

REVIEW OF 2022 OCEAN SALMON FISHERIES

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



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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
CYER	calendar year exploitation rate
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 _{MSY}	maximum sustainable yield exploitation rate
FRAM	Fishery Regulation Assessment Model
IGN	Indian gill net
ISBM	individual stock-based management
KMZ	Klamath management zone (ocean zone between Humbug Mountain and latitude 40°10'N, near Cape Mendocino, California, 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

LIST OF ACRONYMS AND ABBREVIATIONS *(continued)*

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
PSC	Pacific Salmon Commission
PST	Pacific Salmon Treaty
RER	rebuilding exploitation rate
RK	Rogue/Klamath (coho)
S _{ACL}	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 _{MSY}	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	Upriver 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

COMMON TABLE CONVENTIONS

All 2022 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.

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 2022 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 2023 ocean salmon management measures. Preseason Report I will constitute the first part of the EA for 2023 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 2023 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.

Status determination criteria (SDC) for overfishing, approaching an overfished condition, overfished, not overfished/rebuilding, and rebuilt were included in the Salmon Fishery Management Plan (FMP) under Amendment 16 (December 2011).

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 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. Stock specific reference points, and recent year estimates for relevant stocks, are presented in Table II-6 and Table III-7.

Status determinations 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 or in Preseason III if more recent spawning escapement or exploitation rate estimates become available between the time this SAFE document and Preseason Reports 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.

1 CHAPTER I – COASTWIDE 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 summary of the Council's 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 summarizes management information and harvests under the authority of the PSC.

1.1 Council-Area Regulations and Landings

Summaries of the 2022 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 2022 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.

1.2 Regulatory Objectives by Management Area

The following sections provide a brief outline of the regulatory objectives that shaped the 2022 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.

1.2.1 Latitude 40°10' N. to U.S./Mexico Border

Chinook Fisheries

Chinook fisheries management in this area is guided by the 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 2022 Chinook salmon fisheries south of latitude 40°10'N. (near Cape Mendocino, California) to meet the following objectives (in order of most to least constraining):

1. A KRFC age-4 ocean harvest rate of no greater than 10.0 percent, consistent with 2022 NMFS guidance for California Coastal Chinook salmon.
2. A Klamath Basin natural area spawning escapement of no less than 38,180 fall Chinook adults which is produced, in expectation, by a spawner reduction rate of 25.0 percent, along with the allocation objective of 50 percent of the allowable adult harvest for federally-recognized tribal subsistence and commercial fisheries.
3. A SRFC spawner escapement of no less than 180,000 hatchery and natural area adults consistent with 2022 Council guidance.
4. The SRWC ESA consultation standard requiring:
 - a. A maximum forecast age-3 impact rate for the area south of Point Arena of 20.0 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, except for 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.
5. A total exploitation rate not to exceed 16.0 percent for the Trinity River component of the SONCC coho ESU and a total exploitation rate not to exceed 15.0 percent for all other components of the SONCC coho ESU.
6. The OCN coho allowable exploitation rate (marine and freshwater combined) of no greater than 15.0 percent for the north-central sub-aggregate and 30.0 percent for the northern and south-central sub-aggregates 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.

Objective 1 was the primary constraining factor for 2022 Chinook fisheries management in this area. The adopted regulations (Table I-1 and I-3) resulted in the following projections: a KRFC age-4 ocean harvest rate of 10.0 percent, a KRFC spawning escapement of 38,180 natural area adults, a SRWC age-3 impact rate of 15.2 percent for the area south of Point Arena, and a SRFC spawner escapement of 198,694 hatchery and natural area adults.

Coho Fisheries

Coho fishery management for 2022 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 OCN and SONCC coho were 0.5 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 2022 fisheries are presented more fully in the Cape Falcon to Humbug Mountain section.

1.2.2 Humbug Mountain to Latitude 40°10' N.

Chinook Fisheries

The area between Humbug Mountain (near Port Orford, Oregon) and latitude 40°10' N. is referred to as the Klamath Management Zone (KMZ). In 2021 the southern border of the KMZ was shifted from Horse Mountain five nautical miles north to latitude 40°10' N. 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, Lower Columbia Natural (LCN) coho, OCN coho, and SONCC coho. The Council structured 2022 Chinook salmon fisheries in the KMZ to meet the following objectives (in order of most to least constraining):

1. A KRFC age-4 ocean harvest rate of no greater than 10.0 percent, consistent with 2022 NMFS guidance for California Coastal Chinook salmon.
2. A Klamath Basin natural area spawning escapement of no less than 38,180 fall Chinook adults which is produced, in expectation, by a spawner reduction rate of 25.0 percent, along with the allocation objective of 50 percent of the allowable adult harvest for federally-recognized tribal subsistence and commercial fisheries.
3. A SRFC spawner escapement of no less than 180,000 hatchery and natural area adults consistent with 2022 Council guidance.
4. A total exploitation rate not to exceed 16.0 percent for the Trinity River component of SONCC coho and a total exploitation rate not to exceed 15.0 percent for all other components of the SONCC coho ESU.
5. The OCN coho allowable exploitation rate (marine and freshwater combined) of no greater than 15.0 percent for the north-central sub-aggregate and 30.0 percent for the northern and south-central sub-aggregates 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.

