656                         | 798         | 10,018     | 5,176    | 21,299            | 14,171   | 35,470  |
| 2013               | 20,477                       | 942                         | 1,047       | 2,973      | 1,834    | 12,240            | 14,209   | 26,449  |
| 2014               | 50,299                       | 2,061                       | 2,268       | 29,720     | 16,024   | 52,606            | 46,326   | 98,932  |
| 2015               | 9,556                        | 541                         | 802         | 11,631     | 7,346    | 16,760            | 13,083   | 29,843  |
| 2016               | 37,258                       | 1,360                       | 1,522       | 10,523     | 14,778   | 25,347            | 38,904   | 64,251  |
| 2017               | 33,832                       | 1,333                       | 1,544       | 23,174     | 16,384   | 41,864            | 33,861   | 75,725  |
| 2018 <sup>b/</sup> | 12,051                       | NA                          | NA          | NA         | NA       | NA                | NA       | NA      |
| GOAL               | Hatchery Production          |                             |             |            |          |                   |          |         |

a/ Includes dip-in fish destined for other river systems.

b/ Preliminary.

TABLE B-29. Estimated inriver run size, catch, and escapement of Queets River spring/summer Chinook in numbers of fish.

| Year or<br>Average   | Terminal Catch |                             |                           | Escapement            |          | Terminal Run Size |          |       |
|----------------------|----------------|-----------------------------|---------------------------|-----------------------|----------|-------------------|----------|-------|
|                      | Gillnet        | Ceremonial &<br>Subsistence | River Sport <sup>a/</sup> | Natural <sup>b/</sup> | Hatchery | Natural           | Hatchery | Total |
| 1981-1985            | 243            | 20                          | 27                        | 890                   | 52       | 1,164             | 74       | 1,209 |
| 1986-1990            | 646            | 46                          | 67                        | 1,527                 | -        | 2,287             | -        | 2,287 |
| 1991-1995            | 64             | 5                           | 10                        | 610                   | -        | 689               | -        | 690   |
| 1996-2000            | 36             | 17                          | 70                        | 486                   | -        | 559               | -        | 559   |
| 2001-2005            | -              | 13                          | -                         | 475                   | -        | 488               | -        | 488   |
| 2006                 | -              | 6                           | -                         | 330                   | -        | 336               | -        | 336   |
| 2007                 | -              | 6                           | -                         | 352                   | -        | 358               | -        | 358   |
| 2008                 | -              | 3                           | -                         | 305                   | -        | 305               | -        | 305   |
| 2009                 | -              | 0                           | -                         | 495                   | -        | 495               | -        | 495   |
| 2010                 | -              | 0                           | -                         | 259                   | -        | 259               | -        | 259   |
| 2011                 | -              | 0                           | -                         | 373                   | -        | 373               | -        | 373   |
| 2012                 | -              | 0                           | -                         | 760                   | -        | 760               | -        | 760   |
| 2013                 | -              | <10                         | -                         | 520                   | -        | 520               | -        | 520   |
| 2014 <sup>b/</sup>   | 75             | <10                         | -                         | 377                   | -        | 452               | -        | 452   |
| 2015 <sup>c/e/</sup> | 44             | <10                         | -                         | 532                   | -        | 576               | -        | 576   |
| 2016 <sup>c/e/</sup> | 73             | <10                         | -                         | 704                   | -        | 777               | -        | 777   |
| 2017 <sup>c/e/</sup> | 90             | <10                         | -                         | NA                    | -        | NA                | -        | NA    |
| 2018 <sup>c/</sup>   | 6              | <10                         | -                         | NA                    | -        | NA                | -        | NA    |
| GOAL                 |                |                             |                           | 700 <sup>d/</sup>     |          |                   |          |       |

a/ River catch of adults.

b/ Natural escapement includes hatchery strays.

c/ Preliminary.

d/ Minimum. Terminal run managed at 30 percent exploitation rate of inriver run size.

e/ A fishery targeting early fall coho at the tail end of August in weeks 33 and 34 caught a number of early Chinook.

TABLE B-30. Estimated inriver run size, catch, and escapement of Queets River fall Chinook in numbers of fish.

| Average            | Terminal Catch |                             |                           | Escapement<br>Natural <sup>b/</sup> | Terminal Run Size     |                         | Total  |
|--------------------|----------------|-----------------------------|---------------------------|-------------------------------------|-----------------------|-------------------------|--------|
|                    | Gillnet        | Ceremonial &<br>Subsistence | River Sport <sup>a/</sup> |                                     | Natural <sup>c/</sup> | Indicator <sup>d/</sup> |        |
| 1981-1985          | 2,104          | 20                          | 135                       | 3,930                               | 5,691                 | 591                     | 6,282  |
| 1986-1990          | 2,430          | 20                          | 214                       | 8,768                               | 10,677                | 861                     | 11,538 |
| 1991-1995          | 1,860          | 20                          | 109                       | 4,106                               | 5,511                 | 708                     | 6,219  |
| 1996-2000          | 1,006          | 20                          | 188                       | 3,324                               | 4,092                 | 567                     | 4,659  |
| 2001-2005          | 1,690          | 82                          | 279                       | 4,077                               | 4,505                 | 1,610                   | 6,115  |
| 2006               | 1,079          | 57                          | 71                        | 3,059                               | 3,262                 | 1,004                   | 4,266  |
| 2007               | 634            | 20                          | 74                        | 872                                 | 1,288                 | 307                     | 1,595  |
| 2008               | 1,020          | 41                          | 0                         | 3,105                               | 3,510                 | 698                     | 4,208  |
| 2009               | 1,522          | 65                          | 209                       | 3,135                               | 4,062                 | 856                     | 4,918  |
| 2010               | 1,722          | 81                          | 169                       | 4,031                               | 4,250                 | 1,751                   | 6,001  |
| 2011               | 2,327          | 83                          | 412                       | 3,857                               | 4,877                 | 1,772                   | 6,649  |
| 2012               | 2,722          | 86                          | 296                       | 3,707                               | 5,835                 | 922                     | 6,757  |
| 2013               | 1,943          | 63                          | 369                       | 2,582                               | 4,070                 | 887                     | 4,957  |
| 2014               | 1,180          | 73                          | 117                       | 3,820                               | 3,099                 | 2,059                   | 5,158  |
| 2015               | 1,314          | 102                         | 567                       | 5,313                               | 4,825                 | 2,627                   | 7,452  |
| 2016               | 804            | 54                          | 9                         | 2,915                               | 3,110                 | 778                     | 3,888  |
| 2017               | 1,568          | 59                          | 20                        | 2,702                               | 3,582                 | 880                     | 4,462  |
| 2018 <sup>e/</sup> | 852            | NA                          | NA                        | NA                                  | NA                    | NA                      | NA     |
| GOAL               |                |                             |                           | 2,500 <sup>f/</sup>                 |                       |                         |        |

a/ River sport catch of age-3 and older fish. The 2000 sport fishery was closed to retention of unmarked Chinook. The 2002 sport fishery was closed to Chinook retention on October 18 due to unusually low water conditions. The 2008 sport fishery was closed to the retention of Chinook. The 2009 sport fishery was closed to retention of unmarked Chinook in Queets and Salmon Rivers within Olympic National Park.

b/ Includes Indicator Stock. Estimates for years prior to 2001 assume a broodstock take of 150 as a placeholder until individual run reconstructions are complete.

c/ Includes from 100 to 200 wild Chinook captured each season near spawning grounds to be used as Indicator broodstock.

d/ This is an integrated wild/hatchery program. Brood stock are unmarked wild fish collected from river.

e/ Preliminary.

f/ Minimum. Terminal run managed at 40 percent exploitation rate of terminal run size.

TABLE B-31. Estimated terminal run size, catch, and escapement for Queets River coho in numbers of fish.

| Year or<br>Average        | Terminal Catch <sup>a/</sup> |                             |                           | Escapement <sup>c/</sup> |              |          | Terminal Run Size <sup>c/</sup> |              |          | Total <sup>d/</sup> |
|---------------------------|------------------------------|-----------------------------|---------------------------|--------------------------|--------------|----------|---------------------------------|--------------|----------|---------------------|
|                           | Gillnet                      | Ceremonial &<br>Subsistence | River Sport <sup>b/</sup> | Natural                  | Supplemental | Hatchery | Natural                         | Supplemental | Hatchery |                     |
| 1981-1985                 | 2,385                        | 20                          | 104                       | 5,460                    | -            | 2,654    | 6,411                           | -            | 3,794    | 10,205              |
| 1986-1990                 | 8,455                        | 18                          | 241                       | 4,826                    | 996          | 3,700    | 6,343                           | 1,825        | 9,685    | 17,123              |
| 1991-1995 <sup>e/</sup>   | 4,420                        | 211                         | 273                       | 4,945                    | 1,025        | 3,455    | 5,981                           | 1,169        | 6,928    | 13,843              |
| 1996-2000                 | 7,114                        | 509                         | 173                       | 5,502                    | 1,275        | 3,643    | 6,243                           | 1,813        | 8,496    | 16,189              |
| 2001-2005 <sup>e/f/</sup> | 15,903                       | 1,044                       | 942                       | 12,345                   | 977          | 5,512    | 15,723                          | 1,368        | 17,995   | 35,086              |
| 2006 <sup>f/</sup>        | 6,233                        | 312                         | 46                        | 5,612                    | 0            | 2,946    | 6,400                           | 0            | 7,100    | 13,500              |
| 2007                      | 2,261                        | 187                         | 153                       | 4,600                    | 0            | 1,954    | 6,003                           | 0            | 2,901    | 8,905               |
| 2008                      | 4,738                        | 359                         | 563                       | 4,629                    | 0            | 3,461    | 6,282                           | 0            | 5,929    | 12,211              |
| 2009                      | 25,004                       | 1,677                       | 865                       | 9,204                    | 0            | 14,151   | 16,557                          | 0            | 30,511   | 47,068              |
| 2010                      | 21,138                       | 1,415                       | 957                       | 11,261                   | 0            | 10,326   | 18,154                          | 0            | 21,676   | 39,830              |
| 2011                      | 16,641                       | 1,229                       | 1,491                     | 8,588                    | 0            | 12,887   | 13,477                          | 0            | 20,190   | 33,668              |
| 2012                      | 6,118                        | 370                         | 527                       | 4,285                    | 0            | 1,090    | 7,712                           | 0            | 3,289    | 11,001              |
| 2013                      | 4,519                        | 522                         | 1,285                     | 5,684                    | 0            | 9,680    | 8,019                           | 0            | 11,801   | 19,820              |
| 2014                      | 15,481                       | 1,148                       | 1,625                     | 7,558                    | 0            | 12,271   | 10,501                          | 0            | 23,210   | 33,711              |
| 2015                      | 2,268                        | 215                         | 300                       | 2,028                    | 0            | 3,315    | 2,201                           | 0            | 5,296    | 7,496               |
| 2016                      | 6,822                        | 564                         | 440                       | 5,156                    | 0            | 6,985    | 5,653                           | 0            | 12,956   | 18,608              |
| 2017                      | 7,583                        | 669                         | 111                       | 5,232                    | 0            | 9,947    | 6,469                           | 0            | 15,381   | 21,851              |
| 2018 <sup>g/</sup>        | 3,308                        | NA                          | NA                        | NA                       | 0            | NA       | NA                              | 0            | NA       | NA                  |
| GOAL                      |                              |                             |                           | 5,800-14,500             |              |          |                                 |              |          |                     |

a/ Includes dip-in fish from other river systems.

b/ Recreational catch of adults (coho over 20 inches).

c/ Natural escapement and run size estimates include fish taken for hatchery brood stock.

d/ Queets stock only; does not include non-local, dip-in fish.

e/ 1991 and 1997 supplemental was included in natural escapement and run size.

f/ In 2004, 2005 and 2006 escapement estimates are from non-standard methods due to poor survey conditions during the coho spawning season.

g/ Preliminary.



TABLE B-32. Estimated inriver run size, catch, and escapement for Hoh River spring/summer Chinook in numbers of fish.

| Year or<br>Average        | Terminal Catch <sup>a/</sup> |          |       |                          |          |       |         |                           |                   |         |                   |       |  |
|---------------------------|------------------------------|----------|-------|--------------------------|----------|-------|---------|---------------------------|-------------------|---------|-------------------|-------|--|
|                           | Gillnet                      |          |       | Ceremonial & Subsistence |          |       |         | River Sport <sup>b/</sup> | Escapement        |         | Terminal Run Size |       |  |
|                           | Natural                      | Hatchery | Total | Natural                  | Hatchery | Total | Natural |                           | Hatchery          | Natural | Hatchery          | Total |  |
| 1981-1985                 | NA                           | NA       | 448   | --                       | --       | 30    | 124     | 1,431                     | 50                | 1,944   | 128               | 2,073 |  |
| 1986-1990                 | NA                           | NA       | 1,072 | --                       | --       | 33    | 315     | 2,829                     | 34                | 4,043   | 257               | 4,300 |  |
| 1991-1995                 | NA                           | NA       | 432   | --                       | --       | 22    | 273     | 1,268                     | 0                 | 1,852   | 156               | 2,008 |  |
| 1996-2000 <sup>c/</sup>   | NA                           | NA       | 285   | --                       | --       | 33    | 192     | 1,181                     | 23                | 1,631   | 96                | 1,727 |  |
| 2001-2005 <sup>d/e/</sup> | NA                           | NA       | 348   | --                       | --       | 30    | 159     | 1,566                     | 0                 | 1,976   | 115               | 2,091 |  |
| 2006 <sup>e/</sup>        | NA                           | NA       | 576   | --                       | --       | 37    | 109     | 904                       | 0                 | 1,061   | 571               | 1,632 |  |
| 2007 <sup>e/</sup>        | NA                           | NA       | 760   | --                       | --       | 68    | 136     | 810                       | 0                 | 1,023   | 592               | 1,615 |  |
| 2008 <sup>d/e/</sup>      | 22                           | 227      | 249   | 10                       | 40       | 50    | 7       | 671                       | 0                 | 703     | 274               | 977   |  |
| 2009 <sup>d/e</sup>       | 30                           | 106      | 136   | 3                        | 2        | 5     | 12      | 880                       | 2                 | 913     | 122               | 1,035 |  |
| 2010 <sup>d/e</sup>       | 24                           | 83       | 107   | 0                        | 0        | 0     | 6       | 828                       | 0                 | 852     | 89                | 941   |  |
| 2011 <sup>d/e</sup>       | 51                           | 25       | 76    | 7                        | 3        | 10    | 22      | 827                       | 0                 | 885     | 50                | 935   |  |
| 2012 <sup>d/e</sup>       | 135                          | 263      | 398   | 9                        | 11       | 20    | 36      | 915                       | 1                 | 1,059   | 311               | 1,370 |  |
| 2013 <sup>d/e/f/</sup>    | 117                          | 415      | 532   | 6                        | 17       | 23    | 65      | 750                       | 0                 | 873     | 497               | 1,370 |  |
| 2014 <sup>d/h/</sup>      | 67                           | 264      | 331   | 8                        | 20       | 28    | 0       | 744                       | 0                 | 819     | 284               | 1,103 |  |
| 2015 <sup>d/h/</sup>      | 17                           | 55       | 72    | 9                        | 5        | 14    | 0       | 1,070                     | 0                 | 1,096   | 60                | 1,156 |  |
| 2016 <sup>d/h/</sup>      | 4                            | 2        | 6     | 10                       | 16       | 26    | 0       | 1,144                     | 0                 | 1,158   | 18                | 1,176 |  |
| 2017 <sup>d/f/i/</sup>    | 7                            | 39       | 46    | 8                        | 12       | 20    | 0       | 1,364                     | 0                 | 1,379   | 51                | 1,430 |  |
| 2018 <sup>d/f/i/</sup>    | NA                           | NA       | 34    | NA                       | NA       | NA    | NA      | NA                        | NA                | NA      | NA                | NA    |  |
| GOAL                      |                              |          |       |                          |          |       |         |                           | 900 <sup>g/</sup> |         |                   |       |  |

a/ Beginning in 1981, catch breakouts recalculated to account for Solduc hatchery yearling release dip-in fish.

b/ Recreational catch of adults (at least 24 inches total length); beginning in 2008, all Chinook must be marked with a healed adipose fin clip.

c/ In 1999, the sport fishery was closed until July 14.

d/ Sport fishery closed to retention of wild adult spring/summer Chinook through August 31 in 2001, 2002, and every year since 2008.

e/ Sport fishery open May 16 through August 31 from mouth to Willoughby Creek since 2002.

f/ Preliminary.

g/ Minimum. Terminal run managed at 31 percent harvest rate of inriver run size.

h/ Sport salmon fishery closed through August 31.

i/ Sport salmon fishery closed September 1-15.

TABLE B-33. Estimated inriver run size, catch, and escapement for Hoh River fall Chinook in numbers of fish.

| Year or<br>Average      | Terminal Catch |                             |                           | Escapement            |          | Terminal Run Size     |          |       |
|-------------------------|----------------|-----------------------------|---------------------------|-----------------------|----------|-----------------------|----------|-------|
|                         | Gillnet        | Ceremonial &<br>Subsistence | River Sport <sup>a/</sup> | Natural <sup>b/</sup> | Hatchery | Natural <sup>b/</sup> | Hatchery | Total |
| 1981-1985               | 849            | 36                          | 59                        | 2,745                 | 20       | 3,684                 | 100      | 3,764 |
| 1986-1990               | 2,000          | 32                          | 213                       | 4,500                 | 33       | 6,819                 | 88       | 6,907 |
| 1991-1995               | 871            | 27                          | 233                       | 2,774                 | 0        | 3,590                 | 65       | 3,655 |
| 1996-2000               | 759            | 29                          | 303                       | 2,545                 | 0        | 3,611                 | 25       | 3,636 |
| 2001-2005 <sup>c/</sup> | 942            | 30                          | 316                       | 3,217                 | 31       | 4,350                 | 155      | 4,505 |
| 2006                    | 586            | 30                          | 204                       | 1,535                 | 0        | 2,336                 | 19       | 2,355 |
| 2007                    | 660            | 30                          | 192                       | 1,556                 | 0        | 2,427                 | 11       | 2,438 |
| 2008                    | 659            | 0                           | 278                       | 2,999                 | 0        | 3,911                 | 25       | 3,936 |
| 2009                    | 553            | 0                           | 134                       | 2,081                 | 0        | 2,747                 | 21       | 2,768 |
| 2010                    | 342            | 0                           | 297                       | 2,599                 | 0        | 3,204                 | 34       | 3,238 |
| 2011                    | 528            | 0                           | 400                       | 1,293                 | 0        | 2,163                 | 58       | 2,221 |
| 2012                    | 929            | 10                          | 237                       | 1,937                 | 0        | 3,014                 | 99       | 3,113 |
| 2013                    | 1,683          | 10                          | 477                       | 1,269                 | 0        | 3,297                 | 142      | 3,439 |
| 2014                    | 658            | 10                          | 144                       | 1,933                 | 0        | 2,664                 | 81       | 2,745 |
| 2015 <sup>d/</sup>      | 493            | 11                          | 198                       | 1,795                 | 0        | 2,439                 | 58       | 2,497 |
| 2016 <sup>d/</sup>      | 137            | 3                           | 47                        | 2,831                 | 0        | 3,012                 | 6        | 3,018 |
| 2017 <sup>d/</sup>      | 518            | 20                          | 130                       | 1,808                 | 0        | 2,454                 | 22       | 2,476 |
| 2018 <sup>d/</sup>      | 139            | 0                           | NA                        | NA                    | 0        | NA                    | NA       | NA    |
| GOAL                    |                |                             |                           | 1,200 <sup>e/</sup>   |          |                       |          |       |

a/ Recreational catch of age-3 and older fish.

b/ Includes fish taken for hatchery brood stock.

c/ In 2002: Low water in October and early November delayed upstream migration, prompting closure of the sport fishery to Chinook retention on October 19 for the remainder of season. Tribal gillnet fishery closed weeks 44 and 45.

d/ Preliminary.

e/ Minimum. Terminal run managed for a maximum 40 percent harvest rate of inriver run size.

TABLE B-34. Estimated inriver run size, catch, and escapement for Hoh River coho in numbers of fish.

| Year or<br>Average      | Terminal Catch <sup>a/</sup> |                             |                           | Escapement            |          | Terminal Run Size     |          |        |
|-------------------------|------------------------------|-----------------------------|---------------------------|-----------------------|----------|-----------------------|----------|--------|
|                         | Gillnet                      | Ceremonial &<br>Subsistence | River Sport <sup>b/</sup> | Natural <sup>c/</sup> | Hatchery | Natural <sup>c/</sup> | Hatchery | Total  |
| 1981-1985               | 1,604                        | 48                          | 22                        | 3,371                 | 92       | 4,655                 | 452      | 5,107  |
| 1986-1990               | 2,507                        | 30                          | 165                       | 3,145                 | 238      | 5,221                 | 760      | 5,981  |
| 1991-1995               | 801                          | 26                          | 168                       | 3,078                 | 122      | 3,816                 | 379      | 4,195  |
| 1996-2000 <sup>d/</sup> | 1,069                        | 28                          | 171                       | 4,406                 | 0        | 5,518                 | 159      | 5,678  |
| 2001-2005 <sup>d/</sup> | 2,796                        | 28                          | 451                       | 7,094                 | 831      | 8,931                 | 1,437    | 10,368 |
| 2006                    | 1,313                        | 30                          | 108                       | 1,282                 | 0        | 2,267                 | 466      | 2,733  |
| 2007                    | 1,757                        | 40                          | 305                       | 3,072                 | 0        | 5,120                 | 54       | 5,174  |
| 2008                    | 1,788                        | 4                           | 204                       | 2,461                 | 67       | 4,237                 | 220      | 4,457  |
| 2009                    | 4,294                        | 0                           | 505                       | 6,595                 | 0        | 10,709                | 685      | 11,394 |
| 2010                    | 2,638                        | 0                           | 515                       | 8,231                 | 0        | 10,916                | 468      | 11,384 |
| 2011                    | 3,418                        | 0                           | 1,210                     | 8,043                 | 0        | 12,463                | 208      | 12,671 |
| 2012                    | 2,706                        | 10                          | 444                       | 4,072                 | 0        | 7,106                 | 126      | 7,232  |
| 2013                    | 4,830                        | 20                          | 1,093                     | 2,899                 | 0        | 8,609                 | 233      | 8,842  |
| 2014                    | 3,879                        | 20                          | 432                       | 4,565                 | 0        | 8,656                 | 240      | 8,896  |
| 2015                    | 579                          | 10                          | 253                       | 1,794                 | 0        | 2,609                 | 27       | 2,636  |
| 2016 <sup>f/</sup>      | 297                          | 2                           | 40                        | 5,009                 | 0        | 5,324                 | 24       | 5,348  |
| 2017 <sup>f/</sup>      | 1,766                        | 20                          | 885                       | 4,478                 | 0        | 7,023                 | 126      | 7,149  |
| 2018 <sup>f/</sup>      | 560                          | 0                           | NA                        | NA                    | 0        | NA                    | NA       | NA     |
| GOAL                    |                              |                             |                           | 2,000 to 5,000        |          |                       |          |        |

a/ Includes dip-in fish from other river systems.

b/ Recreational catch of adults (coho over 20 inches).

c/ Natural escapement and run sizes estimate include fish taken for hatchery brood stock.

d/ In 1997: Recreational fishermen were limited to Chinook only. Release of adult coho required. Tribal net fishery used large mesh to minimize coho impacts.

e/ In 2002: Sport and tribal gillnet seasons reduced in season in response to delayed upriver movement of coho caused by extreme low water conditions in October and early November. Closures were for two weeks.

f/ Preliminary.

TABLE B-35. Estimated inriver run size, catch, and escapement for Quillayute River spring/summer Chinook in numbers of fish.

| Year or<br>Average | Terminal Catch |   |                           | Escapement            |                        | Terminal Run Size     |                        |       |
|--------------------|----------------|---|---------------------------|-----------------------|------------------------|-----------------------|------------------------|-------|
|                    | Gillnet        | Ceremonial &<br>Subsistence <sup>a/</sup> | River Sport <sup>b/</sup> | Natural <sup>c/</sup> | Hatchery <sup>d/</sup> | Natural <sup>c/</sup> | Hatchery <sup>d/</sup> | Total |
| 1981-1985          | 700            | 20  | 48                        | 731                   | 260                    | -                     | -                      | 1,164 |
| 1986-1990          | 1,631          | 22  | 258                       | 1,602                 | 1,003                  | 3,085                 | 2,503                  | 4,341 |
| 1991-1995          | 893            | 25  | 293                       | 1,159                 | 832                    | 1,444                 | 1,758                  | 3,202 |
| 1996-2000          | 213            | 50  | 239                       | 1,072                 | 299                    | 1,272                 | 585                    | 1,857 |
| 2001-2005          | 296            | 41  | 377                       | 1,083                 | 925                    | 1,220                 | 1,498                  | 2,717 |
| 2006               | 688            | 0   | 318                       | 553                   | 1,032                  | 604                   | 1,987                  | 2,591 |
| 2007               | 800            | 0   | 180                       | 502                   | 1,007                  | 568                   | 1,921                  | 2,489 |
| 2008               | 993            | 40  | 223                       | 949                   | 796                    | 1,081                 | 1,920                  | 3,054 |
| 2009               | 483            | 30  | 192                       | 555                   | 722                    | 682                   | 1,301                  | 2,073 |
| 2010               | 567            | 0   | 233                       | 772                   | 880                    | 941                   | 1,554                  | 2,495 |
| 2011               | 599            | 41  | 659                       | 569                   | 696                    | 823                   | 1,759                  | 2,582 |
| 2012               | 880            | 20  | 640                       | 729                   | 437                    | 841                   | 1,881                  | 2,722 |
| 2013               | 1,204          | 0   | 803                       | 957                   | 528                    | 1,148                 | 2,380                  | 3,528 |
| 2014               | 714            | 0   | 481                       | 608                   | 342                    | 843                   | 1,330                  | 2,173 |
| 2015               | 1,075          | 0   | 556                       | 794                   | 505                    | 1,006                 | 1,924                  | 2,930 |
| 2016               | 1,374          | 15  | 480                       | 900                   | 745                    | 1,171                 | 2,387                  | 3,558 |
| 2017               | 1,239          | 60  | 929                       | 1,097                 | 521                    | 1,362                 | 2,484                  | 3,846 |
| 2018 <sup>e/</sup> | 1,426          | 0   | 666                       | 1,232                 | 602                    | 1,445                 | 2,481                  | 3,926 |
| GOAL               |                |   |                           | 1,200 <sup>f/</sup>   |                        |                       |                        |       |

a/ Beginning in 2005, ceremonial and subsistence catch taken during scheduled gillnet fishery is reported as gillnet catch. Catch during designated ceremonial and subsistence fisheries is listed separately.

b/ Recreational catch of adults; mark selective for adipose fin clipped coho beginning in 2003.

c/ Natural escapement includes hatchery strays and broodstock fish.

d/ Hatchery escapement and terminal run size exclude hatchery strays.

e/ Preliminary.

f/ FMP goal is adults; WDFW goal of 1,200 includes age-3 males (jacks).

TABLE B-36. Estimated inriver run size, catch, and escapement for Quillayute River fall Chinook in numbers of fish.

| Year or<br>Average | Terminal Catch |   |                           | Escapement            |                        | Terminal Run Size     |                        |        |
|--------------------|----------------|---|---------------------------|-----------------------|------------------------|-----------------------|------------------------|--------|
|                    | Gillnet        | Ceremonial &<br>Subsistence <sup>a/</sup> | River Sport <sup>b/</sup> | Natural <sup>c/</sup> | Hatchery <sup>d/</sup> | Natural <sup>c/</sup> | Hatchery <sup>d/</sup> | Total  |
|                    |                |   |                           |                       |                        |                       |                        |        |
| 1981-1985          | 2,075          | 50  | 131                       | 6,282                 | 77                     | 8,219                 | 305                    | 8,525  |
| 1986-1990          | 5,475          | 50  | 564                       | 12,238                | 112                    | 18,004                | 379                    | 18,383 |
| 1991-1995          | 713            | 50  | 289                       | 5,670                 | 11                     | 6,705                 | 29                     | 6,733  |
| 1996-2000          | 831            | 90  | 338                       | 5,307                 | 0                      | 6,566                 | 0                      | 6,566  |
| 2001-2005          | 1,602          | 80  | 547                       | 5,768                 | 0                      | 8,196                 | 13                     | 8,209  |
| 2006               | 1,969          | 0   | 35                        | 5,642                 | 0                      | 7,656                 | 15                     | 7,671  |
| 2007               | 905            | 0   | 166                       | 3,066                 | 0                      | 4,137                 | 0                      | 4,137  |
| 2008               | 1,426          | 0   | 217                       | 3,612                 | 0                      | 5,250                 | 5                      | 5,255  |
| 2009               | 2,434          | 0   | 352                       | 3,130                 | 0                      | 5,874                 | 42                     | 5,916  |
| 2010               | 1,815          | 0   | 553                       | 4,635                 | 0                      | 6,985                 | 18                     | 7,003  |
| 2011               | 1,972          | 3   | 868                       | 3,963                 | 0                      | 6,765                 | 41                     | 6,806  |
| 2012               | 2,842          | 0   | 358                       | 3,518                 | 0                      | 6,682                 | 36                     | 6,718  |
| 2013               | 2,001          | 0   | 1,024                     | 3,901                 | 0                      | 6,877                 | 49                     | 6,926  |
| 2014               | 4,213          | 0   | 423                       | 2,782                 | 0                      | 7,322                 | 96                     | 7,418  |
| 2015               | 2,387          | 0   | 868                       | 3,440                 | 0                      | 6,676                 | 19                     | 6,695  |
| 2016               | 1,328          | 0   | 29                        | 3,654                 | 0                      | 5,005                 | 6                      | 5,011  |
| 2017               | 3,999          | 0   | 396                       | 3,604                 | 0                      | 7,957                 | 42                     | 7,999  |
| 2018 <sup>e/</sup> | 2,042          | 0   | 580                       | 4,031                 | 0                      | 6,638                 | 15                     | 6,653  |
| GOAL               |                |   |                           | 3,000 <sup>f/</sup>   |                        |                       |                        |        |

a/ Beginning in 2005, ceremonial and subsistence catch taken during scheduled gillnet fishery is reported as gillnet catch.

b/ River recreational catch of age-3 and older fish.

c/ Includes fish taken for hatchery brood stock and hatchery strays.

d/ Hatchery escapement and terminal run size exclude hatchery strays.

e/ Preliminary.

f/ Minimum. Terminal run managed at 40 percent harvest rate.

TABLE B-37. Estimated inriver run size, catch, and escapement for Quillayute River coho stocks in numbers of fish. (Page 1 of 2)

| Year or<br>Average | Terminal Catch <sup>a/</sup> |   |                           | Escapement            |                        | Terminal Run Size     |                        |        |
|--------------------|------------------------------|---|---------------------------|-----------------------|------------------------|-----------------------|------------------------|--------|
|                    | Gillnet                      | Ceremonial &<br>Subsistence <sup>b/</sup> | River Sport <sup>c/</sup> | Natural <sup>d/</sup> | Hatchery <sup>e/</sup> | Natural <sup>d/</sup> | Hatchery <sup>e/</sup> | Total  |
| <b>SUMMER COHO</b> |                              |   |                           |                       |                        |                       |                        |        |
| 1981-1985          | 4,062                        | 50  | 105                       | 946                   | 2,744                  | 2,106                 | 5,802                  | 7,908  |
| 1986-1990          | 3,204                        | 50  | 94                        | 723                   | 4,001                  | 1,643                 | 6,430                  | 8,072  |
| 1991-1995          | 1,286                        | 50  | 191                       | 784                   | 6,501                  | 989                   | 7,823                  | 8,812  |
| 1996-2000          | 1,213                        | 50  | 173                       | 638                   | 3,574                  | 830                   | 4,817                  | 5,648  |
| 2001-2005          | 4,040                        | 40  | 379                       | 993                   | 7,436                  | 1,897                 | 10,992                 | 12,888 |
| 2006               | 2,146                        | 0   | 141                       | 621                   | 1,832                  | 1,549                 | 3,191                  | 4,740  |
| 2007               | 645                          | 0   | 200                       | 805                   | 4,778                  | 1,029                 | 5,399                  | 6,428  |
| 2008               | 1,313                        | 0   | 198                       | 706                   | 6,419                  | 971                   | 7,665                  | 8,636  |
| 2009               | 3,227                        | 0   | 233                       | 1,337                 | 8,085                  | 2,210                 | 10,672                 | 12,882 |
| 2010               | 890                          | 0   | 58                        | 273                   | 1,644                  | 564                   | 2,304                  | 2,868  |
| 2011               | 757                          | 0   | 220                       | 1,654                 | 3,800                  | 2,069                 | 4,362                  | 6,431  |
| 2012               | 430                          | 0   | 251                       | 672                   | 1,588                  | 789                   | 2,152                  | 2,941  |
| 2013               | 1,028                        | 0   | 331                       | 451                   | 2,504                  | 990                   | 3,324                  | 4,314  |
| 2013               | 4,299                        | 0   | 934                       | 688                   | 5,085                  | 2,320                 | 8,686                  | 11,006 |
| 2013               | 444                          | 0   | 274                       | 668                   | 4,570                  | 876                   | 5,080                  | 5,956  |
| 2013               | 2,462                        | 0   | 270                       | 772                   | 2,116                  | 1,669                 | 3,951                  | 5,620  |
| 2013               | 4,443                        | 0   | 704                       | 688                   | 7,245                  | 1,609                 | 11,471                 | 13,080 |
| 2018 <sup>g/</sup> | 1,721                        | 0   | 91                        | 250                   | 624                    | 954                   | 1,545                  | 2,499  |
| GOAL               | Hatchery Production          |   |                           |                       |                        |                       |                        |        |

TABLE B-37. Estimated inriver run size, catch, and escapement for Quillayute River coho stocks in numbers of fish. (Page 2 of 2)

| Year or<br>Average      | Terminal Catch <sup>a/</sup> |   |                           | Escapement            |                        | Terminal Run Size     |                        |        |
|-------------------------|------------------------------|---|---------------------------|-----------------------|------------------------|-----------------------|------------------------|--------|
|                         | Gillnet                      | Ceremonial &<br>Subsistence <sup>b/</sup> | River Sport <sup>c/</sup> | Natural <sup>d/</sup> | Hatchery <sup>e/</sup> | Natural <sup>d/</sup> | Hatchery <sup>e/</sup> | Total  |
| <b>FALL COHO</b>        |                              |   |                           |                       |                        |                       |                        |        |
| 1981-1985               | 3,789                        | 49  | 164                       | 7,464                 | 2,102                  | 10,988                | 2,580                  | 13,568 |
| 1986-1990               | 5,794                        | 100                                       | 385                       | 8,766                 | 1,771                  | 14,119                | 2,695                  | 16,815 |
| 1991-1995               | 3,598                        | 100                                       | 565                       | 7,357                 | 4,736                  | 9,930                 | 6,426                  | 16,356 |
| 1996-2000 <sup>f/</sup> | 8,407                        | 100                                       | 1,336                     | 11,009                | 11,515                 | 14,596                | 17,783                 | 32,379 |
| 2001-2005               | 21,801                       | 50  | 38 <sup>f/</sup>          | 4,623                 | 2,645                  | 5,021                 | 2,791                  | 7,812  |
| 2006                    | 9,779                        | 0   | 291                       | 5,210                 | 4,450                  | 12,266                | 7,464                  | 19,730 |
| 2007                    | 10,152                       | 0   | 826                       | 6,252                 | 5,423                  | 10,942                | 11,711                 | 22,653 |
| 2008                    | 15,722                       | 10  | 511                       | 6,947                 | 12,098                 | 12,979                | 22,309                 | 35,288 |
| 2009                    | 37,112                       | 0   | 4,620                     | 7,863                 | 23,373                 | 24,653                | 48,315                 | 72,968 |
| 2010                    | 27,127                       | 10  | 3,537                     | 9,837                 | 23,325                 | 23,901                | 39,935                 | 63,836 |
| 2011                    | 21,983                       | 11  | 3,955                     | 8,070                 | 22,487                 | 20,887                | 35,634                 | 56,521 |
| 2012                    | 11,051                       | 1   | 1,317                     | 5,846                 | 2,276                  | 15,421                | 5,070                  | 20,490 |
| 2013                    | 12,611                       | 0   | 4,370                     | 7,072                 | 5,111                  | 18,125                | 11,039                 | 29,164 |
| 2014                    | 27,427                       | 0   | 5,736                     | 7,425                 | 12,389                 | 23,528                | 29,449                 | 52,977 |
| 2015                    | 5,291                        | 0   | 2,706                     | 2,571                 | 3,595                  | 6,978                 | 7,185                  | 14,163 |
| 2016                    | 5,678                        | 0   | 326                       | 9,630                 | 16,332                 | 11,676                | 20,290                 | 31,966 |
| 2017                    | 15,629                       | 0   | 2,590                     | 7,474                 | 18,299                 | 13,282                | 30,710                 | 43,992 |
| 2018 <sup>g/</sup>      | 3,831                        | 0   | 1,972                     | 5,157                 | 9,762                  | 7,794                 | 12,928                 | 20,722 |
| GOAL                    | 6,300-15,800                 |   |                           |                       |                        |                       |                        |        |

a/ Includes dip-in fish from other systems.

b/ Beginning in 2005, ceremonial and subsistence catch taken during scheduled gillnet fishery is reported as gillnet catch. Catch during designated ceremonial and subsistence fisheries is listed separately.

c/ Recreational catch of adults (coho over 20 inches).

d/ Natural escapement and run size estimates include fish taken for hatchery brood stock.

e/ Hatchery escapement and terminal run size exclude hatchery strays.

f/ In 1997 river sport: Regulations required nonretention of coho.

g/ Preliminary.

TABLE B-38. Estimated inriver run size, catch, and escapement for Hoko River summer/fall Chinook in numbers of fish.

| Year or<br>Average | Terminal Catch |                             |                           | Escapement            |                   | Terminal Run Size     |              |       |
|--------------------|----------------|-----------------------------|---------------------------|-----------------------|-------------------|-----------------------|--------------|-------|
|                    | Gillnet        | Ceremonial &<br>Subsistence | River Sport <sup>a/</sup> | Natural <sup>b/</sup> | Supplemental      | Natural <sup>b/</sup> | Supplemental | Total |
| 1991-1995          | -              | -                           | 5                         | 362                   | 432               | 362                   | 432          | 795   |
| 1996               | -              | -                           | 4                         | 435                   | 830               | 435                   | 830          | 1,265 |
| 1997               | -              | -                           | 8                         | 365                   | 529               | 365                   | 529          | 894   |
| 1998               | -              | -                           | -                         | 705                   | 1,017             | 705                   | 1,017        | 1,722 |
| 1999               | -              | -                           | -                         | 734                   | 954               | 734                   | 954          | 1,688 |
| 2000               | -              | -                           | -                         | 294                   | 437               | 294                   | 437          | 731   |
| 2001               | -              | -                           | -                         | 496                   | 450               | 496                   | 450          | 946   |
| 2002               | -              | -                           | -                         | 192                   | 488               | 192                   | 488          | 680   |
| 2003               | -              | -                           | -                         | 402                   | 696               | 402                   | 696          | 1,098 |
| 2004               | -              | -                           | -                         | 266                   | 820               | 266                   | 820          | 1,086 |
| 2005               | -              | -                           | -                         | 72                    | 212               | 72                    | 212          | 284   |
| 2006               | -              | -                           | -                         | 172                   | 723               | 172                   | 723          | 895   |
| 2007               | -              | -                           | -                         | 251                   | 317               | 251                   | 317          | 568   |
| 2008               | -              | -                           | -                         | 106                   | 377               | 106                   | 377          | 483   |
| 2009               | -              | -                           | -                         | 38                    | 347               | 38                    | 347          | 385   |
| 2010               | -              | -                           | -                         | 322                   | 471               | 322                   | 471          | 793   |
| 2011               | -              | -                           | -                         | 1,081                 | 423               | 1,081                 | 423          | 1,504 |
| 2012               | -              | -                           | -                         | 212                   | 451               | 212                   | 451          | 663   |
| 2013               | -              | -                           | -                         | 726                   | 680               | 726                   | 680          | 1,406 |
| 2014               | -              | -                           | -                         | 1,531                 | 229               | 1,531                 | 229          | 1,760 |
| 2015 <sup>c/</sup> | -              | -                           | -                         | 1,500                 | 1,377             | 1,500                 | 1,377        | 2,877 |
| 2016 <sup>c/</sup> | -              | -                           | -                         | 651                   | 673               | 651                   | 673          | 1,324 |
| 2017 <sup>c/</sup> | -              | -                           | -                         | 913                   | 275               | 913                   | 275          | 1,188 |
| 2018 <sup>c/</sup> | -              | -                           | -                         | 1,943                 | 236               | 1,943                 | 236          | 2,179 |
| GOAL               |                |                             |                           | 850 <sup>d/</sup>     | 200 <sup>e/</sup> |                       |              |       |

a/ River recreational catch of age-3 and older fish.

b/ Includes fish taken for hatchery brood stock and hatchery strays.

c/ Preliminary.

d/ Goal in terms of naturally spawning fish and includes supplementation production.

e/ Not an FMP goal.



TABLE B-39. Puget Sound commercial net and troll fishery salmon catches in numbers of fish.<sup>al</sup> (Page 1 of 2)

| Average            | Fishery       | Chinook | Coho      | Pink <sup>bl</sup> | Chum      | Sockeye   |
|--------------------|---------------|---------|-----------|--------------------|-----------|-----------|
| 1981-1985          | Non-Indian    | 72,934  | 346,125   | 1,154,851          | 368,762   | 928,477   |
|                    | Treaty Indian | 155,966 | 608,241   | 829,340            | 387,951   | 912,408   |
|                    | Total         | 228,899 | 954,366   | 1,984,191          | 756,713   | 1,840,885 |
| 1986-1990          | Non-Indian    | 57,550  | 470,494   | 509,445            | 540,843   | 964,690   |
|                    | Treaty Indian | 176,966 | 812,712   | 590,138            | 662,215   | 1,028,361 |
|                    | Total         | 234,516 | 1,283,206 | 1,099,583          | 1,203,058 | 1,993,051 |
| 1991-1995          | Non-Indian    | 17,519  | 74,371    | 784,067            | 523,396   | 735,834   |
|                    | Treaty Indian | 82,513  | 316,784   | 832,948            | 607,028   | 741,058   |
|                    | Total         | 100,033 | 391,155   | 1,617,015          | 1,130,424 | 1,476,892 |
| 1996-2000          | Non-Indian    | 12,870  | 15,204    | 174,163            | 307,799   | 240,088   |
|                    | Treaty Indian | 64,442  | 184,866   | 211,946            | 210,140   | 321,849   |
|                    | Total         | 77,311  | 200,071   | 386,109            | 517,939   | 561,937   |
| 2001-2005          | Non-Indian    | 11,100  | 26,008    | 258,211            | 852,710   | 92,830    |
|                    | Treaty Indian | 94,113  | 340,391   | 214,297            | 725,349   | 194,046   |
|                    | Total         | 107,667 | 369,373   | 475,002            | 1,620,081 | 288,484   |
| 2006 <sup>cl</sup> | Non-Indian    | 13,300  | 9,827     | 6                  | 877,791   | 223,908   |
|                    | Treaty Indian | 104,956 | 259,779   | 411                | 790,603   | 548,661   |
|                    | Total         | 118,256 | 269,606   | 417                | 1,668,394 | 772,569   |
| 2007 <sup>cl</sup> | Non-Indian    | 6,785   | 13,435    | 200,687            | 680,385   | 6,266     |
|                    | Treaty Indian | 120,252 | 209,137   | 301,847            | 782,804   | 6,327     |
|                    | Total         | 127,037 | 222,572   | 502,534            | 1,463,189 | 12,593    |
| 2008 <sup>cl</sup> | Non-Indian    | 6,103   | 6,464     | 14                 | 449,348   | 16,319    |
|                    | Treaty Indian | 103,181 | 227,273   | 744                | 575,947   | 44,865    |
|                    | Total         | 109,284 | 233,737   | 758                | 1,025,295 | 61,184    |
| 2009 <sup>cl</sup> | Non-Indian    | 2,753   | 20,091    | 2,789,870          | 294,841   | 1,605     |
|                    | Treaty Indian | 86,786  | 259,528   | 1,948,562          | 354,963   | 2,949     |
|                    | Total         | 89,539  | 279,619   | 4,738,432          | 649,804   | 4,554     |
| 2010 <sup>cl</sup> | Non-Indian    | 7,922   | 18,220    | 309                | 416,252   | 749,668   |
|                    | Treaty Indian | 87,510  | 153,683   | 1,759              | 545,795   | 1,222,590 |
|                    | Total         | 95,432  | 171,903   | 2,068              | 962,047   | 1,972,258 |

TABLE B-39. Puget Sound commercial net and troll fishery salmon catches in numbers of fish.<sup>a/</sup> (Page 2 of 2)

| Year or            | Fishery       | Chinook | Coho    | Pink <sup>b/</sup> | Chum      | Sockeye   |
|--------------------|---------------|---------|---------|--------------------|-----------|-----------|
| 2011 <sup>c/</sup> | Non-Indian    | 10,097  | 28,821  | 2,266,672          | 463,116   | 86,908    |
|                    | Treaty Indian | 100,798 | 223,800 | 2,264,446          | 600,149   | 198,299   |
|                    | Total         | 110,895 | 252,621 | 4,531,118          | 1,063,265 | 285,207   |
| 2012 <sup>c/</sup> | Non-Indian    | 9,053   | 35,628  | 417                | 576,660   | 41,048    |
|                    | Treaty Indian | 113,691 | 355,839 | 1,233              | 577,610   | 89,865    |
|                    | Total         | 122,744 | 391,467 | 1,650              | 1,154,270 | 130,913   |
| 2013 <sup>c/</sup> | Non-Indian    | 9,189   | 29,577  | 3,193,644          | 909,250   | 6,999     |
|                    | Treaty Indian | 104,479 | 298,503 | 2,703,304          | 818,691   | 31,063    |
|                    | Total         | 113,668 | 328,080 | 5,896,948          | 1,727,941 | 38,062    |
| 2014 <sup>c/</sup> | Non-Indian    | 4,343   | 11,815  | 29                 | 543,192   | 234,200   |
|                    | Treaty Indian | 59,469  | 191,166 | 703                | 626,919   | 497,829   |
|                    | Total         | 63,812  | 202,981 | 732                | 1,170,111 | 732,029   |
| 2015 <sup>c/</sup> | Non-Indian    | 3,367   | 4,777   | 398,670            | 559,632   | 16,906    |
|                    | Treaty Indian | 65,758  | 47,118  | 580,679            | 618,446   | 56,055    |
|                    | Total         | 69,125  | 51,895  | 979,349            | 1,178,078 | 72,961    |
| 2016 <sup>c/</sup> | Non-Indian    | 6,599   | 14,486  | -                  | 444,586   | -         |
|                    | Treaty Indian | 73,152  | 259,957 | 88                 | 552,012   | 21,224    |
|                    | Total         | 79,751  | 274,443 | 88                 | 996,598   | 21,224    |
| 2017 <sup>c/</sup> | Non-Indian    | 12,065  | 11,763  | 17,852             | 713,535   | -         |
|                    | Treaty Indian | 136,699 | 191,478 | 124,346            | 704,338   | 18,957    |
|                    | Total         | 148,764 | 203,241 | 142,198            | 1,417,873 | 18,957    |
| 2018 <sup>c/</sup> | Non-Indian    | 13,700  | 9,645   | 3                  | 388,933   | 397,671   |
|                    | Treaty Indian | 104,689 | 240,757 | 181                | 457,341   | 618,467   |
|                    | Total         | 118,389 | 250,402 | 184                | 846,274   | 1,016,138 |

a/ Data do not reflect treaty Indian allocations. Includes U.S. and Canadian-origin salmon and fish caught in test fisheries.

b/ Odd-year averages for pink salmon.

c/ Preliminary.

TABLE B-40. Summary of Puget Sound marine recreational salmon catch estimates in numbers of fish from catch record cards.<sup>a/</sup>

| Year or Average    | Chinook | Coho    | Pink <sup>b/</sup> |
|--------------------|---------|---------|--------------------|
| 1971-1975          | 225,650 | 119,301 | 14,855             |
| 1976-1980          | 253,763 | 202,983 | 47,029             |
| 1981-1985          | 156,183 | 196,632 | 14,910             |
| 1986-1990          | 127,860 | 251,087 | 40,884             |
| 1991-1995          | 77,310  | 137,637 | 71,030             |
| 1996               | 72,069  | 85,139  | 50                 |
| 1997               | 60,425  | 137,571 | 35,197             |
| 1998               | 26,114  | 89,520  | 201                |
| 1999               | 28,739  | 22,055  | 23,780             |
| 2000               | 23,679  | 74,934  | 17                 |
| 2001               | 44,422  | 193,454 | 117,367            |
| 2002               | 30,743  | 66,576  | 31                 |
| 2003               | 30,349  | 92,114  | 143,248            |
| 2004               | 26,727  | 83,708  | 138                |
| 2005               | 22,879  | 58,309  | 68,546             |
| 2006               | 28,582  | 26,688  | 19                 |
| 2007               | 48,726  | 65,306  | 93,251             |
| 2008               | 32,422  | 21,400  | 4                  |
| 2009               | 31,305  | 75,719  | 156,901            |
| 2010               | 28,306  | 20,290  | 27                 |
| 2011               | 27,507  | 56,775  | 142,781            |
| 2012               | 41,632  | 169,884 | 5                  |
| 2013               | 41,036  | 115,934 | 134,539            |
| 2014               | 32,358  | 124,185 | 52                 |
| 2015               | 29,168  | 142,669 | 198,931            |
| 2016               | 30,195  | 4,983   | 10                 |
| 2017 <sup>c/</sup> | 52,203  | 40,686  | 15,308             |
| 2018 <sup>c/</sup> | NA      | NA      | NA                 |

a/ WDFW Statistical Areas 5 through 13, which include the Strait of Juan de Fuca, San Juan Islands, and inner Puget Sound. 1981-1987: Adjusted all Puget Sound and freshwater estimates by 0.833, due to previous estimates being 20% too high. 1988: Area 5, no adjustment. Areas 6-13 adjusted by 0.633, due to estimates being 58% too high. 1989-Present: Area 5, no adjustment. Areas 6-13 adjusted by 0.685, due to estimates being 46% too high. 1991, 1992, and 1993 catch record card estimates adjusted for results of 1987-1990 WDFW/tribal sports emphasis study.

b/ Odd-year averages for pink salmon.

c/ Preliminary.

TABLE B-41. Puget Sound commercial net fishery catches and spawning escapements in numbers of fish for hatchery and natural Puget Sound Chinook stocks.<sup>a/</sup> (Page 1 of 3)

| Year or<br>Average            | Commercial Net Catches |                       |        | Spawning Escapement |                       |        | Puget Sound Run Size <sup>c/</sup> |                       |         |
|-------------------------------|------------------------|-----------------------|--------|---------------------|-----------------------|--------|------------------------------------|-----------------------|---------|
|                               | Hatchery               | Natural <sup>b/</sup> | Total  | Hatchery            | Natural <sup>b/</sup> | Total  | Hatchery                           | Natural <sup>b/</sup> | Total   |
| <b>Strait of Juan de Fuca</b> |                        |                       |        |                     |                       |        |                                    |                       |         |
| 1981-1985                     | 58                     | 129                   | 187    | 811                 | 1,450                 | 2,261  | 869                                | 1,579                 | 2,448   |
| 1986-1990                     | 265                    | 371                   | 636    | 2,372               | 3,401                 | 5,774  | 2,637                              | 3,772                 | 6,409   |
| 1991-1995                     | 91                     | 88                    | 180    | 1,110               | 1,606                 | 2,715  | 1,201                              | 1,694                 | 2,895   |
| 1996-2000                     | 9                      | 18                    | 28     | 1,229               | 2,207                 | 3,435  | 1,238                              | 2,225                 | 3,463   |
| 2001-2005                     | 6                      | 11                    | 17     | 1,471               | 2,640                 | 4,110  | 1,476                              | 2,651                 | 4,127   |
| 2006-2010                     | 10                     | 14                    | 24     | 1,313               | 1,853                 | 3,166  | 1,323                              | 1,867                 | 3,190   |
| 2011                          | 10                     | 9                     | 19     | 1,633               | 1,696                 | 3,329  | 1,643                              | 1,705                 | 3,348   |
| 2012                          | 10                     | 12                    | 22     | 1,856               | 2,187                 | 4,043  | 1,866                              | 2,199                 | 4,065   |
| 2013                          | 12                     | 11                    | 23     | 3,050               | 2,993                 | 6,043  | 3,062                              | 3,004                 | 6,066   |
| 2014                          | 30                     | 45                    | 75     | 2,708               | 4,172                 | 6,880  | 2,738                              | 4,217                 | 6,955   |
| 2015                          | 33                     | 48                    | 81     | 2,932               | 4,474                 | 7,406  | 2,965                              | 4,522                 | 7,487   |
| 2016                          | 2                      | 4                     | 6      | 2,044               | 2,593                 | 4,637  | 2,046                              | 2,597                 | 4,643   |
| 2017                          | 2                      | 4                     | 6      | 1,957               | 3,290                 | 5,247  | 1,959                              | 3,294                 | 5,253   |
| 2018                          | NA                     | NA                    | NA     | NA                  | NA                    | NA     | NA                                 | NA                    | NA      |
| GOAL                          |                        |                       |        |                     |                       | 5,300  |                                    |                       |         |
| <b>Nooksack-Samish</b>        |                        |                       |        |                     |                       |        |                                    |                       |         |
| 1981-1985                     | 54,087                 | 33,729                | 87,816 | 16,083              | 6,575                 | 22,658 | 70,170                             | 40,304                | 110,474 |
| 1986-1990                     | 38,117                 | 26,293                | 64,410 | 10,729              | 4,113                 | 14,841 | 48,846                             | 30,405                | 79,251  |
| 1991-1995                     | 17,792                 | 2,748                 | 20,539 | 8,646               | 1,041                 | 9,686  | 26,438                             | 3,788                 | 30,226  |
| 1996-2000                     | 19,694                 | 5,277                 | 24,971 | 8,263               | 2,957                 | 11,219 | 27,957                             | 8,233                 | 36,190  |
| 2001-2005                     | 10,197                 | 15,798                | 25,995 | 3,909               | 7,429                 | 11,338 | 14,106                             | 23,227                | 37,333  |
| 2006-2010                     | 10,997                 | 7,545                 | 18,543 | 6,793               | 3,628                 | 10,421 | 17,790                             | 11,174                | 28,964  |
| 2011                          | 20,466                 | 3,907                 | 24,373 | 8,520               | 669                   | 9,189  | 28,986                             | 4,576                 | 33,562  |
| 2012                          | 20,335                 | 5,816                 | 26,151 | 6,686               | 941                   | 7,627  | 27,021                             | 6,757                 | 33,778  |
| 2013                          | 19,254                 | 4,307                 | 23,562 | 9,002               | 621                   | 9,623  | 28,256                             | 4,928                 | 33,185  |
| 2014                          | 10,912                 | 1,542                 | 12,453 | 12,501              | 773                   | 13,274 | 23,413                             | 2,315                 | 25,728  |
| 2015                          | 8,348                  | 3,680                 | 12,029 | 6,218               | 592                   | 6,810  | 14,566                             | 4,273                 | 18,839  |
| 2016                          | 8,380                  | 2,559                 | 10,939 | 4,725               | 336                   | 5,061  | 13,105                             | 2,895                 | 16,000  |
| 2017                          | 9,404                  | 1,822                 | 11,226 | 5,454               | 520                   | 5,974  | 14,858                             | 2,342                 | 17,200  |
| 2018                          | NA                     | NA                    | NA     | NA                  | NA                    | NA     | NA                                 | NA                    | NA      |
| GOAL                          |                        |                       |        | 1,800               |                       |        |                                    |                       |         |

TABLE B-41. Puget Sound commercial net fishery catches and spawning escapements in numbers of fish for hatchery and natural Puget Sound Chinook stocks.<sup>a/</sup>  
(Page 2 of 3)

| Year or<br>Average             | Commercial Net Catches |                       |        | Spawning Escapement |                       |        | Puget Sound Run Size <sup>c/</sup> |                       |         |
|--------------------------------|------------------------|-----------------------|--------|---------------------|-----------------------|--------|------------------------------------|-----------------------|---------|
|                                | Hatchery               | Natural <sup>b/</sup> | Total  | Hatchery            | Natural <sup>b/</sup> | Total  | Hatchery                           | Natural <sup>b/</sup> | Total   |
| <b>Skagit</b>                  |                        |                       |        |                     |                       |        |                                    |                       |         |
| 1981-1985                      | 599                    | 9,200                 | 9,798  | 787                 | 11,109                | 11,896 | 1,385                              | 20,309                | 21,694  |
| 1986-1990                      | 253                    | 4,059                 | 4,312  | 815                 | 12,398                | 13,213 | 1,068                              | 16,457                | 17,525  |
| 1991-1995                      | 465                    | 1,590                 | 2,054  | 2,402               | 6,280                 | 8,682  | 2,867                              | 7,870                 | 10,736  |
| 1996-2000                      | 10                     | 463                   | 473    | 316                 | 10,390                | 10,705 | 326                                | 10,853                | 11,179  |
| 2001-2005                      | 12                     | 806                   | 818    | 221                 | 17,503                | 17,725 | 233                                | 18,309                | 18,542  |
| 2006-2010                      | 40                     | 2,697                 | 2,738  | 210                 | 11,742                | 11,952 | 250                                | 14,439                | 14,689  |
| 2011                           | 44                     | 3,662                 | 3,707  | 67                  | 5,537                 | 5,604  | 111                                | 9,199                 | 9,311   |
| 2012                           | 12                     | 1,941                 | 1,952  | 82                  | 13,818                | 13,900 | 94                                 | 15,759                | 15,852  |
| 2013                           | 14                     | 2,088                 | 2,102  | 73                  | 10,882                | 10,955 | 87                                 | 12,970                | 13,057  |
| 2014                           | 0                      | 1,592                 | 1,592  | 0                   | 10,457                | 10,457 | 0                                  | 12,049                | 12,049  |
| 2015                           | 0                      | 1,446                 | 1,446  | 0                   | 13,314                | 13,314 | 0                                  | 14,760                | 14,760  |
| 2016                           | 8                      | 1,805                 | 1,813  | 81                  | 19,290                | 19,371 | 89                                 | 21,095                | 21,184  |
| 2017                           | 7                      | 1,016                 | 1,023  | 91                  | 12,579                | 12,670 | 98                                 | 13,595                | 13,693  |
| 2018                           | NA                     | NA                    | NA     | NA                  | NA                    | NA     | NA                                 | NA                    | NA      |
| GOAL                           |                        |                       |        |                     | 14,900                |        |                                    |                       |         |
| <b>Hood Canal<sup>d/</sup></b> |                        |                       |        |                     |                       |        |                                    |                       |         |
| 1981-1985                      | 7,870                  | 731                   | 8,601  | 4,786               | 1,037                 | 5,823  | 12,656                             | 1,769                 | 14,424  |
| 1986-1990                      | 14,748                 | 781                   | 15,529 | 7,699               | 390                   | 8,089  | 22,446                             | 1,172                 | 23,618  |
| 1991-1995                      | 2,676                  | 158                   | 2,834  | 4,915               | 440                   | 5,355  | 7,591                              | 598                   | 8,189   |
| 1996-2000                      | 3,691                  | 24                    | 3,715  | 11,915              | 649                   | 12,564 | 15,607                             | 673                   | 16,279  |
| 2001-2005                      | 17,908                 | 106                   | 18,014 | 16,678              | 976                   | 17,653 | 34,586                             | 1,082                 | 35,668  |
| 2006-2010                      | 19,640                 | 101                   | 19,741 | 16,231              | 347                   | 16,578 | 35,871                             | 448                   | 36,319  |
| 2011                           | 36,021                 | 41                    | 36,062 | 26,512              | 366                   | 26,878 | 62,533                             | 407                   | 62,940  |
| 2012                           | 55,217                 | 132                   | 55,349 | 29,652              | 609                   | 30,261 | 84,869                             | 741                   | 85,610  |
| 2013                           | 45,317                 | 115                   | 45,432 | 25,421              | 931                   | 26,352 | 70,738                             | 1,046                 | 71,784  |
| 2014                           | 15,975                 | 69                    | 16,044 | 14,418              | 304                   | 14,722 | 30,393                             | 373                   | 30,766  |
| 2015                           | 23,772                 | 102                   | 23,874 | 13,164              | 405                   | 13,569 | 36,936                             | 507                   | 37,443  |
| 2016                           | 38,925                 | 96                    | 39,021 | 30,120              | 547                   | 30,667 | 69,045                             | 643                   | 69,688  |
| 2017                           | 57,560                 | 429                   | 57,990 | 51,632              | 1,347                 | 52,979 | 109,192                            | 1,777                 | 110,969 |
| 2018                           | NA                     | NA                    | NA     | NA                  | NA                    | NA     | NA                                 | NA                    | NA      |
| GOAL                           |                        |                       |        | 3,400               |                       |        |                                    |                       |         |

TABLE B-41. Puget Sound commercial net fishery catches and spawning escapements in numbers of fish for hatchery and natural Puget Sound Chinook stocks.<sup>a/</sup>  
(Page 3 of 3)

| Year or<br>Average | Commercial Net Catches                      |                       |         | Spawning Escapement |                       |         | Puget Sound Run Size <sup>c/</sup> |                       |         |
|--------------------|---|-----------------------|---------|---------------------|-----------------------|---------|------------------------------------|-----------------------|---------|
|                    | Hatchery                                    | Natural <sup>b/</sup> | Total   | Hatchery            | Natural <sup>b/</sup> | Total   | Hatchery                           | Natural <sup>b/</sup> | Total   |
|                    | <b>Stillaguamish-Snohomish<sup>e/</sup></b> |                       |         |                     |                       |         |                                    |                       |         |
| 1981-1985          | 3,289                                       | 7,476                 | 10,765  | 1,990               | 4,830                 | 6,821   | 5,279                              | 12,307                | 17,585  |
| 1986-1990          | 3,831                                       | 3,764                 | 7,595   | 1,187               | 5,469                 | 6,656   | 5,018                              | 9,233                 | 14,250  |
| 1991-1995          | 4,314                                       | 1,339                 | 5,653   | 2,581               | 4,375                 | 6,957   | 6,895                              | 5,714                 | 12,610  |
| 1996-2000          | 6,063                                       | 4,143                 | 10,206  | 8,246               | 4,585                 | 12,831  | 14,310                             | 8,728                 | 23,038  |
| 2001-2005          | 2,998                                       | 3,923                 | 6,921   | 4,756               | 7,981                 | 12,737  | 7,754                              | 11,904                | 19,658  |
| 2006-2010          | 3,804                                       | 182                   | 3,986   | 6,432               | 4,945                 | 11,377  | 10,236                             | 5,127                 | 15,363  |
| 2011               | 4,222                                       | 91                    | 4,313   | 5,256               | 1,862                 | 7,118   | 9,478                              | 1,953                 | 11,431  |
| 2012               | 420   | 29                    | 449     | 9,201               | 4,382                 | 13,583  | 9,620                              | 4,411                 | 14,032  |
| 2013               | 1,771                                       | 95                    | 1,867   | 6,280               | 3,607                 | 9,887   | 8,051                              | 3,703                 | 11,754  |
| 2014               | 1,788                                       | 53                    | 1,841   | 6,539               | 2,639                 | 9,178   | 8,327                              | 2,693                 | 11,019  |
| 2015               | 861   | 1,515                 | 2,376   | 4,980               | 2,819                 | 7,799   | 5,842                              | 4,334                 | 10,175  |
| 2016               | 2,259                                       | 4,095                 | 6,355   | 10,416              | 3,887                 | 14,304  | 12,676                             | 7,982                 | 20,658  |
| 2017               | 11,561                                      | 207                   | 11,768  | 9,606               | 4,963                 | 14,569  | 21,167                             | 5,170                 | 26,337  |
| 2018               | NA  | NA                    | NA      | NA                  | NA                    | NA      | NA                                 | NA                    | NA      |
| GOAL               |   |                       |         |                     | 7,300                 |         |                                    |                       |         |
|                    | <b>South Puget Sound</b>                    |                       |         |                     |                       |         |                                    |                       |         |
| 1981-1985          | 88,350                                      | 60,729                | 149,079 | 47,150              | 30,732                | 77,882  | 135,500                            | 91,461                | 226,961 |
| 1986-1990          | 88,201                                      | 56,976                | 145,177 | 60,726              | 44,218                | 104,944 | 148,926                            | 101,195               | 250,121 |
| 1991-1995          | 47,550                                      | 17,781                | 65,330  | 52,148              | 27,615                | 79,763  | 99,698                             | 45,396                | 145,093 |
| 1996-2000          | 45,425                                      | 19,416                | 64,841  | 67,460              | 45,653                | 113,114 | 112,886                            | 65,069                | 177,955 |
| 2001-2005          | 57,510                                      | 31,354                | 88,864  | 78,247              | 57,194                | 135,441 | 135,757                            | 88,548                | 224,305 |
| 2006-2010          | 80,417                                      | 18,198                | 98,615  | 91,521              | 32,479                | 124,001 | 171,939                            | 50,677                | 222,616 |
| 2011               | 90,348                                      | 12,088                | 102,436 | 89,331              | 18,049                | 107,380 | 179,679                            | 30,137                | 209,816 |
| 2012               | 99,851                                      | 11,409                | 111,259 | 93,634              | 34,079                | 127,712 | 193,484                            | 45,487                | 238,972 |
| 2013               | 88,599                                      | 16,417                | 105,016 | 97,700              | 25,862                | 123,563 | 186,300                            | 42,279                | 228,579 |
| 2014               | 38,995                                      | 6,631                 | 45,626  | 64,048              | 22,549                | 86,597  | 103,043                            | 29,180                | 132,224 |
| 2015               | 42,490                                      | 11,400                | 53,890  | 60,922              | 28,784                | 89,707  | 103,413                            | 40,184                | 143,597 |
| 2016               | 60,151                                      | 14,370                | 74,521  | 114,884             | 34,944                | 149,828 | 175,035                            | 49,314                | 224,349 |
| 2017               | 116,376                                     | 10,979                | 127,355 | 164,913             | 33,700                | 198,613 | 281,288                            | 44,679                | 325,968 |
| 2018               | NA  | NA                    | NA      | NA                  | NA                    | NA      | NA                                 | NA                    | NA      |
| GOAL               |   |                       |         |                     |                       | NA      |                                    |                       |         |

a/ Includes treaty Indian and non-Indian net commercial catches during the adult accounting period. Source: Puget Sound run reconstruction model.

b/ Includes estimated off-station returns.

c/ Puget Sound run size is defined as the run available to Puget Sound net fisheries; spawning escapement plus Puget Sound net fishery catch. Does not include fish caught by troll and recreational fisheries inside Puget Sound.

d/ Natural escapement includes NORs and supplementation origin fish in the Mid Hood Canal management unit streams. Escapement management objectives in the Skokomish River are for total river spawners (HOR & NOR) and are not comparable to the natural escapement column in this table. NOR/HOR breakout of Skokomish R spawners from prior to mass adipose clipping (pre-2010) are based on the average pHOS from after mass adipose clipping (2010-2017).

e/ Since 1999, numbers include Tulaip hatchery returns, which are not added into escapement since no broodstock is taken at the hatchery.

TABLE B-42. Puget Sound commercial net fishery catches and spawning escapements in numbers of fish for hatchery and natural Puget Sound coho stocks.<sup>a/</sup> (Page 1 of 4)

| Year or<br>Average            | Commercial Net Catches <sup>c/</sup> |         |         | Spawning Escapement    |         |        | Terminal Run Size <sup>c/</sup> |         |         |
|-------------------------------|--------------------------------------|---------|---------|------------------------|---------|--------|---------------------------------|---------|---------|
|                               | Hatchery <sup>b/</sup>               | Natural | Total   | Hatchery <sup>b/</sup> | Natural | Total  | Hatchery <sup>b/</sup>          | Natural | Total   |
| <b>Strait of Juan de Fuca</b> |                                      |         |         |                        |         |        |                                 |         |         |
| 1981-1985                     | 19,362                               | 527     | 19,889  | 9,440                  | 4,660   | 14,100 | 28,802                          | 5,187   | 33,989  |
| 1986-1990                     | 9,012                                | 125     | 9,138   | 3,013                  | 5,940   | 8,953  | 12,025                          | 6,065   | 18,091  |
| 1991-1995                     | 2,635                                | 23      | 2,658   | 4,230                  | 4,396   | 8,626  | 6,865                           | 4,419   | 11,284  |
| 1996-2000                     | 4,262                                | 797     | 5,058   | 10,174                 | 13,053  | 23,227 | 15,398                          | 14,087  | 29,484  |
| 2001-2005                     | 6,112                                | 994     | 7,106   | 13,141                 | 20,929  | 34,071 | 21,417                          | 22,352  | 43,770  |
| 2006-2010                     | 2,948                                | 15      | 2,954   | 4,343                  | 9,740   | 13,919 | 7,752                           | 9,757   | 17,509  |
| 2011                          | 5,607                                | 1       | 5,608   | 11,056                 | 10,731  | 21,787 | 18,808                          | 10,732  | 29,540  |
| 2012 <sup>d/</sup>            | 5,281                                | 3       | 5,284   | 7,945                  | 11,020  | 18,965 | 14,119                          | 11,023  | 25,142  |
| 2013 <sup>d/</sup>            | 2,057                                | 42      | 2,099   | 6,765                  | 8,458   | 15,223 | 10,260                          | 8,500   | 18,760  |
| 2014 <sup>d/</sup>            | 3,195                                | 28      | 3,223   | 3,686                  | 11,488  | 15,174 | 7,345                           | 11,516  | 18,861  |
| 2015 <sup>d/</sup>            | 298                                  | 34      | 332     | 1,018                  | 3,859   | 4,877  | 1,619                           | 3,893   | 5,512   |
| 2016 <sup>d/</sup>            | 3,931                                | 16      | 3,947   | 4,103                  | 8,435   | 12,538 | 8,672                           | 8,451   | 17,123  |
| 2017 <sup>d/</sup>            | 4,842                                | 9       | 4,851   | 5,763                  | 5,530   | 11,293 | 11,635                          | 5,539   | 17,174  |
| 2018 <sup>d/</sup>            | NA                                   | NA      | NA      | NA                     | NA      | NA     | NA                              | NA      | NA      |
| GOAL                          | 7,000-11,000                         |         |         |                        |         |        |                                 |         |         |
| <b>Nooksack-Samish</b>        |                                      |         |         |                        |         |        |                                 |         |         |
| 1981-1985                     | 121,448                              | 17,429  | 138,877 | 24,420                 | 7,200   | 31,620 | 145,868                         | 24,629  | 170,497 |
| 1986-1990                     | 140,733                              | 21,761  | 162,494 | 21,087                 | 7,420   | 28,507 | 161,821                         | 29,181  | 191,002 |
| 1991-1995                     | 48,056                               | 13,872  | 61,928  | 17,793                 | 10,320  | 28,113 | 65,849                          | 24,192  | 90,042  |
| 1996-2000                     | 36,169                               | 5,272   | 41,441  | 36,920                 | 7,611   | 44,530 | 75,056                          | 13,577  | 88,633  |
| 2001-2005                     | 43,483                               | 15,589  | 59,072  | 35,805                 | 15,712  | 51,517 | 80,456                          | 32,263  | 112,720 |
| 2006-2010                     | 29,808                               | 12,896  | 42,708  | 9,469                  | 7,896   | 17,365 | 39,657                          | 20,943  | 60,600  |
| 2011                          | 53,796                               | 15,611  | 69,407  | 15,283                 | 2,228   | 17,511 | 70,543                          | 17,906  | 88,449  |
| 2012 <sup>d/</sup>            | 32,842                               | 26,291  | 59,133  | 16,370                 | 9,600   | 25,970 | 51,699                          | 36,095  | 87,794  |
| 2013 <sup>d/</sup>            | 38,628                               | 51,180  | 89,808  | 18,209                 | 20,494  | 38,703 | 58,726                          | 72,968  | 131,694 |
| 2014 <sup>d/</sup>            | 20,038                               | 8,616   | 28,654  | 16,117                 | 5,455   | 21,572 | 37,189                          | 14,118  | 51,307  |
| 2015 <sup>d/</sup>            | 9,129                                | 5,914   | 15,043  | 23,891                 | 1,359   | 25,250 | 35,833                          | 7,507   | 43,340  |
| 2016 <sup>d/</sup>            | 37,734                               | 5,301   | 43,035  | 11,818                 | 7,212   | 19,030 | 50,295                          | 12,513  | 62,808  |
| 2017 <sup>d/</sup>            | 25,772                               | 1,814   | 27,586  | 13,309                 | 3,257   | 16,566 | 39,894                          | 5,071   | 44,965  |
| 2018 <sup>d/</sup>            | NA                                   | NA      | NA      | NA                     | NA      | NA     | NA                              | NA      | NA      |
| GOAL                          | 17,900                               |         |         |                        |         |        |                                 |         |         |

TABLE B-42. Puget Sound commercial net fishery catches and spawning escapements in numbers of fish for hatchery and natural Puget Sound coho stocks. <sup>a/</sup>(Page 2 of 4)

| Year or<br>Average   | Commercial Net Catches <sup>c/</sup> |         |        | Spawning Escapement    |         |         | Terminal Run Size <sup>c/</sup> |         |         |
|----------------------|--------------------------------------|---------|--------|------------------------|---------|---------|---------------------------------|---------|---------|
|                      | Hatchery <sup>b/</sup>               | Natural | Total  | Hatchery <sup>b/</sup> | Natural | Total   | Hatchery <sup>b/</sup>          | Natural | Total   |
| <b>Skagit</b>        |                                      |         |        |                        |         |         |                                 |         |         |
| 1981-1985            | 6,619                                | 8,858   | 15,477 | 21,740                 | 19,800  | 41,540  | 28,359                          | 28,658  | 57,017  |
| 1986-1990            | 5,309                                | 11,448  | 16,757 | 13,861                 | 25,800  | 39,661  | 19,170                          | 37,248  | 56,418  |
| 1991-1995            | 1,338                                | 1,739   | 3,077  | 11,082                 | 14,240  | 25,322  | 12,420                          | 15,979  | 28,399  |
| 1996-2000            | 738                                  | 5,909   | 6,647  | 10,166                 | 42,139  | 52,306  | 11,251                          | 50,571  | 61,822  |
| 2001-2005            | 3,860                                | 18,569  | 22,429 | 13,512                 | 77,441  | 90,953  | 18,326                          | 101,705 | 120,031 |
| 2006-2010            | 1,584                                | 11,579  | 13,163 | 7,606                  | 38,858  | 46,464  | 9,684                           | 53,152  | 62,836  |
| 2011                 | 4,184                                | 17,500  | 21,684 | 9,488                  | 43,916  | 53,404  | 14,887                          | 67,043  | 81,930  |
| 2012 <sup>d/</sup>   | 2,056                                | 17,524  | 19,580 | 10,833                 | 92,687  | 103,520 | 13,650                          | 117,699 | 131,349 |
| 2013 <sup>d/</sup>   | 4,721                                | 21,812  | 26,533 | 14,996                 | 85,751  | 100,747 | 22,194                          | 121,659 | 143,853 |
| 2014 <sup>d/</sup>   | 2,657                                | 11,563  | 14,220 | 8,242                  | 24,820  | 33,062  | 11,996                          | 42,140  | 54,136  |
| 2015 <sup>d/</sup>   | 808                                  | 2,188   | 2,996  | 2,108                  | 5,794   | 7,902   | 4,232                           | 12,939  | 17,171  |
| 2016 <sup>d/</sup>   | 908                                  | 4,660   | 5,568  | 11,394                 | 35,822  | 47,216  | 13,134                          | 43,097  | 56,231  |
| 2017 <sup>d/</sup>   | 263                                  | 780     | 1,043  | 6,831                  | 20,184  | 27,015  | 7,094                           | 20,964  | 28,058  |
| 2018 <sup>d/</sup>   | NA                                   | NA      | NA     | NA                     | NA      | NA      | NA                              | NA      | NA      |
| GOAL                 | 14,875-25,000                        |         |        |                        |         |         |                                 |         |         |
| <b>Hood Canal</b>    |                                      |         |        |                        |         |         |                                 |         |         |
| 1981-1985            | 39,340                               | 18,310  | 57,650 | 20,329                 | 22,280  | 42,609  | 59,669                          | 40,590  | 100,259 |
| 1986-1990            | 45,708                               | 18,991  | 64,699 | 15,099                 | 17,940  | 33,039  | 60,807                          | 36,931  | 97,738  |
| 1991-1995            | 13,553                               | 454     | 14,007 | 15,032                 | 29,808  | 44,840  | 28,585                          | 30,262  | 58,847  |
| 1996-2000            | 5,973                                | 6,837   | 12,810 | 23,077                 | 55,401  | 78,478  | 30,124                          | 62,953  | 93,077  |
| 2001-2005            | 21,042                               | 22,249  | 43,291 | 35,237                 | 103,851 | 139,089 | 66,893                          | 130,781 | 197,674 |
| 2006-2010            | 37,548                               | 11,478  | 49,026 | 10,634                 | 20,458  | 31,092  | 51,465                          | 33,757  | 85,222  |
| 2011                 | 58,757                               | 15,735  | 74,492 | 20,586                 | 24,389  | 44,975  | 87,819                          | 42,405  | 130,224 |
| 2012 <sup>d/</sup>   | 63,078                               | 28,341  | 91,419 | 16,900                 | 45,921  | 62,821  | 87,946                          | 77,378  | 165,324 |
| 2013 <sup>d/</sup>   | 35,929                               | 6,886   | 42,815 | 18,255                 | 16,064  | 34,319  | 59,942                          | 24,277  | 84,219  |
| 2014 <sup>d/</sup>   | 8,020                                | 16,181  | 24,201 | 7,066                  | 26,787  | 33,853  | 16,865                          | 44,694  | 61,559  |
| 2015 <sup>d/e/</sup> | 4,755                                | 3,303   | 8,058  | 9,593                  | 26,926  | 36,519  | 16,498                          | 31,213  | 47,711  |
| 2016 <sup>d/</sup>   | 45,690                               | 6,079   | 51,769 | 17,301                 | 24,313  | 41,614  | 68,534                          | 31,731  | 100,265 |
| 2017 <sup>d/</sup>   | NA                                   | NA      | NA     | 15,590                 | 22,519  | 38,109  | NA                              | NA      | NA      |
| 2018 <sup>d/</sup>   | NA                                   | NA      | NA     | NA                     | NA      | NA      | NA                              | NA      | NA      |
| GOAL                 | 10,750-14,350                        |         |        |                        |         |         |                                 |         |         |



TABLE B-42. Puget Sound commercial net fishery catches and spawning escapements in numbers of fish for hatchery and natural Puget Sound coho stocks. <sup>a/</sup> (Page 3 of 4)

| Year or Average      | Commercial Net Catches <sup>c/</sup> |         |         | Spawning Escapement    |         |         | Terminal Run Size <sup>c/</sup> |         |         |
|----------------------|--------------------------------------|---------|---------|------------------------|---------|---------|---------------------------------|---------|---------|
|                      | Hatchery <sup>b/</sup>               | Natural | Total   | Hatchery <sup>b/</sup> | Natural | Total   | Hatchery <sup>b/</sup>          | Natural | Total   |
| <b>Stillaguamish</b> |                                      |         |         |                        |         |         |                                 |         |         |
| 1981-1985            | 1,923                                | 11,014  | 12,937  | 1,080                  | 13,200  | 14,280  | 3,003                           | 24,214  | 27,217  |
| 1986-1990            | 0                                    | 18,931  | 18,931  | 0                      | 15,600  | 15,600  | 0                               | 34,531  | 34,531  |
| 1991-1995            | 28                                   | 3,012   | 3,040   | 108                    | 13,720  | 13,828  | 136                             | 16,732  | 16,868  |
| 1996-2000            | 4                                    | 1,210   | 1,214   | 34                     | 16,537  | 16,571  | 45                              | 18,790  | 18,835  |
| 2001-2005            | 10                                   | 3,996   | 4,006   | 71                     | 47,628  | 47,699  | 85                              | 53,446  | 53,531  |
| 2006-2010            | 8                                    | 2,358   | 2,365   | 61                     | 19,514  | 19,575  | 74                              | 23,086  | 23,160  |
| 2011                 | 16                                   | 5,310   | 5,326   | 155                    | 49,991  | 50,146  | 180                             | 58,188  | 58,368  |
| 2012 <sup>d/</sup>   | 78                                   | 6,843   | 6,921   | 101                    | 45,156  | 45,257  | 249                             | 56,091  | 56,340  |
| 2013 <sup>d/</sup>   | 73                                   | 5,057   | 5,130   | 0                      | 60,387  | 60,387  | 133                             | 70,597  | 70,730  |
| 2014 <sup>d/</sup>   | 30                                   | 5,620   | 5,650   | 180                    | 35,829  | 36,009  | 233                             | 44,182  | 44,415  |
| 2015 <sup>d/</sup>   | 0                                    | 447     | 447     | 0                      | 2,914   | 2,914   | 0                               | 4,773   | 4,773   |
| 2016 <sup>d/</sup>   | 0                                    | 2,152   | 2,152   | 0                      | 13,048  | 13,048  | 0                               | 15,206  | 15,206  |
| 2017 <sup>d/</sup>   | 1                                    | 795     | 796     | 11                     | 6,099   | 6,110   | 12                              | 6,894   | 6,906   |
| 2018 <sup>d/</sup>   | NA                                   | NA      | NA      | NA                     | NA      | NA      | NA                              | NA      | NA      |
| GOAL                 | 6,100-10,000                         |         |         |                        |         |         |                                 |         |         |
| <b>Snohomish</b>     |                                      |         |         |                        |         |         |                                 |         |         |
| 1981-1985            | 18,050                               | 36,538  | 54,587  | 11,860                 | 74,800  | 86,660  | 29,910                          | 111,338 | 141,247 |
| 1986-1990            | 58,543                               | 67,956  | 126,499 | 26,134                 | 94,800  | 120,934 | 84,677                          | 162,756 | 247,433 |
| 1991-1995            | 40,677                               | 18,363  | 59,040  | 23,462                 | 84,000  | 107,462 | 64,139                          | 102,363 | 166,502 |
| 1996-2000            | 31,614                               | 4,869   | 36,483  | 21,260                 | 82,711  | 103,971 | 55,016                          | 95,218  | 150,234 |
| 2001-2005            | 34,568                               | 16,999  | 51,568  | 18,279                 | 193,476 | 211,755 | 55,068                          | 221,664 | 276,732 |
| 2006-2010            | 14,037                               | 10,461  | 24,498  | 6,473                  | 75,521  | 81,994  | 21,030                          | 90,670  | 111,700 |
| 2011                 | 8,069                                | 7,947   | 16,016  | 8,375                  | 111,374 | 119,749 | 17,210                          | 129,235 | 146,445 |
| 2012 <sup>d/</sup>   | 34,605                               | 15,020  | 49,625  | 13,354                 | 130,637 | 143,991 | 48,572                          | 160,553 | 209,125 |
| 2013 <sup>d/</sup>   | 37,929                               | 10,176  | 48,105  | 10,277                 | 125,870 | 136,147 | 49,591                          | 156,856 | 206,447 |
| 2014 <sup>d/</sup>   | 34,103                               | 6,932   | 41,035  | 13,641                 | 46,244  | 59,885  | 50,809                          | 58,740  | 109,549 |
| 2015 <sup>d/</sup>   | 5,462                                | 2,207   | 7,669   | 3,945                  | 12,804  | 16,749  | 10,026                          | 23,571  | 33,597  |
| 2016 <sup>d/</sup>   | 66,452                               | 7,478   | 73,930  | 9,201                  | 44,141  | 53,342  | 75,658                          | 52,834  | 128,492 |
| 2017 <sup>d/</sup>   | 42,154                               | 2,597   | 44,751  | 6,371                  | 18,195  | 24,566  | 49,163                          | 22,922  | 72,085  |
| 2018 <sup>d/</sup>   | NA                                   | NA      | NA      | NA                     | NA      | NA      | NA                              | NA      | NA      |
| GOAL                 | 31,000-50,000                        |         |         |                        |         |         |                                 |         |         |

TABLE B-42. Puget Sound commercial net fishery catches and spawning escapements in numbers of fish for hatchery and natural Puget Sound coho stocks. <sup>a/</sup> (Page 4 of 4)

| Year or<br>Average       | Commercial Net Catches <sup>c/</sup> |         |         | Spawning Escapement    |         |         | Terminal Run Size <sup>c/</sup> |         |         |
|--------------------------|--------------------------------------|---------|---------|------------------------|---------|---------|---------------------------------|---------|---------|
|                          | Hatchery <sup>b/</sup>               | Natural | Total   | Hatchery <sup>b/</sup> | Natural | Total   | Hatchery <sup>b/</sup>          | Natural | Total   |
| <b>South Puget Sound</b> |                                      |         |         |                        |         |         |                                 |         |         |
| 1981-1985                | 328,516                              | 141,229 | 469,745 | 76,560                 | 38,510  | 115,070 | 405,076                         | 179,738 | 584,815 |
| 1986-1990                | 509,525                              | 211,476 | 721,001 | 69,198                 | 28,882  | 98,080  | 578,723                         | 240,358 | 819,081 |
| 1991-1995                | 137,961                              | 56,462  | 194,423 | 97,002                 | 23,945  | 120,947 | 234,963                         | 80,407  | 315,370 |
| 1996-2000                | 57,648                               | 29,324  | 86,972  | 73,685                 | 28,337  | 102,022 | 140,763                         | 62,893  | 203,656 |
| 2001-2005                | 119,234                              | 40,241  | 159,475 | 114,492                | 33,690  | 148,182 | 250,219                         | 81,366  | 331,585 |
| 2006-2010                | 74,330                               | 20,150  | 94,479  | 47,422                 | 20,893  | 68,315  | 130,776                         | 47,441  | 178,217 |
| 2011                     | 31,583                               | 11,106  | 42,689  | 45,721                 | 36,567  | 82,288  | 86,625                          | 59,779  | 146,404 |
| 2012                     | 95,993                               | 37,202  | 133,195 | 77,409                 | 60,078  | 137,487 | 191,398                         | 118,303 | 309,701 |
| 2013                     | 68,652                               | 16,570  | 85,222  | 59,791                 | 30,746  | 90,537  | 146,275                         | 66,946  | 213,221 |
| 2014                     | 44,269                               | 10,537  | 54,806  | 51,459                 | 20,766  | 72,225  | 105,929                         | 39,447  | 145,376 |
| 2015                     | 7,404                                | 3,697   | 11,101  | 18,994                 | 16,408  | 35,402  | 34,297                          | 29,926  | 64,223  |
| 2016 <sup>d/</sup>       | 57,799                               | 19,690  | 77,489  | 94,259                 | 37,387  | 131,646 | 154,355                         | 57,838  | 212,193 |
| 2017 <sup>d/</sup>       | 52,466                               | 21,477  | 73,943  | 48,710                 | 26,555  | 75,265  | 124,170                         | 53,280  | 177,450 |
| 2018 <sup>d/</sup>       | NA                                   | NA      | NA      | NA                     | NA      | NA      | NA                              | NA      | NA      |
| GOAL                     |                                      |         |         | 52,000                 |         |         |                                 |         |         |

a/ Includes treaty Indian and non-Indian net commercial catches during the adult accounting period. Source: Puget Sound run reconstruction model.

b/ Includes estimated off-station returns and secondary wild stocks.

c/ Terminal run size is defined as the run to terminal marine areas; spawning escapement plus sport and commercial net catch (inriver and terminal fishery catch). Prior to 1997, estimates are Puget Sound run size, which is defined as the run available to Puget Sound net fisheries; spawning escapement plus commercial net catch (inriver, terminal, and pre-terminal Puget Sound net fishery catch), but not including fish caught in Puget Sound troll and recreational fisheries.

d/ Preliminary.

e/ 2015 Hood Canal terminal run size is defined as the run to terminal marine areas; spawning escapement plus sport and commercial net catch (inriver and terminal fishery catch). Prior to 1997, estimates are Puget Sound run size, which is defined as the run available to Puget Sound net fisheries; spawning escapement plus commercial net catch (inriver, terminal, and pre-terminal Puget Sound net fishery catch), including fish caught in Puget Sound troll and recreational fisheries.

TABLE B-43. Puget Sound commercial net fishery catches and spawning escapements in numbers of fish for hatchery and natural Puget Sound pink stocks.<sup>a/</sup> (Page 1 of 3)

| Average<br>(odd year)         | Commercial Net Catches |         |         | Spawning Escapement    |         |         | Puget Sound Run Size <sup>c/</sup> |         |         |
|-------------------------------|------------------------|---------|---------|------------------------|---------|---------|------------------------------------|---------|---------|
|                               | Hatchery <sup>b/</sup> | Natural | Total   | Hatchery <sup>b/</sup> | Natural | Total   | Hatchery <sup>b/</sup>             | Natural | Total   |
| <b>Strait of Juan de Fuca</b> |                        |         |         |                        |         |         |                                    |         |         |
| 1981-1989                     | 1                      | 507     | 507     | 9                      | 5,175   | 5,185   | 10                                 | 5,681   | 5,692   |
| 1991-1999                     | 2                      | 426     | 428     | 34                     | 6,421   | 6,455   | 36                                 | 6,847   | 6,883   |
| 2001                          | 4                      | 718     | 722     | 470                    | 80,950  | 81,420  | 474                                | 81,668  | 82,142  |
| 2003                          | 0                      | 346     | 346     | 0                      | 15,149  | 15,149  | 0                                  | 15,495  | 15,495  |
| 2005                          | 0                      | 103     | 103     | 0                      | 8,669   | 8,669   | 0                                  | 8,772   | 8,772   |
| 2007                          | 0                      | 131     | 131     | 0                      | 6,252   | 6,252   | 0                                  | 6,383   | 6,383   |
| 2009                          | 0                      | 2,684   | 2,684   | 0                      | 41,534  | 41,534  | 0                                  | 44,218  | 44,218  |
| 2011                          | 0                      | 2,013   | 2,013   | 0                      | 27,616  | 27,616  | 0                                  | 29,629  | 29,629  |
| 2013                          | 8                      | 20,597  | 20,605  | 157                    | 409,959 | 410,116 | 165                                | 430,556 | 430,721 |
| 2015                          | 0                      | 18,485  | 18,485  | 0                      | 337,724 | 337,724 | 0                                  | 356,209 | 356,209 |
| 2017                          | 1                      | 565     | 566     | 46                     | 17,755  | 17,801  | 47                                 | 18,320  | 18,367  |
| GOAL <sup>d/</sup>            | Not Agreed Upon        |         |         |                        |         |         |                                    |         |         |
| <b>Nooksack-Samish</b>        |                        |         |         |                        |         |         |                                    |         |         |
| 1981-1989                     | 40                     | 14,458  | 14,458  | 0                      | 54,201  | 54,441  | 40                                 | 68,659  | 39,499  |
| 1991-1999                     | 3                      | 9,779   | 9,782   | 89                     | 84,206  | 84,295  | 92                                 | 93,985  | 174,077 |
| 2001                          | 215                    | 14,584  | 14,799  | 3,714                  | 226,001 | 229,715 | 3,929                              | 240,585 | 244,514 |
| 2003                          | 304                    | 3,177   | 3,481   | 7,264                  | 51,012  | 58,276  | 7,568                              | 54,189  | 61,757  |
| 2005                          | 589                    | 2,095   | 2,684   | 1,791                  | 3,719   | 5,510   | 2,380                              | 5,814   | 8,194   |
| 2007                          | 15                     | 1,006   | 1,021   | 276                    | 9,302   | 9,578   | 291                                | 10,308  | 10,599  |
| 2009                          | 248                    | 6,229   | 6,477   | 2,097                  | 45,120  | 47,217  | 2,345                              | 51,349  | 53,694  |
| 2011                          | 49                     | 12,483  | 12,532  | 285                    | 53,852  | 54,137  | 334                                | 66,335  | 66,669  |
| 2013                          | 61                     | 103,864 | 103,925 | 284                    | 224,002 | 224,286 | 345                                | 327,866 | 328,211 |
| 2015                          | 25                     | 88,620  | 88,645  | 90                     | 247,358 | 247,448 | 115                                | 335,978 | 336,093 |
| 2017                          | 0                      | 11,445  | 11,445  | 0                      | 24,012  | 24,012  | 0                                  | 35,457  | 35,457  |
| GOAL <sup>d/</sup>            | 50,000                 |         |         |                        |         |         |                                    |         |         |

TABLE B-43. Puget Sound commercial net fishery catches and spawning escapements in numbers of fish for hatchery and natural Puget Sound pink stocks.<sup>a/</sup>  
(Page 2 of 3)

| Average<br>(odd-year) | Commercial Net Catches |         |         | Spawning Escapement    |                 |           | Puget Sound Run Size <sup>c/</sup> |           |           |
|-----------------------|------------------------|---------|---------|------------------------|-----------------|-----------|------------------------------------|-----------|-----------|
|                       | Hatchery <sup>b/</sup> | Natural | Total   | Hatchery <sup>b/</sup> | Natural         | Total     | Hatchery <sup>b/</sup>             | Natural   | Total     |
| <b>Skagit</b>         |                        |         |         |                        |                 |           |                                    |           |           |
| 1981-1989             | 319                    | 316,772 | 317,093 | 393                    | 455,052         | 455,445   | 711                                | 771,825   | 772,538   |
| 1991-1999             | 0                      | 247,256 | 247,256 | 0                      | 423,600         | 423,600   | 0                                  | 670,856   | 670,856   |
| 2001                  | 0                      | 305,081 | 305,081 | 0                      | 894,061         | 894,061   | 0                                  | 1,199,142 | 1,199,142 |
| 2003                  | 0                      | 309,851 | 309,851 | 0                      | 567,080         | 567,080   | 0                                  | 876,931   | 876,931   |
| 2005                  | 0                      | 25,191  | 25,191  | 0                      | 60,000          | 60,000    | 0                                  | 85,191    | 85,191    |
| 2007                  | 0                      | 14,723  | 14,723  | 0                      | 300,000         | 300,000   | 0                                  | 314,723   | 314,723   |
| 2009                  | 0                      | 478,121 | 478,121 | 0                      | 1,160,000       | 1,160,000 | 0                                  | 1,638,121 | 1,638,121 |
| 2011                  | 0                      | 470,769 | 470,769 | 0                      | 560,000         | 560,000   | 0                                  | 1,030,769 | 1,030,769 |
| 2013                  | 0                      | 720,639 | 720,639 | 0                      | 900,000         | 900,000   | 0                                  | 1,620,639 | 1,620,639 |
| 2015                  | 0                      | 121,662 | 121,662 | 0                      | 290,000         | 290,000   | 0                                  | 411,662   | 411,662   |
| 2017                  | 0                      | 6,816   | 6,816   | 0                      | 110,000         | 110,000   | 0                                  | 116,816   | 116,816   |
| GOAL <sup>d/</sup>    |                        |         |         |                        | 330,000         |           |                                    |           |           |
| <b>Hood Canal</b>     |                        |         |         |                        |                 |           |                                    |           |           |
| 1981-1989             | 2,252                  | 9,729   | 11,981  | 2,814                  | 43,809          | 46,623    | 5,066                              | 53,538    | 58,604    |
| 1991-1999             | 1,243                  | 4,075   | 5,318   | 13,719                 | 41,287          | 55,005    | 14,962                             | 45,362    | 60,324    |
| 2001                  | 4,401                  | 5,956   | 10,357  | 71,539                 | 98,338          | 169,877   | 75,940                             | 104,294   | 180,234   |
| 2003                  | 2,060                  | 3,272   | 5,332   | 25,217                 | 37,531          | 62,748    | 27,277                             | 40,803    | 68,080    |
| 2005                  | 401                    | 691     | 1,092   | 14,107                 | 17,481          | 31,588    | 14,508                             | 18,172    | 32,680    |
| 2007                  | 261                    | 1,722   | 1,983   | 4,406                  | 29,001          | 33,407    | 4,667                              | 30,723    | 35,390    |
| 2009                  | 3,552                  | 893     | 4,445   | 22,455                 | 11,093          | 33,548    | 26,007                             | 11,986    | 37,993    |
| 2011                  | 5,441                  | 1,375   | 6,816   | 17,792                 | 15,122          | 32,914    | 23,233                             | 16,497    | 39,730    |
| 2013                  | 2,159                  | 12,379  | 14,538  | 4,904                  | 195,601         | 200,505   | 7,063                              | 207,980   | 215,043   |
| 2015                  | 650                    | 43,983  | 44,633  | 5,948                  | 595,679         | 601,627   | 6,598                              | 639,662   | 646,260   |
| 2017                  | 957                    | 2,387   | 3,397   | 2,544                  | 32,988          | 35,532    | 3,554                              | 35,375    | 38,929    |
| GOAL <sup>d/</sup>    |                        |         |         |                        | Not Agreed Upon |           |                                    |           |           |

TABLE B-43. Puget Sound commercial net fishery catches and spawning escapements in numbers of fish for hatchery and natural Puget Sound pink stocks.<sup>a/</sup>  
(Page 3 of 3)

| Average<br>(odd-year)              | Commercial Net Catches |           |           | Spawning Escapement    |           |           | Puget Sound Run Size <sup>c/</sup> |           |           |
|------------------------------------|------------------------|-----------|-----------|------------------------|-----------|-----------|------------------------------------|-----------|-----------|
|                                    | Hatchery <sup>b/</sup> | Natural   | Total     | Hatchery <sup>b/</sup> | Natural   | Total     | Hatchery <sup>b/</sup>             | Natural   | Total     |
| <b>Stillaguamish-Snohomish</b>     |                        |           |           |                        |           |           |                                    |           |           |
| 1981-1989                          | 76                     | 154,539   | 154,615   | 201                    | 271,328   | 271,529   | 276                                | 425,867   | 426,144   |
| 1991-1999                          | 39                     | 71,055    | 71,094    | 122                    | 286,650   | 286,772   | 160                                | 357,706   | 357,866   |
| 2001                               | 0                      | 199,908   | 199,908   | 0                      | 1,847,648 | 1,847,648 | 0                                  | 2,047,556 | 2,047,556 |
| 2003                               | 0                      | 288,985   | 288,985   | 0                      | 1,577,001 | 1,577,001 | 0                                  | 1,865,986 | 1,865,986 |
| 2005                               | 0                      | 66,615    | 66,615    | 0                      | 600,124   | 600,124   | 0                                  | 666,739   | 666,739   |
| 2007                               | 0                      | 132,876   | 132,876   | 0                      | 1,383,591 | 1,383,591 | 0                                  | 1,516,467 | 1,516,467 |
| 2009                               | 0                      | 849,860   | 849,860   | 0                      | 2,882,373 | 2,882,373 | 0                                  | 3,732,233 | 3,732,233 |
| 2011                               | 0                      | 627,735   | 627,735   | 0                      | 612,903   | 612,903   | 0                                  | 1,240,638 | 1,240,638 |
| 2013                               | 0                      | 1,281,642 | 1,281,642 | 0                      | 2,153,569 | 2,153,569 | 0                                  | 3,435,211 | 3,435,211 |
| 2015                               | 0                      | 212,357   | 212,357   | 0                      | 480,674   | 480,674   | 0                                  | 693,031   | 693,031   |
| 2017                               | 0                      | 15,088    | 15,088    | 0                      | 78,953    | 78,953    | 0                                  | 94,041    | 94,041    |
| GOAL <sup>d/</sup> - Stillaguamish |                        |           |           |                        | 155,000   |           |                                    |           |           |
| GOAL <sup>d/</sup> - Snohomish     |                        |           |           |                        | 120,000   |           |                                    |           |           |
| <b>South Puget Sound</b>           |                        |           |           |                        |           |           |                                    |           |           |
| 1981-1989                          | 651                    | 17,149    | 17,800    | 282                    | 32,803    | 33,085    | 933                                | 49,952    | 50,885    |
| 1991-1999 <sup>e/</sup>            | 88                     | 3,847     | 3,935     | 90                     | 10,483    | 10,573    | 178                                | 14,330    | 14,508    |
| 2001 <sup>e/f/</sup>               | 0                      | 3,128     | 3,128     | 0                      | 26,692    | 26,692    | 0                                  | 29,820    | 29,820    |
| 2003 <sup>e/f/</sup>               | 0                      | 30,795    | 30,795    | 0                      | 391,702   | 391,702   | 0                                  | 422,497   | 422,497   |
| 2005 <sup>e/f/</sup>               | 0                      | 55,263    | 55,263    | 0                      | 1,087,906 | 1,087,906 | 0                                  | 1,143,169 | 1,143,169 |
| 2007 <sup>e/f/</sup>               | 0                      | 84,180    | 84,180    | 0                      | 1,218,896 | 1,218,896 | 0                                  | 1,303,076 | 1,303,076 |
| 2009 <sup>e/f/</sup>               | 0                      | 695,324   | 695,324   | 0                      | 4,091,283 | 4,091,283 | 0                                  | 4,786,607 | 4,786,607 |
| 2011 <sup>f/</sup>                 | 0                      | 500,308   | 500,308   | 0                      | 2,422,575 | 2,422,575 | 0                                  | 2,922,883 | 2,922,883 |
| 2013 <sup>f/</sup>                 | 40                     | 546,139   | 546,179   | 6                      | 2,172,795 | 2,172,801 | 46                                 | 2,718,934 | 2,718,980 |
| 2015 <sup>f/</sup>                 | 66                     | 285,504   | 285,570   | 115                    | 941,673   | 941,788   | 181                                | 1,227,177 | 1,227,358 |
| 2017 <sup>f/</sup>                 | 0                      | 31,293    | 31,293    | 2                      | 175,952   | 175,954   | 2                                  | 207,245   | 207,247   |
| GOAL <sup>d/</sup>                 |                        |           |           |                        | 25,000    |           |                                    |           |           |

a/ Includes treaty Indian and non-Indian net commercial catches during the adult accounting period. Source: Puget Sound run reconstruction model.

b/ Includes estimated off-station returns.

c/ Puget Sound run size is defined as the run available to Puget Sound fisheries; spawning escapement plus Puget Sound fishery catch. Includes fish caught by treaty net fisheries and non-Indian commercial and recreational fisheries inside Puget Sound.

d/ State-Tribal comanager goal; the only Council goal is for a total Puget Sound pink salmon spawning escapement of 900,000 natural spawners.

e/ Nisqually escapement estimate incomplete.

f/ Green river returns included in run reconstruction.