Objective 1 was the primary constraining factor for 2022 Chinook fisheries management in this area. The adopted regulations (Table I-1 and I-3) resulted in the following projections: a KRFC

age-4 ocean harvest rate of 10.0 percent, a KRFC spawning escapement of 38,180 natural area adults, and a SRFC spawner escapement of 198,694 hatchery and natural area adults.

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 SONCC coho were 0.0, 0.4, and 1.1 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 2022 fisheries are presented more fully in the Cape Falcon to Humbug Mountain section.

1.2.3 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, and Snake River wild (SRW) Chinook. The Council structured 2022 Chinook salmon fisheries in this area to meet the following objectives (in order of most to least constraining):

1. 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.
2. A KRFC age-4 ocean harvest rate of no greater than 10.0 percent, consistent with 2022 NMFS guidance for California Coastal Chinook salmon.
3. A Klamath Basin natural area spawning escapement of no less than 38,180 fall Chinook adults which is produced, in expectation, by a spawner reduction rate of 25.0 percent, along with the allocation objective of 50 percent of the allowable adult harvest for federally-recognized tribal subsistence and commercial fisheries.
4. A SRFC spawner escapement of no less than 180,000 hatchery and natural area adults consistent with 2022 Council guidance.
5. The OCN coho allowable exploitation rate (marine and freshwater combined) of no greater than 15.0 percent for the north-central sub-aggregate and 30.0 percent for the northern and south-central sub-aggregates 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. A total exploitation rate not to exceed 16.0 percent for the Trinity River component of SONCC coho and a total exploitation rate not to exceed 15.0 percent for all other components of the SONCC coho ESU.

Objectives 1 and 2 were the constraining factors for 2022 Chinook fisheries management in this area. The adopted regulations (Table I-1 and I-3) resulted in the following projections: a LCR natural tule Chinook total exploitation rate of 38.0 percent, a coastwide ocean fishery harvest rate

of 10.0 percent on age-4 KRFC, a KRFC spawning escapement of 38,180 natural area adults, and a SRFC spawner escapement of 198,694 hatchery and natural area adults.

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 2022 coho salmon fisheries in this area to meet the following objectives:

1. The LCN coho ESA consultation standard requirement of no greater than a 23.0 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 for the north-central sub-aggregate and 30.0 percent for the northern and south-central sub-aggregates 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. A total exploitation rate not to exceed 16.0 percent for the Trinity River component of the SONCC coho ESU and a total exploitation rate not to exceed 15.0 percent for all other components of the SONCC coho ESU.

Objective 2 was the most constraining factor in 2022 coho fisheries management in this area. The Council adopted seasons in this area with projected exploitation rates of 4.6, 8.5, and 0.6 percent on LCN natural coho, OCN coho, and SONCC coho, respectively. In all relevant fisheries, projected exploitation rates were 17.5 and 15.0 for LCN and OCN, respectively. For the Trinity, Klamath, Rogue, and all other components of the SONCC ESU, projected total exploitation rates were 13.5, 8.7, 7.8, and 2.9 percent, respectively.

1.2.4 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 broodstock 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 relevant Chinook stocks, adhere to the Individual Stock Based Management (ISBM) limits set forth in Attachment I of Chapter 3 of the 2019 PST.

Objective 1 above was the primary constraint for 2022 ocean fisheries in this area. Under the adopted regulations (Tables I-1, I-2, and I-3), fisheries were projected to have a 38.0 percent total AEQ exploitation rate on LCR natural tules (12.0 percent in Council-area fisheries) and be 53.1 percent of the 1988 to 1993 base period AEQ exploitation rate for SRW (a 53 percent reduction). Additionally, the 2022 ocean fisheries were shaped to limit impacts on ESA-listed Puget Sound natural Chinook stocks.

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 23.0 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 for the north-central sub-aggregate and 30.0 percent for the northern and south-central sub-aggregates 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 meeting objectives for Washington Coastal 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 2022 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 17.5 percent (13.5 percent in Council-area fisheries), an exploitation rate in SUS fisheries of 9.5 percent on Interior Fraser (Thompson River) coho (4.8 percent in Council-area fisheries), and a total exploitation rate of 15.0 percent on OCN coho (11.2 percent in Council-area fisheries). The adopted regulations were projected to meet all FMP objectives or objectives agreed to by Tribal and WDFW comanagers per the PST Southern Coho Management Plan for Grays Harbor, Queets, Hoh, and Quillayute natural coho when combined with scheduled in-river fisheries.

1.3 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 of 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.

1.3.1 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 2022. 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. Area 5 was open to mark-selective retention daily from July 1 through July 4, even-numbered days only July 5 through 24, and daily July 25 through August 15, Area 6 was open from July 1 through August 2 (Figure I-1). Both Area 5 and Area 6 mark-selective fisheries were managed to a threshold of total legal-sized encounters for the fishery. The threshold for Area 5 was 7,342 and the threshold for Area 6 was 9,400.