TABLE B-44. Puget Sound spring Chinook spawning escapement estimates in numbers of adult fish.

| Year or Average    | Stock                  |         |                        |                       |                   |                        |                        |
|--------------------|------------------------|---------|------------------------|-----------------------|-------------------|------------------------|------------------------|
|                    | Skagit                 |         | NF Nooksack            |                       | SF Nooksack       | White River            | Quilcene               |
|                    | Hatchery <sup>a/</sup> | Natural | Hatchery <sup>a/</sup> | Natural <sup>b/</sup> | Hatchery/ Natural | Hatchery <sup>c/</sup> | Hatchery <sup>d/</sup> |
| 1981-1985          | 49                     | 1,408   | 0                      | 152                   | 317               | 70                     | 149                    |
| 1986-1990          | 161                    | 1,826   | 0                      | 235                   | 280               | 408                    | 125                    |
| 1991-1995          | 815                    | 907     | 770                    | 266                   | 222               | 1,065                  | 19                     |
| 1996-2000          | 1,448                  | 934     | 2,011                  | 717                   | 240               | 2,009                  | 7                      |
| 2001-2005          | 2,028                  | 1,317   | 4,226                  | 2,510                 | 403               | 2,763                  | 0                      |
| 2006               | 1,487                  | 1,896   | 732                    | 1,184                 | 515               | 3,864                  | 0                      |
| 2007               | 1,931                  | 613     | 665                    | 1,438                 | 323               | 8,006                  | 0                      |
| 2008               | 1,462                  | 1,470   | 1,194                  | 1,266                 | 443               | 3,585                  | 0                      |
| 2009               | 900                    | 978     | 812                    | 1,903                 | 453               | 2,342                  | 0                      |
| 2010               | 1,371                  | 1,361   | 1,279                  | 2,048                 | 548               | 2,070                  | 0                      |
| 2011               | 1,301                  | 825     | 1,404                  | 865                   | 470               | 3,155                  | 0                      |
| 2012               | 1,579                  | 2,774   | 1,215                  | 758                   | 508               | 3,812                  | 0                      |
| 2013               | 1,256                  | 2,010   | 2,297                  | 1,346                 | 243               | 6,540                  | 0                      |
| 2014               | 1,109                  | 1,608   | 1,998                  | 1,398                 | 208               | 2,131                  | 0                      |
| 2015 <sup>e/</sup> | 1,836                  | 1,409   | 2,994                  | 1,717                 | 135               | 2,893                  | 0                      |
| 2016 <sup>e/</sup> | 2,441                  | 2,445   | 1,806                  | 922                   | 958               | 6,586                  | 0                      |
| 2017 <sup>e/</sup> | 3,325                  | 2,851   | 2,301                  | NA                    | NA                | 9,993                  | 0                      |
| 2018 <sup>e/</sup> | 2,333                  | 2,376   | 1,778                  | NA                    | NA                | 6,528                  | 0                      |
| GOAL               |                        | 2,000   |                        |                       |                   |                        |                        |

a/ Hatchery escapement estimates include all rack returns (retained and released).

b/ Natural escapement estimates based on carcass counts expanded by a 3.48 multiplier developed from 5 years of redd count-based estimates. Most natural spawners are hatchery fish spawning in the wild.

c/ Estimate includes adult returns to Hupp Springs, White R. Hatchery, and Buckley Trap. Data from 1999 - 2017 were updated using new "agreed-to" methodology for estimating unsampled portions of Spring Chinook back to Buckley Trap with Fall/Unknown origin fish removed from the estimate.

d/ Program has been discontinued.

e/ Preliminary.

**APPENDIX C  
HISTORICAL RECORD OF OCEAN SALMON FISHERY  
REGULATIONS AND A CHRONOLOGY OF 2018 EVENTS**

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TABLE C-1. Summary of actual California commercial salmon seasons in state and federal (EEZ) waters.<sup>a/</sup> (Page 1 of 3)

| Year | Area                                 | Seasons                    |               | Number of Days             |               | Minimum Size Limit (in.) |      | Other Restrictions   |
|------|--------------------------------------|----------------------------|---------------|----------------------------|---------------|--------------------------|------|--|
|      |                                      | All-Salmon-<br>Except-Coho | All<br>Salmon | All-Salmon-<br>Except-Coho | All<br>Salmon | Chinook                  | Coho |  |
| 2013 | OR/CA Border to Humboldt South Jetty | May 1-10                   | -             | 10                         | -             | 27                       | -    | 3,000 Chinook quota; 20 Chinook per vessel per day landing limit.  |
|      |                                      | June 1-9, 11               | -             | 10                         | -             | 27                       | -    | 3,352 Chinook quota; 20 Chinook per vessel per day landing limit.  |
|      |                                      | July 15-21                 | -             | 7                          | -             | 27                       | -    | 2,547 Chinook quota; 20 Chinook per vessel per day landing limit.  |
|      |                                      | Aug. 1-3                   | -             | 3                          | -             | 27                       | -    | 1,692 Chinook quota; 20 Chinook per vessel per day landing limit.  |
|      |                                      | Sept. 16-30                | -             | 15                         | -             | 27                       | -    | 6,000 Chinook quota; 20 Chinook per vessel per day landing limit.  |
|      | Horse Mt. to Pt. Arena               | May 22-31                  | -             | 10                         | -             | 27                       | -    | All fish caught in the area must be landed south of Horse Mt. whenever KMZ quota fishery is open during May through Sept. All fish caught in the area must be landed north of Pt. Arena during Sept. |
|      |                                      | June 1-8, 21-30            | -             | 18                         | -             | 27                       | -    |  |
|      |                                      | July 15-Aug. 29            | -             | 46                         | -             | 27                       | -    |  |
|      |                                      | Sept. 1-30                 | -             | 30                         | -             | 27                       | -    |  |
|      | Pt. Arena to U.S./Mexico Border      | May 1-31                   | -             | 31                         | -             | 27                       | -    | All fish caught in the area must be landed south of Pt. Arena during Sept.   |
|      |                                      | June 1-8, 21-30            | -             | 18                         | -             | 27                       | -    |  |
|      |                                      | July 15-Aug. 29            | -             | 46                         | -             | 27                       | -    |  |
|      |                                      | Sept. 1-30                 | -             | 30                         | -             | 26                       | -    |  |
|      | Pt. Reyes to Pt. San Pedro           | Oct. 1-4, 7-11, 14-15      | -             | 11                         | -             | 26                       | -    | All fish must be landed between Pt. Arena and Pigeon Pt. during Oct.   |
| 2014 | OR/CA Border to Humboldt South Jetty | Sept. 12-16, 19-23, 26-30  | -             | 15                         | -             | 27                       | -    | 4,000 Chinook quota; 20 Chinook per vessel per day landing limit through Sept. 16, 30 Chinook thereafter.  |
|      | Horse Mt. to Pt. Arena               | June 19-30                 | -             | 12                         | -             | 27                       | -    | All fish caught in the area must be landed north of Pt. Arena during Sept. When the KMZ fishery is open, all fish must be landed south of Horse Mt.  |
|      |                                      | July 15-Aug. 29            | -             | 46                         | -             | 27                       | -    |  |
|      |                                      | Sept. 1-30                 | -             | 30                         | -             | 27                       | -    |  |
|      | Pt. Arena to Pigeon Pt.              | May 1-June 30              | -             | 61                         | -             | 27                       | -    | All fish caught in the area must be landed south of Pt. Arena during Sept.   |
|      |                                      | July 15-Aug. 29            | -             | 46                         | -             | 27                       | -    |  |
|      |                                      | Sept. 1-30                 | -             | 30                         | -             | 26                       | -    |  |
|      | Pt. Reyes to Pt. San Pedro           | Oct. 1-3, 6-10, 13-15      | -             | 11                         | -             | 26                       | -    | All fish must be landed between Pt. Arena and Pigeon Pt. during Oct.   |
|      | Pigeon Pt. to U.S./Mexico Border     | May 1-June 30              | -             | 61                         | -             | 27                       | -    |  |
|      |                                      | July 15-Aug. 13            | -             | 30                         | -             | 27                       | -    |  |

TABLE C-1. Summary of actual California commercial salmon seasons in state and Federal (EEZ) waters.<sup>a/</sup> (Page 2 of 3)

| Year      | Area                                 | Seasons                    |               | Number of Days             |               | Minimum Size Limit (in.) |      | Other Restrictions  |
|-----------|--------------------------------------|----------------------------|---------------|----------------------------|---------------|--------------------------|------|---|
|           |                                      | All-Salmon-<br>Except-Coho | All<br>Salmon | All-Salmon-<br>Except-Coho | All<br>Salmon | Chinook                  | Coho |   |
| 2015      | OR/CA Border to Humboldt South Jetty | Sept. 11-15, 18-30         | -             | 18                         | -             | 28                       | -    | 3,000 Chinook quota; 20 Chinook per vessel per day landing limit.   |
|           | Horse Mt. to Pt. Arena               | May 1-31                   | -             | 31                         | -             | 27                       | -    | All fish caught in the area must be landed north of Pt. Arena during Sept. When the KMZ fishery is open, all fish must be landed south of Horse Mt. |
|           |                                      | June 15-30                 | -             | 16                         | -             | 27                       | -    |   |
|           |                                      | July 12-Aug. 26            | -             | 46                         | -             | 27                       | -    |   |
|           |                                      | Sept. 1-30                 | -             | 30                         | -             | 27                       | -    |   |
|           | Pt. Arena to Pigeon Pt.              | May 1-31                   | -             | 31                         | -             | 27                       | -    | All fish caught in the area must be landed south of Pt. Arena during Sept.  |
|           |                                      | June 7-30                  | -             | 24                         | -             | 27                       | -    |   |
|           |                                      | July 8-Aug. 29             | -             | 53                         | -             | 27                       | -    |   |
|           |                                      | Sept. 1-30                 | -             | 30                         | -             | 26                       | -    |   |
|           | Pt. Reyes to Pt. San Pedro           | Oct. 1-2, 5-9, 12-15       | -             | 11                         | -             | 26                       | -    | All fish must be landed between Pt. Arena and Pigeon Pt. during Oct.  |
|           | Pigeon Pt. to Pt. Sur                | May 1-31                   | -             | 31                         | -             | 27                       | -    |   |
|           |                                      | June 7-30                  | -             | 24                         | -             | 27                       | -    |   |
|           |                                      | July 8-Aug. 15             | -             | 39                         | -             | 27                       | -    |   |
|           | Pt. Sur to U.S./Mexico Border        | May 1-31                   | -             | 31                         | -             | 27                       | -    |   |
| June 7-30 |                                      | -                          | 24            | -                          | 27            | -                        |      |   |
| July 8-31 |                                      | -                          | 24            | -                          | 27            | -                        |      |   |
| 2016      | OR/CA Border to Humboldt South Jetty | Sept. 9-13, 16-20, 23-27   | -             | 15                         | -             | 28                       | -    | 1,000 Chinook quota; 20 Chinook per vessel per day landing limit.   |
|           | Horse Mt. to Pt. Arena               | June 13-30                 | -             | 18                         | -             | 27                       | -    | All fish caught in the area must be landed north of Pt. Arena during Sept. When the KMZ fishery is open, all fish must be landed south of Horse Mt. |
|           |                                      | Aug. 3-27                  | -             | 25                         | -             | 27                       | -    |   |
|           |                                      | Sept. 1-30                 | -             | 30                         | -             | 27                       | -    |   |
|           | Pt. Arena to Pigeon Pt.              | May 6-31                   | -             | 26                         | -             | 27                       | -    | All fish caught in the area must be landed south of Pt. Arena during Sept.  |
|           |                                      | June 13-30                 | -             | 18                         | -             | 27                       | -    |   |
|           |                                      | Aug. 3-28                  | -             | 26                         | -             | 27                       | -    |   |
|           |                                      | Sept. 1-30                 | -             | 30                         | -             | 26                       | -    |   |
|           | Pt. Reyes to Pt. San Pedro           | Oct. 3-7, 10-14            | -             | 10                         | -             | 26                       | -    | All fish must be landed between Pt. Arena and Pigeon Pt. during Oct.  |
|           | Pigeon Pt. to U.S./Mexico Border     | May 1-June 30              | -             | 61                         | -             | 27                       | -    |   |

TABLE C-1. Summary of actual California commercial salmon seasons in state and Federal (EEZ) waters.<sup>a/</sup> (Page 3 of 3)

| Year                             | Area  | Seasons                              |            | Number of Days         |            | Minimum Size Limit (in.) |  | Other Restrictions   |   |
|----------------------------------|---|--------------------------------------|------------|------------------------|------------|--------------------------|--|--|---|
|                                  |   | All-Salmon-Except-Coho               | All Salmon | All-Salmon-Except-Coho | All Salmon | Chinook                  | Coho   |  |   |
| <b>2017</b>                      | OR/CA Border to Humboldt South Jetty  | Closed                               | -          | -                      | -          | -                        | -  |  |   |
|                                  | Horse Mt. to Pt. Arena  | Sept. 1-5, 8-12, 15-19, 22-26, 29-30 | -          | 22                     | -          | 27                       | -  | 3,000 Chinook quota; 60 Chinook per vessel per open period landing limit. All fish caught in the area must be landed between the OR/CA border and Pt. Arena.   |   |
|                                  | Pt. Arena to Pigeon Pt.   | Aug. 1-29                            | -          | 29                     | -          | 27                       | -  | All fish caught in the area must be landed south of Pt. Arena during Sept., unless the Fort Bragg commercial quota has been met and that fishery has closed for at least 24 hours.   |   |
|                                  |   | Sept. 1-30                           | -          | 30                     | -          | 26                       | -  |  |   |
|                                  | Pt. Reyes to Pt. San Pedro  | Oct. 2-6, 9-13                       | -          | 10                     | -          | 26                       | -  | All fish must be landed between Pt. Arena and Pigeon Pt. during Oct.   |   |
| Pigeon Pt. to U.S./Mexico Border | May 1-June 30   | -                                    | 61         | -                      | 27         | -                        |  |  |   |
| <b>2018<sup>b/</sup></b>         | OR/CA Border to Humboldt South Jetty (California Klamath Management Zone, CA KMZ) | May 1-29,                            | -          | 21                     | -          | 26                       | -  | Open 5 days per week (Fri.-Tue.). Chinook quotas: 3,600 in May, 6,650 in June, 6,612 in July, and 9,423 in Aug. Chinook landing and possession limits per vessel per day: 20 during May 1- July 19, 40 July 20-31, and 50 in Aug. Landing criteria in place for all salmon caught in this area through-out the season. |   |
|                                  |   | June 1-July 31,                      | -          | 45                     | -          | 26                       | -  |  |   |
|                                  |   | Aug. 3-31                            | -          | 21                     | -          | 26                       | -  |  |   |
|                                  | Horse Mt. to Pt. Arena  | July 26-31,                          | -          | 6                      | -          | 26                       | -  |  | Landing criteria in place for all salmon caught in this area through-out the season.                                  |
|                                  |   | Aug. 3-29,                           | -          | 27                     | -          | 26                       | -  |  |   |
|                                  |   | Sept. 1-30                           | -          | 30                     | -          | 26                       | -  |  |   |
|                                  | Pt. Arena to Pigeon Pt.   | July 26-31,                          | -          | 6                      | -          | 26                       | -  |  | Landing criteria in place for all salmon caught in this area through-out the season.                                  |
|                                  |   | Aug. 3-29,                           | -          | 27                     | -          | 26                       | -  |  |   |
|                                  |   | Sept. 1-30                           | -          | 30                     | -          | 26                       | -  |  |   |
|                                  | Pt. Reyes to Pt. San Pedro  | Oct. 1-5, 8-12                       | -          | 10                     | -          | 26                       | -  |  | Open 5 days per week (Mon.-Fri.). All salmon caught in this area must be landed between Point Arena and Pigeon Point. |
| Pigeon Pt. to U.S./Mexico Border | May 1-7,  | -                                    | 7          | -                      | 26         | -                        | Landing criteria in place for all salmon caught in this area through-out the season. |  |   |
|                                  | June 19-30  | -                                    | 12         | -                      | 26         | -                        |  |  |   |

a/ For earlier years, see Review of 2013 Ocean Salmon Fisheries, Appendix C, Table C-1.

b/ For detailed regulations and inseason adjustments, see Tables I-1 and C-9.

TABLE C-2. Summary of actual California recreational ocean salmon regulations <sup>a/</sup> (Page 1 of 2)

| Year                             | Area                             | Season         | Days | Bag Limit | Minimum Size Limit (in.) |  | Other Restrictions                           |
|----------------------------------|----------------------------------|----------------|------|-----------|--------------------------|--|--|
|                                  |                                  |                |      |           | Chinook                  | Coho   |  |
| <b>2011</b>                      | OR/CA Border to Horse Mt.        | May 14-Sept. 5 | 115  | 2         | 24                       | -  |  |
|                                  | Horse Mt. to Pigeon Pt.          | Apr. 2-Oct. 30 | 212  | 2         | 24                       | -  |  |
|                                  | Pigeon Pt. to U.S./Mexico Border | Apr. 2-Sept.18 | 170  | 2         | 24                       | -  |  |
| <b>2012</b>                      | OR/CA Border to Horse Mt.        | May 1-Sept. 9  | 132  | 2         | 20                       | -  |  |
|                                  | Horse Mt. to Pt. Arena           | Apr. 7-Nov. 11 | 219  | 2         | 20                       | -  |  |
|                                  | Pt. Arena to Pigeon Pt.          | Apr. 7-July 5  | 90   | 2         | 24                       | -  |  |
|                                  |                                  | July 6-Nov. 11 | 129  | 2         | 20                       | -  |  |
|                                  | Pigeon Pt. to U.S./Mexico Border | Apr. 7-July 5  | 90   | 2         | 24                       | -  |  |
| July 6-Oct. 7                    |                                  | 94             | 2    | 20        | -                        |  |  |
| <b>2013</b>                      | OR/CA Border to Horse Mt.        | May 1-Sept. 8  | 131  | 2         | 20                       | -  |  |
|                                  | Horse Mt. to Pt. Arena           | Apr. 6-Nov. 10 | 219  | 2         | 20                       | -  |  |
|                                  | Pt. Arena to Pigeon Pt.          | Apr. 6-July 31 | 105  | 2         | 24                       | -  | Closed Monday-Tuesday June 1 through July 9. |
|                                  |                                  | Aug. 1-Nov. 10 | 102  | 2         | 20                       | -  |  |
| Pigeon Pt. to U.S./Mexico Border | Apr. 6-Oct. 6                    | 172            | 2    | 24        | -                        | Closed Monday-Tuesday June 1 through July 9. |  |
| <b>2014</b>                      | OR/CA Border to Horse Mt.        | May 10-Sept. 7 | 121  | 2         | 24                       | -  |  |
|                                  | Horse Mt. to Pt. Arena           | Apr. 5-Nov. 9  | 219  | 2         | 20                       | -  |  |
|                                  | Pt. Arena to Pigeon Pt.          | Apr. 5-June 30 | 87   | 2         | 24                       | -  |  |
|                                  |                                  | July 1-Nov. 9  | 132  | 2         | 20                       | -  |  |
|                                  | Pigeon Pt. to U.S./Mexico Border | Apr. 5-Oct. 5  | 184  | 2         | 24                       | -  |  |
| <b>2015</b>                      | OR/CA Border to Horse Mt.        | May 1-Sept. 7  | 130  | 2         | 20                       | -  |  |
|                                  | Horse Mt. to Pt. Arena           | Apr. 4-Nov. 8  | 219  | 2         | 20                       | -  |  |
|                                  | Pt. Arena to Pigeon Pt.          | Apr. 4-30      | 27   | 2         | 24                       | -  |  |
|                                  |                                  | May 1-Oct. 31  | 184  | 2         | 20                       | -  |  |
|                                  |                                  | Apr. 4-May 31  | 58   | 2         | 24                       | -  |  |
|                                  | Pigeon Pt. to Pt. Sur            | June 1-Sept. 7 | 99   | 2         | 20                       | -  |  |
|                                  |                                  | Apr. 4-May 31  | 58   | 2         | 24                       | -  |  |
|                                  | Pt. Sur to U.S./Mexico Border    | June 1-July 19 | 49   | 2         | 20                       | -  |  |

TABLE C-2. Summary of actual California recreational ocean salmon regulations.<sup>a/</sup> (Page 2 of 2)

| Year                          | Area                             | Season          | Days | Bag Limit | Minimum Size Limit (in.) |      | Other Restrictions |
|-------------------------------|----------------------------------|-----------------|------|-----------|--------------------------|------|--------------------|
|                               |                                  |                 |      |           | Chinook                  | Coho |                    |
| <b>2016</b>                   | OR/CA Border to Horse Mt.        | May 16-31       | 16   | 2         | 20                       | -    |                    |
|                               |                                  | June 16-30      | 15   | 2         | 20                       | -    |                    |
|                               |                                  | July 16-Aug. 16 | 32   | 2         | 20                       | -    |                    |
|                               |                                  | Sept. 1-5       | 5    | 2         | 20                       | -    |                    |
|                               | Horse Mt. to Pt. Arena           | Apr. 2-Nov. 13  | 226  | 2         | 20                       | -    |                    |
|                               | Pt. Arena to Pigeon Pt.          | Apr. 2-30       | 29   | 2         | 24                       | -    |                    |
|                               |                                  | May 1-Oct. 31   | 184  | 2         | 20                       | -    |                    |
|                               | Pigeon Pt. to Pt. Sur            | Apr. 2-July 15  | 105  | 2         | 24                       | -    |                    |
| Pt. Sur to U.S./Mexico Border | Apr. 2-May 31                    | 60              | 2    | 24        | -                        |      |                    |
| <b>2017</b>                   | OR/CA Border to Horse Mt.        | Closed          | -    | -         | -                        | -    |                    |
|                               | Horse Mt. to Pt. Arena           | Apr. 1-May 31   | 61   | 2         | 20                       | -    |                    |
|                               |                                  | Aug. 15-Nov. 12 | 90   | 2         | 20                       | -    |                    |
|                               | Pt. Arena to Pigeon Pt.          | Apr. 1-30       | 30   | 2         | 24                       | -    |                    |
|                               |                                  | May 15-Oct. 31  | 170  | 2         | 20                       | -    |                    |
|                               | Pigeon Pt. to Pt. Sur            | Apr. 1-July 15  | 106  | 2         | 24                       | -    |                    |
|                               | Pt. Sur to U.S./Mexico Border    | Apr. 1-May 31   | 61   | 2         | 24                       | -    |                    |
| <b>2018<sup>b/</sup></b>      | OR/CA Border to Horse Mt.        | June 1- Sept. 3 | 95   | 2         | 20                       | -    |                    |
|                               | Horse Mt. to Pt. Arena           | June 17-Oct. 31 | 137  | 2         | 20                       | -    |                    |
|                               | Pt. Arena to Pigeon Pt.          | June 17-Oct. 31 | 137  | 2         | 20                       | -    |                    |
|                               | Pigeon Pt. to U.S./Mexico Border | Apr. 7-July 2   | 87   | 2         | 24                       | -    |                    |

a/ For earlier years, see Review of 2013 Ocean Salmon Fisheries, Appendix C, Table C-2.

b/ For detailed regulations and inseason adjustments, see Tables I-3 and C-9.

TABLE C-3. Summary of actual Oregon commercial salmon seasons in state and federal (EEZ) waters.<sup>a/</sup> (Page 1 of 6)

| Year | Area   | Seasons                           |  | Number of Days         |            | Minimum Size Limit (in.) |      | Other Restrictions   |
|------|--|-----------------------------------|--|------------------------|------------|--------------------------|------|--|
|      |  | All-Salmon-Except-Coho            | All Salmon                                   | All-Salmon-Except-Coho | All Salmon | Chinook                  | Coho |  |
| 2013 | WA/OR Border to Cape Falcon                                | May 1-June 30                     | -  | -                      | 61         | 28                       | -    | Seven days per week, no landing limits.  |
|      |  | -                                 | July 1-9                                     | -                      | 9          | 28                       | 16   | 50 Chinook and 40 marked coho per vessel per open period.  |
|      |  | -                                 | July 12-16, July 19-23, July 26-30, Aug. 2-6 | -                      | 20         | 28                       | 16   | 100 Chinook and 40 marked coho per vessel per open period.   |
|      |  | -                                 | Aug. 9-13, Aug. 16-20                        | -                      | 10         | 28                       | 16   | 150 Chinook and 80 marked coho per vessel per open period  |
|      |  | -                                 | Aug. 30-Sept. 3                              | -                      | 5          | 28                       | 16   | 35 Chinook and 40 marked coho per vessel per open period.  |
|      | Cape Falcon to Humbug Mt.                                  | -                                 | Sept. 6-10, Sept. 13-17                      | -                      | 10         | 28                       | 16   | 75 Chinook and 50 marked coho per vessel per open period.  |
|      |  | Apr. 1-Aug. 29<br>Sept. 4-Oct. 31 | -  | -                      | 151<br>58  | 28<br>28                 | -    | 100 Chinook per vessel per landing week (Wed.-Tues.).  |
|      | Cape Blanco to Humbug Mt. (Elk River Area)                 | Nov. 1-30                         | -  | -                      | 30         | 26                       | -    | Inside of a line from Cape Blanco to Black Rock to Best Rock to 42°40'30" N Lat. 124°29'00" W Long. to Humbug Mt. 20 Chinook per day vessel limit. Landings restricted to Port Orford. |
|      | Humbug Mt. to OR/CA Border                                 | Apr. 1 - May 31                   | -  | -                      | 61         | 28                       | -    | Landings restricted to the State of Oregon.  |
|      |  | June 1-30                         | -  | -                      | 30         | 28                       | -    | 4,000 quota; 30 Chinook per day vessel limit.  |
|      |  | July 1-31                         | -  | -                      | 31         | 28                       | -    | 4,782 quota; 30 Chinook per day vessel limit.  |
|      |  | Aug. 1-29                         | -  | -                      | 29         | 28                       | -    | 2,714 quota; 30 Chinook per day vessel limit.  |
|      |  | Sept. 16-27                       | -  | -                      | 12         | 28                       | -    | 1,000 quota; 20 Chinook per day vessel limit. June - Sept.:Landings restricted to the area or Port Orford with mandatory phone or email trip reports thereafter.                       |
|      | Twin Rocks to OR/CA Border Inside 3 nm (Chetco River Area) | Oct. 13-31                        | -  | -                      | 19         | 28                       | -    | 750 Chinook quota; 20 Chinook per day per vessel landing limit; landings restricted to Brookings; mandatory phone or email trip reports.   |

TABLE C-3. Summary of actual Oregon commercial salmon seasons in state and Federal (EEZ) waters.<sup>a/</sup> (Page 2 of 6)

| Year | Area   | Seasons                                    |                           |                         | Number of Days | Minimum Size Limit (in.) |      | Other Restrictions   |  |
|------|--|--|---------------------------|-------------------------|----------------|--------------------------|------|--|--|
|      |  | All-Salmon-Except-Coho                     | All Salmon                | All-Salmon-Except-Chin. |                | Chinook                  | Coho |  |  |
| 2014 | WA/OR Border to Cape Falcon                                | May 1-20                                   | -                         | -                       | 20             | 28                       | -    | Seven days per week, no landing limits.  |  |
|      |  | May 23-27                                  | -                         | -                       | 5              | 28                       | -    | 60 Chinook per vessel per open period.   |  |
|      |  | May 30-June 3                              | -                         | -                       | 5              | 28                       | -    | 50 Chinook per vessel per open period.   |  |
|      |  | June 6-10                                  | -                         | -                       | 5              | 28                       | -    | 40 Chinook per vessel per open period.   |  |
|      |  | June 13-17, 20-24, 27-30                   | -                         | -                       | 14             | 28                       | -    | 20 Chinook per vessel per open period.   |  |
|      |  |  | July 1-8                  | -                       | -              | 8                        | 28   | 16   | 60 Chinook and 60 marked coho per vessel per open period.  |
|      |  |  | July 11-15, 18-22, 25-29  | -                       | -              | 15                       | 28   | 16   | 35 Chinook and 60 marked coho per vessel per open period.  |
|      |  |  | Aug. 1-5                  | -                       | -              | 5                        | 28   | 16   | 50 Chinook and 80 marked coho per vessel per open period.  |
|      |  |  | Aug. 8-12, 15-19          | -                       | -              | 10                       | 28   | 16   | 75 Chinook and 150 marked coho per vessel per open period.   |
|      |  |  | Aug. 22-26                | -                       | -              | 5                        | 28   | 16   | 35 Chinook and 150 marked coho per vessel per open period.   |
|      |  | Aug. 29-Sept. 2                            | -                         | -                       | 5              | 28                       | 16   | 20 Chinook and 150 marked coho per vessel per open period.   |  |
|      |  | Sept. 5-9                                  | -                         | -                       | 5              | 28                       | 16   | 15 Chinook and 100 coho (non-mark-selective) per vessel per open period.   |  |
|      |  | Sept. 12-16                                | -                         | -                       | 5              | 28                       | 16   | 15 Chinook and 200 coho (non-mark-selective) per vessel per open period.   |  |
|      |  | Cape Falcon to Humbug Mt.                  | Apr. 1-July 31, Aug. 6-29 | -                       | -              | 146                      | 28   | -  | Non-mark-selective coho quota of 6,300. 65 Chinook and one coho for each Chinook landed up to 20 coho per vessel per landing week (Wed.-Tues.).  |
|      |  |  |                           | Sept. 3-30              | -              | -                        | 28   | 28   |  |
|      |  |  | Oct. 1-31                 | -                       | -              | 31                       | 28   | -  | 65 Chinook per vessel per landing week (Wed.-Tues.)  |
|      |  | Cape Blanco to Humbug Mt. (Elk River Area) | Nov. 1-30                 | -                       | -              | 30                       | 26   | -  | Inside of a line from Cape Blanco to Black Rock to Best Rock to 42°40'30" N Lat. 124°29'00" W Long. to Humbug Mt. 20 Chinook per day vessel limit. Landings restricted to Port Orford. |
|      |  | Humbug Mt. to OR/CA Border                 | Apr. 1-May 31             | -                       | -              | 61                       | 28   | -  | Landings restricted to the State of Oregon.  |
|      |  |  | June 15-18                | -                       | -              | 4                        | 28   | -  | 1,500 quota; 30 Chinook per day vessel limit.  |
|      |  |  | July 1-2                  | -                       | -              | 2                        | 28   | -  | 574 quota; 15 Chinook per day vessel limit.  |
|      | Aug. 6-7, 13-15, 20-21, and 27-28                          |  | -                         | -                       | 9              | 28                       | -    | 580 quota; 15 Chinook per day vessel limit.  |  |
|      | Sept. 12-27  |  | -                         | -                       | 16             | 28                       | -    | 500 quota; 20 Chinook per day vessel limit. June-Sept.: Landings restricted to the area or Port Orford; mandatory phone or email trip reports. |  |
|      | Twin Rocks to OR/CA Border Inside 3 nm (Chetco River Area) | Oct. 12-31                                 | -                         | -                       | 20             | 28                       | -    | 600 Chinook quota; 20 Chinook per day per vessel landing limit; landings restricted to Brookings; mandatory phone or email trip reports.       |  |

TABLE C-3. Summary of actual Oregon commercial salmon seasons in state and Federal (EEZ) waters.<sup>a/</sup> (Page 3 of 6)

| Year  | Area                         | Seasons  |   |                         | Number of Days | Minimum Size Limit (in.)  |  | Other Restrictions  |  |
|---|------------------------------|--|---|-------------------------|----------------|---|--|---|--|
|   |                              | All-Salmon-Except-Coho                                   | All Salmon  | All-Salmon-Except-Chin. |                | Chinook   | Coho   |   |  |
| 2015  | WA/OR Border to Cape Falcon  | May 1-29   | -   | -                       | 29             | 28  | -  | Seven days per week, no landing limits.   |  |
|   |                              | June 5-9, 12-16  | -   | -                       | 10             | 28  | -  | 40 Chinook per vessel per open period.  |  |
|   |                              | June 19-23   | -   | -                       | 5              | 28  | -  | 80 Chinook per vessel per open period.  |  |
|   |                              | -  | July 1-7  | -                       | 7              | 28  | 16   | 50 Chinook and 50 marked coho per open period vessel limit.   |  |
|   |                              | -  | July 10-14, 17-21, 24-28, July 31-Aug.4, Aug 7-11 | -                       | 25             | 28  | 16   | 75 Chinook and 50 marked coho per open period vessel limit.   |  |
|   |                              | -  | Aug. 14-18  | -                       | 5              | 28  | 16   | 50 Chinook and 50 marked coho per open period vessel limit.   |  |
|   |                              | -  | Aug. 21-25  | -                       | 5              | 28  | 16   | 40 Chinook and 50 marked coho per open period vessel limit.   |  |
|   |                              | -  | Aug. 28-Sept. 1                                   | -                       | 5              | 28  | 16   | 35 Chinook and 50 marked coho per open period vessel limit.   |  |
|   | -                            | Sept. 4-8, 11-15   | -   | 10                      | 28             | 16  | 40 Chinook and 50 marked coho per open period vessel limit.  |   |  |
|   | -                            | Sept. 18-22  | -   | 5                       | 28             | 16  | 40 Chinook and 80 coho (non-mark-selective) per open period vessel limit.  |   |  |
|   | Cape Falcon to Humbug Mt.    | Apr. 1-Aug.27  | -   | -                       | 149            | 28  | -  |   |  |
|   |                              | Sept. 2-30   | -   | -                       | 29             | 28  | -  | 60 Chinook per vessel per landing week (Thurs.-Wed.).   |  |
|   |                              | Tw in Rocks to Pyramid Rock Inside 3 nm (Tillamook Area) | Oct. 1-31   | -                       | -              | 31  | 28   | -   | 20 Chinook per day vessel limit. Landings restricted to Garibaldi.   |
|   |                              | Cape Blanco to Humbug Mt. (Elk River Area)               | Oct. 15-Nov. 30                                   | -                       | -              | 47  | 26   | -   | Inside of a line from Cape Blanco to Black Rock to Best Rock to 42°40'30" N Lat. 124°29'00" W Long. to Humbug Mt. 20 Chinook per day vessel limit. Landings restricted to Port Orford. |
| Humbug Mt. to OR/CA Border                                  |                              | Apr. 1-May 31  | -   | -                       | 61             | 28  | -  | Landings restricted to the State of Oregon.   |  |
|   |                              | June 1-26  | -   | -                       | 26             | 28  | -  | 1,800 quota; 30 Chinook per day vessel limit. Landings restricted to the area or Port Orford.                         |  |
|   |                              | July 1-2, 5-31   | -   | -                       | 29             | 28  | -  | 1,184 quota; 15 Chinook per day vessel limit July 1-2, 25 thereafter. Landings restricted to the area or Port Orford. |  |
| Aug. 1-27   | -                            | -  | 27  | 28                      | -              | 772 quota; 25 Chinook per day vessel limit. Landings restricted to the area or Port Orford. |  |   |  |
| Tw in Rocks to OR/CA Border Inside 3 nm (Chetco River Area) | Oct. 12-17, 21, 23-24, 27-31 | -  | -   | 14                      | 28             | -   | 600 quota; 20 Chinook per day per vessel landing limit through Oct. 17, 10 Chinook thereafter; landings restricted to Brookings. |   |  |



TABLE C-3. Summary of actual Oregon commercial salmon seasons in state and Federal (EEZ) waters. <sup>a/</sup> (Page 4 of 6)

| Year   | Area                        | Seasons                                    |            |                         | Number of Days | Minimum Size Limit (in.) |   | Other Restrictions  |
|--|-----------------------------|--|------------|-------------------------|----------------|--------------------------|---|---|
|  |                             | All-Salmon-Except-Coho                     | All Salmon | All-Salmon-Except-Chin. |                | Chinook                  | Coho  |   |
| 2016   | WA/OR Border to Cape Falcon | May 1-3, 6-31                              | -          | -                       | 23             | 28                       | -   | 5 days per week, Fri.-Tues. 40 Chinook per vessel per open period.  |
|  |                             | June 3-5                                   | -          | -                       | 3              | 28                       | -   | 40 Chinook per vessel per open period.  |
|  |                             | June 10-16                                 | -          | -                       | 7              | 28                       | -   | 65 Chinook per vessel per open period.  |
|  |                             | June 24-30                                 | -          | -                       | 7              | 28                       | -   | 40 Chinook per vessel per open period.  |
|  |                             | July 8-14                                  | -          | -                       | 7              | 28                       | -   | 80 Chinook per vessel per open period.  |
|  |                             | July 22-28                                 | -          | -                       | 7              | 28                       | -   | 150 Chinook per vessel per open period.   |
|  |                             | Aug. 1-7                                   | -          | -                       | 7              | 28                       | -   | 225 Chinook per vessel per open period.   |
|  |                             | Aug. 15-23                                 | -          | -                       | 9              | 28                       | -   | 300 Chinook per vessel per open period.   |
|  | Cape Falcon to Humbug Mt.   | Apr. 8-May 31                              | -          | -                       | 54             | 28                       | -   |   |
|  |                             | June 5-10, 15-30                           | -          | -                       | 22             | 28                       | -   |   |
|  |                             | July 8-31                                  | -          | -                       | 24             | 28                       | -   |   |
|  |                             | Aug. 8-12, 18-24                           | -          | -                       | 12             | 28                       | -   |   |
|  |                             | Sept. 1-7, 15-30, Oct. 1-31                | -          | -                       | 54             | 28                       | -   | 45 Chinook per vessel per landing week (Thurs.-Wed.) and only open shoreward of the 40 fathom regulatory line in October. |
|  | 272                         | Cape Blanco to Humbug Mt. (Elk River Area) | Nov. 1-30  | -                       | -              | 30                       | 26  | -   |
| Humbug Mt. to OR/CA Border (Oregon KMZ)                    |                             | Apr. 8-30                                  | -          | -                       | 23             | 28                       | -   |   |
|  |                             | May 1-31                                   | -          | -                       | 31             | 28                       | -   |   |
|  |                             | June 5-10, 15-30                           | -          | -                       | 22             | 28                       | -   | 720 Chinook quota; 15 Chinook per day per vessel landing limit.   |
|  |                             | July 8-31                                  | -          | -                       | 24             | 28                       | -   | 594 Chinook quota; 15 Chinook per day per vessel landing limit.   |
| Twin Rocks to OR/CA Border Inside 3 nm (Chetco River Area) | Oct. 10-31                  | -  | -          | 22                      | 28             | -                        | 300 Chinook quota; 5 Chinook per day per vessel landing limit through Oct. 25, 10 thereafter; landings restricted to Brookings. |   |

TABLE C-3. Summary of actual Oregon commercial salmon seasons in state and Federal (EEZ) waters.<sup>a/</sup> (Page 5 of 6)

| Year  | Area                                    | Seasons                                    |                                |                         | Number of Days | Minimum Size Limit (in.) |      | Other Restrictions  |
|---|---|--|--------------------------------|-------------------------|----------------|--------------------------|------|---|
|   |   | All-Salmon-Except-Coho                     | All Salmon                     | All-Salmon-Except-Chin. |                | Chinook                  | Coho |   |
| 2017  | WA/OR Border to Cape Falcon             | May 1-June 30                              | -                              | -                       | 61             | 28                       | -    | 27,000 Chinook quota (capped at 9,000 south of Leadbetter Point).   |
|   |   | -  | July 1-4                       | -                       | 4              | 28                       | 16   | 5 days per week, Fri. -Tues. through July 18; 7 days a week thereafter. Landing and possession limits: 75 Chinook and 10 marked coho per vessel per open period through July 19, then 150 Chinook and 10 marked coho thereafter.  |
|   |   | -  | July 7-18,<br>July 21-Sept. 19 | -                       | 71             | 28                       | 16   |   |
|   | Cape Falcon to Florence South Jetty     | Apr. 15-May 31                             | -                              | -                       | 47             | 28                       | -    | 45 Chinook per vessel per landing week (Thurs.-Wed.) and only open shoreward of the 40 fathom regulatory line.  |
|   |   | June 7-12, 15-30                           | -                              | -                       | 22             | 28                       | -    |   |
|   |   | July 8-31                                  | -                              | -                       | 24             | 28                       | -    |   |
|   |   | Sept. 1-Oct. 31                            | -                              | -                       | 61             | 28                       | -    |   |
|   | Florence South Jetty to Humbug Mt.      | Closed                                     | -                              | -                       | -              | -                        | -    | Inside of a line from Cape Blanco to Black Rock to Best Rock to 42°40'30" N Lat. 124°29'00" W Long. to Humbug Mt. 20 Chinook per day vessel limit. Landings restricted to Port Orford.  |
|   |   | Cape Blanco to Humbug Mt. (Elk River Area) | Oct. 15-Nov. 30                | -                       | -              | 47                       | 26   |   |
|   | Humbug Mt. to OR/CA Border (Oregon KMZ) | Closed                                     | -                              | -                       | -              | -                        | -    | 300 Chinook quota; 5 Chinook per day per vessel landing limit; landings restricted to Brookings.  |
| Tw in Rocks to OR/CA Border Inside 3 nm (Chetco River Area) |   | Oct. 9-13, 16-17, 26-27                    | -                              | -                       | 9              | 28                       | -    |   |
|   |   |  |                                |                         |                |                          |      |   |
| 2018 <sup>b/</sup>  | WA/OR Border to Cape Falcon             | May 1-June 30                              | -                              | -                       | 61             | 28                       | -    | 16,500 Chinook quota (capped at 4,600 south of Leadbetter Point). 50 Chinook per vessel per landing week (Thurs.-Wed.) through May 30, 100 Chinook per vessel per landing week (Thurs.-Wed.) thereafter.  |
|   |   | -  | July 1-Sept. 19                | -                       | 81             | 28                       | 16   | Quota: 11,000 Chinook (capped at 1,300 south of Leadbetter Point), and 4,600 marked coho. Landing and possession limits per vessel per landing week (Thurs.-Wed.): 50 Chinook and 10 marked coho through July 25, 75 Chinook and 10 marked coho July 26-Aug. 22, 85 Chinook and 10 marked coho during Aug. 23-29, and 85 Chinook and 25 marked coho thereafter. |
|   | Cape Falcon to Humbug Mt.               | May 4-14, and 19-31                        | -                              | -                       | 24             | 28                       | -    | Beginning September 1 no more than 50 Chinook allowed per vessel per landing week (Thurs.-Wed.); and only open shoreward of the 40 fathom management line beginning October 1.  |
|   |   | June 4-12, and 16-30                       | -                              | -                       | 24             | 28                       | -    |   |
|   |   | July 5-12, and 16-31                       | -                              | -                       | 24             | 28                       | -    |   |
|   | Aug. 3-7, 13-17, and 25-29              | -  | -                              | 15                      | 28             | -                        |      |   |
|   | Sept. 1-Oct. 31                         | -  | -                              | 61                      | 28             | -                        |      |   |

TABLE C-3. Summary of actual Oregon commercial salmon seasons in state and Federal (EEZ) waters.<sup>a/</sup> (Page 6 of 6)

| Year                       | Area   | Seasons                |            |                         | Number of Days | Minimum Size Limit (in.) |      | Other Restrictions   |
|----------------------------|--|------------------------|------------|-------------------------|----------------|--------------------------|------|--|
|                            |  | All-Salmon-Except-Coho | All Salmon | All-Salmon-Except-Chin. |                | Chinook                  | Coho |  |
| <b>2018 cont.</b>          | Cape Blanco to Humbug Mt. (Elk River Area)                         | Nov. 1-30              | -          | -                       | 30             | 26                       | -    | Inside of a line from Cape Blanco to Black Rock to Best Rock to 42°40'30" N Lat. 124°29'00" W Long. to Humbug Mt. 10 Chinook per day vessel limit. Landings restricted to Port Orford.                       |
|                            | Humbug Mt. to OR/CA Border (Oregon Klamath Mangement Zone, OR KMZ) | May 4-14, and 19-31    | -          | -                       | 24             | 28                       | -    | Chinook Quotas: 1,500 in June, 1,975 in July, and 1,430 in August. Beginning June 4 - landing and possession limit per vessel per week (Thurs.-Wed.): 50 Chinook through Aug. 12, and 80 Chinook thereafter. |
| June 4-12                  |  | -                      | -          | 9                       | 28             | -                        |      |  |
| July 5-12, and 16-31       |  | -                      | -          | 24                      | 28             | -                        |      |  |
| Aug. 3-7, 13-17, and 25-29 |  | -                      | -          | 15                      | 28             | -                        |      |  |
|                            | Tw in Rocks to OR/CA Border Inside 3 nm (Chetco River Area)        | Sept. 1-Oct. 31        | -          | -                       | 61             | 28                       | -    | 5 Chinook per day per vessel landing limit; landings restricted to Brookings.  |
|                            |  | Oct. 8-12, 15-23       | -          | -                       | 14             | 28                       | -    |  |

a/ For earlier years see Review of 2013 Ocean Salmon Fisheries, Appendix C, Table C-3.

b/ For detailed regulations and inseason adjustments, see Tables I-1 and C-3.

TABLE C-4. Summary of actual Oregon recreational ocean salmon regulations.<sup>a/</sup> (Page 1 of 5)

| Year  | Area   | Season   | Days | Bag Limit | Minimum Size Limit (in.) |  | Other Restrictions <sup>c/</sup>   |
|---|--|--|------|-----------|--------------------------|--|--|
|   |  |  |      |           | Chinook                  | Coho <sup>b/</sup>   |  |
| 2013  | WA/OR Border to Cape Falcon  | June 8-21  | 14   | 2         | 24                       | -  | 8,000 marked Chinook quota Cape Falcon, OR to U.S. Canada Border.  |
|   | 38,380 coho quota and 9,900 Chinook guideline south of Leadbetter Pt. WA   | June 22-Aug. 22  | 62   | 2         | 24                       | 16   | Seven days per week; no more than one Chinook.   |
|   |  | Aug. 23-Aug. 31  | 9    | 2         | 24                       | 16   | Seven days per week.   |
|   |  | Sept 1-30  | 30   | 2         | 24                       | 16   | Seven days per week, non-mark-selective coho fishery with remaining quota converted to an impact neutral quota of 9,785. |
|   | Cape Falcon to Humbug Mt.  | Mar. 15-June 30, Aug. 1-31, Sept. 3-4, 8-11, and Oct. 1-31 | 176  | 2         | 24                       | -  | All salmon except coho.  |
|   |  | July 1-31  | 31   | 2         | 24                       | 16   | All salmon; 10,500 marked coho quota.  |
|   |  | Sept. 1-2, 5-7, and 12-30                                  | 24   | 2         | 24                       | 16   | All salmon; 19,580 non-mark-selective coho quota (incl. rollover from July mark-selective coho quota).                   |
|   | Cape Blanco to Humbug Mt.: Inside a line from Cape Blanco to Black Rock to Best Rock to 42°40'30" N. Lat. 124°29'00" W. Long. to Humbug Mt. (Elk River Area) | Nov. 1-30  | 30   | 2         | 24                       | -  | Barbless hooks required. Only one unmarked Chinook per day, no more than 10 unmarked Chinook per season.                 |
|   | Humbug Mt. to OR/CA Border   | May 1-June 30, Aug. 1-Sept. 8                              | 100  | 2         | 24                       | -  | All salmon except coho.  |
|   |  | July 1-31  | 31   | 2         | 24                       | 16   | All salmon, shared quota with July Cape Falcon to Humbug Mt. fishery.  |
| Tw in Rocks to OR/CA Border Inside 3 nm (Chetco River Area) | Oct. 1-13  | 13   | 1    | 24        | -                        | Barbless hooks required. No more than five Chinook per season. |  |

TABLE C-4. Summary of actual Oregon recreational ocean salmon regulations.<sup>a/</sup> (Page 2 of 5)

| Year   | Area  | Season  | Days      | Bag Limit | Minimum Size Limit (in.) |   | Other Restrictions <sup>c/</sup>   |
|--|---|---|-----------|-----------|--------------------------|---|--|
|  |   |   |           |           | Chinook                  | Coho <sup>b/</sup>  |  |
| 2014   | WA/OR Border to Cape Falcon   | May 31-June 13  | 14        | 2         | 24                       | -   | 9,000 marked Chinook quota Cape Falcon, OR to U.S. Canada Border.  |
|  | 92,400 coho quota and 13,100 Chinook guideline south of Leadbetter Pt. WA | June 14-Sept. 5   | 84        | 2         | 24                       | 16  | Seven Days per week; no more than one Chinook. Seven days per week, non-mark-selective coho fishery with remaining quota converted to an impact neutral quota of 13,100. |
|  |   | Sept. 6-21  | 16        | 2         | 24                       | 16  |  |
|  | Cape Falcon to Humbug Mt.   | Mar. 15-June 20,  | 159       | 2         | 24                       | -   | All salmon except coho.  |
|  |   | Aug. 11-29, Sept. 20-Oct. 31  |           |           |                          |   |  |
|  |   | June 21-Aug. 10   | 51        | 2         | 24                       | 16  |  |
|  | Cape Falcon to Humbug Mt.   | Aug. 30-Sept. 19  | 21        | 2         | 24                       | 16  | All salmon; 35,000 non-mark-selective coho quota (includes rollover from mark-selective coho quota).   |
|  |   | Cape Blanco to Humbug Mt.:<br>Inside a line from Cape Blanco to Black Rock to Best Rock to 42°40'30" N. Lat. 124°29'00" W. Long. to Humbug Mt. (Elk River Area) | Nov. 1-30 | 30        | 2                        | 24  | -  |
|  | Humbug Mt. to OR/CA Border  | May 10-June 20,   | 70        | 2         | 24                       | -   | All salmon except coho.  |
|  |   | Aug. 11-Sept. 7<br>June 21-Aug. 10  | 51        | 2         | 24                       | 16  |  |
| Tw in Rocks to OR/CA Border<br>Inside 3 nm (Chetco River Area) | Oct. 1-12   | 12  | 2         | 24        | -                        | Two Chinook daily, one of which can be unmarked; no more than five unmarked per season. |  |

TABLE C-4. Summary of actual Oregon recreational ocean salmon regulations.<sup>a/</sup> (Page 3 of 5)

| Year | Area  | Season                                      | Days | Bag Limit | Minimum Size Limit (in.) |                    | Other Restrictions <sup>c/</sup>   |
|------|---|---|------|-----------|--------------------------|--------------------|--|
|      |   |   |      |           | Chinook                  | Coho <sup>b/</sup> |  |
| 2015 | WA/OR Border to Cape Falcon   | May 30-June 12                              | 14   | 2         | 24                       | -                  | 10,000 marked Chinook quota Cape Falcon, OR to U.S. Canada Border.   |
|      | 79,400 coho quota and 15,225 Chinook guideline south of Leadbetter Pt. WA   | June 13-Sept. 3                             | 83   | 2         | 24                       | 16                 | Seven days per week. All salmon; two fish per day, no more than one Chinook June 13-Aug.28.  |
|      |   | Sept. 4-30                                  | 27   | 2         | 24                       | 16                 | Seven days per week. All salmon; unmarked coho retention allowed. Remaining coho quota converted to impact neutral quota of 15,300.            |
|      | Cape Falcon to Humbug Mt.   | Mar. 15-June 26, Aug. 10-Sept. 3, Oct. 1-31 | 159  | 2         | 24                       | -                  | All salmon except coho.  |
|      |   | June 27-Aug. 9                              | 44   | 2         | 24                       | 16                 | All salmon; 55,000 marked coho quota shared with June 27-Aug. 9 Humbug Mt. to OR/CA Border fishery.  |
|      |   | Sept. 4-30                                  | 27   | 2         | 24                       | 16                 | All salmon; 20,700 non-mark-selective coho quota (includes rollover from mark-selective coho quota).   |
|      | Cape Blanco to Humbug Mt.:<br>Inside a line from Cape Blanco to Black Rock to Best Rock to 42°40'30" N. Lat. 124°29'00" W. Long. to Humbug Mt. (Elk River Area) | Nov. 1-30                                   | 30   | 2         | 24                       | -                  | Two Chinook daily, one of which can be unmarked; no more than 10 unmarked per season in aggregate with Elk R., Sixes R., and Floras Ck./New R. |
|      | Humbug Mt. to OR/CA Border  | May 1-June 26, Aug. 10-Sept. 7              | 86   | 2         | 24                       | -                  | All salmon except coho.  |
|      |   | June 27-Aug. 9                              | 44   | 2         | 24                       | 16                 | All salmon, shared quota with June 27-Aug. 9 Cape Falcon to Humbug Mt. fishery.  |
|      | Tw in Rocks to OR/CA Border<br>Inside 3 nm (Chetco River Area)  | Oct. 1-11                                   | 11   | 2         | 24                       | -                  | Two Chinook daily, one of which can be unmarked; no more than five unmarked per season.  |

TABLE C-4. Summary of actual Oregon recreational ocean salmon regulations.<sup>a/</sup> (Page 4 of 5)

| Year   | Area  | Season   | Days | Bag Limit | Minimum Size Limit (in.) |  | Other Restrictions <sup>c/</sup>  |
|--|---|--|------|-----------|--------------------------|--|---|
|  |   |  |      |           | Chinook                  | Coho <sup>b/</sup>                               |   |
| 2016   | WA/OR Border to Cape Falcon   | July 1-Aug. 27                                   | 58   | 2         | 24                       | 16   | All salmon. 10,200 Chinook guideline and 18,900 marked coho quota from Leadbetter Point, WA to Cape Falcon. No more than 1 Chinook through Aug. 15. |
|  | Cape Falcon to Humbug Mt.   | Mar. 15-June 24, Aug. 8-Sept. 2, Oct. 1-31       | 159  | 2         | 24                       | -  | All salmon except coho.   |
|  |   | June 25-Aug. 7                                   | 44   | 2         | 24                       | 16   | All salmon; 26,000 marked coho quota shared with June 25-Aug. 7 Humbug Mt. to OR/CA Border fishery.   |
|  |   | Sept. 3-30                                       | 28   | 2         | 24                       | 16   | All salmon; 7,500 non-mark-selective coho quota.  |
|  | Cape Blanco to Humbug Mt.:<br>Inside a line from Cape Blanco to Black Rock to Best Rock to 42°40'30" N. Lat. 124°29'00" W. Long. to Humbug Mt. (Elk River Area) | Nov. 1-30  | 30   | 2         | 24                       | -  | Two Chinook daily, one of which can be unmarked; no more than 10 unmarked per season in aggregate with Elk R., Sixes R., Floras Ck. and New R.      |
|  | Humbug Mt. to OR/CA Border  | May 28-June 24, Sept. 3-5                        | 31   | 2         | 24                       | -  | All salmon except coho.   |
|  |   | June 25-Aug. 7                                   | 44   | 2         | 24                       | 16   | All salmon. Shared 26,000 marked coho quota with Cape Falcon to Humbug Mt. fishery.   |
| Tw in Rocks to OR/CA Border<br>Inside 3 nm (Chetco River Area) | Oct. 1-3, 8-9   | 5  | 2    | 24        | -                        | Two Chinook daily, one of which can be unmarked. |   |
| 2017   | WA/OR Border to Cape Falcon   | June 24-Aug. 22                                  | 60   | 2         | 24                       | 16   | All salmon. 13,200 Chinook guideline and 22,527 marked coho quota from Leadbetter Point, WA to Cape Falcon. No more than 1 Chinook.                 |
|  | Cape Falcon to Humbug Mt.   | Mar. 15-June 23, Aug. 1-Sept. 1, Sept. 8-Oct. 31 | 187  | 2         | 24                       | -  | All salmon except coho.<br>In Oct., only open shoreward of the 40 fathom line.  |
|  |   | June 24-July 31                                  | 38   | 2         | 24                       | 16   | All salmon; 18,000 marked coho quota.   |
|  |   | Sept. 2-7  | 6    | 2         | 24                       | 16   | All salmon; 7,900 non-mark-selective coho quota.  |

TABLE C-4. Summary of actual Oregon recreational ocean salmon regulations.<sup>a/</sup> (Page 5 of 5)

| Year                     | Area  | Season   | Days | Bag Limit | Minimum Size Limit (in.) |                    | Other Restrictions <sup>c/</sup>   |
|--------------------------|---|--|------|-----------|--------------------------|--------------------|--|
|                          |   |  |      |           | Chinook                  | Coho <sup>b/</sup> |  |
| <b>2017</b><br>(cont.)   | Cape Blanco to Humbug Mt.:<br>Inside a line from Cape Blanco<br>to Black Rock to Best Rock to<br>42°40'30" N. Lat. 124°29'00" W.<br>Long. to Humbug Mt.<br>(Elk River Area)           | Nov. 1-30  | 30   | 2         | 24                       | -                  | Two Chinook daily, one of which can be unmarked;<br>no more than 10 unmarked per season in aggregate<br>with Elk R., Sixes R., Floras Ck. and New R.             |
|                          | Humbug Mt. to OR/CA Border  | Closed   | -    | -         | -                        | -                  |  |
|                          | Tw in Rocks to OR/CA Border<br>Inside 3 nm (Chetco River Area)  | Oct. 7-8, 14-15  | 4    | 1         | 28                       | -                  | One Chinook daily.   |
| <b>2018<sup>d/</sup></b> | WA/OR Border to Cape Falcon   | June 23-Aug.12,<br>Sept. 2-3   | 53   | 2         | 24                       | 16                 | 8,000 Chinook guideline and 21,000 marked coho<br>quota. Two salmon daily, no more than one Chinook<br>through Aug. 12, then any two salmon daily<br>thereafter. |
|                          | Cape Falcon to Humbug Mt.   | Mar. 15-June 29, Sept. 4-6,<br>Sept. 9-13, Sept. 16-20, Sept. 22-Oct. 31 | 160  | 2         | 24                       | -                  | In Oct., only open shoreward of the 40 fathom line.  |
|                          |   | June 30-Sept. 3  | 66   | 2         | 24                       | 16                 | 35,000 marked coho quota.  |
|                          |   | Sept. 7-8,14-15, 21  | 5    | 2         | 24                       | 16                 | 7,600 non-mark-selective coho quota.   |
|                          | Cape Blanco to Humbug Mt.:<br>Elk River Ocean Terminal Area<br>Inside a line from Cape Blanco<br>to Black Rock to Best Rock to<br>42°40'30" N. Lat. 124°29'00"<br>Long. to Humbug Mt. | Nov. 1-30  | 30   | 2         | 24                       | -                  | Two Chinook daily, one of which can be unmarked;<br>no more than 10 unmarked per season in aggregate<br>with Elk R., Sixes R., Floras Ck. and New R.             |
|                          | Humbug Mt. to OR/CA Border<br>(Oregon KMZ)  | May 19-Aug. 26   | 100  | 2         | 24                       | -                  |  |
|                          | Chetco River Terminal Area:<br>Tw in Rocks to OR/CA Border<br>Inside 3 nm   | Oct. 6-7, 13-14  | 4    | 1         | 28                       | -                  | One Chinook daily.   |

a/ For earlier years see Review of 2013 Ocean Salmon Fisheries, Appendix C, Table C-4.

b/ Mark-selective coho fishery unless otherwise noted; all retained coho must be marked with a healed adipose fin clip.

c/ All seasons are seven days per week unless otherwise indicated.

d/ For detailed regulations and inseason adjustments, see Tables F-3 and C-9.



TABLE C-5. Summary of actual Washington commercial salmon seasons in state and federal (EEZ) waters.<sup>a/</sup> (Page 1 of 5)

| Year                     | Area                                  | Seasons                    |                                       | Number of Days             |            | Minimum Size Limit (in.)                                    |      | Other Restrictions   |
|--------------------------|---------------------------------------|----------------------------|---------------------------------------|----------------------------|------------|---|------|--|
|                          |                                       | All-Salmon-<br>Except-Coho | All Salmon                            | All-Salmon-<br>Except-Coho | All Salmon | Chinook   | Coho |  |
| 2013                     | U.S./Canada Border to<br>WA/OR Border | <b>Areas 1 &amp; 2</b>     | -                                     | 61                         | -          | 28  | -    | Seven days per week, no landing limits.                      |
|                          |                                       | May 1-June 30              |                                       |                            |            |   |      |  |
|                          |                                       | <b>Areas 3 &amp; 4</b>     | -                                     | 24                         | -          | 28  | -    | Seven days per week<br>28 Chinook vessel limit May 24-28.    |
|                          |                                       | May 1-20, 24-28            |                                       |                            |            |   |      |  |
|                          |                                       | -                          | <b>Areas 1 &amp; 2</b>                |                            |            |   |      |  |
|                          |                                       |                            | July 1-9                              | -                          | 9          | 28  | 16   | 50 Chinook and 40 marked coho per open period vessel limit.  |
|                          |                                       | -                          | July 12-16, 19-23,<br>26-30, Aug. 2-6 | -                          | 20         | 28  | 16   | 100 Chinook and 40 marked coho per open period vessel limit. |
|                          |                                       | -                          | Aug. 9-13, 16-20                      | -                          | 10         | 28  | 16   | 150 Chinook and 80 marked coho per open period vessel limit. |
|                          |                                       | -                          | Aug. 30-Sept. 3                       | -                          | 5          | 28  | 16   | 35 Chinook and 40 marked coho per open period vessel limit.  |
|                          |                                       | -                          | Sept. 6-10, 13-17                     | -                          | 10         | 28  | 16   | 75 Chinook and 50 marked coho per open period vessel limit.  |
|                          |                                       |                            | <b>Areas 3 &amp; 4</b>                |                            |            |   |      |  |
|                          |                                       |                            | July 1-9, 12-16, 19-<br>23            | -                          | 19         | 28  | 16   | 50 Chinook and 40 marked coho per open period vessel limit.  |
|                          | July 26-30, Aug. 2-<br>6, 9-13        | -                          | 15                                    | 28                         | 16         | 40 Chinook and 40 marked coho per open period vessel limit. |      |  |
| 2014                     | U.S./Canada Border to<br>WA/OR Border | <b>Areas 1 &amp; 2</b>     |                                       |                            |            |   |      |  |
|                          |                                       | May 1-20                   | -                                     | 20                         | -          | 28  | -    | Seven days per week, no landing limits.                      |
|                          |                                       | May 23-27                  | -                                     | 5                          | -          | 28  | -    | 60 Chinook per vessel per open period.                       |
|                          |                                       | May 30-June 3              | -                                     | 5                          | -          | 28  | -    | 50 Chinook per vessel per open period.                       |
|                          |                                       | June 6-10                  | -                                     | 5                          | -          | 28  | -    | 40 Chinook per vessel per open period.                       |
|                          |                                       | June 13-17, 20-24, 27-30   | -                                     | 14                         | -          | 28  | -    | 20 Chinook per vessel per open period.                       |
|                          |                                       |                            | <b>Areas 3 &amp; 4</b>                |                            |            |   |      |  |
|                          |                                       | May 1-8                    | -                                     | 8                          | -          | 28  | -    | Seven days per week, no landing limits.                      |
|                          |                                       | May 10-13, 16-20           | -                                     | 9                          | -          | 28  | -    | 50 Chinook per vessel per open period.                       |
|                          |                                       | May 23-27, May 30-June 3   | -                                     | 10                         | -          | 28  | -    | 40 Chinook per vessel per open period.                       |
| June 6-10                | -                                     | 5                          | -                                     | 28                         | -          | 30 Chinook per vessel per open period.                      |      |  |
| June 13-17, 20-24, 27-30 | -                                     | 14                         | -                                     | 28                         | -          | 20 Chinook per vessel per open period.                      |      |  |

TABLE C-5. Summary of actual Washington commercial salmon seasons in state and federal (EEZ) waters.<sup>a/</sup> (Page 2 of 5)

| Year        | Area | Seasons                |                          | Number of Days         |            | Minimum Size Limit (in.) |      | Other Restrictions   |
|-------------|------|------------------------|--------------------------|------------------------|------------|--------------------------|------|--|
|             |      | All-Salmon-Except-Coho | All Salmon               | All-Salmon-Except-Coho | All Salmon | Chinook                  | Coho |  |
| <b>2014</b> |      |                        | <b>Areas 1 &amp; 2</b>   |                        |            |                          |      |  |
| (cont.)     |      | -                      | July 1-8                 | -                      | 8          | 28                       | 16   | 60 Chinook and 60 marked coho per open period vessel limit.                |
|             |      | -                      | July 11-15, 18-22, 25-29 | -                      | 15         | 28                       | 16   | 35 Chinook and 60 marked coho per open period vessel limit.                |
|             |      | -                      | Aug. 1-5                 | -                      | 5          | 28                       | 16   | 50 Chinook and 80 marked coho per open period vessel limit.                |
|             |      | -                      | Aug. 8-12, 15-19         | -                      | 10         | 28                       | 16   | 75 Chinook and 150 marked coho per open period vessel limit.               |
|             |      | -                      | Aug. 22-26               | -                      | 5          | 28                       | 16   | 35 Chinook and 150 marked coho per open period vessel limit.               |
|             |      | -                      | Aug. 29-Sept. 2          | -                      | 5          | 28                       | 16   | 20 Chinook and 150 marked coho per open period vessel limit.               |
|             |      | -                      | Sept. 5-9                | -                      | 5          | 28                       | 16   | 15 Chinook and 100 coho (non-mark-selective) per open period vessel limit. |
|             |      | -                      | Sept. 12-16              | -                      | 5          | 28                       | 16   | 15 Chinook and 200 coho (non-mark-selective) per open period vessel limit. |
|             |      |                        | <b>Areas 3 &amp; 4</b>   |                        |            |                          |      |  |
|             |      | -                      | July 1-8                 | -                      | 8          | 28                       | 16   | 60 Chinook and 40 marked coho per open period vessel limit.                |
|             |      | -                      | July 11-15, 18-22, 25-29 | -                      | 15         | 28                       | 16   | 35 Chinook and 40 marked coho per open period vessel limit.                |
|             |      | -                      | Aug. 1-5                 | -                      | 5          | 28                       | 16   | 50 Chinook and 50 marked coho per open period vessel limit.                |
|             |      | -                      | Aug. 8-12, 15-19         | -                      | 10         | 28                       | 16   | 75 Chinook and 150 marked coho per open period vessel limit.               |
|             |      | -                      | Aug. 22-26               | -                      | 5          | 28                       | 16   | 35 Chinook and 50 marked coho per open period vessel limit.                |
|             |      | -                      | Aug. 29-Sept. 2          | -                      | 5          | 28                       | 16   | 20 Chinook and 50 marked coho per open period vessel limit.                |
|             |      | -                      | Sept. 5-9, 12-16         | -                      | 10         | 28                       | 16   | 15 Chinook and 20 marked coho per open period vessel limit.                |

TABLE C-5. Summary of actual Washington commercial salmon seasons in state and federal (EEZ) waters.<sup>a/</sup> (Page 3 of 5)

| Year | Area                               | Seasons                |  | Number of Days         |            | Minimum Size Limit (in.)  |      | Other Restrictions  |  |
|------|------------------------------------|------------------------|--|------------------------|------------|---|------|---|--|
|      |                                    | All-Salmon-Except-Coho | All Salmon   | All-Salmon-Except-Coho | All Salmon | Chinook   | Coho |   |  |
| 2015 | U.S./Canada Border to WA/OR Border | <b>Area 1</b>          |  |                        |            |   |      |   |  |
|      |                                    | May 1-29               | -  | 29                     | -          | 28  | -    | Seven days per week, no landing limits.                                   |  |
|      |                                    | June 5-9, 12-16        | -  | 10                     | -          | 28  | -    | 40 Chinook per vessel per open period.                                    |  |
|      |                                    | June 19-23             | -  | 5                      | -          | 28  | -    | 80 Chinook per vessel per open period.                                    |  |
|      |                                    | <b>Area 2</b>          |  |                        |            |   |      |   |  |
|      |                                    | May 1-June 25          | -  | 56                     | -          | 28  | -    | Seven days per week, no landing limits.                                   |  |
|      |                                    | <b>Area 3</b>          |  |                        |            |   |      |   |  |
|      |                                    | May 1-June 30          |  |                        |            |   |      |   |  |
|      |                                    | May 1-16               | -  | 16                     | -          | 28  | -    | Seven days per week, no landing limits.                                   |  |
|      |                                    | <b>Area 4</b>          |  |                        |            |   |      |   |  |
|      |                                    | May 1-16               | -  | 16                     | -          | 28  | -    | 60 Chinook per vessel per open period.                                    |  |
|      |                                    | May 22-26              | -  | 5                      | -          | 28  | -    | 15 Chinook per vessel per open period.                                    |  |
|      |                                    | May 29-June 23         | -  | 20                     | -          | 28  | -    | 20 Chinook per vessel per open period.                                    |  |
|      |                                    | June 26-27             | -  | 2                      | -          | 28  | -    | 12 Chinook per vessel per open period.                                    |  |
|      |                                    | <b>Areas 1 &amp; 2</b> |  |                        |            |   |      |   |  |
|      |                                    | -                      | July 1-7   | -                      | 7          | 28  | 16   | 50 Chinook and 50 marked coho per open period vessel limit.               |  |
|      |                                    | -                      | July 10-14, 17-21, 24-28, July 31-Aug.4, Aug 7-11. | -                      | 25         | 28  | 16   | 75 Chinook and 50 marked coho per open period vessel limit.               |  |
|      |                                    | -                      | Aug. 14-18   | -                      | 5          | 28  | 16   | 50 Chinook and 50 marked coho per open period vessel limit.               |  |
|      |                                    | -                      | Aug. 21-25   | -                      | 5          | 28  | 16   | 40 Chinook and 50 marked coho per open period vessel limit.               |  |
|      |                                    | -                      | Aug. 28-Sept. 1                                    | -                      | 5          | 28  | 16   | 35 Chinook and 50 marked coho per open period vessel limit.               |  |
|      |                                    | -                      | Sept. 4-8, 11-15                                   | -                      | 10         | 28  | 16   | 40 Chinook and 50 marked coho per open period vessel limit.               |  |
|      |                                    | -                      | Sept. 18-22  | -                      | 5          | 28  | 16   | 40 Chinook and 80 coho (non-mark-selective) per open period vessel limit. |  |
|      |                                    | <b>Areas 3 &amp; 4</b> |  |                        |            |   |      |   |  |
|      |                                    | -                      | July 1-7   | -                      | 7          | 28  | 16   | 50 Chinook and 50 marked coho per open period vessel limit.               |  |
|      |                                    | -                      | July 10-14, 17-21, 24-28, July 31-Aug.4, Aug 7-11  | -                      | 30         | 28  | 16   | 60 Chinook and 50 marked coho per open period vessel limit.               |  |
|      |                                    | -                      | Aug. 14-18   | -                      | 5          | 28  | 16   | 50 Chinook and 50 marked coho per open period vessel limit.               |  |
|      |                                    | -                      | Aug. 21-25   | -                      | 5          | 28  | 16   | 40 Chinook and 50 marked coho per open period vessel limit.               |  |
| -    | Aug. 28-Sept. 1                    | -                      | 5  | 28                     | 16         | 35 Chinook and 50 marked coho per open period vessel limit.             |      |   |  |
| -    | Sept. 4-8, 11-15                   | -                      | 10   | 28                     | 16         | 40 Chinook and 50 marked coho per open period vessel limit.             |      |   |  |
| -    | Sept. 18-22                        | -                      | 5  | 28                     | 16         | 40 Chinook and 80 non-mark-selective coho per open period vessel limit. |      |   |  |

TABLE C-5. Summary of actual Washington commercial salmon seasons in state and federal (EEZ) waters.<sup>a/</sup> (Page 4 of 5)

| Year | Area                               | Seasons                |            | Number of Days         |            | Minimum Size Limit (in.) |      | Other Restrictions                                     |  |
|------|------------------------------------|------------------------|------------|------------------------|------------|--------------------------|------|--|--|
|      |                                    | All-Salmon-Except-Coho | All Salmon | All-Salmon-Except-Coho | All Salmon | Chinook                  | Coho |  |  |
| 2016 | U.S./Canada Border to WA/OR Border | <b>Areas 1 &amp; 2</b> |            |                        |            |                          |      |  |  |
|      |                                    | May 1-3                | -          | 3                      | -          | 28                       | -    | 40 Chinook per vessel per open period.                 |  |
|      |                                    | May 6-31               | -          | 20                     | -          | 28                       | -    | 5 days per w.k. 40 Chinook per vessel per open period. |  |
|      |                                    | June 3-5               | -          | 3                      | -          | 28                       | -    | 40 Chinook per vessel per open period.                 |  |
|      |                                    | June 10-16             | -          | 7                      | -          | 28                       | -    | 65 Chinook per vessel per open period.                 |  |
|      |                                    | June 24-30             | -          | 7                      | -          | 28                       | -    | 40 Chinook per vessel per open period.                 |  |
|      |                                    | July 8-14              | -          | 7                      | -          | 28                       | -    | 80 Chinook per vessel per open period.                 |  |
|      |                                    | July 22-28             | -          | 7                      | -          | 28                       | -    | 125 Chinook per vessel per open period.                |  |
|      |                                    | Aug. 1-7               | -          | 7                      | -          | 28                       | -    | 225 Chinook per vessel per open period.                |  |
|      |                                    | Aug. 15-23             | -          | 9                      | -          | 28                       | -    | 300 Chinook per vessel per open period.                |  |
|      |                                    | <b>Area 3</b>          |            |                        |            |                          |      |  |  |
|      |                                    | May 1-3                | -          | 3                      | -          | 28                       | -    | 40 Chinook per vessel per open period.                 |  |
|      |                                    | May 6-31               | -          | 20                     | -          | 28                       | -    | 5 days per w.k. 40 Chinook per vessel per open period. |  |
|      |                                    | June 3-5               | -          | 3                      | -          | 28                       | -    | 40 Chinook per vessel per open period.                 |  |
|      |                                    | July 8-14              | -          | 7                      | -          | 28                       | -    | 60 Chinook per vessel per open period.                 |  |
|      |                                    | July 22-28             | -          | 7                      | -          | 28                       | -    | 150 Chinook per vessel per open period.                |  |
|      |                                    | Aug. 1-7               | -          | 7                      | -          | 28                       | -    | 225 Chinook per vessel per open period.                |  |
|      |                                    | Aug. 15-23             | -          | 9                      | -          | 28                       | -    | 300 Chinook per vessel per open period.                |  |
|      |                                    | <b>Area 4</b>          |            |                        |            |                          |      |  |  |
|      |                                    | May 1-3                | -          | 3                      | -          | 28                       | -    | 40 Chinook per vessel per open period.                 |  |
|      |                                    | May 6-31               | -          | 20                     | -          | 28                       | -    | 5 days per w.k. 40 Chinook per vessel per open period. |  |
|      |                                    | June 3-5               | -          | 3                      | -          | 28                       | -    | 40 Chinook per vessel per open period.                 |  |
|      |                                    | June 10-16             | -          | 7                      | -          | 28                       | -    | 15 Chinook per vessel per open period.                 |  |
|      |                                    | June 24-30             | -          | 7                      | -          | 28                       | -    | 14 Chinook per vessel per open period.                 |  |
|      |                                    | July 8-14              | -          | 7                      | -          | 28                       | -    | 60 Chinook per vessel per open period.                 |  |
|      |                                    | July 22-28             | -          | 7                      | -          | 28                       | -    | 150 Chinook per vessel per open period.                |  |
|      |                                    | Aug. 1-7               | -          | 7                      | -          | 28                       | -    | 225 Chinook per vessel per open period.                |  |
|      |                                    | Aug. 15-23             | -          | 9                      | -          | 28                       | -    | 300 Chinook per vessel per open period.                |  |

TABLE C-5. Summary of actual Washington commercial salmon seasons in state and federal (EEZ) waters.<sup>a/</sup> (Page 5 of 5)

| Year                   | Area                               | Seasons                |                                    | Number of Days         |            | Minimum Size Limit (in.) |      | Other Restrictions   |   |   |
|------------------------|------------------------------------|------------------------|------------------------------------|------------------------|------------|--------------------------|------|--|---|---|
|                        |                                    | All-Salmon-Except-Coho | All Salmon                         | All-Salmon-Except-Coho | All Salmon | Chinook                  | Coho |  |   |   |
| 2017                   | U.S./Canada Border to WA/OR Border | <b>Areas 1 &amp; 2</b> |                                    |                        |            |                          |      |  |   |   |
|                        |                                    | May 1-June 30          | -                                  | 61                     | -          | 28                       | -    |  |   |   |
|                        |                                    | -                      | July 1-4                           | -                      | 4          | 28                       | 16   | 75 Chinook and 10 marked coho per vessel per open period.  |   |   |
|                        |                                    | -                      | July 7-20                          | -                      | 10         | 28                       | 16   | 75 Chinook and 10 marked coho per vessel per open period (5 days per w.k. Fri-Tues).   |   |   |
|                        |                                    | -                      | July 21-Sept. 19                   | -                      | 61         | 28                       | 16   | 150 Chinook and 10 marked coho per vessel per calendar week.   |   |   |
|                        |                                    | <b>Areas 3 &amp; 4</b> |                                    |                        |            |                          |      |  |   |   |
|                        |                                    | May 1-June 20          | -                                  | 51                     | -          | 28                       | -    | 60 Chinook per vessel per open period.   |   |   |
|                        |                                    | June 21-30             | -                                  | 10                     | -          | 28                       | -    |  |   |   |
|                        |                                    | -                      | July 1-4                           | -                      | 4          | 28                       | 16   | 60 Chinook and 10 marked coho per vessel per open period.  |   |   |
|                        |                                    | -                      | July 7-20                          | -                      | 10         | 28                       | 16   | 60 Chinook and 10 marked coho per vessel per open period (5 days per w.k. Fri-Tues).   |   |   |
|                        |                                    | -                      | July 21-Aug. 20                    | -                      | 31         | 28                       | 16   | 75 Chinook and 10 marked coho per vessel per open period (5 days per w.k. Fri-Tues).   |   |   |
|                        |                                    | -                      | Aug. 21- Sept. 19                  | -                      | 30         | 28                       | 16   | 100 Chinook and 10 marked coho per vessel per calendar week.   |   |   |
|                        |                                    | 2018 <sup>b/</sup>     | U.S./Canada Border to WA/OR Border | <b>Area 1</b>          |            |                          |      |  |   |   |
|                        |                                    |                        |                                    | May 1-June 30          | -          | 61                       | -    | 28   | - | Chinook landing and possession limit per vessel per landing week (Thurs.-Weds.): 50 through May 30, and 100 thereafter. |
| -                      | July 1- Sept. 19                   |                        |                                    | -                      | 81         | 28                       | 16   | Landing and possession limit per vessel per landing week (Thurs.-Weds.): 50 Chinook and 10 marked coho through Aug. 22, 85 Chinook and 10 marked coho Aug. 23-29, and 85 Chinook and 25 marked coho thereafter.  |   |   |
| <b>Area 2</b>          |                                    |                        |                                    |                        |            |                          |      |  |   |   |
| May 1-June 30          | -                                  |                        |                                    | 61                     | -          | 28                       | -    | Chinook landing and possession limit per vessel per landing week (Thurs.-Weds.): 100 through May 30, and 200 thereafter.   |   |   |
| -                      | July 1- Sept. 19                   |                        |                                    | -                      | 81         | 28                       | 16   | Landing and possession limit per vessel per landing week (Thurs.-Weds.): 10 marked coho through Aug. 29, and 25 thereafter.  |   |   |
| <b>Areas 3 &amp; 4</b> |                                    |                        |                                    |                        |            |                          |      |  |   |   |
| May 1-27               | -                                  |                        |                                    | 27                     | -          | 28                       | -    | 50 Chinook per vessel per landing week (Thurs.-Weds.).   |   |   |
| May 31-June 4          | -                                  |                        |                                    | 5                      | -          | 28                       | -    | 35 Chinook per vessel per open period  |   |   |
| June 8-11              | -                                  |                        |                                    | 4                      | -          | -                        | -    | 30 Chinook per vessel per open period  |   |   |
| -                      | July 1- Sept. 19                   |                        |                                    | -                      | 81         | 28                       | 16   | Landing and possession limit per vessel per landing week (Thurs.-Weds.): 50 Chinook and 10 marked coho through July 25, 75 Chinook and 10 marked coho July 26-Aug. 1. 50 Chinook and 10 marked coho Aug. 2-22, 85 Chinook and 10 marked coho Aug. 23-29, and 85 Chinook and 25 marked coho thereafter. |   |   |

a/ For earlier years see Review of 2013 Ocean Salmon Fisheries, Appendix C, Table C-5.

b/ For detailed regulations and inseason adjustments, see Tables I-1 and C-9.

TABLE C-6. Summary of actual Washington recreational ocean salmon regulations.<sup>a/</sup> (Page 1 of 4)

| Year | Area   | Season                            | Days            | Bag Limit | Minimum Size Limit (in.) |                    | Other Restrictions   |
|------|--|-----------------------------------|-----------------|-----------|--------------------------|--------------------|--|
|      |  |                                   |                 |           | Chinook                  | Coho <sup>b/</sup> |  |
| 2013 | U.S./Canada Border to Queets R. WA (Neah Bay and La Push subareas) | May 10-11, 17-18, June 22-28      | 11              | 2         | 24                       | -                  | Coastwide quota: 8,000 marked Chinook.   |
|      | Queets R. to Leadbetter Pt. WA (Westport subarea)                  | June 8-22                         | 15              | 2         | 24                       | -                  | Coastwide quota: 8,000 marked Chinook.   |
|      | Leadbetter Pt. WA to Cape Falcon OR (Columbia River subarea)       | June 8-21                         | 14              | 2         | 24                       | -                  | Coastwide quota: 8,000 marked Chinook.   |
|      | U.S./Canada Border to Cape Alava                                   | June 29-Sept 22                   | 86              | 2         | 24                       | 16                 | 8,200 coho quota and 4,900 Chinook guideline. Seven days per week. Two salmon daily plus two additional pinks; Aug. 10-22 two salmon daily, no more than one Chinook, plus two additional pinks. |
|      | Cape Alava to Queets River   | June 29-Sept 22                   | 86              | 2         | 24                       | 16                 | 3,040 coho quota and 1,700 Chinook guideline. Seven days per week. Two salmon daily plus two additional pinks; Aug. 10-22 two salmon daily, no more than one Chinook, plus two additional pinks. |
|      | 48°00' N. Lat. to 47°50' N. Lat.                                   | Sept. 28-Oct. 13                  | 16              | 2         | 24                       | 16                 | Seven days per week. Two salmon daily plus two additional pinks.   |
|      | Queets River to Leadbetter Point                                   | June 23-August 3                  | 36              | 2         | 24                       | 16                 | 22,916 coho quota and 20,300 Chinook guideline. Five days per week (Sun.-Thurs.) through July 18; seven days per week thereafter; no more than one Chinook.                                      |
|      |  | Aug. 4-Sept. 5                    | 33              | 2         | 24                       | 16                 | Seven days per week. Two salmon daily plus two additional pinks.   |
|      |  | Sept. 6-30                        | 25              | 2         | 24                       | 16                 | Seven days per week, non-mark-selective coho fishery with remaining quota converted to an impact neutral quota of 6,350.   |
|      |  | Leadbetter Point to WA/OR Border. | June 22-Aug. 22 | 62        | 2                        | 24                 | 16   |
|      |  | Aug. 23-Aug. 31                   | 9               | 2         | 24                       | 16                 | Seven days per week, non-mark-selective coho fishery with remaining quota converted to an impact neutral quota of 9,785.   |
|      |  | Sept 1-30                         | 30              | 2         | 24                       | 16                 | Seven days per week, non-mark-selective coho fishery with remaining quota converted to an impact neutral quota of 9,785.   |

TABLE C-6. Summary of actual Washington recreational ocean salmon regulations.<sup>a/</sup> (Page 2 of 4)

| Year       | Area  | Season   | Days            | Bag Limit | Minimum Size Limit (in.) |   | Other Restrictions  |
|------------|---|--|-----------------|-----------|--------------------------|---|---|
|            |   |  |                 |           | Chinook                  | Coho <sup>b/</sup>  |   |
| 2014       | U.S./Canada Border to Queets R. WA (Neah Bay and La Push subareas)                | May 16-17, 23-24,  | 18              | 2         | 24                       | -   | Coastwide quota: 9,000 marked Chinook.  |
|            |   | May 31-June 13   |                 |           |                          |   |   |
|            |   | Queets R. to Leadbetter Pt. WA (Westport subarea)                                | May 31-June 13  | 14        | 2                        | 24  |   |
|            | Leadbetter Pt. WA to Cape Falcon OR (Columbia River subarea)                      | May 31-June 13   | 14              | 2         | 24                       | -   | Coastwide quota: 9,000 marked Chinook.  |
|            |   | U.S./Canada Border to Cape Alava: 19,200 coho quota and 7,000 Chinook guideline. | June 14-Aug. 31 | 79        | 2                        | 24  | 16  |
|            | Cape Alava to Queets River 4,750 coho quota and 2,350 Chinook guideline.          | Sept. 1-21   | 21              | 2         | 24                       | 16  | Seven days per week. All salmon; unmarked coho retention allowed. Remaining coho quota converted to impact neutral quota of 1,600.  |
|            |   | June 14-Aug. 31  | 79              | 2         | 24                       | 16  | Seven days per week. All salmon; two fish per day.  |
|            | 48°00' N. Lat. to 47°50' N. Lat.  | Sept. 1-21   | 21              | 2         | 24                       | 16  | Seven days per week. All salmon; unmarked coho retention allowed. Remaining coho quota converted to impact neutral quota of 1,500.  |
|            |   | Sept. 27-Oct. 12   | 16              | 2         | 24                       | 16  | Seven days per week. Two salmon per day. Quotas of 50 Chinook and 50 coho.  |
|            | Queets River to Leadbetter Point 68,380 coho quota and 27,600 Chinook guideline.  | June 14-Aug. 31  | 79              | 2         | 24                       | 16  | Seven days per week. All salmon; two fish per day, no more than one Chinook June 14-Aug. 17.  |
|            |   | Sept. 1-19   | 19              | 2         | 24                       | 16  | Seven days per week. All salmon; unmarked coho retention allowed. Remaining coho quota converted to impact neutral quota of 13,750. |
|            | Leadbetter Point to WA/OR Border. 92,400 coho quota and 13,100 Chinook guideline. | June 14-Sept. 5  | 84              | 2         | 24                       | 16  | Seven days per week. All salmon; two fish per day, no more than one Chinook.  |
| Sept. 6-21 |   | 16   | 2               | 24        | 16                       | Seven days per week. All salmon; unmarked coho retention allowed. Remaining coho quota converted to impact neutral quota of 13,100. |   |

TABLE C-6. Summary of actual Washington recreational ocean salmon regulations.<sup>a/</sup> (Page 3 of 4)

| Year | Area   | Season   | Days             | Bag Limit | Minimum Size Limit (in.) |                    | Other Restrictions  |   |
|------|--|--|------------------|-----------|--------------------------|--------------------|---|---|
|      |  |  |                  |           | Chinook                  | Coho <sup>b/</sup> |   |   |
| 2015 | U.S./Canada Border to Queets R. WA (Neah Bay and La Push subareas)   | May 15-16, 22-23,<br>May 30-June 12                          | 18               | 2         | 24                       | -                  | Coastwide quota: 10,000 marked Chinook.   |   |
|      |  | Queets R. to Leadbetter Pt. WA (Westport subarea)            | May 30 - June 12 | 14        | 2                        | 24                 | -   | Coastwide quota: 10,000 marked Chinook. |
|      |  | Leadbetter Pt. WA to Cape Falcon OR (Columbia River subarea) | May 30 - June 12 | 14        | 2                        | 24                 | -   | Coastwide quota: 10,000 marked Chinook. |
|      | U.S./Canada Border to Cape Alava: 14,850 coho quota and 8,820 Chinook guideline, plus 1,700 mark-selective coho quota transferred from the commercial fishery. | June 13-Sept 3   | 83               | 2         | 24                       | 16                 | Seven days per week. All salmon; two fish per day. One Chinook allowed June 24-July 27, Aug. 14-15 and after Aug. 20, Chinook retention prohibited July 28- Aug. 13 and Aug. 16-20. |   |
|      |  | Sept 4-10  | 7                | 2         | 24                       | 16                 | Seven days per week. All salmon except Chinook; unmarked coho retention allowed. Remaining coho quota converted to impact neutral quota of 4,100.                                   |   |
|      |  | Sept 11-30   | 20               | 2         | 24                       | 16                 | Seven days per week. All salmon except Chinook; two fish per day. 1,700 mark-selective coho quota transferred from the commercial fishery.  |   |
|      | Cape Alava to Queets River 3,610 coho quota and 2,735 Chinook guideline.   | June 13-Sept. 3  | 83               | 2         | 24                       | 16                 | Seven days per week. All salmon; two fish per day; July 24-Sept. 30 limited to one Chinook.   |   |
|      |  | Sept. 4-30   | 27               | 2         | 24                       | 16                 | Seven days per week. All salmon; two fish per day, only one Chinook, unmarked coho retention allowed. Remaining coho quota converted to quota of 625.                               |   |
|      | 48°00' N. Lat. to 47°50' N. Lat.   | Oct. 1-11  | 11               | 2         | 24                       | 16                 | Seven days per week. Two salmon per day. Quotas of 100 Chinook and 100 coho.  |   |
|      | Queets River to Leadbetter Point 52,840 coho quota and 28,320 Chinook guideline.   | June 13-Sept. 3  | 83               | 2         | 24                       | 16                 | Seven days per week. All salmon; two fish per day, no more than one Chinook June 13-Aug.14.   |   |
|      |  | Sept. 4-30   | 27               | 2         | 24                       | 16                 | Seven days per week. All salmon; unmarked coho retention allowed. Remaining coho quota converted to impact neutral quota of 13,000.   |   |
|      | Leadbetter Point to WA/OR Border. 79,400 coho quota and 15,225 Chinook guideline.  | June 13-Sept. 3  | 83               | 2         | 24                       | 16                 | Seven days per week. All salmon; two fish per day, no more than one Chinook June 13-Aug.28.   |   |
|      |  | Sept. 4-30   | 27               | 2         | 24                       | 16                 | Seven days per week. All salmon; unmarked coho retention allowed. Remaining coho quota converted to impact neutral quota of 15,300.   |   |



TABLE C-6. Summary of actual Washington recreational ocean salmon regulations.<sup>a/</sup> (Page 4 of 4)

| Year               | Area   | Season                       | Days     | Bag Limit | Minimum Size Limit (in.) |                    | Other Restrictions   |
|--------------------|--|------------------------------|----------|-----------|--------------------------|--------------------|--|
|                    |  |                              |          |           | Chinook                  | Coho <sup>b/</sup> |  |
| 2016               | U.S./Canada Border to Cape Alva<br>(Neah Bay subarea)        | July 1- Aug. 21              | 52       | 2         | 24                       | -                  | All salmon except coho. Chinook guideline: 6,200   |
|                    | Cape Alava to Queets R.<br>(La Push sub area)                | July 1- Aug. 21              | 52       | 2         | 24                       | -                  | All salmon except coho. Chinook guideline: 2,000   |
|                    | Queets R. to Leadbetter Pt. WA<br>(Westport subarea)         | July 1-22<br>July 23-Aug. 21 | 22<br>30 | 1<br>2    | 24<br>24                 | -<br>-             | All salmon except coho. Chinook guideline: 16,600  |
|                    | Leadbetter Pt. WA to Cape Falcon<br>(Columbia River subarea) | July 1- Aug. 27              | 58       | 2         | 24                       | 16                 | All salmon. Guidelines: 10,200 Chinook, 18,900 coho. Daily bag limit allow s only 1 Chinook through Aug 15.  |
| 2017               | U.S./Canada Border to Cape Alva<br>(Neah Bay subarea)        | June 24-Sept. 4              | 73       | 2         | 24                       | 16                 | All salmon. Guidelines: 7,900 Chinook, 3,970 coho. Tw o fish daily.  |
|                    | Cape Alava to Queets R.<br>(La Push sub area)                | June 24-Sept. 4              | 73       | 2         | 24                       | 16                 | All salmon. Guidelines: 2,500 Chinook, 1,490 coho. Tw o fish daily.  |
|                    | Queets R. to Leadbetter Pt. WA<br>(Westport subarea)         | July 1-Aug.22                | 53       | 2         | 24                       | 16                 | All salmon. Guidelines: 21,400 Chinook, 17,113 coho. Tw o salmon daily, no more than one Chinook through July 21, then any tw o salmon daily thereafter.   |
|                    | Leadbetter Pt. WA to Cape Falcon<br>(Columbia River subarea) | June 24-Aug.22               | 60       | 2         | 24                       | 16                 | All salmon. Guidelines:13,200 Chinook, 22,527 coho. Tw o salmon daily, no more than one Chinook.   |
| 2018 <sup>c/</sup> | U.S./Canada Border to Cape Alva<br>(Neah Bay subarea)        | June 23-Aug 12               | 51       | 2         | 24                       | 16                 | Guidelines: 3,024 Chinook, 5,370 marked coho. Daily limit includes only one Chinook through July 13.   |
|                    | Cape Alava to Queets R.<br>(La Push sub area)                | June 23-Sept. 3              | 73       | 2         | 24                       | 16                 | Guidelines: 1,500 Chinook, 1,090 marked coho   |
|                    | Queets R. to Leadbetter Pt. WA<br>(Westport subarea)         | July 1-Sept. 3               | 51       | 2         | 24                       | 16                 | Guidelines: 13,100 Chinook, 15,540 marked coho. Open five days per w eek (Sun.-Thurs.), through Aug.23, then seven days per w eek thereafter. Daily limit includes only one Chinook through Aug. 23. |
|                    | Leadbetter Pt. WA to Cape Falcon<br>(Columbia River subarea) | June 23-Aug.12,<br>Sept. 2-3 | 53       | 2         | 24                       | 16                 | Guidelines: 8,000 Chinook, 21,000 marked coho. Daily limit includes only one Chinook through Aug. 12.  |

a/ For earlier years see Review of 2013 Ocean Salmon Fisheries, Appendix C, Table C-6.

b/ Mark-selective coho fishery unless otherwise noted; all retained coho must be marked w ith a healed adipose fin clip.

c/ For detailed regulations and inseason adjustments, see Tables I-3 and C-9.

TABLE C-7. Summary of actual Washington treaty Indian ocean and Area 4B troll salmon seasons. <sup>a/</sup> (Page 1 of 6)

| Year                  | Tribe/Area   | Seasons                    |                  | Number of Days             |            | Minimum Size Limit (in.) |      | Other Restrictions              |
|-----------------------|--|----------------------------|------------------|----------------------------|------------|--------------------------|------|---------------------------------|
|                       |  | All-Salmon-<br>Except-Coho | All Salmon       | All-Salmon-<br>Except-Coho | All Salmon | Chinook                  | Coho |                                 |
| 2012                  | <b>Quinault, Quileute, and Hoh</b>   |                            |                  |                            |            |                          |      |                                 |
|                       | Sand Point to Point Chehalis   | May 1-June 30              | -                | 61                         | -          | 24                       | -    |                                 |
|                       |  | -                          | July 1-Sept. 15  | -                          | 77         | 24                       | 16   |                                 |
|                       | Sand Point to Queets River<br>(Quileute only)                              | -                          | Sept. 16-Oct. 15 | -                          | 30         | 24                       | 16   | Ceremonial and subsistence only |
|                       | <b>Makah</b>   |                            |                  |                            |            |                          |      |                                 |
|                       | Ocean waters north of 48°02'15" N. Lat.<br>and east of 125°44'00" W. Long. |                            |                  |                            |            |                          |      |                                 |
|                       |  | May 1-June 30              | -                | 61                         | -          | 24                       | -    |                                 |
|                       |  | -                          | July 1-Sept. 15  | -                          | 77         | 24                       | 16   |                                 |
|                       | Area 4B inside waters  | -                          | Jan. 1-Apr. 15   |                            | 105        | 22                       | 16   |                                 |
|                       |  | May 1-June 30              | -                | 61                         | -          | 24                       | -    |                                 |
|                       | -  | July 1-Sept. 15            |                  | 77                         | 24         | 16                       |      |                                 |
|                       | -  | Nov. 1-Dec. 31             | -                | 61                         | 22         | 16                       |      |                                 |
| <b>S'Klallam</b>      |  |                            |                  |                            |            |                          |      |                                 |
| Area 4B inside waters | -  | Jan. 1-Apr. 15             |                  |                            |            |                          |      |                                 |
|                       | May 1-June 30  | -                          | 61               | -                          | 24         | -                        |      |                                 |
|                       | -  | July 1-Oct. 31             | -                | 123                        | 24         | 16                       |      |                                 |
| 2013                  | <b>Quinault, Quileute, and Hoh</b>   |                            |                  |                            |            |                          |      |                                 |
|                       | Sand Point to Point Chehalis   | May 1-June 18              | -                | 49                         | -          | 24                       | -    |                                 |
|                       |  | -                          | July 1-Sept. 4   | -                          | 66         | 24                       | 16   |                                 |
|                       | Sand Point to Queets River<br>(Quileute only)                              | -                          | Sept. 16-Oct. 15 | -                          | 30         | 24                       | 16   | Ceremonial and subsistence only |

TABLEC-7. Summary of actual Washington treaty Indian ocean and Area 4B troll salmon seasons.<sup>a</sup> (Page 2 of 6)

| Year        | Tribe/Area   | Seasons                    |                 | Number of Days             |            | Minimum Size Limit (in.) |      | Other Restrictions                                  |
|-------------|--|----------------------------|-----------------|----------------------------|------------|--------------------------|------|---|
|             |  | All-Salmon-<br>Except-Coho | All Salmon      | All-Salmon-<br>Except-Coho | All Salmon | Chinook                  | Coho |   |
| <b>2013</b> | <b>Makah</b>   |                            |                 |                            |            |                          |      |   |
| Cont.       | Ocean waters north of 48° 02'15" N. Lat.<br>and east of 125° 44'00" W. Long. |                            |                 |                            |            |                          |      |   |
|             |  | May 1-June 18              | -               | 49                         | -          | 24                       | -    |   |
|             |  | -                          | July 2-8        | -                          | 7          | 24                       | 16   | 50 Chinook per vessel per open period               |
|             |  | -                          | July 9-15       | -                          | 7          | 24                       | 16   | 100 Chinook per vessel per open period              |
|             |  | -                          | July 16-29      | -                          | 14         | 24                       | 16   | 75 Chinook per vessel per open period               |
|             |  | -                          | July 30-Aug. 11 | -                          | 13         | 24                       | 16   | 50 Chinook per vessel per open period               |
|             |  | -                          | Aug. 12-25      | -                          | 14         | 24                       | 16   | 35 Chinook per vessel per open period               |
|             |  | -                          | Aug. 26         | -                          | 1          | 24                       | 16   | 50 Chinook and 200 coho per vessel per open period  |
|             |  | -                          | Aug. 27         | -                          | 0          | 24                       | 16   | Closed  |
|             |  | -                          | Aug. 28-Sept. 3 | -                          | 7          | 24                       | 16   | 100 Chinook and 100 coho per vessel per open period |
|             | Area 4B inside waters  | -                          | Jan. 1-Apr. 15  | -                          | 105        | 22                       | 16   |   |
|             |  | May 1-June 18              | -               | 49                         | -          | 24                       | -    |   |
|             |  | -                          | July 2-8        | -                          | 7          | 24                       | 16   | 50 Chinook per vessel per open period               |
|             |  | -                          | July 9-15       | -                          | 7          | 24                       | 16   | 100 Chinook per vessel per open period              |
|             |  | -                          | July 16-29      | -                          | 14         | 24                       | 16   | 75 Chinook per vessel per open period               |
|             |  | -                          | July 30-Aug. 11 | -                          | 13         | 24                       | 16   | 50 Chinook per vessel per open period               |
|             |  | -                          | Aug. 12-25      | -                          | 14         | 24                       | 16   | 35 Chinook per vessel per open period               |
|             |  | -                          | Aug. 26         | -                          | 1          | 24                       | 16   | 50 Chinook and 200 coho per vessel per open period  |
|             |  | -                          | Aug. 27         | -                          | 0          | 24                       | 16   | Closed  |
|             |  | -                          | Aug. 28-Sept. 3 | -                          | 7          | 24                       | 16   | 100 Chinook and 100 coho per vessel per open period |
|             |  | -                          | Nov. 1-Dec. 31  | -                          | 61         | 22                       | 16   |   |
|             | <b>S'Kallam</b>  |                            |                 |                            |            |                          |      |   |
|             | Area 4B inside waters  | -                          | Jan. 1-Apr. 15  | -                          | 105        | 22                       | 16   |   |
|             |  | May 1-June 18              | -               | 49                         | -          | 24                       | -    |   |
|             |  | -                          | July 1-Sept. 4  | -                          | 66         | 24                       | 16   |   |
|             |  | -                          | Nov. 1-Dec. 31  | -                          | 61         | 22                       | 16   |   |