Mark-selective Chinook fisheries were also held in Puget Sound Area 7 Thursday through Saturday only from July 14 through July 30, in Area 9 Thursday through Saturday only from July 14 through July 27, and daily July 28 through August 5, in Area 10 from July 14 through August 31, in Area 11 from June 1 through June 3 Wednesday through Saturday only July 1 through July 12, and August 2 through August 16, in Area 12 from July 1 through September 30, and in Area 13 May 19 through September 30 (Figure I-1).

A winter mark-selective fishery was held in Area 11 Sunday through Wednesday only from November 1 through November 30. The Area 11 mark-selective fishery was managed to a threshold of 1,093 total Chinook encounters, 732 sublegal encounters, and 256 unmarked encounters. Winter mark-selective fisheries are scheduled in Area 5 from March 1, 2023 through April 30, 2023, and in Area 10 from February 1, 2023, through March 31, 2023. The preseason prediction of total Chinook salmon encounters in Area 10 is 7,152; WDFW will also manage to 1,089 total unmarked encounters and 6,295 total sublegal encounters. Area 13 is open for mark-selective Chinook from October 1, 2022, until June 30, 2023. Marine Areas 6, 7, 8-1, 8-2, 9, and 12 are not scheduled for winter Chinook mark-selective fisheries in 2022-2023.

1.3.2 Selective Coho Fisheries

Commercial troll fisheries selective for marked coho were planned for the area between the U.S./Canada border and Humbug Mountain, Oregon. Recreational fisheries selective for marked coho were planned for the area between the U.S./Canada border and the Oregon/California border, 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 in Washington were sampled by dockside interviews, with some fisheries monitored using additional voluntary trip reporting and/or onboard observers. Oregon fisheries were sampled exclusively by dockside interviews. The observed mark rates in ocean fisheries were lower than what was predicted preseason. Observed total non-retention mortality was lower than expected in north of Cape Falcon Council-area mark-selective coho recreational fisheries and lower than expected in north of Cape Falcon Council-area mark-selective coho commercial troll fisheries. Estimated non-retention mortality was lower than expected in all south of Cape Falcon Council-area mark-selective coho fisheries.

1.4 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 not include incidental mortality associated with regulation of these fisheries, except as noted.

1.4.1 Chinook Fisheries

Northern British Columbia (B.C.) and Southeast Alaska (SEAK) fisheries impact 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 recreational fisheries, in addition to recreational fisheries in the Strait of Georgia and the Strait of Juan de Fuca, impact far-north migrating stocks (including LRW) to a lesser degree but can 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 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 (AI) 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.

With the expiration of the 1999 agreement in 2008, another 10-year agreement was negotiated and implemented from 2009 through 2018 that included reductions to catch ceilings in SEAK and WCVI AABM fisheries of 15 percent and 30 percent, respectively, from those in the 1999 agreement. As this 2009 agreement expired at the end of 2018, a new 10-year agreement has been negotiated and went into effect beginning with the 2019 season. This new agreement includes further reductions to SEAK and WCVI AABM fisheries relative to the 2009 agreement. For

SEAK, the reductions range from 1.5 percent in years of high abundance to 7.5 percent in years of low abundance. For WCVI, the reductions range from 2.4 percent in years of high abundance to 12.5 percent in years of low abundance. Additionally, beginning with the 2019 Agreement, the allowable catches for SEAK fisheries will no longer be determined using the AI produced by the PSC Chinook Model, rather, they will be set using a catch-per-unit-effort (CPUE) estimate from the early winter power troll fishery (see Tables 1 and 2 in Chapter 3 of the 2019 PST Agreement for specifics).

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 postseason basis only. Under the terms of the 2019 PST Agreement, these fisheries are subject to a new set of ISBM fishery limits. These provisions require the calendar year exploitation rate (CYER) by all U.S. fisheries south of the U.S./Canada border on specific indicator stocks to be below some level of the average 2009 – 2015 CYER if they do not achieve their management objectives (see Attachment I in Chapter 3 of the 2019 PST Agreement for specifics). Similar to the previous ISBM obligations, these limits are taken into account during preseason planning processes, however, relative to meeting the provisions of the PST, the CYER limits are evaluated on a postseason basis only.

Beginning in 2019, AABM fisheries were conducted in accordance with the obligations set forth in the 2019 PST Agreement. The PSC reached agreement in 2022 on a calibration of the PSC Chinook Model that produces AIs for the three AABM fisheries. The AI corresponds to an annual catch limit 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 AIs produced by the 2022 calibration of the PSC Chinook Model were used to set the treaty catch limits for the Northern B.C. and WCVI AABM fisheries, however, the treaty catch limit for the SEAK AABM fishery was determined by the CPUE from the early winter power troll.

The SEAK early winter troll CPUE used to set 2022 catch limits was 7.02, which corresponds to a catch ceiling of 266,585 Treaty Chinook. The preliminary estimate of total Chinook catch by SEAK fisheries in 2022 is 275,800, of which 238,600 were Treaty Chinook (Table I-10). These catches were greater than the total catch of 236,200 Chinook in 2021, of which 202,100 were Treaty fish.

The 2022 AI for Northern B.C. was 1.17, corresponding to an annual catch limit of 142,800 Chinook. The preliminary estimated catch in the Northern B.C. AABM fisheries (Northern B.C. troll plus Haida Gwaii [Queen Charlotte Islands] recreational) in 2022 is 83,200 Chinook (57,500 troll; 25,700 recreational; Table I-11). This was well below the preseason catch ceiling and slightly below the previous year’s total catch of 91,000. The Northern B.C. troll fishery in 2022 was

conducted under a system of individual transferable quotas that was fully implemented beginning in 2008.

The 2022 AI for WCVI was 0.88, corresponding to an annual catch limit of 100,700 Chinook. In addition to the overall catch ceiling determined by the PST, Canada's principal management objectives for the 2022 WCVI Chinook fisheries were to meet domestic allocation objectives as well as address concerns for Lower Strait of Georgia Chinook, WCVI Chinook stocks, and Fraser River Chinook, in addition to Interior Fraser (Upper Fraser and Thompson) coho and steelhead populations. The preliminary estimated 2022 catch in WCVI AABM fisheries was 86,300 Chinook (28,400 First Nations, 24,700 troll, and 33,100 recreational; Table I-11). This was below the preseason catch ceiling but higher than the previous year's total catch of 75,800.

Since 1999, the WCVI Area G 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. Beginning with the 2019 fishing year (October 2018 through September 2019), additional conservation measures were put in place to protect Fraser River Chinook by implementing troll fishery closures prior to July 31. Troll catch in the 2022 fishing year occurred during two openings, one from February 7 through March 14 and another from August 1 through September 15. Preliminary estimates indicate that the fishery harvested 24,700 fish, which is similar to the 25,200 caught in 2021 (Table I-12).

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. In addition to existing domestic management measures to protect local WCVI Chinook, new actions have been in place since 2019 to further protect Fraser River Chinook populations. These included Chinook non-retention from April 1 through July 14 in waters beyond 1 mile of shore and a maximum size limit of 80 cm (31.5 inches) from July 15 – 31 in these same areas. Preliminary estimates indicate that the fishery harvested 33,100 Chinook in 2022, up from 23,000 caught in 2021.

The reported Canadian ISBM Chinook catch for Northern B.C. in 2022 was approximately 18,000 (8,200 First Nations FSC & Treaty, 500 commercial, 9,300 recreational). Southern B.C. ISBM fisheries in 2022 harvested approximately 242,400 Chinook (80,500 First Nations, 28,600 commercial, 133,400 recreational). Note, however, that these ISBM catch estimates for both Northern and Southern B.C. are preliminary and incomplete, as catch estimates in some areas are not yet available.

No direct management measures for Chinook salmon within the Council management area were specified under the 2019 PST agreement, except for the ISBM commitment. The Council's 2022 ocean fisheries and inside fisheries conducted by the state and tribal managers were designed to minimize impacts on spawning escapements of depressed stocks, and preseason estimates of impacts complied with the terms of the PST agreement. Information necessary to evaluate the postseason impacts of 2022 Council-area fisheries was not available.

1.4.2 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. A new 10-year agreement has been negotiated and went into effect beginning in 2019. Under the new plan the Strait of Georgia Mainland and Strait of Georgia Vancouver Island management units were combined into a single Strait of Georgia management unit. The status of the Interior Fraser management unit shall be managed at a low status until Canada establishes status determination methods that would provide the basis for a change.

The status of Interior Fraser River coho remained “low” in 2022 pre-season. The smolt-to-adult survival index in 2021 was greater than 3 percent for the first time in decades, indicating that Interior Fraser River Coho condition might be improving. In 2022, Canadian fisheries were managed for an exploitation rate of 3-5 percent on interior Fraser River coho, less than the 10 percent ceiling allowed under the PSC coho management plan. Categorical forecasts for the Lower Fraser, Georgia Basin, and the Johnstone Strait coho management units were not performed. The PSC coho status categories of low, moderate, and abundant are analogous to the FMP categories of critical, low, and normal.

In 2022, approximately 102,900 coho were retained in troll fisheries in Northern and Central B.C. Catches in Southern B.C. commercial fisheries were very 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 2022 was 76,100. Coho kept and released by marine recreational fisheries in Southern B.C. are summarized in Table I-14. The preliminary harvest estimate for the 2022 Southern B.C. First Nations coho fisheries is 15,289.