TABLE C-7. Summary of actual Washington treaty Indian ocean and Area 4B troll salmon seasons.<sup>a/</sup> (Page 3 of 6)

| Year                  | Tribe/Area  | Seasons                |                  | Number of Days         |            | Minimum Size Limit (in.) |      | Other Restrictions                                  |   |
|-----------------------|---|------------------------|------------------|------------------------|------------|--------------------------|------|---|---|
|                       |   | All-Salmon-Except-Coho | All Salmon       | All-Salmon-Except-Coho | All Salmon | Chinook                  | Coho |   |   |
| 2014                  | <b>Quinault, Quileute, and Hoh</b>                                      |                        |                  |                        |            |                          |      |   |   |
|                       | Sand Point to Point Chehalis  | May 1-June 30          | -                | 61                     | -          | 24                       | -    |   |   |
|                       | Quileute and Hoh  | -                      | July 1-Sept. 15  | -                      | 77         | 24                       | 16   |   |   |
|                       | Quinault  | -                      | July 1-Sept. 4   | -                      | 66         | -                        | -    |   |   |
|                       |   | -                      | Sept 5-10        | -                      | 6          | 24                       | 16   | 40 Chinook and 120 coho per vessel per open period  |   |
|                       |   | -                      | Sept 11-15       | -                      | 5          | 24                       | 16   | 45 Chinook and 135 coho per vessel per open period  |   |
|                       | Sand Point to Queets River (Quileute only)                              | -                      | Sept. 16-Oct. 15 | -                      | 30         | 24                       | 16   | Ceremonial and subsistence only                     |   |
|                       | <b>Makah</b>  |                        |                  |                        |            |                          |      |   |   |
|                       | Ocean waters north of 48°02'15" N. Lat. and east of 125°44'00" W. Long. |                        |                  |                        |            |                          |      |   |   |
|                       |   |                        | May 1-June 23    |                        | 54         | -                        | 24   | -   |   |
|                       |   |                        | June 25-30       |                        | 6          | -                        | 24   | -   | 75 Chinook per vessel per open period               |
|                       |   |                        | -                | July 1-31              | -          | 31                       | 24   | 16  |   |
|                       |   |                        | -                | Aug. 2-Aug. 9          | -          | 8                        | 24   | 16  | 70 Chinook per vessel per open period               |
|                       |   |                        | -                | Aug. 11-13             | -          | 3                        | 24   | 16  | 70 Chinook per vessel per open period               |
|                       |   |                        | -                | Aug. 15-20             | -          | 6                        | 24   | 16  | 100 Chinook and 315 coho per vessel per open period |
|                       |   |                        | -                | Aug. 22-27             | -          | 6                        | 24   | 16  | 120 Chinook and 360 coho per vessel per open period |
|                       |   |                        | -                | Aug. 29-Sept 3         | -          | 7                        | 24   | 16  | 120 Chinook and 200 coho per vessel per open period |
|                       |   |                        | -                | Sept 5-10              | -          | 6                        | 24   | 16  | 35 Chinook and 110 coho per vessel per open period  |
|                       |   |                        | -                | Sept 11-15             | -          | 5                        | -    | -   | 45 Chinook and 135 coho per vessel per open period  |
|                       | Area 4B inside waters   |                        | -                | Jan. 1-Apr. 15         | -          | 105                      | 22   | 16  |   |
|                       |   |                        | May 1-June 23    |                        | 54         | -                        | 24   | -   |   |
|                       |   |                        | June 25-30       |                        | 6          | -                        | 24   | -   | 75 Chinook per vessel per open period               |
|                       |   |                        | -                | July 1-31              | -          | 31                       | 24   | 16  |   |
|                       |   |                        | -                | Aug. 2-Aug. 9          | -          | 8                        | 24   | 16  | 70 Chinook per vessel per open period               |
|                       |   |                        | -                | Aug. 11-13             | -          | 3                        | 24   | 16  | 70 Chinook per vessel per open period               |
|                       |   |                        | -                | Aug. 15-20             | -          | 6                        | 24   | 16  | 100 Chinook and 315 coho per vessel per open period |
|                       |   |                        | -                | Aug. 22-27             | -          | 6                        | 24   | 16  | 120 Chinook and 360 coho per vessel per open period |
|                       |   | -                      | Aug. 29-Sept 3   | -                      | 7          | 24                       | 16   | 120 Chinook and 200 coho per vessel per open period |   |
|                       |   | -                      | Sept 5-10        | -                      | 6          | 24                       | 16   | 35 Chinook and 110 coho per vessel per open period  |   |
|                       |   | -                      | Sept 11-15       | -                      | 5          | -                        | -    | 45 Chinook and 135 coho per vessel per open period  |   |
|                       |   | -                      | Nov. 1-Dec. 31   | -                      | 61         | 22                       | 16   |   |   |
| <b>S'Klallam</b>      |   |                        |                  |                        |            |                          |      |   |   |
| Area 4B inside waters |   | -                      | Jan. 1-Apr. 15   | -                      | 105        | 22                       | 16   |   |   |
|                       |   | May 1-June 30          |                  | 61                     | -          | 24                       | -    |   |   |
|                       |   | -                      | July 1-Sept. 15  | -                      | 77         | 24                       | 16   |   |   |
|                       |   | -                      | Nov. 1-Dec. 31   | -                      | 61         | 22                       | 16   |   |   |

TABLE C-7. Summary of actual Washington treaty Indian ocean and Area 4B troll salmon seasons.<sup>a/</sup> (Page 4 of 6)

| Year                  | Tribe/Area   | Seasons                    |                  | Number of Days             |            | Minimum Size Limit (in.) |      | Other Restrictions                    |                                       |
|-----------------------|--|----------------------------|------------------|----------------------------|------------|--------------------------|------|---------------------------------------|---------------------------------------|
|                       |  | All-Salmon-<br>Except-Coho | All Salmon       | All-Salmon-<br>Except-Coho | All Salmon | Chinook                  | Coho |                                       |                                       |
| 2015                  | <b>Quinault, Quileute, and Hoh</b>   |                            |                  |                            |            |                          |      |                                       |                                       |
|                       | Sand Point to Point Chehalis   | May 1-June 30              | -                | 61                         | -          | 24                       | -    |                                       |                                       |
|                       | Quileute and Hoh   | -                          | July 1-Sept. 15  | -                          | 77         | 24                       | 16   |                                       |                                       |
|                       | Quinault   | -                          | July 1-Sept. 15  | -                          | 77         | -                        | -    |                                       |                                       |
|                       | Sand Point to Queets River<br>(Quileute only)                              | -                          | Sept. 16-Oct. 15 | -                          | 30         | 24                       | 16   | Ceremonial and subsistence only       |                                       |
|                       | <b>Makah</b>   |                            |                  |                            |            |                          |      |                                       |                                       |
|                       | Ocean waters north of 48°02'15" N. Lat.<br>and east of 125°44'00" W. Long. |                            |                  |                            |            |                          |      |                                       |                                       |
|                       |  |                            | May 1-June 23    |                            | 54         | -                        | 24   | -                                     |                                       |
|                       |  |                            | June 25-30       |                            | 6          | -                        | 24   | -                                     | 75 Chinook per vessel per open period |
|                       |  |                            | -                | July 6-11                  | -          | 6                        | 24   | 16                                    | 75 Chinook per vessel per open period |
|                       |  |                            | -                | July 13-23                 | -          | 11                       | 24   | 16                                    |                                       |
|                       |  |                            | -                | July 25-29                 | -          | 6                        | 24   | 16                                    | 30 Chinook per vessel per open period |
|                       |  |                            | -                | July 31-Aug. 5             | -          | 6                        | 24   | 16                                    | 30 Chinook per vessel per open period |
|                       |  |                            | -                | Aug. 7-12                  | -          | 6                        | 24   | 16                                    | 35 Chinook per vessel per open period |
|                       |  |                            | -                | Aug. 14-19; 21-26;         | -          | 17                       | 24   | 16                                    | 20 Chinook per vessel per open period |
|                       |  |                            | -                | 28-Sept 2                  | -          |                          |      |                                       |                                       |
|                       |  |                            | -                | Sept. 3-9                  | -          | 7                        | 24   | 16                                    | 25 Chinook per vessel per open period |
|                       |  |                            | -                | Sept. 10-15                | -          | 6                        |      |                                       | 40 Chinook per vessel per open period |
|                       | Area 4B inside waters  |                            | -                | Jan. 1-Apr. 15             | -          | 105                      | 22   | 16                                    |                                       |
|                       |  |                            | May 1-June 23    |                            | 54         | -                        | 24   | -                                     |                                       |
|                       |  |                            | June 25-30       |                            | 6          | -                        | 24   | -                                     | 75 Chinook per vessel per open period |
|                       |  |                            | -                | July 6-11                  | -          | 6                        | 24   | 16                                    | 75 Chinook per vessel per open period |
|                       |  |                            | -                | July 13-23                 | -          | 11                       | 24   | 16                                    |                                       |
|                       |  |                            | -                | July 25-29                 | -          | 6                        | 24   | 16                                    | 30 Chinook per vessel per open period |
|                       |  |                            | -                | July 31-Aug. 5             | -          | 6                        | 24   | 16                                    | 30 Chinook per vessel per open period |
|                       |  |                            | -                | Aug. 7-12                  | -          | 6                        | 24   | 16                                    | 35 Chinook per vessel per open period |
|                       |  |                            | -                | Aug. 14-19; 21-26;         | -          | 17                       | 24   | 16                                    | 20 Chinook per vessel per open period |
|                       |  | -                          | 28-Sept 2        | -                          |            |                          |      |                                       |                                       |
|                       |  | -                          | Sept. 3-9        | -                          | 7          | 24                       | 16   | 25 Chinook per vessel per open period |                                       |
|                       |  | -                          | Sept. 10-15      | -                          | 6          |                          |      | 40 Chinook per vessel per open period |                                       |
|                       |  | -                          | Nov. 1-Dec. 31   | -                          | 61         | 22                       | 16   |                                       |                                       |
| <b>S'Klallam</b>      |  |                            |                  |                            |            |                          |      |                                       |                                       |
| Area 4B inside waters |  | -                          | Jan. 1-Apr. 15   | -                          | 105        | 22                       | 16   |                                       |                                       |
|                       |  | May 1-June 30              | -                | 61                         | -          | 24                       | -    |                                       |                                       |
|                       |  | -                          | July 1-Sept. 15  | -                          | 77         | 24                       | 16   |                                       |                                       |
|                       |  | -                          | Nov. 1-Dec. 31   | -                          | 61         | 22                       | 16   |                                       |                                       |

TABLE C-7. Summary of actual Washington treaty Indian ocean and Area 4B troll salmon seasons.<sup>a/</sup> (Page 5 of 6)

| Year                            | Tribe/Area  | Seasons                |                 | Number of Days         |            | Minimum Size Limit (in.) |      | Other Restrictions                             |
|---------------------------------|---|------------------------|-----------------|------------------------|------------|--------------------------|------|--|
|                                 |   | All-Salmon-Except-Coho | All Salmon      | All-Salmon-Except-Coho | All Salmon | Chinook                  | Coho |  |
| 2016                            | <b>Quinault, Quileute, and Hoh</b>  |                        |                 |                        |            |                          |      |  |
|                                 | Sand Point to Point Chehalis  | May 1-June 30          | -               | 61                     | -          | 24                       | -    |  |
|                                 | Quileute and Hoh  | -                      | July 1-Aug. 31  | -                      | 62         | 24                       | 16   | No coho retention                              |
|                                 | Quinault  | -                      | July 1-Aug. 31  | -                      | 62         | 24                       | 16   | No coho retention                              |
|                                 | <b>Makah</b>  |                        |                 |                        |            |                          |      |  |
|                                 | North of 48°02'15" N. Lat. (Norwegian Memorial) and east of                     | May 1-June 4           | -               | 35                     | -          | 24                       | -    | Area closure: Sw iftsure                       |
|                                 |   | June 5-30              | -               | 26                     | -          | 24                       | -    | All Areas Open                                 |
|                                 |   | -                      | July 1-Aug. 6   | -                      | 37         | 24                       | 16   | No coho retention; Gear restriction plugs only |
|                                 |   | -                      | Aug. 7-31       | -                      | 25         | -                        | -    | No coho retention; No gear restrictions        |
|                                 | Area 4B (inside waters) (Tootosh line east to Sieku R.)                         | -                      | Jan. 1-Apr. 15  | -                      | 105        | 22                       | 16   |  |
|                                 |   | May 1-June 30          | -               | 61                     | -          | 24                       | -    |  |
|                                 |   | -                      | July 1-Aug. 6   | -                      | 37         | 24                       | 16   | No coho retention; Gear restriction plugs only |
|                                 |   | -                      | Aug. 7-31       | -                      | 25         | 24                       | -    | No coho retention; No gear restrictions        |
|                                 |   | -                      | Nov. 1-Dec. 31  | -                      | 61         | 22                       | 16   |  |
|                                 | <b>S'Klallam/Area 4B</b>  |                        |                 |                        |            |                          |      |  |
|                                 | (Tootosh line east to Sieku R.)   | -                      | Jan. 1-Apr. 15  | -                      | 105        | 22                       | 16   |  |
|                                 |   | May 1-June 30          | -               | 61                     | -          | 24                       | -    |  |
|                                 |   | -                      | July 1-Aug. 31  | -                      | 62         | 24                       | 16   | No coho retention                              |
|                                 |   | -                      | Nov. 1-Dec. 31  | -                      | 61         | 22                       | 16   |  |
| 2017                            | <b>Quinault, Quileute, and Hoh</b>  |                        |                 |                        |            |                          |      |  |
|                                 | Cape Alava to Point Chehalis  | May 1-June 30          | -               | 61                     | -          | 24                       | -    |  |
|                                 |   | -                      | July 1-Sept. 15 | -                      | 77         | 24                       | 16   |  |
|                                 | <b>Makah</b>  |                        |                 |                        |            |                          |      |  |
|                                 | North of 48°02'15" N. Lat. (Norwegian Memorial) and east of 125°44'00" W. Long. | May 1-June 30          | -               | 61                     | -          | 24                       | -    |  |
|                                 |   | -                      | July 1- Aug. 14 | -                      | 45         | 24                       | 16   |  |
|                                 |   | -                      | Aug. 15-21      | -                      | 7          | 24                       | 16   | 100 coho per vessel per week                   |
|                                 |   | -                      | Aug. 22-31      | -                      | 10         | 24                       | 16   | 175 coho per vessel per week                   |
|                                 |   | -                      | Sept. 1-8       | -                      | 8          | 24                       | 16   | 50 coho per vessel per week                    |
|                                 |   | -                      | Sept. 9-10      | -                      | 2          | 24                       | 16   | 75 coho per vessel per week                    |
|                                 |   | -                      | Sept. 11-14     | -                      | 4          | 24                       | 16   | 100 coho per vessel per week                   |
|                                 | Area 4B (inside waters) (Tootosh line east to Sieku R.)                         | -                      | Jan. 1-Apr. 15  | -                      | 105        | 22                       | 16   |  |
|                                 |   | May 1-June 30          | -               | 61                     | -          | 24                       | -    |  |
|                                 |   | -                      | July 1- Aug. 14 | -                      | 45         | 24                       | 16   |  |
|                                 |   | -                      | Aug. 15-21      | -                      | 7          | 24                       | 16   | 100 coho per vessel per week                   |
|                                 |   | -                      | Aug. 22-31      | -                      | 10         | 24                       | 16   | 175 coho per vessel per week                   |
|                                 |   | -                      | Sept. 1-8       | -                      | 8          | 24                       | 16   | 50 coho per vessel per week                    |
|                                 |   | -                      | Sept. 9-10      | -                      | 2          | 24                       | 16   | 75 coho per vessel per week                    |
|                                 |   | -                      | Sept. 11-14     | -                      | 4          | 24                       | 16   | 100 coho per vessel per week                   |
|                                 | -   | Nov. 1-Dec. 31         | -               | 61                     | 22         | 16                       |      |  |
| <b>S'Klallam/Area 4B</b>        |   |                        |                 |                        |            |                          |      |  |
| (Tootosh line east to Sieku R.) | -   | Jan. 1-Apr. 15         | -               | 105                    | 22         | 16                       |      |  |
|                                 | May 1-June 30   | -                      | 61              | -                      | 24         | -                        |      |  |
|                                 | -   | July 1-Sept. 15        | -               | 77                     | 24         | 16                       |      |  |
|                                 | -   | Nov. 1-Dec. 31         | -               | 61                     | 22         | 16                       |      |  |

TABLE C-7. Summary of actual Washington treaty Indian ocean and Area 4B troll salmon seasons.<sup>a/</sup> (Page 6 of 6)

| Year                            | Tribe/Area  | Seasons                    |                 | Number of Days             |            | Minimum Size Limit (in.) |                              | Other Restrictions           |
|---------------------------------|---|----------------------------|-----------------|----------------------------|------------|--------------------------|------------------------------|------------------------------|
|                                 |   | All-Salmon-<br>Except-Coho | All Salmon      | All-Salmon-<br>Except-Coho | All Salmon | Chinook                  | Coho                         |                              |
| 2018 <sup>b/</sup>              | <b>Quinault, Quileute, and Hoh</b>  |                            |                 |                            |            |                          |                              |                              |
|                                 | Cape Alava to Point Chehalis  | May 1-June 30              | -               | 61                         | -          | 24                       | -                            |                              |
|                                 |   | -                          | July 1-Sept. 15 | -                          | 77         | 24                       | 16                           |                              |
|                                 | <b>Makah</b>  |                            |                 |                            |            |                          |                              |                              |
|                                 | North of 48°02'15" N. Lat.<br>(Norwegian Memorial) and east of<br>125°44'00" W. Long. | May 1-June 30              | -               | 61                         | -          | 24                       | -                            |                              |
|                                 |   | -                          | July 1- Aug. 14 | -                          | 45         | 24                       | 16                           | 100 coho per vessel per week |
|                                 |   | -                          | Aug. 15-21      | -                          | 7          | 24                       | 16                           | 250 coho per vessel per week |
|                                 |   | -                          | Aug. 22-26      | -                          | 5          | 24                       | 16                           | 300 coho per vessel per week |
|                                 |   | -                          | Aug. 27-Sept. 2 | -                          | 7          | 24                       | 16                           | 300 coho per vessel per week |
|                                 |   | -                          | Sept. 3         | -                          | 1          | 24                       | 16                           |                              |
|                                 |   | -                          | Sept. 4-8       | -                          | 5          | 24                       | 16                           | 100 coho per vessel per week |
|                                 |   | -                          | Sept 9-15       | -                          | 5          | 24                       | 16                           | 200 coho per vessel per week |
|                                 | Area 4B (inside waters)<br>(Tootosh line east to Sieku R.)                            | -                          | Jan. 1-Apr. 15  | -                          | 105        | 22                       | 16                           |                              |
|                                 |   | May 1-June 30              | -               | 61                         | -          | 24                       | -                            |                              |
|                                 |   | -                          | July 1- Aug. 14 | -                          | 45         | 24                       | 16                           |                              |
|                                 |   | -                          | Aug. 15-21      | -                          | 7          | 24                       | 16                           | 100 coho per vessel per week |
|                                 |   | -                          | Aug. 22-26      | -                          | 5          | 24                       | 16                           | 250 coho per vessel per week |
|                                 |   | -                          | Aug. 27-Sept. 2 | -                          | 7          | 24                       | 16                           | 300 coho per vessel per week |
|                                 |   | -                          | Sept. 3         | -                          | 1          | 24                       | 16                           |                              |
|                                 |   | -                          | Sept. 4-8       | -                          | 5          | 24                       | 16                           | 100 coho per vessel per week |
|                                 | -   | Sept 9-15                  | -               | 5                          | 24         | 16                       | 200 coho per vessel per week |                              |
| <b>S'Klallam/Area 4B</b>        |   |                            |                 |                            |            |                          |                              |                              |
| (Tootosh line east to Sieku R.) | -   | Jan. 1-Apr. 15             | -               | 105                        | 22         | 16                       |                              |                              |
|                                 | May 1-June 30   | -                          | 61              | -                          | 24         | -                        |                              |                              |
|                                 | -   | July 1-Sept. 15            | -               | 77                         | 24         | 16                       |                              |                              |
|                                 | -   | Nov. 1-Dec. 31             | -               | 61                         | 22         | 16                       |                              |                              |

a/ For earlier years see Review of 2013 Ocean Salmon Fisheries, Appendix C, Table C-7.

b/ For detailed regulations see Table I-2.

TABLE C-8. Council preseason adopted catch quotas (thousands of fish) for ocean fisheries north of Cape Falcon and critical stocks driving management. (Page 1 of 3)

| Year | Chinook  |               |                       |       | Coho   |               |                       |                    |
|------|--|---------------|-----------------------|-------|--|---------------|-----------------------|--------------------|
|      | Critical Stocks  | Catch Quota   |                       |       | Critical Stocks  | Catch Quota   |                       |                    |
|      |  | Treaty Indian | Non-Indian Commercial | Sport |  | Treaty Indian | Non-Indian Commercial | Sport              |
| 1979 | None   | -             | -                     | -     | None   | -             | -                     | -                  |
| 1980 | None   | -             | -                     | -     | Washington coastal coho                                  | -             | -                     | -                  |
| 1981 | None   | -             | -                     | -     | Hoh and Skagit <sup>a/</sup>                             | -             | 372.0                 | 248.0              |
| 1982 | None   | -             | -                     | -     | Washington coastal coho                                  | -             | 293.0                 | 215.0              |
| 1983 | Columbia River hatchery and depressed upriver stocks                               | -             | 114.0                 | 88.0  | Queets and Skagit <sup>b/</sup>                          | -             | 164.0                 | 318.0              |
| 1984 | Low er Columbia River and Spring Creek Hatchery tules                              | 8.3           | 16.7                  | 10.3  | Grays Harbor   | 38.5          | 24.8                  | 50.2               |
| 1985 | Columbia River Spring Creek Hatchery tules   | 10.5          | 47.5 <sup>c/</sup>    | 37.2  | Skagit   | 75.0          | 91.5                  | 198.4              |
| 1986 | Columbia River Spring Creek Hatchery tules   | 12.5          | 51.0                  | 37.1  | Quillayute and Queets                                    | 86.0          | 140.6                 | 207.5              |
| 1987 | Columbia River Spring Creek Hatchery tules   | 15.8          | 58.2 <sup>d/</sup>    | 44.6  | Skagit   | 86.0          | 141.2                 | 200.9              |
| 1988 | Columbia River upriver stocks  | 60.0          | 73.7                  | 29.8  | Washington coastal and Puget Sound                       | 68.0          | 0.0 <sup>e/</sup>     | 100.0              |
| 1989 | Columbia River upriver stocks  | 32.0          | 47.5                  | 47.5  | Queets and Skagit  | 77.0          | 75.0                  | 225.0              |
| 1990 | Low er Columbia River Hatchery tules   | 31.2          | 37.5                  | 37.5  | Queets and Skagit  | 90.0          | 105.0                 | 245.0              |
| 1991 | Low er Columbia River Hatchery tules   | 33.0          | 40.0                  | 40.0  | Hood Canal and Skagit                                    | 80.0          | 87.0                  | 233.0              |
| 1992 | Columbia River Low er River and Spring Creek Hatchery tules, and Snake River falls | 33.0          | 47.0                  | 33.0  | Hood Canal and Stillaguamish                             | 68.0          | 19.0                  | 141.0              |
| 1993 | Columbia River Low er River and Spring Creek Hatchery tules, and Snake River falls | 33.0          | 35.0                  | 25.0  | Skagit   | 90.0          | 47.5                  | 202.5              |
| 1994 | Columbia River Low er River Hatchery tules and Snake River falls                   | 16.4          | 0.0                   | 0.0   | Washington coastal and Puget Sound                       | 0.0           | 0.0                   | 0.0                |
| 1995 | Columbia River Low er River Hatchery tules and Snake River falls                   | 12.0          | 0.0                   | 0.0   | Washington coastal and Puget Sound                       | 30.0          | 25.0                  | 75.0               |
| 1996 | Columbia River Low er River Hatchery tules and Snake River falls                   | 11.0          | 0.0                   | 0.0   | Washington coastal and Puget Sound                       | 30.0          | 20.8                  | 62.2               |
| 1997 | Snake River falls  | 15.0          | 11.5                  | 5.2   | Washington coastal and Puget Sound                       | 12.4          | 0.0                   | 32.3 <sup>f/</sup> |
| 1998 | Columbia River Low er River Hatchery tules   | 15.0          | 6.5                   | 3.5   | Washington coastal and Oregon Coast Natural              | 10.0          | 0.0                   | 16.0               |
| 1999 | Columbia River Low er River Wild (Lew is River)                                    | 30.0          | 28.5                  | 21.5  | Queets, Strait of Juan de Fuca, and Oregon Coast Natural | 38.5          | 20.0                  | 110 <sup>g/</sup>  |



TABLE C-8. Council preseason adopted catch quotas (thousands of fish) for ocean fisheries north of Cape Falcon and critical stocks driving management. (Page 2 of 3)

| Year | Chinook   |               |                       |                    | Coho  |               |                       |                       |
|------|---|---------------|-----------------------|--------------------|---|---------------|-----------------------|-----------------------|
|      | Critical Stocks   | Catch Quota   |                       |                    | Critical Stocks   | Catch Quota   |                       |                       |
|      |   | Treaty Indian | Non-Indian Commercial | Sport              |   | Treaty Indian | Non-Indian Commercial | Sport                 |
| 2000 | Columbia River Lower River Wild (Lewis River)                                 | 25.5          | 12.5                  | 12.5               | Queets, Skagit, Stillaguamish, Snohomish, Strait of Juan de Fuca, and OCN         | 20.0          | 25.0 <sup>g/</sup>    | 75.0 <sup>g/</sup>    |
| 2001 | Columbia River Lower River natural tules                                      | 37.0          | 30.0                  | 30.0               | Oregon Coast Natural  | 90.0          | 75.0 <sup>g/</sup>    | 225.0 <sup>g/</sup>   |
| 2002 | Columbia River Lower River natural tules                                      | 60.0          | 82.5                  | 67.5               | Oregon Coast Natural  | 60.0          | 5.0 <sup>g/i/</sup>   | 115.0 <sup>g/i/</sup> |
| 2003 | Columbia River Lower River natural tules and Snake River Fall                 | 60.0          | 64.4                  | 59.6               | Oregon Coast Natural  | 90.0          | 75.0 <sup>g/</sup>    | 225.0 <sup>g/</sup>   |
| 2004 | Columbia River Lower River natural tules and Snake River Fall                 | 49.0          | 44.5                  | 44.5               | Interior Fraser (B.C.), Oregon Coast Natural, and upper Columbia River escapement | 75.0          | 67.5 <sup>g/</sup>    | 202.5 <sup>g/</sup>   |
| 2005 | Snake River Fall  | 48.0          | 43.3                  | 43.3               | Interior Fraser (B.C.) and Skagit River   | 50.0          | 23.2 <sup>g/</sup>    | 121.8 <sup>g/</sup>   |
| 2006 | Columbia River Lower River natural tules <sup>h/</sup>                        | 42.2          | 34.0                  | 31.0               | Lower Columbia River natural and Interior Fraser (B.C.)                           | 37.5          | 6.8 <sup>g/</sup>     | 73.2 <sup>g/</sup>    |
| 2007 | Columbia River Lower River natural tules <sup>h/</sup>                        | 35.0          | 16.3                  | 16.3               | Lower Columbia River natural and Interior Fraser (B.C.)                           | 38.0          | 22.4 <sup>g/</sup>    | 117.6 <sup>g/</sup>   |
| 2008 | Lower River wild (Lewis River) <sup>h/</sup> and Columbia River natural tules | 37.5          | 20.0                  | 20.0               | Lower Columbia River natural and Hood Canal Natural                               | 20.0          | 4.0 <sup>g/</sup>     | 20.35 <sup>g/</sup>   |
| 2009 | Columbia River Lower River natural tules                                      | 39.0          | 20.5                  | 20.5               | Lower Columbia River, Skagit, Stillaguamish, and Interior Fraser Natural          | 60.0          | 33.6 <sup>g/</sup>    | 176.4 <sup>g/</sup>   |
| 2010 | Columbia River Lower River natural tules                                      | 55.0          | 56.0                  | 61.0 <sup>i/</sup> | Lower Columbia River, Strait of Juan de Fuca, and Interior Fraser Natural         | 41.5          | 12.8 <sup>g/</sup>    | 67.2 <sup>g/</sup>    |
| 2011 | Columbia River Lower River natural tules                                      | 41.0          | 30.9                  | 33.7 <sup>i/</sup> | Lower Columbia River and Interior Fraser Natural                                  | 42.0          | 12.8 <sup>g/</sup>    | 67.2 <sup>g/</sup>    |
| 2012 | Columbia River Lower River natural tules                                      | 55.0          | 47.4                  | 51.5 <sup>i/</sup> | Lower Columbia River and Interior Fraser Natural                                  | 47.5          | 11.8 <sup>g/</sup>    | 71.2 <sup>g/</sup>    |
| 2013 | Columbia River Lower River natural tules                                      | 52.5          | 44.0                  | 48.0 <sup>i/</sup> | Lower Columbia River and Interior Fraser Natural                                  | 47.5          | 14.2 <sup>g/</sup>    | 74.8 <sup>g/</sup>    |
| 2014 | Columbia River natural tules and Puget Sound                                  | 62.5          | 56.9                  | 59.1 <sup>i/</sup> | Lower Columbia River and Interior Fraser Natural                                  | 57.5          | 35.2 <sup>g/</sup>    | 184.8 <sup>g/</sup>   |

TABLE C-8. Council preseason adopted catch quotas (thousands of fish) for ocean fisheries north of Cape Falcon and critical stocks driving management. (Page 3 of 3)

| Year | Chinook                                      |               |                       |                    | Coho   |               |                       |                     |
|------|--|---------------|-----------------------|--------------------|--|---------------|-----------------------|---------------------|
|      | Critical Stocks                              | Catch Quota   |                       |                    | Critical Stocks  | Catch Quota   |                       |                     |
|      |  | Treaty Indian | Non-Indian Commercial | Sport              |  | Treaty Indian | Non-Indian Commercial | Sport               |
| 2015 | Columbia River natural tules and Puget Sound | 60.0          | 67.0                  | 64.0 <sup>i/</sup> | Lower Columbia River, Queets River and Interior Fraser Natural coho.               | 42.5          | 19.2 <sup>g/</sup>    | 150.8 <sup>g/</sup> |
| 2016 | Columbia River natural tules and Puget Sound | 40.0          | 35.0                  | 35.0 <sup>i/</sup> | Lower Columbia River, Queets River and Interior Fraser Natural coho.               | 0.0           | 0.0                   | 18.9 <sup>g/</sup>  |
| 2017 | Columbia River natural tules and Puget Sound | 40.0          | 45.0                  | 45.0               | Lower Columbia River, Queets River and Interior Fraser Natural coho.               | 12.5          | 5.6 <sup>g/</sup>     | 42.0 <sup>g/</sup>  |
| 2018 | Columbia River natural tules and Puget Sound | 40.0          | 27.5                  | 27.5               | Lower Columbia River, Grays Harbor, Queets River and Interior Fraser Natural coho. | 12.5          | 5.6 <sup>g/</sup>     | 42.0 <sup>g/</sup>  |

a/ Although the Skagit River escapement goal would not be achieved, management was based on meeting WDFW's escapement goal for Hoh River coho and allocation based on aggregation to Washington coastal tribes.

b/ The Council management regime was not expected to meet equitable adjustment requirements for Skagit River coho.

c/ Plus 7,430 hooking mortality for pink fishery.

d/ Plus 3,250 hooking mortality for pink fishery.

e/ Hooking mortality of 2,800 coho for June 1-15 fishery not included.

f/ Plus 1,200 hook-and-release mortality for the Neah Bay all-salmon-except-coho fishery.

g/ Marked hatchery coho only (healed adipose fin clip).

h/ Sharing of impacts on ESA listed Puget Sound Chinook also affected the shaping of ocean and inside fisheries.

i/ For 2002, the Council elected to constrain fishing so that the OCN exploitation rate would not exceed 12.5 percent per ODFW's recommendation to provide additional protection for lower Columbia River natural coho, which are listed as endangered under the Oregon State-ESA. The FMP objective for OCN coho was 15 percent.

j/ Includes mark-selective fishery quotas of: 12,000 (5,000 non-mark selective quota) in 2010, 4,800 (2,000 non-mark selective quota) in 2011, 8,000 in 2012 and 2013 (4,000 non-mark selective quota), 9,000 (4,500 non-mark selective) in 2014, and 10,000 in 2015 (4,000 non-mark selective).

TABLE C-9. 2018 sequence of events in ocean salmon fishery management.<sup>a/</sup> (Page 1 of 6)

**GENERAL MANAGEMENT ACTIONS AND INSEASON CONFERENCES**

|           |  |
|-----------|--|
| 6-Mar     | National Marine Fisheries Service (NMFS) provides the Council with a letter outlining the 2018 management guidance for stocks listed under the Endangered Species Act (ESA) and stocks of concern  |
| 13-Mar    | Effective date: March 13, 2018. Cancelled specific commercial and recreational ocean salmon fisheries south of Cape Falcon, OR, that were previously scheduled to open in March and April 2018 (82 FR 19630, April 28, 2017). The four fisheries that were cancelled were:<br><br>Commercial fishery from Cape Falcon, OR, to Florence South Jetty, OR, previously scheduled to open March 15, 2018;<br><br>Commercial fishery from Florence South Jetty, OR, to Humbug Mountain, OR, previously scheduled to open March 15, 2018; Commercial fishery from Humbug Mountain, OR, to the Oregon/California border (Oregon Klamath Management Zone), previously scheduled to open March 15, 2018;<br><br>Commercial fishery from Horse Mountain, CA, to Point Arena, CA, previously scheduled to open April 16-30, 2018;<br><br>Recreational fishery from Horse Mountain, CA, to Point Arena, CA, previously scheduled to open April 7, 2018; and Recreational fishery from Point Arena, CA, to Pigeon Point, CA, previously scheduled to open April 7, 2018. |
| 20-Mar    | North of Cape Falcon Salmon Forum meets in Olympia, WA to initiate consideration of recommendations for treaty Indian and non-Indian salmon management alternatives.   |
| 26-27-Mar | Council holds public hearings on proposed 2018 management alternatives in Westport, WA; Coos Bay, OR; and Salinas, CA.   |
| 3-Apr     | North of Cape Falcon (NOF) Salmon Forum meets in Lynnwood, WA to further consider recommendations for treaty Indian and non-Indian salmon management alternatives.   |
| 25-May    | Effective 11:59 pm May 27: The commercial ocean salmon fishery from the U.S./Canada border to the Queets River, WA (Washington state Marine Areas 3 and 4), is closed. Fishers have 24 hours to land their catch.  |
| 30-May    | Effective 12:01 am, Thursday, May 31, to 11:59 pm, midnight, Monday, June 4: the commercial salmon fishery from the US-Canada border to Queets River, WA, (Washington state Marine Areas 3 and 4), is open with an open period landing limit of 35 Chinook salmon per vessel. Fishers have 24 hours to land their catch after the June 4 closure.  |
| 30-May    | Effective 12:01 am, Thursday, May 31: The commercial salmon fishery from the Queets River, WA to Leadbetter Point, WA (Washington state marine area 2) has the landing limit increase from 100 to 200 Chinook per vessel per landing week (Thursday through Wednesday).  |
| 30-May    | Effective 12:01 am, Thursday, May 31: The commercial salmon fishery from Leadbetter Point, WA to Cape Falcon, OR has the landing limit increase from 50 to 100 Chinook per vessel per landing week (Thursday through Wednesday).   |
| 31-May    | Effective date June 1: June quota for the commercial salmon fishery in the California Klamath Management Zone has been adjusted on an impact-neutral basis for unused quota in May. The June quota is adjusted from 4,000 Chinook salmon to 6,650 Chinook salmon.  |
| 7-Jun     | Effective 12:01 am, Friday, June 8, to 11:59 pm, midnight, Monday, June 11: The commercial salmon fishery from the US-Canada border to the Queets River, WA (Washington state marine areas 3 and 4) is open with an open period landing limit of 30 Chinook salmon per vessel. Fishers have 24 hours to land their catch after the June 11 closure.  |
| 14-Jun    | Effective date: June 16, 2018. The Commercial salmon fishery from Humbug Mountain OR to the Oregon/California border (Oregon Klamath Management Zone), previously, scheduled to open Saturday, June 16, will remain closed for the remainder of June due to attainment of the June Chinook salmon quota in the area.   |
| 27-Jun    | Effective date: July 1, 2018. The July quota for the commercial salmon fishery in the California Klamath Management Zone has been adjusted on an impact-neutral basis for unused quota in June. The July quota is adjusted from 4,000 Chinook salmon to 6,612 Chinook salmon.  |

TABLE C-9. 2018 sequence of events in ocean salmon fishery management.<sup>a/</sup> (Page 2 of 6)

**GENERAL MANAGEMENT ACTIONS AND INSEASON CONFERENCES** *(continued)*

|        |  |
|--------|--|
| 27-Jun | Effective date: July 1, 2018. The July quota for the commercial salmon fishery in the Oregon Klamath Management Zone has been adjusted on an impact-neutral basis for quota exceeded in June. The July quota is adjusted from 2,000 Chinook salmon to 1,975 Chinook salmon.  |
| 27-Jun | Effective date: July 1, 2018. NOAA Fisheries has determined that sufficient Pacific halibut allocation remains to allow retention of Pacific halibut caught incidental to the commercial salmon fishery, by IPHC license holders, to continue after June 30, 2018, with the same landing and possession limits set pre-season.   |
| 12-Jul | Effective date: July 14, 2018. The daily bag limit in the recreational ocean salmon fishery in the Neah Bay subarea (U.S./Canada border to Cape Alava, WA) is adjusted to allow for retention of two Chinook salmon, whereas previously only one Chinook salmon could be retained of the two salmon per day bag limit.   |
| 13-Jul | Effective date: July 14, 2018. Retention of Pacific halibut caught incidental to commercial salmon fishing ends at 11:59 pm, Saturday, July 14. Fishers have 24 hours to land all halibut on board after the June 14 closure.  |
| 17-Jul | Effective July 20 through July 31, 2018. Landing and possession limit for the commercial salmon fishery in the California Klamath Management Zone is increased from 20 to 40 Chinook per vessel per day.   |
| 24-Jul | Effective 12:01 am, Thursday, July 26, 2018. Retention of Pacific halibut caught incidental to the commercial salmon fishery resumes with revised landing and possession limits. IPHC license holders may land or possess no more than one Pacific halibut per three Chinook salmon, except one Pacific halibut may be possessed or landed without meeting the ratio requirement, and no more than 10 halibut may be possessed or landed per trip.                       |
| 24-Jul | Effective 12:01 am, Thursday, July 26, 2018, retention of Pacific halibut caught incidental to the commercial salmon fishery resumes with revised landing and possession limits. IPHC license holders may land or possess no more than one Pacific halibut per three Chinook salmon, except one Pacific halibut may be possessed or landed without meeting the ratio requirement, and no more than 10 halibut may be possessed or landed per trip.                       |
| 24-Jul | Effective Thursday, July 26, 2018, the commercial ocean salmon fishery in the area from the U.S./Canada border to the Queets River, WA, and in the area from Leadbetter Point, WA, to Cape Falcon, OR, has the landing and possession limit increased from 50 to 75 Chinook salmon per vessel per landing week.  |
| 24-Jul | Effective Tuesday, July 24, 2018, 1,000 coho from the commercial coho quota north of Cape Falcon, OR is transferred to the recreational coho quota in the Neah Bay subarea (U.S./Canada border to Cape Alava, WA). When the Neah Bay recreational fishery closes for the season, in-season action will be taken to transfer any remaining Chinook guideline for that subarea to the north of Cape Falcon, OR commercial Chinook salmon quota on an impact-neutral basis. |
| 1-Aug  | Effective date: August 2, 2018. The landing and possession limit for the commercial ocean salmon fishery in the area from the U.S./Canada border to the Queets River, WA, is decreased from 75 to 50 Chinook salmon per vessel per landing week.   |
| 2-Aug  | Effective date: August 2, 2018. The August quota for the commercial salmon fishery in the California Klamath Management Zone has been adjusted on an impact-neutral basis for unused quota in July. The August quota is adjusted from 4,000 Chinook salmon to 9,423 Chinook salmon.  |
| 2-Aug  | Effective date: August 3, 2018. The landing and possession limit for the commercial ocean salmon fishery in the California Klamath Management Zone is increased from 20 to 50 Chinook per vessel per day.  |
| 2-Aug  | Effective date: August 2, 2018. The August quota for the commercial salmon fishery in the Oregon Klamath Management Zone has been adjusted on an impact-neutral basis for unused quota in July. The August quota is adjusted from 500 Chinook salmon to 1,430 Chinook salmon.  |
| 8-Aug  | Effective date: 11:59 p.m., August 8, 2018, retention of Pacific halibut caught incidental to the commercial ocean salmon fishery from the U.S./Canada border to the U.S./Mexico border is closed.   |

TABLE C-9. 2018 sequence of events in ocean salmon fishery management.<sup>a/</sup> (Page 3 of 6)

**GENERAL MANAGEMENT ACTIONS AND INSEASON CONFERENCES** *(continued)*

|        |   |
|--------|---|
| 8-Aug  | Effective date: August 8, 2018. Coho quota transferred to the recreational salmon fishery in the Columbia River subarea as follows: 2,400 coho quota from the commercial salmon fishery north of Cape Falcon and 600 coho quota from the recreational salmon fishery in the Westport subarea. The adjusted coho quota in the recreational salmon fishery in the Columbia River subarea is 24,000. The adjusted coho quota in the recreational salmon fishery in the Westport subarea is 15,140. The adjusted coho quota in the commercial salmon fishery north of Cape Falcon is 2,200. |
| 8-Aug  | Effective date: 11:59 p.m., August 12, 2018, the recreational ocean salmon fishery in the Neah Bay subarea (U.S./Canada border to Cape Alava) is closed.  |
| 8-Aug  | Effective date: 11:59 p.m., August 12, 2018, the recreational ocean salmon fishery in the Columbia River subarea (Leadbetter Point to Cape Falcon) is closed.   |
| 9-Aug  | Effective date: August 13, 2018. The landing and possession limit in the commercial ocean salmon fishery from Humbug Mountain, OR to the Oregon/California border (Oregon Klamath Management Zone) is increased from 50 to 80 Chinook salmon per vessel per landing week (Thursday through Wednesday).  |
| 23-Aug | Effective date: August 23, 2018. Remaining Chinook guideline (1,876 Chinook salmon) from the recreational fishery in the Neah Bay subarea, which closed August 12, is transferred to the commercial fishery north of the Queets River, WA, as previously agreed, to complete the trade under inseason action #17 on July 24.  |
| 23-Aug | Effective date: August 24, 2018. The recreational fishery in the Westport subarea is adjusted to be open seven days per week with a daily bag limit of two salmon, both of which can be Chinook salmon. Previously, the recreational fishery in the Westport subarea was open Sunday through Thursday with a daily bag limit of two salmon, only one of which could be a Chinook salmon.  |
| 23-Aug | Effective date: August 23, 2018. The landing and possession limit in the commercial fishery from the U.S./Canada border to the Queets River, WA is adjusted from 50 to 85 Chinook per vessel per landing week (Thursday through Wednesday).   |
| 23-Aug | Effective date: August 23, 2018. The landing and possession limit in the commercial fishery from Leadbetter Point, WA to Cape Falcon, OR is adjusted from 75 to 85 Chinook per vessel per landing week (Thursday through Wednesday).  |
| 30-Aug | Effective date: August 30, 2018. 2,400 coho quota from the north of Cape Falcon, OR commercial ocean salmon fishery is transferred to the north of Cape Falcon recreational ocean salmon fishery in the Columbia River subarea.   |
| 30-Aug | Effective date: August 30, 2018. The landing and possession limit for coho in the north of Cape Falcon, OR commercial ocean salmon fishery is increased from 10 to 25 coho, marked with a healed adipose fin clip, per vessel per landing week (Thursday through Wednesday).  |
| 30-Aug | Effective date: September 2, 2018. The recreational ocean salmon fishery in the area from Leadbetter Point, WA to Cape Falcon, OR (Columbia River subarea) reopens Sunday, September 2, 2018 through Monday, September 3, 2018. All salmon may be retained; two salmon per day, both of which may be Chinook. All coho must be marked with a healed adipose fin clip.   |
| 12-Sep | Effective date: September 12, 2018. Remaining coho quota from the Cape Falcon, OR to Humbug Mountain, OR recreational mark-selective coho fishery (June 30 - September 3) is rolled over, on an impact-neutral basis, to the recreational non-mark-selective coho fishery in September. Coho quota for the non-mark-selective fishery increased from 3,500 to 7,600 coho.   |
| 12-Sep | Effective date: September 12, 2018. Coho quota (2,400 coho) that was transferred from the north of Cape Falcon, OR commercial fishery to the Columbia River subarea recreational fishery on August 30, 2018 (inseason action #32), is transferred back to the north of Cape Falcon, OR commercial fishery without adjustment.   |
| 19-Sep | Effective 11:59 p.m., Friday, September 21, 2018, the recreational non-mark-selective coho salmon fishery from Cape Falcon, OR to Humbug Mountain, OR is closed due to projected attainment of the available coho quota. The recreational fishery for all salmon except coho will continue as announced preseason.  |

TABLE C-9. 2018 sequence of events in ocean salmon fishery management.<sup>a/</sup> (Page 4 of 6)

**TREATY INDIAN COMMERCIAL TROLL SEASONS**

|        |   |
|--------|---|
| 1 Jan  | All-salmon fisheries in Area 4B for Makah and S'Klallam tribes open through April 15.   |
| 1 May  | All-salmon-except-coho fisheries open through the earlier of June 30 or attainment of 16,000 Chinook quota.   |
| 30 Jun | All-salmon-except-coho fisheries close as scheduled (see Table C-7).  |
| 1 Jul  | All-salmon fisheries open through the earlier of September 15, or attainment of 24,000 Chinook quota or 12,500 coho quota. Inseason action includes various landing/possession limits per vessel per week for coho. |
| 15 Sep | All-salmon fisheries close as scheduled.  |
| 1 Nov  | All-salmon fisheries in Area 4B for Makah and S'Klallam tribes open through December 31.  |

**NON-INDIAN COMMERCIAL TROLL SEASONS**

|        |  |
|--------|--|
| 01-May | U.S./Canada border to Cape Falcon, OR non-Indian commercial all-salmon-except-coho fishery opens until the earlier of June 30 or attainment of 16,500 preseason Chinook guideline, of which no more than 5,200 may be caught north of the Queets River, and no more than 4,600 may be caught south of Leadbetter Point, WA. Landing/possession limits of 50 Chinook per vessel per landing week north of the Queets River, WA or south of Leadbetter Point, WA or 100 Chinook per vessel per landing week in the area between the Queets River, WA and Leadbetter Point, WA in effect. |
| 1-May  | OR/CA Border to Humboldt South Jetty non-Indian commercial all-salmon-except-coho fishery opens Friday through Tuesday until the earlier of May 29 or attainment of 3,600 Chinook quota with a landing and possession limit of 20 Chinook per day.   |
| 1-May  | Pigeon Point to U.S./Mexico border non-Indian commercial all-salmon-except-coho fishery opens through May 7 (7 days).  |
| 04-May | From Cape Falcon to Humbug Mt. non-Indian commercial all-salmon-except-coho fishery opens May 4-14, May 19-31, June 4-12, June 16-30, July 5-12, July 16-31, August 3-7, August 13-17, August 25-29, and September 1 through October 31. Beginning September 1, a 50 Chinook weekly limit (Thursday through Wednesday) will be in place, and the fishery will be limited to fishing only shoreward of the 40 fathom curve during the month of October.   |
| 04-May | From Humbug Mt. to the OR/CA non-Indian commercial all-salmon-except-coho fishery opens May 4-14, May 19-31, June 4-12, June 16-30, July 5-12, July 16-31, August 3-7, August 13-17, August 25-29 and monthly quotas of 1,500 in June, 2,000 in July, and 500 in August. Unused quota may be transferred forward to the next open quota period on an impact neutral basis. From June through August, landing week (Thursday-Wednesday) limits of 50 Chinook will be in effect. Mandatory call-in requirements within an hour of landing are in place for all quota managed seasons.    |
| 29-May | OR/CA Border to Humboldt South Jetty non-Indian commercial all-salmon-except-coho fishery closes as scheduled.   |
| 1-Jun  | OR/CA Border to Humboldt South Jetty non-Indian commercial all-salmon-except-coho fishery opens Friday through Tuesday until the earlier of June 30 or attainment of 4,000 Chinook quota (adjusted to 6,650 Chinook on an impact-neutral basis for unused quota in May) with a landing and possession limit of 20 Chinook per day.   |
| 19-Jun | Pigeon Point to U.S./Mexico border non-Indian commercial all-salmon-except-coho fishery opens through June 30 (12 days).   |
| 30-Jun | U.S./Canada border to Cape Falcon non-Indian commercial all-salmon-except-coho fishery closes as scheduled.  |
| 30-Jun | OR/CA Border to Humboldt South Jetty non-Indian commercial all-salmon-except-coho fishery closes as scheduled.   |

TABLE C-9. 2018 sequence of events in ocean salmon fishery management.<sup>a/</sup> (Page 5 of 6)

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**NON-INDIAN COMMERCIAL TROLL SEASONS** *(continued)*

|        |  |
|--------|--|
| 1-Jul  | U.S./Canada border to Cape Falcon non-Indian commercial all-salmon fishery open until the earlier of September 19 or attainment of 11,000 preseason Chinook guideline or 5,600 coho whichever comes first; no more than 4,600 Chinook may be caught north of the Queets River, and no more than 1,300 Chinook may be caught south of Leadbetter Point. Landing/possession limits of 50 Chinook per vessel per landing week north of the Queets River or south of Leadbetter Point in effect. Landing/possession limits of 10 coho per vessel per landing week in effect. |
| 1-Jul  | OR/CA Border to Humboldt South Jetty non-Indian commercial all-salmon-except-coho fishery opens Friday through Tuesday until the earlier of July 31 or attainment of 4,000 Chinook quota (adjusted to 6,612 Chinook on an impact-neutral basis for unused quota in June). The landing and possession limit increased from 20 Chinook per day to 40 Chinook per day effective July 20.  |
| 26-Jul | Horse Mountain to Pigeon Point non-Indian commercial all-salmon-except-coho fishery opens through July 31 (5 days).  |
| 31-Jul | OR/CA Border to Humboldt South Jetty non-Indian commercial all-salmon-except-coho fishery closes as scheduled.   |
| 3-Aug  | OR/CA Border to Humboldt South Jetty non-Indian commercial all-salmon-except-coho fishery opens Friday through Tuesday until the earlier of Aug 31 or attainment of 4,000 Chinook quota (adjusted to 9,423 Chinook on an impact-neutral basis for unused quota in July). The landing and possession limit increased from 20 Chinook per day to 50 Chinook per day effective Aug. 3.  |
| 3-Aug  | Horse Mountain to Pigeon Point non-Indian commercial all-salmon-except-coho fishery opens through Aug. 29 (27 days).   |
| 31-Aug | OR/CA Border to Humboldt South Jetty non-Indian commercial all-salmon-except-coho fishery closes as scheduled.   |
| 1-Sep  | Horse Mountain to Pigeon Point non-Indian commercial all-salmon-except-coho fishery opens through Sept 30 (30 days).   |
| 19-Sep | U.S./Canada border to Cape Falcon non-Indian commercial all-salmon fishery closes as scheduled.  |
| 1-Oct  | Point Reyes to Point San Pedro non-Indian commercial all-salmon-except-coho fishery opens Monday through Friday, through Oct. 12 (10 days).  |

TABLE C-9. 2018 sequence of events in ocean salmon fishery management.<sup>a/</sup> (Page 6 of 6)

**RECREATIONAL SEASONS**

|         |   |
|---------|---|
| 15-Mar  | Cape Falcon to Humbug Mountain all-salmon-except-coho fishery opens through October 31, seven days per week with a 24-inch minimum size limit for Chinook. The fishery will be limited to fishing only shoreward of the 40 fathom curve during the month of October.  |
| 7-Apr   | Pigeon Point to U.S./Mexico border all-salmon-except-coho fishery open seven days per week, with a 24-inch minimum size limit for Chinook. Open through July 2.   |
| 1-Jun   | OR/CA border to Horse Mountain all-salmon-except-coho fishery open seven days per week with a 20-inch minimum size limit for Chinook. Open through September 3.   |
| 17-Jun  | Horse Mountain to Pigeon Point all-salmon-except-coho fishery open seven days per week with a 20-inch minimum size limit for Chinook. Open through October 31.  |
| 23-Jun  | U.S./Canada border to Cape Alava (Neah Bay Subarea), all-salmon fishery opens through the earlier of September 3 or attainment of a subarea quota of 4,370 marked coho and/or a subarea guideline of 4,900 Chinook. Open seven days per week. Bag limit is two fish per day, no more than one of which may be a Chinook. All coho must be marked with a healed adipose fin clip. No chum retention beginning August 1. Minimum size limit is 24 inches for Chinook and 16 inches for coho. Chinook non-retention east of the Bonilla-Tatoosh line in Council area fisheries beginning August 1. |
| 23-Jun  | Cape Alava to Queets River (La Push Subarea), all-salmon fishery opens through the earlier of September 3 or attainment of a subarea quota of 1,090 marked coho and/or a subarea guideline of 1,500 Chinook. Open seven days per week. Bag limit is two fish per day. All coho must be marked with a healed adipose fin clip. Minimum size limit is 24 inches for Chinook and 16 inches for coho.   |
| 23-Jun  | Leadbetter Point to Cape Falcon (Columbia River Subarea), all-salmon fishery opens though the earlier of September 3 or attainment of a subarea quota of 21,000 marked coho and/or a subarea guideline of 8,000 Chinook. Open seven days per week. Bag limit is two fish per day, no more than one of which can be a Chinook. All coho must be marked with a healed adipose fin clip. Minimum size limit is 24 inches for Chinook and 16 inches for coho  |
| 30-June | Cape Falcon to Humbug Mountain., all-salmon mark-selective-coho fishery opens through earlier of September 3 or attainment of a subarea quota of 35,000 marked coho. Open seven days per week. Bag limit is two fish per day. All coho must be marked with a healed adipose fin clip. Minimum size limit is 24 inches for Chinook and 16 inches for coho.   |
| 1-Jul   | Queets River to Leadbetter Point (Westport Subarea), all-salmon fishery opens though the earlier of September 3 or attainment of a subarea quota 15,540 marked coho and/or a subarea guideline of 13,100 Chinook. Open five days per week (Sun.-Thurs.). Bag limit is 2 fish per day, no more than one of which may be a Chinook. All coho must be marked with a healed adipose fin clip. Minimum size limit is 24 inches for Chinook and 16 inches for coho. Grays Harbor Control Zone closed beginning August 13.   |
| 7-Sep   | Cape Falcon to Humbug Mountain all-salmon non-mark-selective coho fishery opens each Friday-Saturday through September 29 or attainment of a 3,500 coho quota adjusted on September 21 to 7,600 coho. Bag limit is two fish per day. Minimum size limit is 24 inches for Chinook and 16 inches for coho.  |

a/ Unless stated otherwise, season openings or modifications of restrictions are effective at 00:01 hours of the listed date. Closures are effective at 23:59 hours of the listed date. NMFS inseason actions are results of conference calls between state, federal and tribal fishery managers.