TABLE I-1. Summary of actual ocean non-Indian commercial troll salmon fishing regulations for 2022. (Page 1 of 2)

Area and Season	Salmon Species	Actual Quota		Special Restrictions ^{a/}
		Chinook	Coho	
U.S./Canada Border to Cape Falcon, OR				
May 1-June 15	All except coho	18,000 ^{b/}	-	Chinook minimum size limit of 27 inches total length. Weekly landing and possession limits in place for specific subareas. 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 2022 ocean salmon regulations for detailed landing and notification requirements.
June 23-29		with sub-allocation by area		
July 1-Sept. 30	All salmon	9,000	32,000 ^{c/}	Chinook minimum size limit of 27 inches total length. Coho minimum size limit of 16 inches total length. All coho must be marked with a healed adipose fin clip through August 25. No chum retention north of Cape Alava beginning August 1. Weekly landing and possession limits for Chinook and coho in place and modified inseason. Coho quota was modified inseason to allow for non-mark selective retention. Mandatory Yellow eye Rockfish Conservation Area, Cape Flattery and Columbia Control Zones, and beginning Aug. 8, 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 2022 ocean salmon regulations for detailed landing and notification requirements.
Cape Falcon to Heceta Bank line, OR	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.
Mar. 15-Apr. 30; June 1-12, 18-30				
July 5-9, 17-21, 25-31; Aug 4-11	All Salmon	None	10,000	Chinook minimum size limit of 28 inches total length. Coho minimum size limit of 16 inches total length. All retained coho must be marked with a healed adipose fin clip. If the coho quota for the combined area from Cape Falcon to Humbug Mt. of 10,000 marked coho is met, then the season continues for all salmon except coho on the remaining open days. Salmon trollers may take and retain or possess on board a fishing vessel no more than 30 coho per vessel per open period. All coho retained, possessed on a vessel, and landed must not exceed a 1:1 ratio with Chinook salmon that are retained and landed at the same time.
Cape Falcon to Humbug Mt., OR	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 100 Chinook per vessel per landing week (Thurs.-Wed.).
May 1-15, 21-31; Sept. 1-4, 11-14; Oct. 1-31				
Heceta Bank line, OR to Humbug Mt.	All Salmon	None	10,000	Chinook minimum size limit of 28 inches total length. Coho minimum size limit of 16 inches total length. All retained coho must be marked with a healed adipose fin clip. If the coho quota for the combined area from Cape Falcon to Humbug Mt. of 10,000 marked coho is met, then the season continues for all salmon except coho on the remaining open days. Salmon trollers may take and retain or possess on board a fishing vessel no more than 30 coho per vessel per open period. All coho retained, possessed on a vessel, and landed must not exceed a 1:1 ratio with Chinook salmon that are retained and landed at the same time.
Aug. 4-11				
Humbug Mt. to OR/CA Border (Oregon KMZ)	All except coho		-	Chinook minimum size limit of 28 inches total length. Landing limits and quotas in effect beginning in June. Landing and possession limit per vessel per week (Thurs.-Wed.): 50 Chinook. All vessels fishing in this area during June, July, and August must land and deliver all salmon within this area or into Port Orford within 24 hours of any closure of this fishery and prior to fishing outside of this area. Prior to June 1, all salmon caught in this area must be landed and delivered in the State of Oregon. Refer to complete 2022 ocean salmon regulations for detailed landing and notification requirements.
Mar. 15-Apr. 30		None		
June 1-16		800		
July 1-31		687 ^{d/}		
Aug. 1-28		658 ^{d/}		

TABLE I-1. Summary of actual ocean non-Indian commercial troll salmon fishing regulations for 2022. (Page 2 of 2)

Area and Season	Salmon Species	Actual Quota		Special Restrictions ^{a/}
		Chinook	Coho	
OR/CA Border to Humboldt South Jetty (California KMZ)				
Closed	-	-	-	
Humboldt South Jetty to 40°10' line				
Closed	-	-	-	
40°10' line to Pt. Arena (Ft. Bragg Area) July 8-12, 21-25, Aug. 3-12	All except coho	None	-	Chinook minimum size limit of 27 inches total length. All salmon must be landed in California. All salmon caught in this area in the month of May must be landed within 24 hours of any closure of the fishery. During the months of May and June, all salmon caught in this area must be landed south of Point
Pt. Arena to Pigeon Pt. (San Francisco Area) July 8-12, 21-25, Aug. 3-12; Sept. 1-30	All except coho	None	-	Chinook minimum size limit of 27 inches total length through August, then 26 inches thereafter. All salmon must be landed in California. During Sept., all salmon must be landed south of Point Arena.
Fall Area Target Zone Pt. Reyes to Pt. San Pedro Oct. 3-7, 10-14	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 (Monterey Area) May 1-5, 10-15, 20-24, June 1-12; July 8-12, 21-25, Aug. 3-12	All except coho	None	-	Chinook minimum size limit of 27 inches total length. All salmon must be landed in California. All salmon caught in this area in the month of May must be landed within 24 hours of any closure of the fishery. During the months of May and June, all salmon caught in this area must be landed south of Point

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. Beginning Apr. 1, 2022 unless modified; 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 35 halibut may be possessed or landed per trip, unless modified by inseason action (see Appendix table C-9 for inseason action on halibut retention limits). See Appendix Tables C.1, C.3, C.5, and C.9 for additional details and inseason adjustments.

b/ No more than 6,040 from U.S./Canada border to Queets R. and 4,840 between Leadbetter Pt. and Cape Falcon.

c/ Beginning August 26, the remaining coho quota was adjusted on an impact-neutral basis, from mark-selective to non-mark-selective. The adjusted non-mark-selective coho quota is 9,700.

d/ 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-2. Summary of actual treaty Indian commercial ocean and Area 4B troll salmon seasons for 2022.