**APPENDIX D  
HISTORICAL ECONOMIC DATA**

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TABLE D-1. California monthly troll Chinook and coho average dressed weights (pounds) by area of landing. (Page 1 of 3)

| Year                 | Apr. | May  | June | July | Aug. | Sept. | Oct. | Season <sup>a/</sup> | May | June | July | Aug. | Sept. | Season |
|----------------------|------|------|------|------|------|-------|------|----------------------|-----|------|------|------|-------|--------|
| CHINOOK              |      |      |      |      |      |       |      | COHO                 |     |      |      |      |       |        |
| <u>Crescent City</u> |      |      |      |      |      |       |      |                      |     |      |      |      |       |        |
| 1981-1985            | -    | 7.7  | 8.3  | 8.6  | 8.7  | 9.2   | -    | 8.5                  | 3.9 | 4.6  | 5.4  | 6.4  | 6.8   | 5.9    |
| 1986-1990            | -    | -    | 9.6  | 9.5  | 9.2  | 9.4   | -    | 9.6                  | -   | 5.0  | 5.0  | 4.5  | 5.6   | 5.0    |
| 1991-1995            | -    | -    | -    | -    | -    | -     | -    | -                    | -   | -    | -    | -    | -     | -      |
| 1996-2000            | -    | -    | -    | -    | 8.3  | 10.2  | -    | 10.0                 | -   | -    | -    | -    | -     | -      |
| 2001-2005            | 11.1 | 12.0 | 10.9 | 11.6 | 12.7 | 12.2  | 10.1 | 12.6                 | -   | -    | -    | -    | -     | -      |
| 2006                 | -    | -    | -    | -    | -    | -     | -    | -                    | -   | -    | -    | -    | -     | -      |
| 2007                 | -    | -    | -    | -    | -    | 13.7  | -    | 13.7                 | -   | -    | -    | -    | -     | -      |
| 2008                 | -    | -    | -    | -    | -    | -     | -    | -                    | -   | -    | -    | -    | -     | -      |
| 2009                 | -    | -    | -    | -    | -    | -     | -    | -                    | -   | -    | -    | -    | -     | -      |
| 2010                 | -    | -    | -    | -    | -    | -     | -    | -                    | -   | -    | -    | -    | -     | -      |
| 2011                 | -    | -    | -    | 15.5 | 16.0 | -     | -    | 16.0                 | -   | -    | -    | -    | -     | -      |
| 2012                 | -    | -    | -    | -    | -    | 11.7  | -    | 11.7                 | -   | -    | -    | -    | -     | -      |
| 2013                 | -    | 11.7 | 11.2 | 14.6 | 11.9 | 13.9  | -    | 12.7                 | -   | -    | -    | -    | -     | -      |
| 2014                 | -    | -    | -    | -    | -    | 11.8  | -    | 11.8                 | -   | -    | -    | -    | -     | -      |
| 2015                 | -    | -    | -    | -    | -    | 12.7  | -    | 12.7                 | -   | -    | -    | -    | -     | -      |
| 2016                 | -    | -    | -    | -    | -    | 14.3  | -    | 14.3                 | -   | -    | -    | -    | -     | -      |
| 2017                 | -    | -    | -    | -    | -    | -     | -    | -                    | -   | -    | -    | -    | -     | -      |
| 2018 <sup>b/</sup>   | -    | 8.6  | 9.7  | 9.5  | 9.8  | -     | -    | 9.6                  | -   | -    | -    | -    | -     | -      |
| <u>Eureka</u>        |      |      |      |      |      |       |      |                      |     |      |      |      |       |        |
| 1981-1985            | -    | 7.4  | 8.2  | 8.9  | 9.2  | 9.6   | -    | 6.6                  | 4.6 | 4.7  | 5.9  | 6.2  | 6.6   | 5.7    |
| 1986-1990            | -    | -    | 9.0  | 10.1 | 10.2 | 9.2   | 9.6  | 9.3                  | -   | 5.1  | 5.6  | 5.5  | 6.2   | 5.3    |
| 1991-1995            | -    | -    | -    | -    | -    | 9.5   | 17.7 | 10.1                 | -   | -    | -    | -    | 6.2   | 6.2    |
| 1996-2000            | -    | -    | -    | -    | 11.9 | 10.1  | -    | 10.2                 | -   | -    | -    | -    | -     | -      |
| 2001-2005            | -    | -    | -    | -    | 11.4 | 11.3  | -    | 11.3                 | -   | -    | -    | -    | -     | -      |
| 2006                 | -    | -    | -    | -    | -    | -     | -    | -                    | -   | -    | -    | -    | -     | -      |
| 2007                 | -    | -    | -    | -    | -    | 12.3  | -    | 12.3                 | -   | -    | -    | -    | -     | -      |
| 2008                 | -    | -    | -    | -    | -    | -     | -    | -                    | -   | -    | -    | -    | -     | -      |
| 2009                 | -    | -    | -    | -    | -    | -     | -    | -                    | -   | -    | -    | -    | -     | -      |
| 2010                 | -    | -    | -    | -    | -    | -     | -    | -                    | -   | -    | -    | -    | -     | -      |
| 2011                 | -    | -    | -    | 13.7 | 11.7 | -     | -    | 13.3                 | -   | -    | -    | -    | -     | -      |
| 2012                 | -    | -    | -    | -    | -    | 10.5  | -    | 10.5                 | -   | -    | -    | -    | -     | -      |
| 2013                 | -    | 9.1  | 11.2 | 11.0 | 11.9 | 11.2  | -    | 10.7                 | -   | -    | -    | -    | -     | -      |
| 2014                 | -    | -    | -    | -    | -    | 11.9  | -    | 11.9                 | -   | -    | -    | -    | -     | -      |
| 2015                 | -    | -    | -    | -    | -    | 12.5  | -    | 12.5                 | -   | -    | -    | -    | -     | -      |
| 2016                 | -    | -    | -    | -    | -    | 11.9  | -    | 11.9                 | -   | -    | -    | -    | -     | -      |
| 2017                 | -    | -    | -    | -    | -    | -     | -    | -                    | -   | -    | -    | -    | -     | -      |
| 2018 <sup>b/</sup>   | -    | 7.1  | 8.3  | 10.6 | 10.1 | -     | -    | 9.4                  | -   | -    | -    | -    | -     | -      |

TABLE D-1. California monthly troll Chinook and coho average dressed weights (pounds) by area of landing. (Page 2 of 3)

| Year                 | Apr.    | May  | June | July | Aug. | Sept. | Oct. | Season <sup>a/</sup> | May | June | July | Aug. | Sept. | Season |
|----------------------|---------|------|------|------|------|-------|------|----------------------|-----|------|------|------|-------|--------|
|                      | CHINOOK |      |      |      |      |       |      | COHO                 |     |      |      |      |       |        |
| <u>Fort Bragg</u>    |         |      |      |      |      |       |      |                      |     |      |      |      |       |        |
| 1981-1985            | 7.6     | 9.0  | 10.4 | 9.6  | 10.3 | 10.1  | -    | 9.8                  | 5.3 | 6.0  | 6.3  | 6.6  | 7.2   | 6.2    |
| 1986-1990            | -       | 9.3  | 10.2 | 9.3  | 10.1 | 10.1  | -    | 9.6                  | -   | 5.3  | 5.8  | 6.4  | 6.2   | 5.7    |
| 1991-1995            | -       | 8.2  | -    | -    | 10.5 | 10.4  | -    | 10.7                 | -   | -    | -    | 6.4  | -     | 6.4    |
| 1996-2000            | -       | -    | -    | -    | 11.0 | 11.4  | -    | 11.3                 | -   | -    | -    | -    | -     | -      |
| 2001-2005            | -       | 13.6 | -    | 12.1 | 12.5 | 13.0  | -    | 12.6                 | -   | -    | -    | -    | -     | -      |
| 2006                 | -       | -    | -    | -    | -    | 15.9  | -    | 15.9                 | -   | -    | -    | -    | -     | -      |
| 2007                 | 12.5    | -    | -    | -    | 15.8 | 12.9  | -    | 15.6                 | -   | -    | -    | -    | -     | -      |
| 2008                 | -       | -    | -    | -    | -    | -     | -    | -                    | -   | -    | -    | -    | -     | -      |
| 2009                 | -       | -    | -    | -    | -    | -     | -    | -                    | -   | -    | -    | -    | -     | -      |
| 2010                 | -       | -    | -    | 15.8 | 14.6 | -     | -    | 15.2                 | -   | -    | -    | -    | -     | -      |
| 2011                 | -       | -    | -    | 14.3 | 14.7 | 12.5  | -    | 14.5                 | -   | -    | -    | -    | -     | -      |
| 2012                 | -       | -    | -    | 11.3 | 12.1 | 12.2  | -    | 11.6                 | -   | -    | -    | -    | -     | -      |
| 2013                 | -       | 12.2 | 13.4 | 13.3 | 12.9 | 12.8  | -    | 13.2                 | -   | -    | -    | -    | -     | -      |
| 2014                 | -       | -    | 14.3 | 13.8 | 14.7 | 14.4  | -    | 14.0                 | -   | -    | -    | -    | -     | -      |
| 2015                 | -       | 10.3 | 11.0 | 10.6 | 11.9 | 12.1  | -    | 10.6                 | -   | -    | -    | -    | -     | -      |
| 2016                 | -       | -    | 10.5 | -    | 11.2 | 12.1  | -    | 10.8                 | -   | -    | -    | -    | -     | -      |
| 2017                 | -       | -    | -    | -    | -    | 10.5  | -    | 10.5                 | -   | -    | -    | -    | -     | -      |
| 2018 <sup>b/</sup>   | -       | -    | -    | 12.6 | 10.3 | 10.0  | -    | 11.5                 | -   | -    | -    | -    | -     | -      |
| <u>San Francisco</u> |         |      |      |      |      |       |      |                      |     |      |      |      |       |        |
| 1981-1985            | 6.8     | 8.6  | 9.4  | 10.5 | 10.5 | 10.1  | -    | 9.7                  | 5.3 | 5.9  | 6.7  | 6.6  | 7.8   | 6.3    |
| 1986-1990            | -       | 9.2  | 10.2 | 10.9 | 12.4 | 12.1  | -    | 10.1                 | -   | 5.6  | 6.1  | 6.7  | 6.2   | 5.9    |
| 1991-1995            | -       | 8.6  | 9.3  | 10.2 | 11.3 | 11.8  | -    | 10.0                 | -   | 5.3  | 5.9  | 5.6  | -     | 5.2    |
| 1996-2000            | 9.9     | 9.4  | 9.8  | 11.0 | 12.5 | 12.9  | -    | 10.6                 | -   | -    | -    | -    | -     | -      |
| 2001-2005            | -       | 11.9 | 13.2 | 12.5 | 14.0 | 14.4  | 14.2 | 12.9                 | -   | -    | -    | -    | -     | -      |
| 2006                 | -       | -    | -    | 15.1 | 14.4 | 16.8  | 18.0 | 15.3                 | -   | -    | -    | -    | -     | -      |
| 2007                 | -       | 11.4 | -    | 13.2 | 14.3 | 17.5  | 19.0 | 12.8                 | -   | -    | -    | -    | -     | -      |
| 2008                 | -       | -    | -    | -    | -    | -     | -    | -                    | -   | -    | -    | -    | -     | -      |
| 2009                 | -       | -    | -    | -    | -    | -     | -    | -                    | -   | -    | -    | -    | -     | -      |
| 2010                 | -       | -    | -    | 14.9 | -    | -     | -    | 14.9                 | -   | -    | -    | -    | -     | -      |
| 2011                 | -       | 13.2 | 13.1 | 13.8 | 13.9 | 12.9  | 15.0 | 13.5                 | -   | -    | -    | -    | -     | -      |
| 2012                 | -       | 10.4 | 11.4 | 11.8 | 12.8 | 13.1  | 12.9 | 11.6                 | -   | -    | -    | -    | -     | -      |
| 2013                 | -       | 11.4 | 13.0 | 12.7 | 15.1 | 12.3  | 13.7 | 12.4                 | -   | -    | -    | -    | -     | -      |
| 2014                 | -       | 11.3 | 12.9 | 13.9 | 15.0 | 13.5  | 13.7 | 12.9                 | -   | -    | -    | -    | -     | -      |
| 2015                 | -       | 9.1  | 9.8  | 11.3 | 13.2 | 11.8  | 11.8 | 11.2                 | -   | -    | -    | -    | -     | -      |
| 2016                 | -       | 9.6  | 10.0 | -    | 12.9 | 11.5  | 12.5 | 12.0                 | -   | -    | -    | -    | -     | -      |
| 2017                 | -       | -    | -    | -    | 11.8 | 11.9  | 12.5 | 11.8                 | -   | -    | -    | -    | -     | -      |
| 2018 <sup>b/</sup>   | -       | -    | -    | 12.4 | 11.9 | 12.1  | 12.1 | 12.0                 | -   | -    | -    | -    | -     | -      |

TABLE D-1. California monthly troll Chinook and coho average dressed weights (pounds) by area of landing. (Page 3 of 3)

| Year                                | Apr.    | May  | June | July | Aug. | Sept. | Oct. | Season <sup>a/</sup> | May  | June | July | Aug. | Sept. | Season |
|-------------------------------------|---------|------|------|------|------|-------|------|----------------------|------|------|------|------|-------|--------|
|                                     | CHINOOK |      |      |      |      |       |      |                      | COHO |      |      |      |       |        |
| <b>Monterey</b>                     |         |      |      |      |      |       |      |                      |      |      |      |      |       |        |
| 1981-1985                           | 7.3     | 8.6  | 9.6  | 10.4 | 11.1 | 10.2  | -    | 9.3                  | 5.4  | 5.2  | 6.5  | 7.6  | 8.3   | 6.1    |
| 1986-1990                           | -       | 10.3 | 11.3 | 12.2 | 12.3 | 11.7  | -    | 11.1                 | -    | 5.6  | 6.0  | 6.5  | 6.4   | 5.9    |
| 1991-1995                           | -       | 9.4  | 10.9 | 11.3 | 11.7 | 11.1  | -    | 10.6                 | -    | 4.8  | 5.6  | 5.5  | -     | 5.0    |
| 1996-2000                           | 11.1    | 10.3 | 11.0 | 12.4 | 11.8 | 10.1  | -    | 10.8                 | -    | -    | -    | -    | -     | -      |
| 2001-2005                           | -       | 12.1 | 13.1 | 13.7 | 14.0 | 13.8  | -    | 12.7                 | -    | -    | -    | -    | -     | -      |
| 2006                                | -       | 12.4 | 12.6 | 16.2 | 13.3 | 15.7  | -    | 12.6                 | -    | -    | -    | -    | -     | -      |
| 2007                                | -       | 14.1 | 13.2 | 13.6 | 14.1 | 17.6  | -    | 14.0                 | -    | -    | -    | -    | -     | -      |
| 2008                                | -       | -    | -    | -    | -    | -     | -    | -                    | -    | -    | -    | -    | -     | -      |
| 2009                                | -       | -    | -    | -    | -    | -     | -    | -                    | -    | -    | -    | -    | -     | -      |
| 2010                                | -       | -    | -    | 14.2 | -    | -     | -    | 14.2                 | -    | -    | -    | -    | -     | -      |
| 2011                                | -       | 14.9 | 14.4 | 14.5 | 12.5 | 12.6  | -    | 14.6                 | -    | -    | -    | -    | -     | -      |
| 2012                                | -       | 10.7 | 13.3 | 13.9 | 12.5 | 11.6  | -    | 12.2                 | -    | -    | -    | -    | -     | -      |
| 2013                                | -       | 12.4 | 13.6 | 16.0 | 14.7 | 12.3  | -    | 13.3                 | -    | -    | -    | -    | -     | -      |
| 2014                                | -       | 11.2 | 13.7 | 14.4 | 14.4 | -     | -    | 12.6                 | -    | -    | -    | -    | -     | -      |
| 2015                                | -       | 9.8  | 10.5 | 11.4 | 12.5 | -     | -    | 10.4                 | -    | -    | -    | -    | -     | -      |
| 2016                                | -       | 9.6  | 10.8 | -    | -    | -     | -    | 9.9                  | -    | -    | -    | -    | -     | -      |
| 2017                                | -       | 10.5 | 12.8 | -    | -    | -     | -    | 11.8                 | -    | -    | -    | -    | -     | -      |
| 2018 <sup>b/</sup>                  | -       | 11.1 | 13.2 | -    | -    | -     | -    | 12.7                 | -    | -    | -    | -    | -     | -      |
| <b>Total Statewide<sup>a/</sup></b> |         |      |      |      |      |       |      |                      |      |      |      |      |       |        |
| 1981-1985                           | 7.1     | 8.5  | 9.7  | 10.0 | 10.2 | 10.0  | -    | 9.5                  | 5.2  | 5.6  | 6.3  | 6.6  | 7.0   | 6.2    |
| 1986-1990                           | -       | 9.5  | 10.2 | 10.3 | 11.1 | 10.8  | 9.6  | 10.1                 | -    | 5.2  | 5.9  | 6.5  | 6.0   | 5.6    |
| 1991-1995                           | -       | 9.0  | 9.9  | 10.5 | 11.1 | 11.2  | 17.7 | 10.1                 | -    | 4.8  | 5.6  | 5.6  | 6.2   | 5.1    |
| 1996-2000                           | 10.3    | 10.0 | 10.4 | 11.5 | 12.3 | 12.1  | -    | 10.7                 | -    | -    | -    | -    | -     | -      |
| 2001-2005                           | 11.1    | 12.1 | 13.1 | 12.7 | 13.4 | 13.0  | 13.8 | 12.7                 | -    | -    | -    | -    | -     | -      |
| 2006                                | -       | 12.4 | 12.6 | 15.1 | 14.4 | 16.4  | 18.0 | 15.0                 | -    | -    | -    | -    | -     | -      |
| 2007                                | 12.5    | 12.2 | 13.2 | 13.2 | 15.3 | 13.7  | 19.0 | 13.4                 | -    | -    | -    | -    | -     | -      |
| 2008                                | -       | -    | -    | -    | -    | -     | -    | -                    | -    | -    | -    | -    | -     | -      |
| 2009                                | -       | -    | -    | -    | -    | -     | -    | -                    | -    | -    | -    | -    | -     | -      |
| 2010                                | -       | -    | -    | 15.4 | 14.6 | -     | -    | 15.1                 | -    | -    | -    | -    | -     | -      |
| 2011                                | -       | 13.8 | 13.5 | 14.2 | 14.6 | 12.8  | 15.0 | 14.2                 | -    | -    | -    | -    | -     | -      |
| 2012                                | -       | 10.5 | 12.3 | 12.1 | 12.5 | 12.0  | 12.9 | 11.7                 | -    | -    | -    | -    | -     | -      |
| 2013                                | -       | 11.6 | 13.1 | 13.2 | 13.5 | 12.5  | 13.7 | 12.7                 | -    | -    | -    | -    | -     | -      |
| 2014                                | -       | 11.2 | 13.7 | 13.8 | 14.9 | 13.5  | 13.7 | 13.4                 | -    | -    | -    | -    | -     | -      |
| 2015                                | -       | 10.0 | 10.6 | 11.0 | 12.7 | 11.8  | 11.8 | 10.8                 | -    | -    | -    | -    | -     | -      |
| 2016                                | -       | 9.6  | 10.6 | -    | 12.5 | 11.6  | 12.5 | 11.2                 | -    | -    | -    | -    | -     | -      |
| 2017                                | -       | 10.5 | 12.8 | -    | 11.8 | 11.6  | 12.5 | 11.8                 | -    | -    | -    | -    | -     | -      |
| 2018 <sup>b/</sup>                  | -       | 10.5 | 12.6 | 12.2 | 11.4 | 12.0  | 12.1 | 11.8                 | -    | -    | -    | -    | -     | -      |

a/ Total statewide and season averages includes minor landings from Oregon prior to 2005.

b/ Preliminary.

TABLE D-2. Oregon monthly troll Chinook and coho average dressed weights (pounds).

| Year               | Mar. | Apr. | May  | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Season |
|--------------------|------|------|------|------|------|------|-------|------|------|------|--------|
| CHINOOK            |      |      |      |      |      |      |       |      |      |      |        |
| 1971-1975          | -    | -    | 9.5  | 10.7 | 10.4 | 10.2 | 9.4   | 10.7 | 16.9 | -    | 10.2   |
| 1976-1980          | -    | -    | 10.2 | 10.2 | 10.6 | 10.0 | 9.9   | 10.5 | 15.4 | -    | 10.3   |
| 1981-1985          | -    | -    | 9.0  | 9.1  | 9.5  | 9.0  | 8.8   | 11.5 | 14.7 | -    | 9.2    |
| 1986-1990          | -    | -    | 9.3  | 9.5  | 9.6  | 9.0  | 9.3   | 10.4 | 13.8 | -    | 9.5    |
| 1991-1995          | -    | -    | 9.9  | 9.8  | 9.2  | 9.4  | 9.2   | 10.7 | 12.3 | -    | 9.6    |
| 1996-2000          | -    | -    | 11.1 | 11.7 | 12.0 | 10.5 | 10.1  | 12.5 | 14.6 | -    | 10.9   |
| 2001-2005          | 10.2 | 10.3 | 10.8 | 10.3 | 10.5 | 10.7 | 9.8   | 10.3 | 13.8 | 13.2 | 10.5   |
| 2006               | -    | -    | 12.2 | 13.6 | 15.5 | 15.3 | 13.8  | 16.0 | 15.8 | 13.7 | 13.9   |
| 2007               | -    | 13.4 | 13.7 | 13.9 | 13.7 | 11.9 | 12.6  | 15.4 | 13.5 | 14.3 | 13.1   |
| 2008               | -    | -    | 10.4 | 10.4 | 12.1 | 11.5 | 14.3  | 19.9 | 15.3 | -    | 11.1   |
| 2009               | -    | -    | 11.0 | 13.1 | 12.2 | 13.0 | 12.5  | 15.5 | -    | -    | 13.3   |
| 2010               | -    | -    | 12.4 | 12.3 | 12.7 | 13.7 | 13.6  | 17.6 | -    | -    | 12.8   |
| 2011               | -    | 11.4 | 11.9 | 13.1 | 14.1 | 13.5 | 13.1  | 14.5 | 11.8 | -    | 12.5   |
| 2012               | -    | 9.5  | 10.3 | 10.3 | 10.9 | 10.5 | 9.8   | 9.6  | 11.3 | -    | 10.1   |
| 2013               | -    | 9.9  | 11.2 | 12.3 | 12.6 | 12.2 | 10.5  | 10.8 | 12.2 | -    | 11.5   |
| 2014               | -    | 12.2 | 12.5 | 11.7 | 13.1 | 12.5 | 11.3  | 13.2 | 12.6 | -    | 12.4   |
| 2015               | -    | 10.9 | 10.4 | 11.1 | 12.1 | 12.4 | 12.1  | 13.9 | 11.9 | -    | 11.4   |
| 2016               | -    | 11.7 | 11.5 | 11.4 | 12.6 | 13.1 | 13.1  | 14.4 | 12.6 | -    | 12.3   |
| 2017               | -    | 13.8 | 11.4 | 11.8 | 12.1 | 13.3 | 12.6  | 13.0 | 11.1 | -    | 12.1   |
| 2018 <sup>a/</sup> | -    | -    | 11.0 | 11.6 | 12.5 | 11.6 | 11.6  | 13.1 | 12.3 | -    | 11.8   |
| COHO               |      |      |      |      |      |      |       |      |      |      |        |
| 1971-1975          | -    | -    | -    | 5.1  | 6.1  | 7.0  | 7.0   | 7.9  | -    | -    | 6.2    |
| 1976-1980          | -    | -    | -    | 4.4  | 5.5  | 6.1  | 5.9   | 6.3  | -    | -    | 5.5    |
| 1981-1985          | -    | -    | -    | -    | 4.8  | 5.3  | 3.6   | -    | -    | -    | 5.0    |
| 1986-1990          | -    | -    | -    | 4.8  | 4.8  | 5.1  | 5.4   | 7.2  | -    | -    | 4.9    |
| 1991-1995          | -    | -    | -    | 4.2  | 4.0  | 4.8  | 5.4   | -    | -    | -    | 4.7    |
| 1996-2000          | -    | -    | -    | -    | -    | 5.9  | 6.6   | -    | -    | -    | 5.9    |
| 2001-2005          | -    | -    | -    | -    | 5.3  | 6.9  | 7.2   | -    | -    | -    | 5.6    |
| 2006               | -    | -    | -    | -    | 7.2  | 9.1  | 9.5   | -    | -    | -    | 9.2    |
| 2007               | -    | -    | -    | -    | 4.9  | 6.0  | 7.0   | -    | -    | -    | 5.9    |
| 2008               | -    | -    | -    | -    | 5.2  | 8.6  | 8.9   | -    | -    | -    | 8.4    |
| 2009               | -    | -    | -    | -    | 4.7  | 6.0  | 7.1   | -    | -    | -    | 6.0    |
| 2010               | -    | -    | -    | -    | 6.1  | 7.3  | 12.0  | -    | -    | -    | 6.7    |
| 2011               | -    | -    | -    | -    | 4.9  | 6.0  | 6.9   | -    | -    | -    | 5.6    |
| 2012               | -    | -    | -    | -    | 4.2  | 5.6  | 6.3   | -    | -    | -    | 6.1    |
| 2013               | -    | -    | -    | -    | 5.6  | 5.5  | 6.9   | -    | -    | -    | 5.9    |
| 2014               | -    | -    | -    | -    | 4.7  | 5.0  | 6.9   | -    | -    | -    | 6.1    |
| 2015               | -    | -    | -    | -    | 4.8  | 4.8  | 5.2   | -    | -    | -    | 5.1    |
| 2016               | -    | -    | -    | -    | -    | -    | -     | -    | -    | -    | -      |
| 2017               | -    | -    | -    | -    | 5.4  | 5.8  | 6.3   | -    | -    | -    | 6.0    |
| 2018 <sup>a/</sup> | -    | -    | -    | -    | 5.7  | 6.8  | 6.9   | -    | -    | -    | 6.6    |

a/ Preliminary.

TABLE D-3. Washington monthly troll Chinook and coho salmon average dressed weights (pounds).<sup>a/</sup>

| Year                    | May           |            | June          |            | July          |            | Aug.          |            | Sept.         |            | Oct.          |            | Season                      |            |
|-------------------------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|-----------------------------|------------|
|                         | Treaty Indian | Non-Indian | Treaty Indian | Non-Indian | Treaty Indian | Non-Indian | Treaty Indian | Non-Indian | Treaty Indian | Non-Indian | Treaty Indian | Non-Indian | Treaty Indian <sup>b/</sup> | Non-Indian |
| CHINOOK                 |               |            |               |            |               |            |               |            |               |            |               |            |                             |            |
| 1981-1985               | 7.3           | 9.7        | 8.8           | -          | 9.6           | 12.3       | 9.3           | 12.2       | 7.7           | 12.7       | 5.1           | -          | 6.4                         | 10.6       |
| 1986-1990               | 8.1           | 9.5        | 8.1           | 11.1       | 9.6           | 12.1       | 9.1           | 12.1       | 6.8           | 12.2       | 5.2           | 12.6       | 6.7                         | 10.4       |
| 1991-1995 <sup>c/</sup> | 7.1           | 10.7       | 7.8           | 10.8       | 8.7           | 12.1       | 8.3           | 11.2       | 6.6           | 11.2       | 6.4           | 8.3        | 6.9                         | 10.2       |
| 1996-2000               | 8.4           | 11.2       | 8.5           | 12.0       | 7.1           | 12.3       | 8.4           | 11.0       | 7.5           | 10.7       | -             | -          | 8.5                         | 11.5       |
| 2001-2005               | 9.5           | 11.3       | 10.7          | 12.6       | 13.5          | 15.0       | 14.2          | 15.4       | 11.9          | 13.6       | -             | -          | 11.4                        | 13.2       |
| 2006                    | 8.5           | 11.9       | 9.8           | 12.3       | 13.3          | 15.6       | 10.4          | 15.4       | 7.2           | 14.4       | -             | -          | 10.2                        | 13.2       |
| 2007                    | 7.7           | 12.0       | 8.2           | 12.3       | 8.2           | 14.3       | 14.2          | 17.0       | 6.8           | 15.8       | -             | -          | 8.9                         | 12.9       |
| 2008                    | 7.8           | 11.1       | 7.7           | 11.3       | 8.5           | 12.5       | 7.5           | 12.3       | 7.1           | 11.2       | -             | -          | 7.5                         | 11.6       |
| 2009                    | 8.7           | 11.3       | 7.4           | 12.4       | 9.4           | 16.2       | 9.4           | 15.1       | 5.8           | 12.7       | -             | -          | 8.1                         | 12.6       |
| 2010                    | 7.2           | 10.4       | 7.5           | 11.6       | 9.6           | 13.2       | 10.3          | 13.1       | 10.2          | 12.3       | -             | -          | 8.7                         | 11.9       |
| 2011                    | 8.9           | 10.3       | 9.1           | 11.4       | 12.2          | 13.6       | 14.1          | 15.0       | 15.0          | 17.2       | -             | -          | 11.0                        | 12.0       |
| 2012                    | 7.6           | 10.2       | 7.9           | 10.8       | 10.9          | 13.6       | 11.9          | 14.7       | 8.6           | 11.9       | -             | -          | 9.5                         | 11.8       |
| 2013                    | 7.6           | 9.6        | 7.9           | 10.5       | 12.1          | 12.4       | 13.1          | 13.0       | 10.5          | 12.2       | -             | -          | 9.3                         | 11.2       |
| 2014                    | 8.3           | 10.9       | 9.9           | 12.6       | 12.0          | 13.1       | 11.1          | 13.4       | 9.1           | 12.8       | -             | -          | 10.1                        | 12.0       |
| 2015                    | 7.6           | 9.8        | 8.1           | 10.9       | 12.7          | 12.6       | 12.4          | 12.3       | 12.5          | 13.1       | -             | -          | 9.9                         | 11.3       |
| 2016                    | 7.7           | 10.2       | 9.7           | 11.6       | 9.7           | 13.2       | 8.6           | 13.3       | 9.8           | -          | -             | -          | 9.3                         | 11.6       |
| 2017                    | 5.8           | 9.3        | 6.3           | 10.0       | 8.5           | 10.8       | 9.3           | 12.0       | 7.8           | 12.3       | -             | -          | 8.1                         | 10.2       |
| 2018                    | 6.1           | 9.4        | 6.5           | 10.7       | 9.1           | 11.2       | 8.6           | 13.0       | 7.1           | 13.5       | -             | -          | 7.5                         | 10.8       |
| COHO                    |               |            |               |            |               |            |               |            |               |            |               |            |                             |            |
| 1981-1985               | 2.3           | -          | 3.2           | -          | 3.8           | 4.6        | 4.9           | 4.6        | 5.6           | 5.4        | 6.5           | 5.8        | 4.6                         | 4.5        |
| 1986-1990               | -             | -          | 2.8           | -          | 4.0           | 4.9        | 4.2           | 4.4        | 4.9           | 5.5        | 5.3           | 7.0        | 4.1                         | 4.5        |
| 1991-1995               | -             | -          | 2.7           | -          | 3.7           | 3.7        | 4.4           | 4.7        | 3.9           | 5.4        | 5.9           | -          | 4.3                         | 4.6        |
| 1996-2000               | -             | -          | 4.0           | -          | 5.0           | 4.2        | 4.4           | 5.2        | 5.0           | 6.3        | -             | -          | 4.8                         | 5.1        |
| 2001-2005               | 7.0           | -          | 4.8           | -          | 5.1           | 6.4        | 6.3           | 6.4        | 6.1           | 7.1        | -             | -          | 5.9                         | 6.3        |
| 2006                    | 5.5           | -          | 4.3           | -          | 5.6           | 5.9        | 6.4           | 7.1        | 6.3           | 10.1       | -             | -          | 6.1                         | 7.7        |
| 2007                    | -             | -          | 4.8           | -          | 4.3           | 4.9        | 7.1           | 5.9        | 6.9           | 6.4        | -             | -          | 5.5                         | 5.6        |
| 2008                    | -             | -          | 3.4           | -          | 6.5           | 6.2        | 7.3           | 8.6        | 9.3           | 9.7        | -             | -          | 8.6                         | 8.4        |
| 2009                    | -             | -          | 3.5           | -          | 5.2           | 5.5        | 6.1           | 7.1        | 6.2           | 7.7        | -             | -          | 5.7                         | 6.8        |
| 2010                    | -             | -          | -             | -          | 6.3           | 6.5        | 6.3           | 7.7        | 8.8           | 9.0        | -             | -          | 7.0                         | 7.1        |
| 2011                    | -             | -          | -             | -          | 5.2           | 5.2        | 5.8           | 5.9        | 5.9           | 6.3        | -             | -          | 5.7                         | 5.6        |
| 2012                    | 5.0           | -          | 9.6           | -          | 5.0           | 4.2        | 5.3           | 5.2        | 5.2           | 6.2        | -             | -          | 5.2                         | 5.4        |
| 2013                    | -             | -          | 9.4           | -          | 4.5           | 4.5        | 4.9           | 5.4        | 7.0           | 6.5        | -             | -          | 5.1                         | 5.2        |
| 2014                    | -             | -          | 6.0           | -          | 5.4           | 5.0        | 5.6           | 5.6        | 5.9           | 6.3        | -             | -          | 5.6                         | 5.7        |
| 2015                    | -             | -          | 7.0           | -          | 5.3           | 4.9        | 5.0           | 5.4        | 4.6           | 5.6        | -             | -          | 5.1                         | 5.4        |
| 2016                    | -             | -          | -             | -          | 7.3           | -          | 8.0           | -          | -             | -          | -             | -          | 7.6                         | -          |
| 2017                    | -             | -          | -             | -          | 5.2           | 5.0        | 6.1           | 6.8        | 6.0           | 7.3        | -             | -          | 6.0                         | 6.5        |
| 2018                    | -             | -          | -             | -          | 5.3           | 5.3        | 5.9           | 6.9        | 6.1           | 7.5        | -             | -          | 5.9                         | 6.7        |

a/ All values in this table are based on preliminary information available at the start of each year's review. Treaty Indian statistics include landings from Puget Sound.

b/ Season totals include additional winter treaty Indian troll.

c/ In 1994-1996 the non-Indian fishery for Chinook was closed north of Cape Falcon; however, Chinook were caught off Oregon and landed in Washington.

TABLE D-4. California troll combined Chinook and coho salmon landings in dressed weight, value of landings, and number of registered vessels making commercial salmon landings.<sup>a/</sup>

| Year               | Dressed Pounds Landed (thousands) | Nominal Exvessel Value (\$ thousands) | Vessels Landing Salmon | Vessels with Permits | Nominal Average Exvessel Value/Vessel (dollars) | Real Average Exvessel Value/Vessel (2018 dollars) |
|--------------------|-----------------------------------|---------------------------------------|------------------------|----------------------|---|---|
| 1960               | 6,221                             | 3,339                                 | 1,365                  | -                    | 2,446   | 16,240  |
| 1961-1965          | 8,463                             | 4,536                                 | 1,713                  | -                    | 2,652   | 15,175  |
| 1966-1970          | 7,316                             | 4,350                                 | 2,101                  | -                    | 2,084   | 10,405  |
| 1971-1975          | 7,977                             | 6,713                                 | 2,759                  | -                    | 2,409   | 9,278   |
| 1976-1980          | 7,052                             | 13,318                                | 4,315                  | -                    | 3,102   | 8,419   |
| 1981-1985          | 4,799                             | 11,499                                | 3,243                  | 4,658                | 3,542   | 6,839   |
| 1986-1990          | 8,360                             | 21,641                                | 2,449                  | 3,523                | 8,735   | 14,447  |
| 1991-1995          | 3,523                             | 7,478                                 | 1,244                  | 2,754                | 6,149   | 8,618   |
| 1996-2000          | 4,037                             | 6,813                                 | 783                    | 1,940                | 8,820   | 11,299  |
| 2001               | 2,409                             | 4,773                                 | 689                    | 1,650                | 6,927   | 9,590   |
| 2002               | 5,008                             | 7,776                                 | 708                    | 1,586                | 10,982  | 14,967  |
| 2003               | 6,392                             | 12,181                                | 584                    | 1,521                | 20,858  | 27,907  |
| 2004               | 6,230                             | 17,895                                | 741                    | 1,511                | 24,150  | 31,464  |
| 2005               | 4,347                             | 12,913                                | 680                    | 1,477                | 18,990  | 23,994  |
| 2006               | 1,043                             | 5,350                                 | 477                    | 1,408                | 11,216  | 13,755  |
| 2007               | 1,525                             | 7,902                                 | 601                    | 1,390                | 13,149  | 15,704  |
| 2008               | -                                 | -                                     | -                      | 1,306                | -   | -   |
| 2009               | -                                 | -                                     | -                      | 1,281                | -   | -   |
| 2010               | 228                               | 1,246                                 | 215                    | 1,239                | 5,794   | 6,659   |
| 2011               | 992                               | 5,133                                 | 464                    | 1,188                | 11,062  | 12,453  |
| 2012               | 2,530                             | 13,521                                | 616                    | 1,172                | 21,950  | 24,246  |
| 2013               | 3,793                             | 23,632                                | 671                    | 1,163                | 35,219  | 38,232  |
| 2014               | 2,253                             | 12,521                                | 653                    | 1,135                | 19,175  | 20,429  |
| 2015               | 1,188                             | 8,347                                 | 587                    | 1,131                | 14,219  | 14,988  |
| 2016               | 615                               | 5,312                                 | 438                    | 1,105                | 12,129  | 12,647  |
| 2017               | 497                               | 4,925                                 | 400                    | 1,083                | 12,312  | 12,599  |
| 2018 <sup>b/</sup> | 929                               | 7,792                                 | 456                    | 1,057                | 17,088  | 17,088  |

a/ Derived from vessel permit database and fish landing tickets.

b/ Preliminary.



TABLE D-5. Oregon troll combined Chinook and coho salmon landings in dressed weight, value of landings, and number of registered vessels making commercial salmon landings.<sup>a/</sup>

| Year                      | Dressed Pounds Landed (thousands) | Nominal Exvessel Value (\$ thousands) | Vessels Landing Salmon | Vessels with Permits | Nominal Average Exvessel Value/Vessel (dollars) | Real Average Exvessel Value/Vessel (2018 dollars) |
|---------------------------|-----------------------------------|---------------------------------------|------------------------|----------------------|---|---|
| 1974                      | -                                 | 7,937                                 | 2,253                  | -                    | 3,523   | 12,690  |
| 1975                      | -                                 | 5,808                                 | 2,304                  | -                    | 2,521   | 8,296   |
| 1976-1980 <sup>b/</sup>   | 6,679                             | 8,185                                 | 3,875                  | 4,314                | 2,112   | 4,886   |
| 1981-1985 <sup>c/d/</sup> | 2,969                             | 5,774                                 | 2,050                  | 2,993                | 2,817   | 5,053   |
| 1986-1990                 | 5,688                             | 6,641                                 | 1,557                  | 2,528                | 4,265   | 6,525   |
| 1991-1995 <sup>e/</sup>   | 1,265                             | 3,294                                 | 476                    | 1,465                | 6,920   | 9,375   |
| 1996-2000                 | 1,428                             | 3,063                                 | 399                    | 1,062                | 7,677   | 9,565   |
| 2001 <sup>f/</sup>        | 2,949                             | 4,721                                 | 449                    | 1,175                | 10,515  | 14,556  |
| 2002 <sup>f/</sup>        | 3,498                             | 5,391                                 | 468                    | 1,175                | 11,519  | 15,699  |
| 2003 <sup>f/</sup>        | 3,681                             | 7,222                                 | 494                    | 1,178                | 14,620  | 19,561  |
| 2004 <sup>f/</sup>        | 2,920                             | 9,919                                 | 595                    | 1,181                | 16,670  | 21,719  |
| 2005 <sup>f/</sup>        | 2,691                             | 8,503                                 | 565                    | 1,168                | 15,050  | 19,015  |
| 2006 <sup>f/</sup>        | 499                               | 2,701                                 | 357                    | 1,127                | 7,565   | 9,278   |
| 2007                      | 565                               | 2,822                                 | 436                    | 1,009                | 6,473   | 7,731   |
| 2008                      | 70                                | 494                                   | 138                    | 1,092                | 3,579   | 4,193   |
| 2009                      | 146                               | 345                                   | 225                    | 1,062                | 1,531   | 1,780   |
| 2010                      | 513                               | 2,791                                 | 370                    | 1,021                | 7,543   | 8,669   |
| 2011                      | 404                               | 2,401                                 | 304                    | 1,003                | 7,899   | 8,893   |
| 2012                      | 745                               | 4,271                                 | 369                    | 990                  | 11,576  | 12,786  |
| 2013                      | 1,293                             | 7,611                                 | 399                    | 977                  | 19,075  | 20,706  |
| 2014                      | 2,639                             | 14,760                                | 493                    | 977                  | 29,938  | 31,896  |
| 2015                      | 1,200                             | 7,334                                 | 488                    | 980                  | 15,028  | 15,841  |
| 2016                      | 518                               | 4,261                                 | 313                    | 972                  | 13,613  | 14,195  |
| 2017                      | 267                               | 2,129                                 | 176                    | 956                  | 12,099  | 12,381  |
| 2018 <sup>g/</sup>        | 288                               | 2,442                                 | 230                    | 946                  | 10,618  | 10,618  |

a/ Derived from vessel registrations and fish landing tickets.

b/ In 1980, the establishment of a restricted vessel permit system drew a number of historically active vessels back into the fishery.

c/ In 1984, vessels were not required to land at least one salmon to be eligible for a permit in 1985. The Oregon Fish and Wildlife Commission waived this requirement because of the elimination of the coho fishery south of Cape Falcon.

d/ In 1985, vessels traditionally landing salmon south of Cape Blanco and north of Cape Falcon were not required to land at least one salmon to be eligible for a permit in 1986. The Oregon Fish and Wildlife Commission waived this requirement because of the complete closure of the coho season south of Cape Blanco and a limited one-day coho season between the Columbia River and Cape Falcon.

e/ During the 1991 session of the Oregon Legislature, legislation passed waiving the requirement that troll permit holders must buy a 1991 permit to be able to renew for 1992. This was a one-time exemption for 1991 only.

f/ Permits were reissued in a lottery, because the total number of permits had fallen below 1,200.

g/ Preliminary.

TABLE D-6. Washington non-Indian troll combined Chinook and coho salmon landings in dressed weight, value of landings and number of registered vessels making commercial salmon landings.<sup>a/</sup>

| Year                          | Dressed Pounds Landed (thousands) | Nominal Exvessel Value (\$ thousands) | Vessels Landing Salmon | Vessels with Permits | Nominal Average Exvessel Value/Vessel (dollars) | Real Average Exvessel Value/Vessel (2018 dollars) |
|-------------------------------|-----------------------------------|---------------------------------------|------------------------|----------------------|---|---|
| 1978                          | 4,746                             | 10,025                                | 3,041                  | 3,291                | 3,297   | 9,013   |
| 1979                          | 5,262                             | 15,091                                | 2,778                  | 3,068                | 5,432   | 13,712  |
| 1980                          | 3,398                             | 7,114                                 | 2,626                  | 2,797                | 2,709   | 6,267   |
| 1981-1985 <sup>b/c/</sup>     | 1,433                             | 3,225                                 | 1,675                  | 2,233                | 1,696   | 3,347   |
| 1986-1990                     | 752                               | 1,670                                 | 913                    | 1,349                | 1,997   | 3,277   |
| 1991-1995 <sup>d/e/f/g/</sup> | 345                               | 834                                   | 397                    | 586                  | 1,607   | 2,292   |
| 1996-2000 <sup>h/i/j/</sup>   | 126                               | 197                                   | 54                     | 270                  | 4,188   | 5,350   |
| 2001                          | 290                               | 383                                   | 57                     | 169                  | 6,718   | 9,300   |
| 2002                          | 679                               | 758                                   | 75                     | 165                  | 10,102  | 13,767  |
| 2003                          | 875                               | 991                                   | 82                     | 163                  | 12,087  | 16,172  |
| 2004                          | 594                               | 1,185                                 | 86                     | 160                  | 13,779  | 17,952  |
| 2005                          | 481                               | 1,290                                 | 91                     | 158                  | 14,170  | 17,905  |
| 2006                          | 231                               | 1,045                                 | 84                     | 158                  | 12,440  | 15,257  |
| 2007                          | 217                               | 953                                   | 79                     | 158                  | 12,062  | 14,406  |
| 2008                          | 114                               | 709                                   | 86                     | 158                  | 8,244   | 9,658   |
| 2009                          | 291                               | 1,169                                 | 97                     | 158                  | 12,051  | 14,012  |
| 2010                          | 537                               | 3,115                                 | 116                    | 158                  | 26,856  | 30,865  |
| 2011                          | 339                               | 1,687                                 | 112                    | 158                  | 15,066  | 16,961  |
| 2012                          | 452                               | 2,358                                 | 105                    | 158                  | 22,457  | 24,805  |
| 2013                          | 481                               | 2,838                                 | 108                    | 157                  | 26,275  | 28,522  |
| 2014                          | 551                               | 2,709                                 | 116                    | 156                  | 23,351  | 24,877  |
| 2015                          | 640                               | 3,448                                 | 122                    | 153                  | 28,266  | 29,796  |
| 2016                          | 201                               | 1,606                                 | 107                    | 151                  | 15,009  | 15,650  |
| 2017                          | 343                               | 2,919                                 | 108                    | 155                  | 27,031  | 27,659  |
| 2018                          | 263                               | 2,350                                 | 102                    | 155                  | 23,039  | 23,039  |

a/ Derived from vessel registrations and fish landing tickets. All values in this table are based on preliminary information available at the start of each year's salmon review.

b/ 312 licenses and delivery permits purchased by buyback program in 1984.

c/ 118 licenses and delivery permits purchased by buyback program in 1985.

d/ The 1994 season was closed north of Cape Falcon, but Chinook were caught off Oregon and landed in Puget Sound.

e/ Value information in 1994 is not provided in order to preserve confidentiality.

f/ Vessels were not required to purchase a permit in 1994 to maintain their eligibility for a permit in 1995.

g/ 190 licenses and delivery permits purchased by buyback program in 1995.

h/ 72 licenses and delivery permits purchased by buyback program at the end of 1996 and early 1997.

i/ 100 licenses and delivery permits purchased by buyback program at the end of 1997 and early 1998.

j/ 41 licenses purchased by buyback program at the end of 2000.

TABLE D-7. California salmon troll boat-size catch statistics in pounds of dressed salmon.<sup>a/</sup> (Page 1 of 5)

| Year               | Vessels                |                      |                  | Average Catch <sup>c/</sup> |                |                  |
|--------------------|------------------------|----------------------|------------------|-----------------------------|----------------|------------------|
|                    | Length Category (feet) | Number <sup>b/</sup> | Percent of Total | Pounds Per Vessel           | Total (pounds) | Percent of Total |
| 2018 <sup>d/</sup> | <20                    | 24                   | 5%               | 564                         | 13,543         | 1%               |
|                    | 21-25                  | 100                  | 22%              | 896                         | 89,603         | 10%              |
|                    | 26-30                  | 74                   | 16%              | 1,542                       | 114,134        | 12%              |
|                    | 31-35                  | 100                  | 22%              | 1,785                       | 178,506        | 19%              |
|                    | 36-40                  | 71                   | 16%              | 3,164                       | 224,650        | 24%              |
|                    | 41-45                  | 55                   | 12%              | 4,550                       | 250,246        | 27%              |
|                    | 46-50                  | 24                   | 5%               | 1,817                       | 43,610         | 5%               |
|                    | 51-55                  | 8                    | 2%               | 1,834                       | 14,675         | 2%               |
|                    | >56                    | e/                   | e/               | e/                          | e/             | e/               |
| TOTAL              | 456                    |                      | 2,037            | 928,967                     |                |                  |
| 2017               | <20                    | 31                   | 8%               | 442                         | 13,693         | 3%               |
|                    | 21-25                  | 95                   | 24%              | 764                         | 72,575         | 15%              |
|                    | 26-30                  | 68                   | 17%              | 919                         | 62,491         | 13%              |
|                    | 31-35                  | 90                   | 23%              | 1,292                       | 116,305        | 23%              |
|                    | 36-40                  | 58                   | 15%              | 1,900                       | 110,225        | 22%              |
|                    | 41-45                  | 35                   | 9%               | 2,408                       | 84,275         | 17%              |
|                    | 46-50                  | 18                   | 5%               | 1,991                       | 35,836         | 7%               |
|                    | 51-55                  | 5                    | 1%               | 395                         | 1,976          | 0%               |
|                    | >56                    | e/                   | e/               | e/                          | e/             | e/               |
| TOTAL              | 400                    |                      | 1,243            | 497,376                     |                |                  |
| 2016               | <20                    | 20                   | 5%               | 924                         | 18,480         | 3%               |
|                    | 21-25                  | 96                   | 22%              | 821                         | 78,851         | 13%              |
|                    | 26-30                  | 78                   | 18%              | 1,108                       | 86,397         | 14%              |
|                    | 31-35                  | 102                  | 23%              | 1,426                       | 145,463        | 24%              |
|                    | 36-40                  | 74                   | 17%              | 1,963                       | 145,229        | 24%              |
|                    | 41-45                  | 37                   | 8%               | 2,557                       | 94,623         | 15%              |
|                    | 46-50                  | 23                   | 5%               | 1,663                       | 38,239         | 6%               |
|                    | 51-55                  | 5                    | 1%               | 1,313                       | 6,565          | 1%               |
|                    | >56                    | 3                    | 1%               | 493                         | 1,479          | 0%               |
| TOTAL              | 438                    |                      | 1,405            | 615,326                     |                |                  |
| 2015               | <20                    | 35                   | 6%               | 484                         | 16,928         | 1%               |
|                    | 21-25                  | 119                  | 20%              | 1,146                       | 136,353        | 11%              |
|                    | 26-30                  | 93                   | 16%              | 1,592                       | 148,075        | 12%              |
|                    | 31-35                  | 128                  | 22%              | 1,908                       | 244,190        | 21%              |
|                    | 36-40                  | 99                   | 17%              | 2,878                       | 284,969        | 24%              |
|                    | 41-45                  | 62                   | 11%              | 3,706                       | 229,802        | 19%              |
|                    | 46-50                  | 34                   | 6%               | 2,560                       | 87,029         | 7%               |
|                    | 51-55                  | 11                   | 2%               | 1,812                       | 19,933         | 2%               |
|                    | >56                    | 6                    | 1%               | 3,460                       | 20,761         | 2%               |
| TOTAL              | 587                    |                      | 2,024            | 1,188,040                   |                |                  |
| 2014               | <20                    | 39                   | 6%               | 554                         | 21,622         | 1%               |
|                    | 21-25                  | 117                  | 18%              | 1,669                       | 195,278        | 9%               |
|                    | 26-30                  | 106                  | 16%              | 1,999                       | 211,870        | 9%               |
|                    | 31-35                  | 139                  | 21%              | 3,792                       | 527,109        | 23%              |
|                    | 36-40                  | 109                  | 17%              | 5,152                       | 561,516        | 25%              |
|                    | 41-45                  | 81                   | 12%              | 5,836                       | 472,719        | 21%              |
|                    | 46-50                  | 41                   | 6%               | 4,298                       | 176,231        | 8%               |
|                    | 51-55                  | 13                   | 2%               | 4,256                       | 55,324         | 2%               |
|                    | >56                    | 8                    | 1%               | 3,958                       | 31,660         | 1%               |
| TOTAL              | 653                    |                      | 3,451            | 2,253,329                   |                |                  |

TABLE D-7. California salmon troll boat-size catch statistics in pounds of dressed salmon.<sup>a/</sup> (Page 2 of 5)

| Year  | Vessels                |                      |                  | Catch <sup>c/</sup>       |                |                  |
|-------|------------------------|----------------------|------------------|---------------------------|----------------|------------------|
|       | Length Category (feet) | Number <sup>b/</sup> | Percent of Total | Average Pounds Per Vessel | Total (pounds) | Percent of Total |
| 2013  | <20                    | 41                   | 6%               | 1,429                     | 58,595         | 2%               |
|       | 21-25                  | 121                  | 18%              | 2,082                     | 251,950        | 7%               |
|       | 26-30                  | 113                  | 17%              | 2,792                     | 315,498        | 8%               |
|       | 31-35                  | 128                  | 19%              | 5,147                     | 658,858        | 17%              |
|       | 36-40                  | 111                  | 17%              | 7,490                     | 831,408        | 22%              |
|       | 41-45                  | 89                   | 13%              | 10,578                    | 941,458        | 25%              |
|       | 46-50                  | 51                   | 8%               | 10,696                    | 545,502        | 14%              |
|       | 51-55                  | 11                   | 2%               | 10,361                    | 113,969        | 3%               |
|       | >56                    | 6                    | 1%               | 12,697                    | 76,183         | 2%               |
| TOTAL | 671                    |                      | 5,653            | 3,793,421                 |                |                  |
| 2012  | <20                    | 42                   | 7%               | 890                       | 37,386         | 1%               |
|       | 21-25                  | 112                  | 18%              | 1,877                     | 210,275        | 8%               |
|       | 26-30                  | 99                   | 16%              | 2,556                     | 253,024        | 10%              |
|       | 31-35                  | 122                  | 20%              | 4,249                     | 518,329        | 20%              |
|       | 36-40                  | 104                  | 17%              | 5,638                     | 586,352        | 23%              |
|       | 41-45                  | 82                   | 13%              | 7,292                     | 597,924        | 24%              |
|       | 46-50                  | 41                   | 7%               | 6,171                     | 252,996        | 10%              |
|       | 51-55                  | 8                    | 1%               | 5,634                     | 45,072         | 2%               |
|       | >56                    | 6                    | 1%               | 4,838                     | 29,026         | 1%               |
| TOTAL | 616                    |                      | 4,108            | 2,530,384                 |                |                  |
| 2011  | <20                    | 27                   | 6%               | 252                       | 6,795          | 1%               |
|       | 21-25                  | 86                   | 19%              | 733                       | 63,062         | 6%               |
|       | 26-30                  | 79                   | 17%              | 889                       | 70,270         | 7%               |
|       | 31-35                  | 91                   | 20%              | 1,748                     | 159,080        | 16%              |
|       | 36-40                  | 86                   | 19%              | 3,175                     | 273,088        | 28%              |
|       | 41-45                  | 64                   | 14%              | 4,348                     | 278,295        | 28%              |
|       | 46-50                  | 23                   | 5%               | 4,782                     | 109,992        | 11%              |
|       | 51-55                  | 5                    | 1%               | 3,416                     | 17,078         | 2%               |
|       | >56                    | 3                    | 1%               | 4,679                     | 14,037         | 1%               |
| TOTAL | 464                    |                      | 2,137            | 991,697                   |                |                  |
| 2010  | <20                    | 9                    | 4%               | 419                       | 3,772          | 2%               |
|       | 21-25                  | 46                   | 21%              | 524                       | 24,124         | 11%              |
|       | 26-30                  | 31                   | 14%              | 1,161                     | 35,990         | 16%              |
|       | 31-35                  | 46                   | 21%              | 637                       | 29,289         | 13%              |
|       | 36-40                  | 40                   | 19%              | 1,360                     | 54,414         | 24%              |
|       | 41-45                  | 30                   | 14%              | 1,533                     | 45,985         | 20%              |
|       | 46-50                  | 10                   | 5%               | 2,066                     | 20,656         | 9%               |
|       | 51-55                  | 3                    | 1%               | 4,451                     | 13,352         | 6%               |
|       | >56                    | e/                   | e/               | e/                        | e/             | e/               |
| TOTAL | 215                    |                      | 1,059            | 227,582                   |                |                  |
| 2009  | <20                    | -                    | -                | -                         | -              | -                |
|       | 21-25                  | -                    | -                | -                         | -              | -                |
|       | 26-30                  | -                    | -                | -                         | -              | -                |
|       | 31-35                  | -                    | -                | -                         | -              | -                |
|       | 36-40                  | -                    | -                | -                         | -              | -                |
|       | 41-45                  | -                    | -                | -                         | -              | -                |
|       | 46-50                  | -                    | -                | -                         | -              | -                |
|       | 51-55                  | -                    | -                | -                         | -              | -                |
|       | >56                    | -                    | -                | -                         | -              | -                |
| TOTAL | -                      | -                    | -                | -                         | -              |                  |

TABLE D-7. California salmon troll boat-size catch statistics in pounds of dressed salmon.<sup>a/</sup> (Page 3 of 5)

| Year  | Vessels                |                      |                  | Catch <sup>c/</sup>       |                |                  |
|-------|------------------------|----------------------|------------------|---------------------------|----------------|------------------|
|       | Length Category (feet) | Number <sup>b/</sup> | Percent of Total | Average Pounds Per Vessel | Total (pounds) | Percent of Total |
| 2008  | <20                    | -                    | -                | -                         | -              | -                |
|       | 21-25                  | -                    | -                | -                         | -              | -                |
|       | 26-30                  | -                    | -                | -                         | -              | -                |
|       | 31-35                  | -                    | -                | -                         | -              | -                |
|       | 36-40                  | -                    | -                | -                         | -              | -                |
|       | 41-45                  | -                    | -                | -                         | -              | -                |
|       | 46-50                  | -                    | -                | -                         | -              | -                |
|       | 51-55                  | -                    | -                | -                         | -              | -                |
|       | >56                    | -                    | -                | -                         | -              | -                |
| TOTAL | -                      | -                    | -                | -                         | -              |                  |
| 2007  | <20                    | 20                   | 3%               | 275                       | 5,506          | 0%               |
|       | 21-25                  | 95                   | 16%              | 718                       | 68,173         | 4%               |
|       | 26-30                  | 87                   | 14%              | 1,417                     | 123,280        | 8%               |
|       | 31-35                  | 119                  | 20%              | 2,622                     | 312,075        | 20%              |
|       | 36-40                  | 124                  | 21%              | 3,312                     | 410,698        | 27%              |
|       | 41-45                  | 79                   | 13%              | 4,273                     | 337,558        | 22%              |
|       | 46-50                  | 55                   | 9%               | 3,633                     | 199,821        | 13%              |
|       | 51-55                  | 12                   | 2%               | 3,676                     | 44,108         | 3%               |
|       | >56                    | 10                   | 2%               | 2,403                     | 24,026         | 2%               |
| TOTAL | 601                    |                      | 2,538            | 1,525,245                 |                |                  |
| 2006  | <20                    | 19                   | 4%               | 338                       | 6,427          | 1%               |
|       | 21-25                  | 85                   | 18%              | 944                       | 80,260         | 8%               |
|       | 26-30                  | 80                   | 17%              | 1,441                     | 115,300        | 11%              |
|       | 31-35                  | 105                  | 22%              | 2,288                     | 240,201        | 23%              |
|       | 36-40                  | 88                   | 18%              | 3,027                     | 266,387        | 26%              |
|       | 41-45                  | 59                   | 12%              | 3,723                     | 219,638        | 21%              |
|       | 46-50                  | 30                   | 6%               | 2,851                     | 85,517         | 8%               |
|       | 51-55                  | 7                    | 1%               | 3,356                     | 23,492         | 2%               |
|       | >56                    | 4                    | 1%               | 1,533                     | 6,131          | 1%               |
| TOTAL | 477                    |                      | 2,187            | 1,043,353                 |                |                  |
| 2005  | <20                    | 34                   | 5%               | 840                       | 28,546         | 1%               |
|       | 21-25                  | 107                  | 16%              | 2,249                     | 240,668        | 6%               |
|       | 26-30                  | 107                  | 16%              | 3,325                     | 355,799        | 8%               |
|       | 31-35                  | 132                  | 19%              | 6,127                     | 808,775        | 19%              |
|       | 36-40                  | 130                  | 19%              | 7,754                     | 1,008,071      | 23%              |
|       | 41-45                  | 84                   | 12%              | 10,779                    | 905,449        | 21%              |
|       | 46-50                  | 62                   | 9%               | 11,429                    | 708,576        | 16%              |
|       | 51-55                  | 13                   | 2%               | 15,821                    | 205,679        | 5%               |
|       | >56                    | 11                   | 2%               | 7,802                     | 85,827         | 2%               |
| TOTAL | 680                    |                      | 6,393            | 4,347,390                 |                |                  |
| 2004  | <20                    | 39                   | 5%               | 1,121                     | 43,706         | 1%               |
|       | 21-25                  | 118                  | 16%              | 2,203                     | 259,933        | 4%               |
|       | 26-30                  | 112                  | 15%              | 3,288                     | 368,224        | 6%               |
|       | 31-35                  | 144                  | 19%              | 7,202                     | 1,037,078      | 17%              |
|       | 36-40                  | 141                  | 19%              | 9,880                     | 1,393,035      | 22%              |
|       | 41-45                  | 84                   | 11%              | 16,223                    | 1,362,724      | 22%              |
|       | 46-50                  | 66                   | 9%               | 17,814                    | 1,175,700      | 19%              |
|       | 51-55                  | 18                   | 2%               | 21,405                    | 385,281        | 6%               |
|       | >56                    | 19                   | 3%               | 10,764                    | 204,515        | 3%               |
| TOTAL | 741                    |                      | 8,408            | 6,230,196                 |                |                  |

TABLE D-7. California salmon troll boat-size catch statistics in pounds of dressed salmon.<sup>a/</sup> (Page 4 of 5)

| Year  | Vessels                |                      |                  | Catch <sup>c/</sup>       |                |                  |
|-------|------------------------|----------------------|------------------|---------------------------|----------------|------------------|
|       | Length Category (feet) | Number <sup>b/</sup> | Percent of Total | Average Pounds Per Vessel | Total (pounds) | Percent of Total |
| 2003  | <20                    | 22                   | 4%               | 1,966                     | 43,251         | 1%               |
|       | 21-25                  | 104                  | 18%              | 2,665                     | 277,192        | 4%               |
|       | 26-30                  | 94                   | 16%              | 4,208                     | 395,574        | 6%               |
|       | 31-35                  | 111                  | 19%              | 8,288                     | 919,974        | 14%              |
|       | 36-40                  | 113                  | 19%              | 14,938                    | 1,687,971      | 26%              |
|       | 41-45                  | 68                   | 12%              | 20,592                    | 1,400,250      | 22%              |
|       | 46-50                  | 48                   | 8%               | 24,450                    | 1,173,576      | 18%              |
|       | 51-55                  | 12                   | 2%               | 24,685                    | 296,220        | 5%               |
|       | >56                    | 12                   | 2%               | 16,468                    | 197,613        | 3%               |
| TOTAL | 584                    |                      | 10,945           | 6,391,621                 |                |                  |
| 2002  | <20                    | 34                   | 5%               | 1,314                     | 44,687         | 1%               |
|       | 21-25                  | 123                  | 17%              | 2,211                     | 271,972        | 5%               |
|       | 26-30                  | 111                  | 16%              | 3,137                     | 348,249        | 7%               |
|       | 31-35                  | 122                  | 17%              | 5,760                     | 702,716        | 14%              |
|       | 36-40                  | 147                  | 21%              | 9,090                     | 1,336,204      | 27%              |
|       | 41-45                  | 79                   | 11%              | 13,411                    | 1,059,442      | 21%              |
|       | 46-50                  | 64                   | 9%               | 11,734                    | 750,989        | 15%              |
|       | 51-55                  | 15                   | 2%               | 19,988                    | 299,817        | 6%               |
|       | >56                    | 13                   | 2%               | 14,880                    | 193,446        | 4%               |
| TOTAL | 708                    |                      | 7,073            | 5,007,522                 |                |                  |
| 2001  | <20                    | 26                   | 4%               | 559                       | 14,529         | 1%               |
|       | 21-25                  | 117                  | 17%              | 1,117                     | 130,707        | 5%               |
|       | 26-30                  | 105                  | 15%              | 2,212                     | 232,279        | 10%              |
|       | 31-35                  | 124                  | 18%              | 3,308                     | 410,150        | 17%              |
|       | 36-40                  | 145                  | 21%              | 4,627                     | 670,878        | 28%              |
|       | 41-45                  | 76                   | 11%              | 6,087                     | 462,586        | 19%              |
|       | 46-50                  | 64                   | 9%               | 5,245                     | 335,652        | 14%              |
|       | 51-55                  | 18                   | 3%               | 5,324                     | 95,824         | 4%               |
|       | >56                    | 14                   | 2%               | 4,000                     | 56,006         | 2%               |
| TOTAL | 689                    |                      | 3,496            | 2,408,611                 |                |                  |
| 2000  | <20                    | 41                   | 5%               | 1,348                     | 55,282         | 1%               |
|       | 21-25                  | 139                  | 18%              | 2,502                     | 347,743        | 7%               |
|       | 26-30                  | 116                  | 15%              | 3,850                     | 446,629        | 9%               |
|       | 31-35                  | 130                  | 17%              | 6,389                     | 830,573        | 16%              |
|       | 36-40                  | 165                  | 22%              | 8,183                     | 1,350,228      | 26%              |
|       | 41-45                  | 73                   | 10%              | 11,447                    | 835,622        | 16%              |
|       | 46-50                  | 66                   | 9%               | 12,811                    | 845,530        | 16%              |
|       | 51-55                  | 17                   | 2%               | 17,942                    | 305,017        | 6%               |
|       | >56                    | 12                   | 2%               | 9,512                     | 114,139        | 2%               |
| TOTAL | 759                    |                      | 6,760            | 5,130,763                 |                |                  |
| 1999  | <20                    | 41                   | 6%               | 891                       | 36,524         | 1%               |
|       | 21-25                  | 125                  | 19%              | 2,259                     | 282,366        | 7%               |
|       | 26-30                  | 88                   | 13%              | 3,712                     | 326,697        | 8%               |
|       | 31-35                  | 131                  | 20%              | 5,196                     | 680,635        | 18%              |
|       | 36-40                  | 139                  | 21%              | 7,867                     | 1,093,568      | 28%              |
|       | 41-45                  | 65                   | 10%              | 10,422                    | 677,411        | 18%              |
|       | 46-50                  | 55                   | 8%               | 10,202                    | 561,119        | 15%              |
|       | 51-55                  | 15                   | 2%               | 9,101                     | 136,509        | 4%               |
|       | >56                    | 7                    | 1%               | 7,275                     | 50,928         | 1%               |
| TOTAL | 666                    |                      | 5,774            | 3,845,757                 |                |                  |

TABLE D-7. California salmon troll boat-size catch statistics in pounds of dressed salmon.<sup>a/</sup> (Page 5 of 5)

| Year  | Vessels                |                      |                  | Catch <sup>c/</sup>       |                |                  |
|-------|------------------------|----------------------|------------------|---------------------------|----------------|------------------|
|       | Length Category (feet) | Number <sup>b/</sup> | Percent of Total | Average Pounds Per Vessel | Total (pounds) | Percent of Total |
| 1998  | <20                    | 45                   | 7%               | 934                       | 42,044         | 2%               |
|       | 21-25                  | 154                  | 23%              | 1,406                     | 216,593        | 12%              |
|       | 26-30                  | 101                  | 15%              | 2,277                     | 229,951        | 12%              |
|       | 31-35                  | 119                  | 18%              | 2,604                     | 309,870        | 17%              |
|       | 36-40                  | 129                  | 19%              | 4,040                     | 521,184        | 28%              |
|       | 41-45                  | 64                   | 10%              | 4,514                     | 288,916        | 16%              |
|       | 46-50                  | 40                   | 6%               | 4,764                     | 190,579        | 10%              |
|       | 51-55                  | 11                   | 2%               | 3,256                     | 35,821         | 2%               |
|       | >56                    | 6                    | 1%               | 2,018                     | 12,105         | 1%               |
| TOTAL | 669                    |                      | 2,761            | 1,847,063                 |                |                  |
| 1997  | <20                    | 54                   | 6%               | 1,482                     | 80,022         | 2%               |
|       | 21-25                  | 197                  | 24%              | 2,791                     | 549,756        | 10%              |
|       | 26-30                  | 126                  | 15%              | 4,462                     | 562,213        | 11%              |
|       | 31-35                  | 144                  | 17%              | 6,358                     | 915,510        | 17%              |
|       | 36-40                  | 157                  | 19%              | 8,500                     | 1,334,555      | 25%              |
|       | 41-45                  | 78                   | 9%               | 11,281                    | 879,913        | 17%              |
|       | 46-50                  | 54                   | 6%               | 13,156                    | 710,418        | 14%              |
|       | 51-55                  | 13                   | 2%               | 11,806                    | 153,476        | 3%               |
|       | >56                    | 12                   | 1%               | 5,161                     | 61,929         | 1%               |
| TOTAL | 835                    |                      | 6,285            | 5,247,792                 |                |                  |
| 1996  | <20                    | 66                   | 7%               | 1,500                     | 99,021         | 2%               |
|       | 21-25                  | 221                  | 22%              | 1,793                     | 396,205        | 10%              |
|       | 26-30                  | 163                  | 17%              | 2,648                     | 431,620        | 10%              |
|       | 31-35                  | 161                  | 16%              | 4,315                     | 694,793        | 17%              |
|       | 36-40                  | 176                  | 18%              | 5,945                     | 1,046,274      | 25%              |
|       | 41-45                  | 97                   | 10%              | 7,311                     | 709,120        | 17%              |
|       | 46-50                  | 73                   | 7%               | 7,984                     | 582,826        | 14%              |
|       | 51-55                  | 14                   | 1%               | 7,751                     | 108,511        | 3%               |
|       | >56                    | 14                   | 1%               | 3,217                     | 45,032         | 1%               |
| TOTAL | 985                    |                      | 4,176            | 4,113,402                 |                |                  |
| 1995  | <20                    | 88                   | 7%               | 1,478                     | 130,074        | 2%               |
|       | 21-25                  | 295                  | 25%              | 2,905                     | 856,987        | 13%              |
|       | 26-30                  | 188                  | 16%              | 4,542                     | 853,887        | 13%              |
|       | 31-35                  | 176                  | 15%              | 6,636                     | 1,167,899      | 18%              |
|       | 36-40                  | 210                  | 18%              | 8,147                     | 1,710,765      | 26%              |
|       | 41-45                  | 105                  | 9%               | 8,748                     | 918,546        | 14%              |
|       | 46-50                  | 82                   | 7%               | 8,480                     | 695,374        | 10%              |
|       | 51-55                  | 21                   | 2%               | 10,708                    | 224,861        | 3%               |
|       | >56                    | 14                   | 1%               | 5,362                     | 75,068         | 1%               |
| TOTAL | 1,179                  |                      | 5,626            | 6,633,461                 |                |                  |

a/ Derived from vessel registrations and fish landing tickets.

b/ Number of boats includes only those recording pounds greater than 0.

c/ Excludes pink salmon landings.

d/ Preliminary.

e/ Fewer than three vessels. Values combined with nearest category to preserve confidentiality.

TABLE D-8. Oregon salmon troll boat-size catch statistics in pounds of dressed salmon. (Page 1 of 5)

| Year               | Vessels                |                      |                  | Catch                     |                |                  |
|--------------------|------------------------|----------------------|------------------|---------------------------|----------------|------------------|
|                    | Length Category (feet) | Number <sup>a/</sup> | Percent of Total | Average Per Boat (pounds) | Total (pounds) | Percent of Total |
| 2018 <sup>b/</sup> | <20                    | 6                    | 3%               | 260                       | 1,559          | 1%               |
|                    | 20-29                  | 54                   | 23%              | 488                       | 26,370         | 9%               |
|                    | 30-39                  | 74                   | 32%              | 1,540                     | 113,937        | 40%              |
|                    | 40-49                  | 80                   | 35%              | 1,612                     | 128,954        | 45%              |
|                    | >50                    | 16                   | 7%               | 1,083                     | 17,327         | 6%               |
|                    | TOTAL                  | 230                  |                  | 1,253                     | 288,147        |                  |
| 2017               | <20                    | -                    | -                | -                         | -              | -                |
|                    | 20-29                  | 40                   | 23%              | 615                       | 24,605         | 9%               |
|                    | 30-39                  | 56                   | 32%              | 1,793                     | 100,416        | 38%              |
|                    | 40-49                  | 68                   | 39%              | 1,954                     | 132,872        | 50%              |
|                    | >50                    | 12                   | 7%               | 748                       | 8,981          | 3%               |
|                    | TOTAL                  | 176                  |                  | 1,516                     | 266,874        |                  |
| 2016               | <20                    | -                    | -                | -                         | -              | -                |
|                    | 20-29                  | 74                   | 24%              | 664                       | 49,106         | 9%               |
|                    | 30-39                  | 96                   | 31%              | 1,546                     | 148,422        | 29%              |
|                    | 40-49                  | 120                  | 38%              | 2,371                     | 284,563        | 55%              |
|                    | >50                    | 24                   | 8%               | 1,489                     | 35,744         | 7%               |
|                    | TOTAL                  | 314                  |                  | 1,649                     | 517,835        |                  |
| 2015               | <20                    | 4                    | 1%               | 1,066                     | 4,265          | 3%               |
|                    | 20-29                  | 102                  | 21%              | 1,094                     | 111,553        | 9%               |
|                    | 30-39                  | 156                  | 32%              | 2,133                     | 332,726        | 28%              |
|                    | 40-49                  | 174                  | 36%              | 3,395                     | 590,784        | 50%              |
|                    | >50                    | 51                   | 10%              | 2,874                     | 146,575        | 12%              |
|                    | TOTAL                  | 487                  |                  | 2,435                     | 1,185,903      |                  |
| 2014               | <20                    | 3                    | 1%               | 1,201                     | 3,603          | 1%               |
|                    | 20-29                  | 115                  | 23%              | 2,487                     | 286,062        | 11%              |
|                    | 30-39                  | 159                  | 32%              | 5,220                     | 829,910        | 31%              |
|                    | 40-49                  | 169                  | 34%              | 7,377                     | 1,246,690      | 47%              |
|                    | >50                    | 47                   | 10%              | 5,870                     | 275,913        | 10%              |
|                    | TOTAL                  | 493                  |                  | 5,359                     | 2,642,178      |                  |
| 2013               | <20                    | 4                    | 1%               | 1,215                     | 4,858          | 7%               |
|                    | 20-29                  | 102                  | 26%              | 1,825                     | 186,110        | 14%              |
|                    | 30-39                  | 127                  | 32%              | 4,015                     | 509,844        | 39%              |
|                    | 40-49                  | 138                  | 35%              | 3,794                     | 523,542        | 40%              |
|                    | >50                    | 28                   | 7%               | 2,524                     | 70,679         | 5%               |
|                    | TOTAL                  | 399                  |                  | 3,246                     | 1,295,033      |                  |



TABLE D-8. Oregon salmon troll boat-size catch statistics in pounds of dressed salmon. (Page 2 of 5)

| Year | Vessels                |                      |                  | Catch                     |                |                  |
|------|------------------------|----------------------|------------------|---------------------------|----------------|------------------|
|      | Length Category (feet) | Number <sup>a/</sup> | Percent of Total | Average Per Boat (pounds) | Total (pounds) | Percent of Total |
| 2012 | <20                    | c/                   | c/               | c/                        | c/             | c/               |
|      | 20-29                  | 93                   | 25%              | 919                       | 85,423         | 11%              |
|      | 30-39                  | 124                  | 34%              | 2,290                     | 283,943        | 38%              |
|      | 40-49                  | 122                  | 33%              | 2,697                     | 329,070        | 44%              |
|      | >50                    | 30                   | 8%               | 1,558                     | 46,727         | 6%               |
|      | TOTAL                  | 369                  |                  | 2,019                     | 745,163        |                  |
| 2011 | <20                    | 3                    | 1%               | 1,157                     | 3,472          | 2%               |
|      | 20-29                  | 80                   | 26%              | 602                       | 48,146         | 147%             |
|      | 30-39                  | 102                  | 34%              | 1,308                     | 133,379        | 33%              |
|      | 40-49                  | 97                   | 32%              | 1,927                     | 186,892        | 46%              |
|      | >50                    | 22                   | 7%               | 1,491                     | 32,792         | 8%               |
|      | TOTAL                  | 304                  |                  | 1,331                     | 404,681        |                  |
| 2010 | <20                    | 4                    | 1%               | 498                       | 1,990          | 0%               |
|      | 20-29                  | 86                   | 23%              | 620                       | 53,298         | 10%              |
|      | 30-39                  | 124                  | 34%              | 1,339                     | 166,008        | 32%              |
|      | 40-49                  | 126                  | 34%              | 1,991                     | 250,837        | 49%              |
|      | >50                    | 30                   | 8%               | 1,351                     | 40,527         | 8%               |
|      | TOTAL                  | 370                  |                  | 1,386                     | 512,660        |                  |
| 2009 | <20                    | 3                    | 1%               | 269                       | 808            | 1%               |
|      | 20-29                  | 94                   | 42%              | 674                       | 63,374         | 43%              |
|      | 30-39                  | 65                   | 29%              | 693                       | 45,040         | 31%              |
|      | 40-49                  | 53                   | 24%              | 656                       | 34,771         | 24%              |
|      | >50                    | 9                    | 4%               | 241                       | 2,167          | 1%               |
|      | TOTAL                  | 224                  |                  | 653                       | 146,160        |                  |
| 2008 | <20                    | 3                    | 2%               | 87                        | 260            | 0%               |
|      | 20-29                  | 47                   | 34%              | 250                       | 11,738         | 17%              |
|      | 30-39                  | 43                   | 31%              | 509                       | 21,882         | 32%              |
|      | 40-49                  | 38                   | 28%              | 828                       | 31,473         | 46%              |
|      | >50                    | 7                    | 5%               | 500                       | 3,498          | 5%               |
|      | TOTAL                  | 138                  |                  | 499                       | 68,851         |                  |
| 2007 | <20                    | 3                    | 1%               | 246                       | 739            | 0%               |
|      | 20-29                  | 90                   | 21%              | 851                       | 76,558         | 14%              |
|      | 30-39                  | 153                  | 35%              | 1,426                     | 218,197        | 39%              |
|      | 40-49                  | 146                  | 33%              | 1,562                     | 227,980        | 40%              |
|      | >50                    | 44                   | 10%              | 942                       | 41,429         | 7%               |
|      | TOTAL                  | 436                  |                  | 1,296                     | 564,903        |                  |

TABLE D-8. Oregon salmon troll boat-size catch statistics in pounds of dressed salmon. (Page 3 of 5)

| Year | Vessels                |                      |                  | Catch                     |                |                  |
|------|------------------------|----------------------|------------------|---------------------------|----------------|------------------|
|      | Length Category (feet) | Number <sup>a/</sup> | Percent of Total | Average Per Boat (pounds) | Total (pounds) | Percent of Total |
| 2006 | <20                    | 3                    | 1%               | 1,094                     | 3,281          | 1%               |
|      | 20-29                  | 78                   | 22%              | 662                       | 51,607         | 10%              |
|      | 30-39                  | 124                  | 35%              | 1,484                     | 184,030        | 37%              |
|      | 40-49                  | 127                  | 36%              | 1,672                     | 212,290        | 43%              |
|      | >50                    | 25                   | 7%               | 1,898                     | 47,462         | 10%              |
|      | TOTAL                  | 357                  |                  | 1,397                     | 498,670        |                  |
| 2005 | <20                    | 7                    | 1%               | 335                       | 2,343          | 0%               |
|      | 20-29                  | 122                  | 22%              | 1,716                     | 209,336        | 8%               |
|      | 30-39                  | 186                  | 33%              | 4,878                     | 907,312        | 34%              |
|      | 40-49                  | 188                  | 33%              | 6,436                     | 1,209,982      | 45%              |
|      | >50                    | 62                   | 11%              | 5,840                     | 362,051        | 13%              |
|      | TOTAL                  | 565                  |                  | 4,763                     | 2,691,024      |                  |
| 2004 | <20                    | 4                    | 1%               | 721                       | 2,883          | 0%               |
|      | 20-29                  | 120                  | 20%              | 2,266                     | 271,944        | 9%               |
|      | 30-39                  | 205                  | 34%              | 5,149                     | 1,055,574      | 36%              |
|      | 40-49                  | 199                  | 33%              | 6,360                     | 1,265,683      | 44%              |
|      | >50                    | 67                   | 11%              | 4,668                     | 312,752        | 11%              |
|      | TOTAL                  | 595                  |                  | 4,889                     | 2,908,836      |                  |
| 2003 | <20                    | 4                    | 1%               | 957                       | 3,829          | 0%               |
|      | 20-29                  | 120                  | 24%              | 2,425                     | 291,051        | 8%               |
|      | 30-39                  | 167                  | 34%              | 7,702                     | 1,286,218      | 35%              |
|      | 40-49                  | 152                  | 31%              | 10,170                    | 1,545,898      | 42%              |
|      | >50                    | 48                   | 10%              | 11,220                    | 538,580        | 15%              |
|      | TOTAL                  | 491                  |                  | 7,466                     | 3,665,576      |                  |
| 2002 | <20                    | 3                    | 1%               | 1,760                     | 5,281          | 0%               |
|      | 20-29                  | 103                  | 22%              | 3,488                     | 359,299        | 10%              |
|      | 30-39                  | 179                  | 38%              | 7,931                     | 1,419,713      | 41%              |
|      | 40-49                  | 140                  | 30%              | 10,092                    | 1,412,864      | 40%              |
|      | >50                    | 42                   | 9%               | 7,173                     | 301,280        | 9%               |
|      | TOTAL                  | 467                  |                  | 7,491                     | 3,498,437      |                  |
| 2001 | <20                    | 6                    | 1%               | 1,271                     | 7,626          | 0%               |
|      | 20-29                  | 102                  | 23%              | 2,768                     | 282,386        | 10%              |
|      | 30-39                  | 170                  | 38%              | 6,894                     | 1,172,058      | 40%              |
|      | 40-49                  | 141                  | 31%              | 9,175                     | 1,293,723      | 44%              |
|      | >50                    | 30                   | 7%               | 6,488                     | 194,652        | 7%               |
|      | TOTAL                  | 449                  |                  | 6,571                     | 2,950,445      |                  |

TABLE D-8. Oregon salmon troll boat-size catch statistics in pounds of dressed salmon. (Page 4 of 5)

| Year | Vessels                |                      |                  | Catch                     |                |                  |
|------|------------------------|----------------------|------------------|---------------------------|----------------|------------------|
|      | Length Category (feet) | Number <sup>a/</sup> | Percent of Total | Average Per Boat (pounds) | Total (pounds) | Percent of Total |
| 2000 | <20                    | 3                    | 1%               | 2,056                     | 6,169          | 0%               |
|      | 20-29                  | 100                  | 25%              | 1,933                     | 193,346        | 12%              |
|      | 30-39                  | 157                  | 39%              | 4,726                     | 741,968        | 48%              |
|      | 40-49                  | 111                  | 28%              | 4,594                     | 509,986        | 33%              |
|      | >50                    | 28                   | 7%               | 3,606                     | 100,965        | 7%               |
|      | TOTAL                  | 399                  |                  | 3,891                     | 1,552,434      |                  |
| 1999 | <20                    | 6                    | 2%               | 1,131                     | 6,783          | 1%               |
|      | 20-29                  | 68                   | 21%              | 1,205                     | 81,964         | 11%              |
|      | 30-39                  | 140                  | 43%              | 2,517                     | 352,355        | 49%              |
|      | 40-49                  | 93                   | 28%              | 2,499                     | 232,418        | 32%              |
|      | >50                    | 21                   | 6%               | 2,298                     | 48,263         | 7%               |
|      | TOTAL                  | 328                  |                  | 2,201                     | 721,783        |                  |
| 1998 | <20                    | 5                    | 1%               | 1,536                     | 7,679          | 1%               |
|      | 20-29                  | 65                   | 17%              | 1,036                     | 67,332         | 5%               |
|      | 30-39                  | 163                  | 44%              | 3,673                     | 598,702        | 43%              |
|      | 40-49                  | 110                  | 29%              | 5,395                     | 593,433        | 42%              |
|      | >50                    | 30                   | 8%               | 4,351                     | 130,537        | 9%               |
|      | TOTAL                  | 373                  |                  | 3,747                     | 1,397,683      |                  |
| 1997 | <20                    | 5                    | 1%               | 1,149                     | 5,743          | 0%               |
|      | 20-29                  | 98                   | 23%              | 838                       | 82,089         | 5%               |
|      | 30-39                  | 185                  | 43%              | 3,976                     | 735,478        | 48%              |
|      | 40-49                  | 114                  | 26%              | 5,401                     | 615,756        | 40%              |
|      | >50                    | 31                   | 7%               | 3,322                     | 102,982        | 7%               |
|      | TOTAL                  | 433                  |                  | 3,561                     | 1,542,048      |                  |
| 1996 | <20                    | 6                    | 1%               | 2,088                     | 12,530         | 1%               |
|      | 20-29                  | 117                  | 26%              | 1,009                     | 118,069        | 6%               |
|      | 30-39                  | 186                  | 41%              | 5,010                     | 931,895        | 48%              |
|      | 40-49                  | 115                  | 25%              | 6,466                     | 743,584        | 39%              |
|      | >50                    | 32                   | 7%               | 3,720                     | 119,048        | 6%               |
|      | TOTAL                  | 456                  |                  | 4,222                     | 1,925,126      |                  |
| 1995 | <20                    | 8                    | 2%               | 1,561                     | 12,486         | 1%               |
|      | 20-29                  | 142                  | 30%              | 1,190                     | 168,999        | 9%               |
|      | 30-39                  | 185                  | 39%              | 4,571                     | 845,647        | 44%              |
|      | 40-49                  | 111                  | 23%              | 6,884                     | 764,118        | 39%              |
|      | >50                    | 30                   | 6%               | 4,995                     | 149,846        | 8%               |
|      | TOTAL                  | 476                  |                  | 4,078                     | 1,941,096      |                  |

TABLE D-8. Oregon salmon troll boat-size catch statistics in pounds of dressed salmon. (Page 5 of 5)

| Year | Vessels                |                      |                  | Catch                     |                |                  |
|------|------------------------|----------------------|------------------|---------------------------|----------------|------------------|
|      | Length Category (feet) | Number <sup>a/</sup> | Percent of Total | Average Per Boat (pounds) | Total (pounds) | Percent of Total |
| 1994 | <20                    | 7                    | 2%               | 968                       | 6,776          | 2%               |
|      | 20-29                  | 114                  | 31%              | 435                       | 49,573         | 17%              |
|      | 30-39                  | 153                  | 41%              | 825                       | 126,188        | 44%              |
|      | 40-49                  | 85                   | 23%              | 1,080                     | 91,834         | 32%              |
|      | >50                    | 12                   | 3%               | 1,032                     | 12,382         | 4%               |
|      | TOTAL                  | 371                  |                  | 773                       | 286,753        |                  |
| 1993 | <20                    | 10                   | 2%               | 662                       | 6,619          | 1%               |
|      | 20-29                  | 206                  | 34%              | 558                       | 115,029        | 15%              |
|      | 30-39                  | 236                  | 39%              | 1,549                     | 365,597        | 47%              |
|      | 40-49                  | 128                  | 21%              | 1,888                     | 241,663        | 31%              |
|      | >50                    | 32                   | 5%               | 1,282                     | 41,029         | 5%               |
|      | TOTAL                  | 612                  |                  | 1,258                     | 769,937        |                  |
| 1992 | <20                    | 7                    | 1%               | 706                       | 4,945          | 0%               |
|      | 20-29                  | 242                  | 37%              | 849                       | 205,466        | 17%              |
|      | 30-39                  | 245                  | 38%              | 2,384                     | 584,162        | 48%              |
|      | 40-49                  | 134                  | 21%              | 2,911                     | 390,040        | 32%              |
|      | >50                    | 21                   | 3%               | 1,630                     | 34,231         | 3%               |
|      | TOTAL                  | 649                  |                  | 1,878                     | 1,218,844      |                  |
| 1991 | <20                    | 22                   | 2%               | 621                       | 13,672         | 1%               |
|      | 20-29                  | 568                  | 47%              | 1,266                     | 719,071        | 34%              |
|      | 30-39                  | 365                  | 30%              | 2,138                     | 780,386        | 37%              |
|      | 40-49                  | 209                  | 17%              | 2,468                     | 515,790        | 24%              |
|      | >50                    | 53                   | 4%               | 1,590                     | 84,279         | 4%               |
|      | TOTAL                  | 1,217                |                  | 1,736                     | 2,113,198      |                  |

a/ Number of boats includes only those with at least one landing containing troll-caught salmon.

b/ Preliminary.

c/ Fewer than three vessels. Values combined with next category below to preserve confidentiality.

TABLE D-9. Washington non-Indian salmon troll boat-size catch statistics in pounds of dressed salmon.<sup>a/b/</sup> (Page 1 of 3)

| Year | Vessels                |                      |                  | Catch                     |                |                  |
|------|------------------------|----------------------|------------------|---------------------------|----------------|------------------|
|      | Length Category (feet) | Number <sup>c/</sup> | Percent of Total | Average Pounds Per Vessel | Total (pounds) | Percent of Total |
| 2018 | <25                    | 5                    | 5%               | 615                       | 3,077          | 1%               |
|      | 25-36                  | 25                   | 25%              | 2,284                     | 57,104         | 22%              |
|      | >36                    | 72                   | 71%              | 2,812                     | 202,448        | 77%              |
|      | Unknown                | 0                    | 0%               | -                         | -              | 0%               |
|      | TOTAL                  | 102                  |                  | 2,575                     | 262,629        |                  |
| 2017 | <25                    | 6                    | 6%               | 1,666                     | 9,995          | 3%               |
|      | 25-36                  | 24                   | 22%              | 3,114                     | 74,729         | 22%              |
|      | >36                    | 78                   | 72%              | 3,834                     | 258,577        | 75%              |
|      | Unknown                | e/                   | e/               | e/                        | e/             | e/               |
|      | TOTAL                  | 108                  |                  | 3,179                     | 343,301        |                  |
| 2016 | <25                    | 10                   | 9%               | 982                       | 9,822          | 5%               |
|      | 25-36                  | 26                   | 24%              | 2,314                     | 60,169         | 30%              |
|      | >36                    | 71                   | 66%              | 1,840                     | 130,671        | 65%              |
|      | Unknown                | 0                    | 0%               | -                         | -              | 0%               |
|      | TOTAL                  | 107                  |                  | 1,875                     | 200,662        |                  |
| 2015 | <25                    | 11                   | 9%               | 4,496                     | 49,459         | 8%               |
|      | 25-36                  | 30                   | 25%              | 5,471                     | 164,138        | 26%              |
|      | >36                    | 81                   | 66%              | 6,857                     | 427,116        | 67%              |
|      | Unknown                | e/                   | e/               | e/                        | e/             | e/               |
|      | TOTAL                  | 122                  |                  | 5,252                     | 640,713        |                  |
| 2014 | <25                    | 11                   | 9%               | 3,456                     | 38,021         | 7%               |
|      | 25-36                  | 34                   | 29%              | 4,772                     | 162,253        | 29%              |
|      | >36                    | 71                   | 61%              | 4,936                     | 350,480        | 64%              |
|      | Unknown                | 0                    | 0%               | -                         | -              | 0%               |
|      | TOTAL                  | 116                  |                  | 4,748                     | 550,754        |                  |
| 2013 | <25                    | 9                    | 8%               | 1,993                     | 17,937         | 4%               |
|      | 25-36                  | 34                   | 31%              | 3,616                     | 122,956        | 26%              |
|      | >36                    | 60                   | 56%              | 5,623                     | 337,374        | 70%              |
|      | Unknown                | 5                    | 5%               | 599                       | 2,993          | 1%               |
|      | TOTAL                  | 108                  |                  | 4,456                     | 481,260        |                  |
| 2012 | <25                    | 8                    | 8%               | 2,389                     | 19,110         | 4%               |
|      | 25-36                  | 32                   | 30%              | 3,687                     | 117,999        | 26%              |
|      | >36                    | 65                   | 62%              | 4,849                     | 315,197        | 70%              |
|      | Unknown                | e/                   | e/               | e/                        | e/             | e/               |
|      | TOTAL                  | 105                  |                  | 4,308                     | 452,306        |                  |
| 2011 | <25                    | 12                   | 11%              | 1,329                     | 15,946         | 5%               |
|      | 25-36                  | 33                   | 29%              | 3,002                     | 99,059         | 29%              |
|      | >36                    | 67                   | 60%              | 3,363                     | 225,317        | 66%              |
|      | Unknown                | e/                   | e/               | e/                        | e/             | e/               |
|      | TOTAL                  | 112                  |                  | 3,039                     | 340,322        |                  |
| 2010 | <25                    | 10                   | 9%               | 1,490                     | 14,902         | 3%               |
|      | 25-36                  | 31                   | 27%              | 3,990                     | 123,695        | 23%              |
|      | >36                    | 72                   | 62%              | 5,693                     | 409,871        | 75%              |
|      | Unknown                | 3                    | 3%               | 427                       | 1,281          | 0%               |
|      | TOTAL                  | 116                  |                  | 4,739                     | 549,749        |                  |

TABLE D-9. Washington non-Indian salmon troll boat-size catch statistics in pounds of dressed salmon. <sup>a/b/</sup> (Page 2 of 3)

| Year | Vessels                |                      |                  | Catch                     |                |                  |
|------|------------------------|----------------------|------------------|---------------------------|----------------|------------------|
|      | Length Category (feet) | Number <sup>c/</sup> | Percent of Total | Average Pounds Per Vessel | Total (pounds) | Percent of Total |
| 2009 | <25                    | 5                    | 5%               | 2,160                     | 10,800         | 4%               |
|      | 25-36                  | 28                   | 29%              | 3,553                     | 99,475         | 34%              |
|      | >36                    | 64                   | 66%              | 2,842                     | 181,911        | 62%              |
|      | Unknown                | 0                    | -                | -                         | -              | -                |
|      | TOTAL                  | 97                   |                  | 3,012                     | 292,186        |                  |
| 2008 | <25                    | 4                    | 5%               | 1,341                     | 5,364          | 5%               |
|      | 25-36                  | 27                   | 31%              | 1,486                     | 42,835         | 37%              |
|      | >36                    | 55                   | 64%              | 1,203                     | 66,167         | 58%              |
|      | Unknown                | 0                    | -                | -                         | -              | -                |
|      | TOTAL                  | 86                   |                  | 1,330                     | 114,366        |                  |
| 2007 | <25                    | 3                    | 4%               | 3,180                     | 9,539          | 4%               |
|      | 25-36                  | 25                   | 32%              | 2,610                     | 65,240         | 30%              |
|      | >36                    | 51                   | 65%              | 2,807                     | 143,155        | 66%              |
|      | Unknown                | 0                    | -                | -                         | -              | -                |
|      | TOTAL                  | 79                   |                  | 2,759                     | 217,934        |                  |
| 2006 | <25                    | 3                    | 4%               | 2,398                     | 7,194          | 3%               |
|      | 25-36                  | 24                   | 29%              | 1,983                     | 47,593         | 21%              |
|      | >36                    | 57                   | 68%              | 3,103                     | 176,873        | 76%              |
|      | Unknown                | e/                   | e/               | e/                        | e/             | e/               |
|      | TOTAL                  | 84                   |                  | 2,758                     | 231,660        |                  |
| 2005 | <25                    | 6                    | 7%               | 4,309                     | 25,854         | 5%               |
|      | 25-36                  | 24                   | 26%              | 4,801                     | 115,228        | 24%              |
|      | >36                    | 61                   | 67%              | 5,565                     | 339,488        | 71%              |
|      | Unknown                | e/                   | e/               | e/                        | e/             | e/               |
|      | TOTAL                  | 91                   |                  | 5,281                     | 480,570        |                  |
| 2004 | <25                    | 8                    | 9%               | 4,463                     | 35,700         | 6%               |
|      | 25-36                  | 20                   | 23%              | 5,797                     | 115,933        | 20%              |
|      | >36                    | 58                   | 67%              | 7,636                     | 442,879        | 74%              |
|      | Unknown                | e/                   | e/               | e/                        | e/             | e/               |
|      | TOTAL                  | 86                   |                  | 6,913                     | 594,512        |                  |
| 2003 | <25                    | 10                   | 12%              | 6,141                     | 61,407         | 7%               |
|      | 25-36                  | 19                   | 23%              | 7,433                     | 141,235        | 16%              |
|      | >36                    | 53                   | 65%              | 12,715                    | 673,876        | 77%              |
|      | Unknown                | 0                    | -                | -                         | -              | -                |
|      | TOTAL                  | 82                   |                  | 10,689                    | 876,518        |                  |
| 2002 | <25                    | 7                    | 9%               | 7,326                     | 51,283         | 8%               |
|      | 25-36                  | 17                   | 23%              | 6,275                     | 106,668        | 16%              |
|      | >36                    | 50                   | 67%              | 9,931                     | 496,565        | 73%              |
|      | Unknown                | 1                    | 1%               | 25,133                    | 25,133         | 4%               |
|      | TOTAL                  | 75                   |                  | 9,062                     | 679,649        |                  |
| 2001 | <25                    | 3                    | 5%               | 4,534                     | 13,603         | 5%               |
|      | 25-36                  | 15                   | 26%              | 3,960                     | 59,403         | 20%              |
|      | >36                    | 39                   | 68%              | 5,576                     | 217,467        | 75%              |
|      | Unknown                | 0                    | -                | -                         | -              | -                |
|      | TOTAL                  | 57                   |                  | 5,096                     | 290,473        |                  |

TABLE D-9. Washington non-Indian salmon troll boat-size catch statistics in pounds of dressed salmon. <sup>a/b/</sup> (Page 3 of 3)

| Year               | Vessels                |                      |                  | Catch                     |                |                  |
|--------------------|------------------------|----------------------|------------------|---------------------------|----------------|------------------|
|                    | Length Category (feet) | Number <sup>c/</sup> | Percent of Total | Average Pounds Per Vessel | Total (pounds) | Percent of Total |
| 2000               | <25                    | 3                    | 6%               | 873                       | 2,620          | 2%               |
|                    | 25-36                  | 13                   | 27%              | 3,401                     | 44,218         | 27%              |
|                    | >36                    | 29                   | 59%              | 3,627                     | 105,171        | 65%              |
|                    | Unknown                | 4                    | 8%               | 2,573                     | 10,291         | 6%               |
|                    | TOTAL                  | 49                   |                  | 3,312                     | 162,300        |                  |
| 1999               | <25                    | 5                    | 9%               | 2,511                     | 12,557         | 6%               |
|                    | 25-36                  | 14                   | 25%              | 3,731                     | 52,237         | 24%              |
|                    | >36                    | 35                   | 61%              | 4,333                     | 151,638        | 69%              |
|                    | Unknown                | 3                    | 5%               | 1,220                     | 3,661          | 2%               |
|                    | TOTAL                  | 57                   |                  | 3,861                     | 220,093        |                  |
| 1998               | <25                    | 3                    | 13%              | 545                       | 1,634          | 2%               |
|                    | 25-36                  | 6                    | 26%              | 2,842                     | 17,050         | 21%              |
|                    | >36                    | 14                   | 61%              | 4,493                     | 62,907         | 77%              |
|                    | Unknown                | e/                   | e/               | e/                        | e/             | e/               |
|                    | TOTAL                  | 23                   |                  | 3,547                     | 81,591         |                  |
| 1997               | <25                    | 7                    | 14%              | 322                       | 2,253          | 3%               |
|                    | 25-36                  | 16                   | 31%              | 1,468                     | 23,491         | 29%              |
|                    | >36                    | 28                   | 55%              | 1,972                     | 55,203         | 68%              |
|                    | Unknown                | e/                   | e/               | e/                        | e/             | e/               |
|                    | TOTAL                  | 51                   |                  | 1,587                     | 80,947         |                  |
| 1996               | <25                    | 39                   | 43%              | 709                       | 27,664         | 31%              |
|                    | 25-36                  | 24                   | 27%              | 868                       | 20,826         | 23%              |
|                    | >36                    | 20                   | 22%              | 1,372                     | 27,440         | 31%              |
|                    | Unknown                | 7                    | 8%               | 1,861                     | 13,029         | 15%              |
|                    | TOTAL                  | 90                   |                  | 988                       | 88,959         |                  |
| 1995               | <25                    | 45                   | 47%              | 1,864                     | 83,901         | 36%              |
|                    | 25-36                  | 30                   | 31%              | 2,936                     | 88,083         | 38%              |
|                    | >36                    | 17                   | 18%              | 2,950                     | 50,144         | 22%              |
|                    | Unknown                | 4                    | 4%               | 2,351                     | 9,403          | 4%               |
|                    | TOTAL                  | 96                   |                  | 2,412                     | 231,531        |                  |
| 1994 <sup>d/</sup> | <25                    | 0                    | -                | -                         | -              | -                |
|                    | 25-36                  | 0                    | -                | -                         | -              | -                |
|                    | >36                    | e/                   | e/               | e/                        | e/             | e/               |
|                    | Unknown                | 0                    | -                | -                         | -              | -                |
|                    | TOTAL                  | e/                   | e/               | e/                        | e/             | e/               |
| 1993               | <25                    | 174                  | 37%              | 235                       | 40,879         | 10%              |
|                    | 25-36                  | 134                  | 28%              | 627                       | 84,005         | 20%              |
|                    | >36                    | 145                  | 31%              | 1,832                     | 265,684        | 65%              |
|                    | Unknown                | 21                   | 4%               | 924                       | 19,406         | 5%               |
|                    | TOTAL                  | 474                  |                  | 865                       | 409,974        |                  |

a/ All values in this table are based on preliminary information available at the start of each year's review.

b/ Excludes pink salmon landings.

c/ Number of boats includes only those recording pounds greater than 0.

d/ The fishery was closed north of Cape Falcon, however, Chinook were caught off Oregon and landed in Puget Sound.

e/ Fewer than three vessels. Values combined with nearest category to preserve confidentiality.