TABLE 1-2: Summary of actual treaty Indian commercial ocean and Area 4B troll salmon seasons for 2022.						
Tribe and Area	Seasons ^{a/}			Minimum Size Limit (Inches)		Special Restrictions
	Salmon Species	Dates	Days	Chinook	Coho	
Quinault						
Areas 2-3	All except coho	May 1-June 30	61	24	-	
	All	July 1-Sept. 15	77	24	16	
Hoh						
Areas 2-3	All except coho	May 1-June 30	61	24	-	
	All	July 1- Sept. 15	77	24	16	
Quileute						
Area 3	All except coho	May 1-June 30	61	24	-	
	All	July 1-Sept.15	77	24	16	
Makah						
Areas 3, 4 and 4A	All except coho	May 1-June 30	61	24	-	
	All ^{b/}	July 1- July 24	24	24	16	
	All ^{b/}	July 25 - July 26	2	24	16	Emergency Closure
	All ^{b/}	July 27 - August 26	31	24	16	300 chinook per vessel per week
	All ^{b/}	August 27 - Sept 15	20	24	16	Removed landing limit
Area 4B	All ^{b/}	Jan. 1-Apr. 15	105	22	16	
	All except coho	May 1-June 30	61	24	-	
	All ^{b/}	July 1- July 24	24	24	16	
	All ^{b/}	July 25 - July 26	2	24	16	Emergency Closure
	All ^{b/}	July 27 - August 26	31	24	16	300 chinook per vessel per week
	All ^{b/}	August 27 - Sept 15	20	24	16	Removed landing limit
S'Klallam						
Area 4B	All ^{b/}	Jan. 1-Apr. 15	105	22	16	
	All except coho	May 1-June 30	61	24	-	
	All ^{b/}	July 1- Sept. 15	77	24	16	
	All ^{b/}	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 52,000 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 pre-season to provide 20,000 Chinook for the May 1-June 30 Chinook-directed season and 20,000 Chinook for the July 1-Sept. 15 all-salmon season. The Quileute C&S fishery (September-October) did not operate in 2021. 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 2022. (Page 1 of 2)

Area and Season	Salmon Species	Actual Quota		Daily Limit and Special Restrictions ^{b/}
		Chinook	Coho ^{a/}	
U.S./Canada Border to Cape Falcon, OR				
U.S./Canada Border to Cape Alava, WA (Neah Bay subarea) June 18-July 4, July 25-Sept. 30	All salmon	5,510 ^{c/}	17,470	Two salmon daily through June 23. Daily limit beginning June 24 includes two salmon per day, only one Chinook. East of the Bonilla-Tatoosh line closed July 2-31. No chum beginning August 1. Chinook non-retention east of the Bonilla-Tatoosh line during Council managed ocean fishery beginning August 1.
Cape Alava to Queets R., WA (La Push subarea) June 18-July 15, July 24-Sept. 30 June 16-23 Oct. 5-8	All salmon	995	4,370	Two salmon daily through through July 3. Beginning July 4 two salmon daily, only one Chinook. No chum beginning August 1.
	All except Chinook	-		Two salmon daily.
	Chinook only	125	-	Two salmon daily. La Push Late Season Area (area north of 47°50'00" N. Lat. and south of 48°00'00" N. Lat.)
Queets R. to Leadbetter Pt., WA (Westport subarea) July 2-21, July 24-28, July 31-Aug. 4, Aug. 7-11, Aug. 14-18, Aug 21-22	All salmon	12,070	62,160 ^{c/}	Two salmon daily, only one Chinook through Aug. 22. Beginning July 22, Chinook retention prohibited on Fridays and Saturdays. Grays Harbor Control Zone closed beginning Aug. 8. Chinook min. size limit of 22 inches total length.
July 22-23, July 29-30, Aug. 5-6, Aug. 12-13, Aug. 19-20, Aug. 23-Sept. 30	All except Chinook	-		Two salmon daily. Coho quota was modified inseason to allow for non-mark selective retention.
Leadbetter Pt., WA to Cape Falcon, OR (Columbia River subarea) June 25-Aug 22	All salmon	8,090 ^{c/}	84,000	Two salmon daily, only one Chinook through Aug. 22. Beginning July 16, the subarea north of 46° 15' N and east of 124° 08' 40" W is closed. Columbia River Control Zone closed. Chinook min. size limit of 22 inches total length.
Aug. 23-Sept. 30	All except Chinook	-		Two salmon daily.
Cape Falcon to Humbug Mt. Mar. 15-June 17, Aug. 22-31, Sept. 1-2, Oct. 1-31 Sept. 3-30	All except coho	-	-	Two salmon daily.
	All salmon		26,800 ^{d/}	Two salmon daily. Non-mark selective for coho.
Cape Falcon to Humbug Mt. June 18-Aug. 21	All salmon	-	100,000 for Cape Falcon to OR/CA border	Two salmon daily. Coho retention closes if the marked coho quota is attained prior to the scheduled closing date. Fishing in the Stonewall Bank groundfish conservation area restricted to trolling only on days the all depth recreational halibut fishery is open.
Humbug Mt. to OR/CA Border (Oregon KMZ) June 18-24	All except Chinook	-		Two salmon daily. Coho retention closes if the marked coho quota is attained prior to the scheduled closing date.
June 25-Aug. 21	All salmon	-	-	