TABLE D-10. Preliminary California salmon landings (in pounds of dressed salmon) and exvessel values by vessel size categories and port from Crescent City to Morro Bay south, 2018.

| Port                     | Length Category (feet) | Number of Deliveries | Total Dressed Pounds Landed | Total Exvessel Value (dollars) | Percent Exvessel Value Landed in Port |
|--------------------------|------------------------|----------------------|-----------------------------|--------------------------------|---------------------------------------|
| Crescent City            | <26                    | a/                   | a/                          | a/                             | a/                                    |
|                          | 26-36                  | 33                   | 3,933                       | 38,753                         | 11%                                   |
|                          | >36                    | 193                  | 38,118                      | 315,155                        | 89%                                   |
|                          | TOTAL                  | 226                  | 42,051                      | 353,908                        |                                       |
| Eureka                   | <26                    | 52                   | 4,697                       | 41,992                         | 12%                                   |
|                          | 26-36                  | 109                  | 9,442                       | 85,413                         | 24%                                   |
|                          | >36                    | 225                  | 28,892                      | 234,778                        | 65%                                   |
|                          | TOTAL                  | 386                  | 43,031                      | 362,183                        |                                       |
| Shelter Cove             | <26                    | 22                   | 1,751                       | 12,254                         | 100%                                  |
|                          | 26-36                  | -                    | -                           | -                              | -                                     |
|                          | >36                    | a/                   | a/                          | a/                             | a/                                    |
|                          | TOTAL                  | 22                   | 1,751                       | 12,254                         |                                       |
| Fort Bragg <sup>b/</sup> | <26                    | 43                   | 8,230                       | 64,465                         | 8%                                    |
|                          | 26-36                  | 212                  | 35,415                      | 254,926                        | 30%                                   |
|                          | >36                    | 160                  | 78,062                      | 529,908                        | 62%                                   |
|                          | TOTAL                  | 415                  | 121,707                     | 849,299                        |                                       |
| Bodega Bay               | <26                    | 143                  | 19,488                      | 146,348                        | 17%                                   |
|                          | 26-36                  | 269                  | 52,427                      | 379,991                        | 44%                                   |
|                          | >36                    | 142                  | 45,369                      | 333,531                        | 39%                                   |
|                          | TOTAL                  | 554                  | 117,284                     | 859,870                        |                                       |
| San Francisco            | <26                    | 181                  | 12,505                      | 114,561                        | 8%                                    |
|                          | 26-36                  | 184                  | 59,828                      | 493,271                        | 36%                                   |
|                          | >36                    | 223                  | 97,928                      | 781,431                        | 56%                                   |
|                          | TOTAL                  | 588                  | 170,261                     | 1,389,263                      |                                       |
| Half Moon Bay            | <26                    | 40                   | 5,307                       | 47,784                         | 2%                                    |
|                          | 26-36                  | 207                  | 85,590                      | 771,948                        | 30%                                   |
|                          | >36                    | 331                  | 197,860                     | 1,729,872                      | 68%                                   |
|                          | TOTAL                  | 578                  | 288,757                     | 2,549,604                      |                                       |
| Santa Cruz               | <26                    | 158                  | 21,268                      | 223,966                        | 32%                                   |
|                          | 26-36                  | 85                   | 17,035                      | 177,788                        | 26%                                   |
|                          | >36                    | 28                   | 29,439                      | 294,821                        | 42%                                   |
|                          | TOTAL                  | 271                  | 67,742                      | 696,575                        |                                       |
| Moss Landing             | <26                    | 139                  | 15,615                      | 154,080                        | 33%                                   |
|                          | 26-36                  | 145                  | 22,010                      | 188,884                        | 41%                                   |
|                          | >36                    | 42                   | 13,718                      | 121,520                        | 26%                                   |
|                          | TOTAL                  | 326                  | 51,343                      | 464,484                        |                                       |
| Monterey                 | <26                    | 98                   | 9,787                       | 97,037                         | 57%                                   |
|                          | 26-36                  | 45                   | 5,398                       | 52,179                         | 30%                                   |
|                          | >36                    | 30                   | 1,970                       | 21,900                         | 13%                                   |
|                          | TOTAL                  | 173                  | 17,155                      | 171,116                        |                                       |
| Morro Bay south          | <26                    | 35                   | 4,802                       | 47,400                         | 57%                                   |
|                          | 26-36                  | 14                   | 1,619                       | 21,158                         | 25%                                   |
|                          | >36                    | 12                   | 1,468                       | 15,044                         | 18%                                   |
|                          | TOTAL                  | 61                   | 7,889                       | 83,602                         |                                       |

a/ Fewer than three vessels. Values combined with nearest category to preserve confidentiality.

b/ Fort Bragg includes minor landings made in Mendocino County areas.



TABLE D-11. Preliminary 2018 Washington non-Indian troll salmon landings (in pounds of dressed salmon) and exvessel value by vessel size category and port area.<sup>a/b/</sup>

| Port Area                 | Length Category (feet) | Number of Boats | Number of Boat Days Fished | Total Dressed Pounds Landed | Total Exvessel Value (dollars) | Percent Exvessel Value Landed in Port |
|---------------------------|------------------------|-----------------|----------------------------|-----------------------------|--------------------------------|---------------------------------------|
| Neah Bay                  | <25                    | c/              | c/                         | c/                          | c/                             | c/                                    |
|                           | 25-36                  | 7               | 41                         | 5,954                       | 38,687                         | 10%                                   |
|                           | >36                    | 28              | 326                        | 36,873                      | 339,209                        | 90%                                   |
|                           | Unknown                | -               | -                          | -                           | -                              | -                                     |
|                           | TOTAL                  | 35              | 367                        | 42,827                      | 377,896                        |                                       |
| La Push                   | <25                    | c/              | c/                         | c/                          | c/                             | c/                                    |
|                           | 25-36                  | 8               | 189                        | 24,412                      | 168,203                        | 43%                                   |
|                           | >36                    | 11              | 179                        | 27,751                      | 227,505                        | 57%                                   |
|                           | Unknown                | -               | -                          | -                           | -                              | -                                     |
|                           | TOTAL                  | 19              | 368                        | 52,163                      | 395,708                        |                                       |
| Westport                  | <25                    | 3               | 41                         | 1,992                       | 15,859                         | 1%                                    |
|                           | 25-36                  | 16              | 328                        | 27,813                      | 255,728                        | 16%                                   |
|                           | >36                    | 48              | 990                        | 136,344                     | 1,289,941                      | 83%                                   |
|                           | Unknown                | -               | -                          | -                           | -                              | -                                     |
|                           | TOTAL                  | 67              | 1,359                      | 166,149                     | 1,561,527                      |                                       |
| Ilwaco                    | <25                    | -               | -                          | -                           | -                              | -                                     |
|                           | 25-36                  | c/              | c/                         | c/                          | c/                             | c/                                    |
|                           | >36                    | 11              | 48                         | 1,490                       | 14,835                         | 99%                                   |
|                           | Unknown                | -               | -                          | -                           | -                              | -                                     |
|                           | TOTAL                  | 11              | 48                         | 1,490                       | 14,835                         |                                       |
| Puget Sound <sup>d/</sup> | <25                    | -               | -                          | -                           | -                              | -                                     |
|                           | 25-36                  | -               | -                          | -                           | -                              | -                                     |
|                           | >36                    | -               | -                          | -                           | -                              | -                                     |
|                           | Unknown                | -               | -                          | -                           | -                              | -                                     |
|                           | TOTAL                  | -               | -                          | -                           | -                              | -                                     |

a/ Preliminary.

b/ Total pounds and exvessel values reported in this table may be less than are reported in other tables of the Review. The differences are generally one percent or less and likely related to vessel information missing for certain landings.

c/ Fewer than three vessels. Values combined with next category to preserve confidentiality.

d/ Landed on the coast and transported to Puget Sound for processing.

TABLE D-12. California number of vessels landing 50 percent and 90 percent of total pounds of salmon troll catch by year.

| Year               | Total Vessels | 50 Percent of Pounds Landed |                  | 90 Percent of Pounds Landed |                  |
|--------------------|---------------|-----------------------------|------------------|-----------------------------|------------------|
|                    |               | Number of Vessels           | Percent of Fleet | Number of Vessels           | Percent of Fleet |
| 1978               | 4,919         | 542                         | 11.0%            | 2,024                       | 41.1%            |
| 1979               | 4,594         | 373                         | 8.1%             | 1,641                       | 35.7%            |
| 1980               | 4,738         | 431                         | 9.1%             | 1,733                       | 36.6%            |
| 1981               | 4,102         | 395                         | 9.6%             | 1,599                       | 39.0%            |
| 1982               | 4,013         | 438                         | 10.9%            | 1,602                       | 39.9%            |
| 1983               | 3,223         | 353                         | 11.0%            | 1,268                       | 39.3%            |
| 1984               | 2,569         | 213                         | 8.3%             | 918                         | 35.7%            |
| 1985               | 2,308         | 241                         | 10.4%            | 898                         | 38.9%            |
| 1986               | 2,582         | 302                         | 11.7%            | 1,151                       | 44.6%            |
| 1987               | 2,442         | 320                         | 13.1%            | 1,080                       | 44.2%            |
| 1988               | 2,571         | 409                         | 15.9%            | 1,285                       | 50.0%            |
| 1989               | 2,534         | 363                         | 14.3%            | 1,244                       | 49.1%            |
| 1990               | 2,115         | 295                         | 13.9%            | 976                         | 46.1%            |
| 1991               | 1,769         | 224                         | 12.7%            | 791                         | 44.7%            |
| 1992               | 1,085         | 131                         | 12.1%            | 485                         | 44.7%            |
| 1993               | 1,240         | 163                         | 13.1%            | 554                         | 44.7%            |
| 1994               | 1,024         | 141                         | 13.8%            | 459                         | 44.8%            |
| 1995               | 1,179         | 190                         | 16.1%            | 581                         | 49.3%            |
| 1996               | 985           | 128                         | 13.0%            | 434                         | 44.1%            |
| 1997               | 835           | 117                         | 14.0%            | 377                         | 45.1%            |
| 1998               | 670           | 90                          | 13.4%            | 325                         | 48.5%            |
| 1999               | 666           | 103                         | 15.5%            | 316                         | 47.4%            |
| 2000               | 759           | 117                         | 15.4%            | 370                         | 48.7%            |
| 2001               | 689           | 90                          | 13.1%            | 328                         | 47.6%            |
| 2002               | 708           | 89                          | 12.6%            | 315                         | 44.5%            |
| 2003               | 584           | 74                          | 12.7%            | 237                         | 40.6%            |
| 2004               | 741           | 108                         | 14.6%            | 344                         | 46.4%            |
| 2005               | 680           | 111                         | 16.3%            | 341                         | 50.1%            |
| 2006               | 477           | 80                          | 16.8%            | 236                         | 49.5%            |
| 2007               | 601           | 95                          | 15.8%            | 293                         | 48.8%            |
| 2008               | -             | -                           | -                | -                           | -                |
| 2009               | -             | -                           | -                | -                           | -                |
| 2010               | 215           | 21                          | 9.8%             | 84                          | 39.1%            |
| 2011               | 464           | 58                          | 12.5%            | 204                         | 44.0%            |
| 2012               | 616           | 100                         | 16.2%            | 312                         | 50.6%            |
| 2013               | 671           | 103                         | 15.4%            | 328                         | 48.9%            |
| 2014               | 653           | 98                          | 15.0%            | 306                         | 46.9%            |
| 2015               | 587           | 86                          | 14.7%            | 291                         | 49.6%            |
| 2016               | 438           | 61                          | 13.9%            | 215                         | 49.1%            |
| 2017               | 400           | 52                          | 13.0%            | 193                         | 48.3%            |
| 2018 <sup>a/</sup> | 456           | 56                          | 12.3%            | 219                         | 48.0%            |

a/ Preliminary.

TABLE D-13. Oregon number of vessels landing 50 percent and 90 percent of total pounds of salmon troll catch by year.<sup>a/</sup>

| Year               | Total Vessels | 50% of Pounds Landed |                  | 90% of Pounds Landed |                  |
|--------------------|---------------|----------------------|------------------|----------------------|------------------|
|                    |               | Number of Vessels    | Percent of Fleet | Number of Vessels    | Percent of Fleet |
| 1978               | 3,157         | 446                  | 14.1%            | 1,576                | 49.9%            |
| 1979               | 3,114         | 423                  | 13.6%            | 1,449                | 46.5%            |
| 1980               | 3,875         | 372                  | 9.6%             | 1,375                | 35.5%            |
| 1981               | 3,615         | 420                  | 11.6%            | 1,391                | 38.5%            |
| 1982               | 3,269         | 359                  | 11.0%            | 1,249                | 38.2%            |
| 1983               | 2,951         | 294                  | 10.0%            | 1,082                | 36.7%            |
| 1984               | 771           | 88                   | 11.4%            | 333                  | 43.2%            |
| 1985               | 2,050         | 132                  | 6.4%             | 514                  | 25.1%            |
| 1986               | 2,284         | 238                  | 10.4%            | 851                  | 37.3%            |
| 1987               | 2,111         | 292                  | 13.8%            | 928                  | 44.0%            |
| 1988               | 2,061         | 337                  | 16.4%            | 1,069                | 51.9%            |
| 1989               | 1,937         | 303                  | 15.6%            | 959                  | 49.5%            |
| 1990               | 1,557         | 221                  | 14.2%            | 709                  | 45.5%            |
| 1991               | 1,217         | 206                  | 16.9%            | 651                  | 53.5%            |
| 1992               | 649           | 87                   | 13.4%            | 286                  | 44.1%            |
| 1993               | 612           | 67                   | 10.9%            | 235                  | 38.4%            |
| 1994               | 371           | 43                   | 11.6%            | 152                  | 41.0%            |
| 1995               | 476           | 52                   | 10.9%            | 184                  | 38.7%            |
| 1996               | 456           | 62                   | 13.6%            | 202                  | 44.3%            |
| 1997               | 433           | 60                   | 13.9%            | 184                  | 42.5%            |
| 1998               | 373           | 51                   | 13.7%            | 165                  | 44.2%            |
| 1999               | 328           | 47                   | 14.3%            | 150                  | 45.7%            |
| 2000               | 399           | 68                   | 17.0%            | 197                  | 49.4%            |
| 2001               | 449           | 68                   | 15.1%            | 221                  | 49.2%            |
| 2002               | 467           | 76                   | 16.3%            | 230                  | 49.3%            |
| 2003               | 491           | 83                   | 16.9%            | 254                  | 51.7%            |
| 2004               | 595           | 110                  | 18.5%            | 318                  | 53.4%            |
| 2005               | 565           | 103                  | 18.2%            | 310                  | 54.9%            |
| 2006               | 357           | 67                   | 18.8%            | 200                  | 56.0%            |
| 2007               | 436           | 69                   | 15.8%            | 232                  | 53.2%            |
| 2008               | 140           | 25                   | 17.9%            | 75                   | 53.6%            |
| 2009               | 224           | 27                   | 12.1%            | 105                  | 46.9%            |
| 2010               | 370           | 43                   | 11.6%            | 139                  | 37.6%            |
| 2011               | 304           | 32                   | 10.5%            | 113                  | 37.2%            |
| 2012               | 369           | 41                   | 11.1%            | 144                  | 39.0%            |
| 2013               | 399           | 52                   | 13.0%            | 158                  | 39.6%            |
| 2014               | 493           | 63                   | 12.8%            | 184                  | 37.3%            |
| 2015               | 487           | 75                   | 15.4%            | 250                  | 51.3%            |
| 2016               | 313           | 36                   | 11.5%            | 134                  | 42.8%            |
| 2017               | 176           | 22                   | 12.5%            | 81                   | 46.0%            |
| 2018 <sup>b/</sup> | 230           | 27                   | 11.7%            | 104                  | 45.2%            |

a/ Includes licensed (permitted for 1980 on) and properly identified vessels only. Total poundage on which the numbers are based is not equal to total aggregate troll landings because of landings by unlicensed or misidentified vessels. Percentages of total pounds not credited to licensed (permitted) vessels were: 1974 -19 percent, 1975 - 19 percent, 1976 - 9.4 percent, 1977 - 8 percent, 1978 - 1.4 percent, 1979 - 0.2 percent, 1980 - 1.7 percent, 1981 - 0.11 percent, 1982-2002 - less than 0.05 percent, 2003 - 0.06 percent, 2004 - 0.15 percent, 2005 - 0.32 percent, 2006 - 0.08 percent, 2007 - 0.7 percent, 2008 - 0.05 percent, 2009 - 0.05 percent, 2010 - 0.05 percent, and 2011 - 0.02 percent.

b/ Preliminary.

TABLE D-14. Washington number of vessels landing 50 percent and 90 percent (by numbers of fish) of non-Indian troll salmon catch.<sup>a/</sup>

| Year               | Total Vessels | 50% of Fish Landed |                  | 90% of Fish Landed |                  |
|--------------------|---------------|--------------------|------------------|--------------------|------------------|
|                    |               | Number of Vessels  | Percent of Fleet | Number of Vessels  | Percent of Fleet |
| 1978               | 3,041         | 223                | 7.3%             | 1,040              | 34.2%            |
| 1979               | 2,778         | 253                | 9.1%             | 946                | 34.1%            |
| 1980               | 2,626         | 206                | 7.8%             | 883                | 33.6%            |
| 1981               | 2,439         | 214                | 8.8%             | 810                | 33.2%            |
| 1982               | 2,253         | 181                | 8.0%             | 703                | 31.2%            |
| 1983               | 2,056         | 75                 | 3.6%             | 409                | 19.9%            |
| 1984               | 374           | 55                 | 14.7%            | 180                | 48.1%            |
| 1985               | 1,259         | 104                | 8.3%             | 443                | 35.2%            |
| 1986               | 1,252         | 100                | 8.0%             | 387                | 30.9%            |
| 1987               | 883           | 97                 | 11.0%            | 385                | 43.6%            |
| 1988               | 650           | 51                 | 7.8%             | 239                | 36.8%            |
| 1989               | 883           | 70                 | 7.9%             | 268                | 30.4%            |
| 1990               | 897           | 111                | 12.4%            | 373                | 41.6%            |
| 1991               | 811           | 84                 | 10.4%            | 344                | 42.4%            |
| 1992               | 604           | 59                 | 9.8%             | 193                | 32.0%            |
| 1993               | 474           | 47                 | 9.9%             | 162                | 34.2%            |
| 1994 <sup>b/</sup> | <3            | NA                 | NA               | NA                 | NA               |
| 1995               | 96            | 13                 | 13.5%            | 41                 | 42.7%            |
| 1996               | 90            | 14                 | 15.6%            | 45                 | 50.0%            |
| 1997               | 51            | 7                  | 13.7%            | 23                 | 45.1%            |
| 1998               | 23            | 5                  | 21.7%            | 12                 | 52.2%            |
| 1999               | 57            | 10                 | 17.5%            | 32                 | 56.1%            |
| 2000               | 49            | 11                 | 22.4%            | 28                 | 57.1%            |
| 2001               | 57            | 12                 | 21.1%            | 34                 | 59.6%            |
| 2002               | 75            | 15                 | 20.0%            | 42                 | 56.0%            |
| 2003               | 82            | 18                 | 22.0%            | 47                 | 57.3%            |
| 2004               | 86            | 18                 | 20.9%            | 53                 | 61.6%            |
| 2005               | 91            | 25                 | 27.5%            | 63                 | 69.2%            |
| 2006               | 84            | 17                 | 20.2%            | 48                 | 57.1%            |
| 2007               | 79            | 17                 | 21.5%            | 49                 | 62.0%            |
| 2008               | 86            | 18                 | 20.9%            | 47                 | 54.7%            |
| 2009               | 97            | 18                 | 18.6%            | 61                 | 62.9%            |
| 2010               | 116           | 29                 | 25.0%            | 73                 | 62.9%            |
| 2011               | 112           | 27                 | 24.1%            | 70                 | 62.5%            |
| 2012               | 105           | 24                 | 22.9%            | 67                 | 63.8%            |
| 2013               | 108           | 25                 | 23.1%            | 67                 | 62.0%            |
| 2014               | 116           | 31                 | 26.7%            | 79                 | 68.1%            |
| 2015               | 122           | 31                 | 25.4%            | 80                 | 65.6%            |
| 2016               | 107           | 29                 | 27.1%            | 75                 | 70.1%            |
| 2017               | 108           | 25                 | 23.1%            | 70                 | 64.8%            |
| 2018               | 102           | 24                 | 23.5%            | 66                 | 64.7%            |

a/ All values in this table are based on preliminary information available at the start of each year's review and are not updated in subsequent years.

b/ The fishery was closed north of Cape Falcon; however, Chinook were caught off Oregon and landed in Puget Sound. Values omitted to preserve confidentiality.

TABLE D-15. Preliminary 2018 California, Oregon, and Washington troll fleet by home state and salmon landings and exvessel value.<sup>a/</sup>

| Home State        | Number of Vessels | Percent | Landings (Pounds) | Percent | Total Value (\$ thousands) | Percent |
|-------------------|-------------------|---------|-------------------|---------|----------------------------|---------|
| <b>CALIFORNIA</b> |                   |         |                   |         |                            |         |
| California        | 433               | 95%     | 878,280           | 95%     | 7,359                      | 94%     |
| Oregon            | 10                | 2%      | 6,879             | 1%      | 59                         | 1%      |
| Washington        | 9                 | 2%      | 31,889            | 3%      | 275                        | 4%      |
| Unknown/Other     | 4                 | 1%      | 11,920            | 1%      | 99                         | 1%      |
| <b>TOTAL</b>      | <b>456</b>        |         | <b>928,968</b>    |         | <b>7,792</b>               |         |
| <b>OREGON</b>     |                   |         |                   |         |                            |         |
| Oregon            | 178               | 77%     | 234,413           | 81%     | 1,982                      | 81%     |
| California        | 21                | 9%      | 20,335            | 7%      | 187                        | 8%      |
| Washington        | 23                | 10%     | 31,098            | 11%     | 250                        | 10%     |
| Unknown/Other     | 8                 | 3%      | 2,293             | 1%      | 22                         | 1%      |
| <b>TOTAL</b>      | <b>230</b>        |         | <b>288,139</b>    |         | <b>2,441</b>               |         |
| <b>WASHINGTON</b> |                   |         |                   |         |                            |         |
| Washington        | 87                | 85%     | 217,533           | 83%     | 1,949                      | 83%     |
| Oregon            | 12                | 12%     | 41,583            | 16%     | 365                        | 16%     |
| California        | 0                 | 0%      | 0                 | 0%      | 0                          | 0%      |
| Unknown/Other     | 3                 | 3%      | 3,513             | 1%      | 36                         | 2%      |
| <b>TOTAL</b>      | <b>102</b>        |         | <b>262,629</b>    |         | <b>2,350</b>               |         |

a/ Pink salmon excluded, except Oregon.

TABLE D-16. Vessels landing salmon in California by vessel length and skipper's state of residence.

| Year                | Home State <sup>a/</sup> |       |     |          |                 |       |     |          |                     |       |     |          |                              |       |     |                           |
|---------------------|--------------------------|-------|-----|----------|-----------------|-------|-----|----------|---------------------|-------|-----|----------|------------------------------|-------|-----|---------------------------|
|                     | California (length)      |       |     |          | Oregon (length) |       |     |          | Washington (length) |       |     |          | Total (length) <sup>b/</sup> |       |     | Grand Total <sup>c/</sup> |
|                     | <26                      | 26-36 | >36 | Subtotal | <26             | 26-36 | >36 | Subtotal | <26                 | 26-36 | >36 | Subtotal | <26                          | 26-36 | >36 |                           |
| 81-85 <sup>d/</sup> | 1,209                    | 906   | 744 | 2,860    | 39              | 79    | 135 | 253      | 2                   | 11    | 43  | 56       | 1,277                        | 1,024 | 939 | 3,243                     |
| 86-90               | 828                      | 757   | 635 | 2,220    | 12              | 44    | 86  | 143      | 2                   | 6     | 32  | 39       | 856                          | 814   | 760 | 2,449                     |
| 91-95               | 420                      | 415   | 346 | 1,180    | 3               | 19    | 30  | 52       | 0                   | 3     | 7   | 11       | 424                          | 438   | 384 | 1,259                     |
| 96-00               | 210                      | 264   | 252 | 726      | 1               | 7     | 23  | 31       | 1                   | 2     | 8   | 11       | 214                          | 277   | 286 | 783                       |
| 2001                | 142                      | 221   | 286 | 649      | 0               | 4     | 23  | 27       | 1                   | 3     | 7   | 11       | 143                          | 229   | 317 | 689                       |
| 2002                | 153                      | 229   | 285 | 667      | 1               | 3     | 28  | 32       | 2                   | 0     | 4   | 6        | 157                          | 233   | 318 | 708                       |
| 2003                | 126                      | 201   | 230 | 557      | 0               | 2     | 16  | 18       | 0                   | 0     | 5   | 5        | 126                          | 205   | 253 | 584                       |
| 2004                | 155                      | 250   | 288 | 693      | 1               | 3     | 28  | 32       | 0                   | 2     | 11  | 13       | 157                          | 256   | 328 | 741                       |
| 2005                | 139                      | 233   | 271 | 643      | 1               | 2     | 25  | 28       | 0                   | 2     | 3   | 5        | 141                          | 239   | 300 | 680                       |
| 2006                | 103                      | 181   | 180 | 464      | 0               | 1     | 5   | 6        | 0                   | 1     | 1   | 2        | 104                          | 185   | 188 | 477                       |
| 2007                | 112                      | 200   | 255 | 567      | 1               | 3     | 22  | 26       | 0                   | 1     | 1   | 2        | 115                          | 206   | 280 | 601                       |
| 2008                | -                        | -     | -   | -        | -               | -     | -   | -        | -                   | -     | -   | -        | -                            | -     | -   | -                         |
| 2009                | -                        | -     | -   | -        | -               | -     | -   | -        | -                   | -     | -   | -        | -                            | -     | -   | -                         |
| 2010                | 55                       | 74    | 81  | 210      | 0               | 1     | 2   | 3        | 0                   | 0     | 0   | 0        | 55                           | 77    | 83  | 215                       |
| 2011                | 110                      | 166   | 169 | 445      | 0               | 2     | 9   | 11       | 1                   | 0     | 2   | 3        | 113                          | 170   | 181 | 464                       |
| 2012                | 151                      | 213   | 218 | 582      | 0               | 4     | 14  | 18       | 0                   | 1     | 8   | 9        | 154                          | 221   | 241 | 616                       |
| 2013                | 158                      | 233   | 243 | 634      | 1               | 3     | 16  | 20       | 1                   | 1     | 9   | 11       | 162                          | 241   | 268 | 671                       |
| 2014                | 151                      | 237   | 235 | 623      | 1               | 3     | 9   | 13       | 1                   | 1     | 6   | 8        | 156                          | 245   | 252 | 653                       |
| 2015                | 149                      | 209   | 188 | 546      | 2               | 4     | 13  | 19       | 1                   | 1     | 8   | 10       | 154                          | 221   | 212 | 587                       |
| 2016                | 114                      | 173   | 132 | 419      | 0               | 2     | 2   | 4        | 1                   | 1     | 7   | 9        | 116                          | 180   | 142 | 438                       |
| 2017                | 124                      | 152   | 106 | 382      | 1               | 1     | 3   | 5        | 1                   | 1     | 5   | 7        | 126                          | 158   | 116 | 400                       |
| 2018 <sup>e/</sup>  | 123                      | 165   | 145 | 433      | 0               | 5     | 5   | 10       | 0                   | 1     | 8   | 9        | 124                          | 174   | 158 | 456                       |

a/ "Home state" refers to the declared state of residence of vessel skipper, who, in most cases, is also the vessel owner.

b/ Includes vessels with home states other than California, Oregon, and Washington.

c/ Includes vessels of unknown lengths.

d/ Length category for 1982 is  $\geq 36$ .

e/ Preliminary.

TABLE D-17. Percentages of vessels landing troll salmon in Oregon by license holder's state of residence.

| Year               | Oregon | California | Washington | Other/Unknown |
|--------------------|--------|------------|------------|---------------|
| 1977               | 83.8%  | 6.9%       | 8.7%       | 0.6%          |
| 1978               | 83.6%  | 5.9%       | 10.0%      | 0.5%          |
| 1979               | 82.5%  | 6.5%       | 10.3%      | 0.7%          |
| 1980               | 80.4%  | 8.5%       | 9.6%       | 1.5%          |
| 1981               | 81.2%  | 7.4%       | 9.9%       | 1.6%          |
| 1982               | 82.1%  | 6.3%       | 10.2%      | 1.4%          |
| 1983               | 85.0%  | 3.9%       | 10.1%      | 1.0%          |
| 1984               | 85.2%  | 2.9%       | 11.0%      | 0.9%          |
| 1985               | 86.9%  | 4.0%       | 8.0%       | 1.1%          |
| 1986               | 84.5%  | 5.2%       | 9.1%       | 1.2%          |
| 1987               | 81.7%  | 6.8%       | 10.2%      | 1.2%          |
| 1988               | 78.7%  | 6.4%       | 13.5%      | 1.3%          |
| 1989               | 80.0%  | 5.6%       | 12.9%      | 1.4%          |
| 1990               | 81.1%  | 6.7%       | 10.7%      | 1.5%          |
| 1991               | 83.8%  | 2.5%       | 12.1%      | 1.6%          |
| 1992               | 83.4%  | 3.4%       | 12.5%      | 0.8%          |
| 1993               | 85.8%  | 2.5%       | 11.1%      | 0.6%          |
| 1994               | 86.5%  | 1.1%       | 12.1%      | 0.3%          |
| 1995               | 85.5%  | 2.7%       | 10.7%      | 1.1%          |
| 1996               | 83.5%  | 2.0%       | 13.8%      | 0.7%          |
| 1997               | 85.0%  | 1.2%       | 12.5%      | 1.4%          |
| 1998               | 82.3%  | 0.8%       | 16.6%      | 0.3%          |
| 1999               | 87.2%  | 0.9%       | 11.6%      | 0.3%          |
| 2000               | 84.4%  | 1.8%       | 13.3%      | 0.5%          |
| 2001               | 81.1%  | 4.0%       | 14.3%      | 0.6%          |
| 2002               | 79.7%  | 3.9%       | 15.6%      | 9.8%          |
| 2003               | 79.2%  | 3.7%       | 15.9%      | 1.2%          |
| 2004               | 72.3%  | 10.3%      | 15.8%      | 1.7%          |
| 2005               | 73.3%  | 10.8%      | 14.2%      | 1.8%          |
| 2006               | 81.0%  | 4.8%       | 13.4%      | 0.8%          |
| 2007               | 78.0%  | 10.3%      | 11.2%      | 0.5%          |
| 2008               | 83.6%  | 2.1%       | 13.6%      | 0.7%          |
| 2009               | 90.2%  | 1.3%       | 7.6%       | 0.9%          |
| 2010               | 80.3%  | 9.7%       | 9.2%       | 0.8%          |
| 2011               | 84.2%  | 5.6%       | 9.2%       | 1.0%          |
| 2012               | 82.4%  | 4.3%       | 11.9%      | 1.4%          |
| 2013               | 79.4%  | 8.5%       | 11.0%      | 1.0%          |
| 2014               | 73.2%  | 14.4%      | 11.0%      | 1.4%          |
| 2015               | 70.1%  | 12.9%      | 13.9%      | 3.1%          |
| 2016               | 76.4%  | 6.6%       | 14.1%      | 2.9%          |
| 2017 <sup>a/</sup> | 74.4%  | 8.0%       | 12.5%      | 5.1%          |
| 2018 <sup>a/</sup> | 77.4%  | 9.1%       | 10.0%      | 3.5%          |

a/ Preliminary.

TABLE D-18. Percentages of vessels landing non-Indian troll salmon in Washington by license holder's state of residence.<sup>a/</sup>

| Year               | Washington | Oregon | California | Alaska | Other/Unknown |
|--------------------|------------|--------|------------|--------|---------------|
| 1978               | 90.8%      | 4.6%   | 0.3%       | 0.2%   | 4.1%          |
| 1979               | 90.9%      | 3.8%   | 0.3%       | 0.3%   | 4.7%          |
| 1980               | 93.7%      | 3.6%   | 0.3%       | 0.3%   | 2.1%          |
| 1981               | 92.6%      | 3.0%   | 0.4%       | 0.2%   | 3.8%          |
| 1982               | 92.6%      | 4.1%   | 0.6%       | 0.0%   | 2.8%          |
| 1983               | 92.7%      | 2.8%   | 0.2%       | 0.1%   | 4.2%          |
| 1984               | 94.8%      | 1.6%   | 0.0%       | 0.0%   | 3.7%          |
| 1985               | 92.7%      | 3.3%   | 0.2%       | 0.2%   | 3.6%          |
| 1986               | 93.1%      | 1.7%   | 0.0%       | 0.1%   | 5.1%          |
| 1987               | 90.4%      | 1.3%   | 0.0%       | 0.3%   | 8.0%          |
| 1988               | 88.0%      | 1.8%   | 0.2%       | 1.5%   | 8.5%          |
| 1989               | 92.2%      | 0.9%   | 0.0%       | 1.0%   | 5.9%          |
| 1990               | 92.7%      | 0.7%   | 0.0%       | 0.1%   | 6.5%          |
| 1991               | 85.8%      | 0.7%   | 0.0%       | 0.0%   | 13.5%         |
| 1992               | 92.7%      | 2.0%   | 0.7%       | 0.3%   | 4.3%          |
| 1993               | 93.3%      | 0.8%   | 0.8%       | 0.0%   | 5.1%          |
| 1994 <sup>b/</sup> | 100.0%     | 0.0%   | 0.0%       | 0.0%   | 0.0%          |
| 1995               | 95.8%      | 0.0%   | 0.0%       | 0.0%   | 4.2%          |
| 1996               | 93.3%      | 0.0%   | 0.0%       | 0.0%   | 6.7%          |
| 1997               | 96.1%      | 0.0%   | 0.0%       | 0.0%   | 3.9%          |
| 1998               | 95.7%      | 0.0%   | 0.0%       | 0.0%   | 4.3%          |
| 1999               | 94.7%      | 0.0%   | 0.0%       | 0.0%   | 5.3%          |
| 2000               | 91.8%      | 0.0%   | 0.0%       | 0.0%   | 8.2%          |
| 2001               | 100.0%     | 0.0%   | 0.0%       | 0.0%   | 0.0%          |
| 2002               | 96.1%      | 0.0%   | 0.0%       | 0.0%   | 3.9%          |
| 2003               | 100.0%     | 0.0%   | 0.0%       | 0.0%   | 0.0%          |
| 2004               | 96.5%      | 1.2%   | 0.0%       | 0.0%   | 2.3%          |
| 2005               | 95.6%      | 3.3%   | 0.0%       | 0.0%   | 1.1%          |
| 2006               | 98.8%      | 1.2%   | 0.0%       | 0.0%   | 0.0%          |
| 2007               | 93.7%      | 6.3%   | 0.0%       | 0.0%   | 0.0%          |
| 2008               | 95.3%      | 3.5%   | 0.0%       | 1.2%   | 0.0%          |
| 2009               | 94.8%      | 4.1%   | 1.0%       | 0.0%   | 0.0%          |
| 2010               | 91.4%      | 5.2%   | 0.0%       | 0.0%   | 3.4%          |
| 2011               | 91.1%      | 8.0%   | 0.0%       | 0.0%   | 0.9%          |
| 2012               | 85.7%      | 11.4%  | 1.9%       | 0.0%   | 1.0%          |
| 2013               | 86.1%      | 9.3%   | 0.0%       | 0.0%   | 4.6%          |
| 2014               | 94.0%      | 6.0%   | 0.0%       | 0.0%   | 0.0%          |
| 2015               | 86.1%      | 10.7%  | 0.8%       | 0.0%   | 2.5%          |
| 2016               | 89.7%      | 9.3%   | 0.0%       | 0.0%   | 0.9%          |
| 2017               | 86.1%      | 10.2%  | 1.9%       | 0.0%   | 1.9%          |
| 2018               | 85.3%      | 11.8%  | 0.0%       | 0.0%   | 2.9%          |

a/ All values in this table are based on preliminary information available at the start of each year's review .

b/ The fishery was closed north of Cape Falcon; however, Chinook were caught off Oregon and landed in Washington.



TABLE D-19. Number of California charter boats participating in the ocean recreational salmon fishery, by port area and activity level.

| Year               | Activity Level <sup>a/</sup> | Port Area |               |            |        |               | Total |
|--------------------|------------------------------|-----------|---------------|------------|--------|---------------|-------|
|                    |                              | Monterey  | San Francisco | Fort Bragg | Eureka | Crescent City |       |
| 2018 <sup>b/</sup> | Active                       | 0         | 54            | 8          | 4      | 0             | 66    |
|                    | Casual                       | 11        | 31            | 5          | 10     | 2             | 59    |
|                    | TOTAL                        | 11        | 85            | 13         | 14     | 2             | 125   |
| 2017               | Active                       | 0         | 37            | 0          | -      | -             | 37    |
|                    | Casual                       | 11        | 32            | 13         | -      | -             | 56    |
|                    | TOTAL                        | 11        | 69            | 13         | -      | -             | 93    |
| 2016               | Active                       | 0         | 28            | 5          | 5      | 0             | 38    |
|                    | Casual                       | 12        | 41            | 11         | 5      | 2             | 71    |
|                    | TOTAL                        | 12        | 69            | 16         | 10     | 2             | 109   |
| 2015               | Active                       | 0         | 31            | 5          | 5      | 0             | 41    |
|                    | Casual                       | 17        | 44            | 7          | 8      | 2             | 78    |
|                    | TOTAL                        | 17        | 75            | 12         | 13     | 2             | 119   |
| 2014               | Active                       | 10        | 39            | 10         | 9      | 0             | 68    |
|                    | Casual                       | 10        | 34            | 3          | 4      | 2             | 53    |
|                    | TOTAL                        | 20        | 73            | 13         | 13     | 2             | 121   |
| 2013               | Active                       | 5         | 44            | 9          | 10     | 0             | 68    |
|                    | Casual                       | 11        | 25            | 3          | 3      | 1             | 43    |
|                    | TOTAL                        | 16        | 69            | 12         | 13     | 1             | 111   |
| 2012               | Active                       | 14        | 38            | 7          | 8      | 1             | 68    |
|                    | Casual                       | 11        | 24            | 3          | 3      | 0             | 41    |
|                    | TOTAL                        | 25        | 62            | 10         | 11     | 1             | 109   |
| 2011               | Active                       | 9         | 35            | 8          | 7      | 0             | 59    |
|                    | Casual                       | 8         | 23            | 1          | 3      | 0             | 35    |
|                    | TOTAL                        | 17        | 58            | 9          | 10     | 0             | 94    |
| 2010               | Active                       | 7         | 13            | 1          | 0      | 0             | 21    |
|                    | Casual                       | 12        | 38            | 7          | 7      | 0             | 64    |
|                    | TOTAL                        | 19        | 51            | 8          | 7      | 0             | 85    |
| 2009               | Active                       | -         | -             | -          | 0      | 0             | 0     |
|                    | Casual                       | -         | -             | -          | 14     | 0             | 14    |
|                    | TOTAL                        | -         | -             | -          | 14     | 0             | 14    |
| 2008               | Active                       | -         | -             | 0          | -      | -             | 0     |
|                    | Casual                       | -         | -             | 3          | -      | -             | 3     |
|                    | TOTAL                        | -         | -             | 3          | -      | -             | 3     |
| 2007               | Active                       | 2         | 24            | 6          | 7      | 0             | 39    |
|                    | Casual                       | 21        | 25            | 6          | 4      | 0             | 56    |
|                    | TOTAL                        | 23        | 49            | 12         | 11     | 0             | 95    |

a/ Active vessels landed more than 100 salmon; casual vessels landed 100 salmon or less.

b/ Preliminary.

TABLE D-20. Number of charter boats licensed in Oregon.

| Year               | Total Number of Licensed Charter Boats <sup>a/</sup> | Oregon Resident License Holders | Washington Resident License Holders | Other State Resident License Holders |
|--------------------|--|---------------------------------|-------------------------------------|--------------------------------------|
| 1980               | 194  | 192                             | 2                                   | 0                                    |
| 1981               | 248  | 213                             | 34                                  | 1                                    |
| 1982               | 253  | 212                             | 40                                  | 1                                    |
| 1983               | 255  | 206                             | 47                                  | 2                                    |
| 1984               | 218  | 185                             | 31                                  | 2                                    |
| 1985               | 226  | 198                             | 25                                  | 3                                    |
| 1986               | 247  | 216                             | 26                                  | 5                                    |
| 1987               | 254  | 226                             | 23                                  | 5                                    |
| 1988               | 313  | 266                             | 42                                  | 5                                    |
| 1989               | 322  | 273                             | 44                                  | 5                                    |
| 1990 <sup>b/</sup> | 170  | 157                             | 9                                   | 4                                    |
| 1991               | 171  | 161                             | 7                                   | 3                                    |
| 1992               | 157  | 150                             | 4                                   | 3                                    |
| 1993               | 148  | 144                             | 2                                   | 2                                    |
| 1994               | 145  | 137                             | 6                                   | 2                                    |
| 1995               | 134  | NA                              | NA                                  | NA                                   |
| 1996               | 127  | 121                             | 6                                   | 0                                    |
| 1997               | 122  | 119                             | 3                                   | 0                                    |
| 1998               | 129  | 125                             | 4                                   | 0                                    |
| 1999               | 137  | 133                             | 4                                   | 0                                    |
| 2000               | 143  | 139                             | 4                                   | 0                                    |
| 2001               | 172  | 162                             | 10                                  | 0                                    |
| 2002               | 181  | 172                             | 9                                   | 0                                    |
| 2003               | 206  | 186                             | 19                                  | 1                                    |
| 2004               | 203  | 184                             | 18                                  | 1                                    |
| 2005               | 225  | 205                             | 19                                  | 1                                    |
| 2006               | 228  | 203                             | 24                                  | 1                                    |
| 2007               | 228  | 198                             | 26                                  | 4                                    |
| 2008               | 237  | 192                             | 41                                  | 4                                    |
| 2009               | 249  | 200                             | 46                                  | 3                                    |
| 2010               | 238  | 196                             | 39                                  | 3                                    |
| 2011               | 260  | 209                             | 46                                  | 5                                    |
| 2012               | 252  | 204                             | 42                                  | 6                                    |
| 2013 <sup>c/</sup> | NA   | NA                              | NA                                  | NA                                   |
| 2014               | 64   | 60                              | 4                                   | 0                                    |
| 2015               | 69   | 46                              | 6                                   | 17                                   |
| 2016               | 69   | 41                              | 8                                   | 20                                   |
| 2017               | 72   | 42                              | 8                                   | 22                                   |
| 2018               | 66   | 37                              | 9                                   | 20                                   |

a/ Legislation that created the license requirement expired in 1987. Annual license fees were between \$25 and \$100 from 1980-1987. The license requirement was reinstated by rule in 1988 and 1989 with a \$10 fee.

b/ Beginning in 1990, responsibility for licensing of charter vessels was transferred to the Marine Board, and fees for Oregon residents were increased from \$10 to between \$50 and \$100.

c/ Beginning in 2013, only vessels of over 6 passengers with a valid USCG Certificate of Inspection can obtain an Oregon Charter Boat License due to change in Oregon law. Smaller vessels, previously included as charter boats, are categorized as guides/outfitters.

TABLE D-21. Number of salmon charter boats licensed in Washington (including Puget Sound).

| Year               | Number of Licenses Issued | Washington Resident License Holders | Other State Resident License Holders | Buyback |
|--------------------|---------------------------|-------------------------------------|--------------------------------------|---------|
| 1975               | 404                       | 351                                 | 53                                   | -       |
| 1976               | 427                       | 362                                 | 65                                   | -       |
| 1977 <sup>a/</sup> | 569                       | NA                                  | NA                                   | -       |
| 1978               | 535                       | 483                                 | 52                                   | -       |
| 1979               | 516                       | 473                                 | 43                                   | -       |
| 1980               | 510                       | 465                                 | 45                                   | 16      |
| 1981               | 478                       | 443                                 | 35                                   | 3       |
| 1982               | 415                       | 387                                 | 28                                   | 25      |
| 1983               | 375                       | 354                                 | 21                                   | 19      |
| 1984               | 334                       | 313                                 | 21                                   | 21      |
| 1985               | 288                       | 268                                 | 20                                   | 19      |
| 1986               | 308                       | 286                                 | 22                                   | 15      |
| 1987               | 280                       | 269                                 | 11                                   | -       |
| 1988               | 281                       | 268                                 | 13                                   | -       |
| 1989               | 276                       | 263                                 | 13                                   | -       |
| 1990               | 273                       | 258                                 | 15                                   | -       |
| 1991               | 267                       | 251                                 | 16                                   | -       |
| 1992               | 269                       | 252                                 | 17                                   | -       |
| 1993               | 265                       | 250                                 | 15                                   | -       |
| 1994               | 260                       | 245                                 | 15                                   | -       |
| 1995               | 231                       | 217                                 | 14                                   | 23      |
| 1996               | 210                       | 199                                 | 9                                    | 18      |
| 1997               | 210                       | 197                                 | 13                                   | 0       |
| 1998               | 198                       | 188                                 | 10                                   | 20      |
| 1999               | 180                       | 172                                 | 8                                    | 0       |
| 2000               | 143                       | 139                                 | 4                                    | 37      |
| 2001               | 142                       | 137                                 | 5                                    | 0       |
| 2002               | 138                       | 134                                 | 4                                    | 0       |
| 2003               | 140                       | 137                                 | 3                                    | 0       |
| 2004               | 143                       | 140                                 | 3                                    | 0       |
| 2005               | 142                       | 136                                 | 6                                    | 0       |
| 2006               | 142                       | 138                                 | 4                                    | 0       |
| 2007               | 142                       | 138                                 | 4                                    | 0       |
| 2008               | 142                       | 138                                 | 4                                    | 0       |
| 2009               | 142                       | 137                                 | 5                                    | 0       |
| 2010               | 142                       | 137                                 | 5                                    | 0       |
| 2011               | 142                       | 136                                 | 6                                    | 0       |
| 2012               | 142                       | 135                                 | 7                                    | 0       |
| 2013               | 142                       | 137                                 | 5                                    | 0       |
| 2014               | 141                       | 138                                 | 3                                    | 0       |
| 2015               | 142                       | 139                                 | 3                                    | 0       |
| 2016               | 142                       | 138                                 | 4                                    | 0       |
| 2017               | 142                       | 139                                 | 3                                    | 0       |
| 2018 <sup>b/</sup> | 142                       | 139                                 | 3                                    | 0       |

a/ First year moratorium in effect.

b/ Preliminary.

TABLE D-22. Price index.<sup>a/</sup>

| Year | Price Index |
|------|-------------|
| 1970 | 22.0        |
| 1971 | 23.1        |
| 1972 | 24.1        |
| 1973 | 25.5        |
| 1974 | 27.8        |
| 1975 | 30.4        |
| 1976 | 32.1        |
| 1977 | 34.2        |
| 1978 | 36.6        |
| 1979 | 39.6        |
| 1980 | 43.2        |
| 1981 | 47.3        |
| 1982 | 50.2        |
| 1983 | 52.1        |
| 1984 | 54.1        |
| 1985 | 55.7        |
| 1986 | 57.0        |
| 1987 | 58.6        |
| 1988 | 60.6        |
| 1989 | 62.9        |
| 1990 | 65.4        |
| 1991 | 67.7        |
| 1992 | 69.3        |
| 1993 | 70.8        |
| 1994 | 72.3        |
| 1995 | 73.8        |
| 1996 | 75.2        |
| 1997 | 76.5        |
| 1998 | 77.4        |
| 1999 | 78.6        |
| 2000 | 80.3        |
| 2001 | 72.2        |
| 2002 | 73.4        |
| 2003 | 74.7        |
| 2004 | 76.8        |
| 2005 | 79.1        |
| 2006 | 81.5        |
| 2007 | 83.7        |
| 2008 | 85.4        |
| 2009 | 86.0        |
| 2010 | 87.0        |
| 2011 | 88.8        |
| 2012 | 90.5        |
| 2013 | 92.1        |
| 2014 | 93.9        |
| 2015 | 94.9        |
| 2016 | 95.9        |
| 2017 | 97.7        |
| 2018 | 100.0       |

a/ Based on gross domestic product implicit price deflator.