TABLE I-3. Summary of actual ocean recreational salmon fishing regulations for 2022. (Page 2 of 2)

Area and Season	Salmon Species	Actual Quota		Daily Limit and Special Restrictions ^{b/}
		Chinook	Coho ^{a/}	
OR/CA Border to 40°10' line. (California KMZ) May 1-31, Aug. 1-Sept. 5	All except coho	None	-	Two salmon daily. Chinook min. size limit of 20 inches total length. Klamath Control Zone closed in August.
40°10' line to Pt. Arena (Fort Bragg) May 1-July 4, July 22- Sept. 5	All except coho	None	-	Two salmon daily. Chinook min. size limit of 20 inches total length.
Pt. Arena to Pigeon Pt. (San Francisco) Apr. 2-May 31 June 23-Oct. 31	All except coho	None	-	Two salmon daily. Chinook min. size limit of 20 inches total length. Two salmon daily. Chinook min. size limit of 24 inches total length.
Pigeon Pt. to U.S./Mexico Border (Monterey) Apr. 3-Sept. 30 May 16-Oct. 2	All except coho	None	-	Two salmon daily. Chinook min. size limit of 24 inches total length Two salmon daily. Chinook min. size limit of 20 inches total length.

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 168,000 marked 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 27,000 fish. Numbers presented for recreational Chinook are subarea guidelines (not quotas). Preseason Chinook guidelines were 6,110 for Neah Bay and 7,700 for Ilwaco.

d/ Preseason coho quota for South of Cape Falcon for the non-mark selective fishery was 14,000.

e/ Beginning August 27, the remaining coho quota was adjusted on an impact-neutral basis, from mark-selective to non-mark-selective. The adjusted non-mark-selective coho quota is 14,000.

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 5)

COMMERCIAL TROLL								RECREATIONAL					
Year or Average	Effort (boat days fished)	Catch						Effort (salmon angler trips)	Catch (numbers of fish)				Salmon Per Angler Trip
		Numbers of Fish			Thousands of Pounds (Dressed Weight)								
		Chinook	Coho	Pink	Chinook	Coho	Pink		Chinook	Coho	Pink	Total	
WASHINGTON ^{a/}													
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 ^{b/}	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	25,590	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	114,785	35,251	109,200	6,862	151,312	1.4
2006	2,243	47,314	33,203	0	634	255	0	65,263	10,667	36,087	0	46,754	0.7
2007	1,864	37,211	45,924	731	526	257	3	72,683	8,944	83,788	4,670	97,402	1.3
2008	1,803	29,543	15,970	0	352	134	0	37,610	14,635	18,870	0	33,505	0.9
2009	2,818	24,542	80,718	935	316	548	3	101,560	12,351	138,493	7,627	158,471	1.6
2010	3,293	77,475	13,565	0	928	96	0	80,955	36,874	36,278	0	73,152	0.9
2011	2,664	58,726	16,617	1,289	740	93	5	73,596	29,203	39,582	10,828	79,613	1.1
2012	3,020	91,644	40,798	0	1,100	220	0	77,659	33,729	31,434	0	65,163	0.8
2013	3,904	91,250	54,309	350	1,049	280	1	80,014	28,918	46,140	7,668	82,726	1.0
2014	3,549	100,468	71,442	0	1,245	406	0	119,617	40,025	123,057	0	163,082	1.4
2015	4,103	114,252	6,882	190	1,328	37	1	97,114	39,431	74,737	8,631	122,799	1.3
2016	2,298	40,445	44	0	474	0	0	51,437	16,907	16,059	0	32,966	0.6
2017	3,336	57,347	14,718	208	596	96	1	61,453	20,037	36,087	732	56,856	0.9
2018	3,030	47,459	13,094	0	522	88	0	47,968	9,913	34,710	0	44,623	0.9
2019	2,636	41,097	59,502	543	556	331	2	65,667	9,583	64,425	1,775	75,783	1.2
2020	1,161	14,747	15,028	0	205	97	0	33,885	7,508	20,250	0	27,758	0.8
2021	2,047	27,320	29,731	91	315	181	0	65,870	15,976	49,769	1,228	66,973	1.0
2022 ^{c/}	1,769	58,656	47,359	0	567	281	0	65,038	21,460	60,816	0	82,275	1.3

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 5)

Year or Average	COMMERCIAL TROLL							RECREATIONAL					Salmon 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						
OREGON ^{d/}													
1966-70	--	122,000	804,500	--	1,159	5,358	--	--	--	--	--	--	--
1971-75	45,788	208,500	979,000	--	2,128	6,015	--	--	--	--	--	--	--
1976-80	55,885	232,632	741,693	--	2,427	4,252	139	387,743	39,974	289,189	--	329,163	0.8
1981-85	25,496	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	62,188	11,588	15,577	0	27,165	0.4
2007	5,217	35,487	17,109	80	464	101	0	88,169	6,941	60,653	0	67,594	0.8
2008	803	5,954	434	0	66	4	0	30,398	1,578	12,085	2	13,665	0.4
2009	1,234	1,149	21,962	18	15	131	0	84,383	1,585	89,606	0	91,191	1.1
2010	4,296	39,433	1,040	0	506	7	0	53,295	4,967	18,295	0	23,262	0.4
2011	3,752	32,080	464	49	402	3	0	48,756	5,164	18,832	0	23,996	0.5
2012	6,256	73,101	625	0	741	4	0	67,326	18,794	16,079	0	34,873	0.5
2013	8,986	112,751	452	0	1,291	2	0	85,544	30,234	14,536	0	44,770	0.5
2014	10,703	209,151	10,997	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	2,573	24,461	92	0	288	1	0	63,831	4,990	25,672	0	30,662	0.5
2019	2,543	28,984	1,412	0	313	7	0	94,236	6,606	66,313	0	72,919	0.8
2020	1,970	12,812	130	0	182	1	0	57,010	7,188	20,800	0	27,988	0.5
2021	1,903	17,527	2,229	0	219	13	0	98,680	8,277	93,294	0	101,571	1.0
2022 ^{c/}	2,641	32,462	3,882	0	357	18	0	96,388	8,391	78,909	0	87,300	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 3 of 5)

Year or Average	COMMERCIAL TROLL							RECREATIONAL					Salmon Per Angler Trip
	Effort (boat days fished)	Catch			Thousands of Pounds (Dressed Weight)			Effort (salmon angler trips)	Catch (numbers of fish)				
		Numbers of Fish											
		Chinook	Coho	Pink	Chinook	Coho	Pink		Chinook	Coho	Pink	Total	
CALIFORNIA ^{e/}													
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	7,577	78,416	-	0	930	-	0	96,625	87,314	195	0	87,509	0.9
2019	15,790	271,489	-	0	2,604	-	0	103,702	88,460	696	0	89,156	0.9
2020 ^{f/}	12,286	177,800	-	0	1,928	-	0	59,843	40,141	52	0	40,193	0.7
2021 ^{c/}	9,922	202,455	-	0	2,294	-	0	88,553	55,547	540	0	56,087	0.6
2022 ^{c/}	11,011	211,186	-	0	2,283	-	0	98,504	88,961	503	0	89,464	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 5)

Year or Average	COMMERCIAL TROLL							RECREATIONAL					Salmon Per Angler Trip
	Effort (Boat days fished)	Catch						Effort (salmon angler trips)	Catch (numbers of fish)				
		Thousands of Pounds			Thousands of Pounds								
		Numbers of Fish			(Dressed Weight)								
		Chinook	Coho	Pink	Chinook	Coho	Pink		Chinook	Coho	Pink	Total	
COUNCIL AREA ^{a/d/e/}													
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	147,188	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	1,669,298	413,380	10,658	9,111	930	948,849	249,488	832,174	23,544	1,105,206	1.2
1981-85 ^{b/}	98,043	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	227,698	424,082	2,419	654,199	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	413,758	223,168	176,195	6,862	406,224	1.0
2006	15,004	151,899	34,617	0	2,163	268	0	253,957	118,547	53,290	0	171,837	0.7
2007	17,752	186,839	63,033	811	2,516	358	3	266,741	63,589	145,187	4,670	213,446	0.8
2008	2,606	35,497	16,404	0	419	138	0	68,399	16,219	30,955	2	47,176	0.7
2009	4,052	25,691	102,680	953	331	678	3	191,302	14,608	228,107	7,627	250,342	1.3
2010	9,564	131,996	14,605	0	1,662	103	0	182,917	56,650	54,748	0	111,398	0.6
2011	13,389	160,834	17,081	1,338	2,133	96	5	214,028	84,189	58,730	10,828	153,747	0.7
2012	23,798	380,330	41,423	0	4,371	224	0	292,992	176,449	47,614	0	224,063	0.8
2013	30,183	501,628	54,761	350	6,134	282	1	312,854	175,226	61,037	7,668	243,931	0.8
2014	28,646	477,902	82,439	0	6,070	473	0	361,430	133,345	223,043	0	356,388	1.0
2015	25,843	329,018	9,095	190	3,705	48	1	244,931	86,353	103,060	8,631	198,044	0.8
2016	13,888	137,977	44	0	1,607	0	0	160,400	59,014	24,539	0	83,553	0.5
2017	12,113	121,518	15,188	208	1,358	98	1	177,736	86,828	57,787	734	145,349	0.8
2018	13,180	150,336	13,186	0	1,740	89	0	208,424	102,217	60,577	0	162,794	0.8
2019	20,969	341,570	60,914	543	3,473	338	2	263,605	104,649	131,434	1,775	237,858	0.9
2020 ^{f/}	15,417	205,359	15,158	0	2,315	98	0	150,738	54,837	41,102	0	95,939	0.6
2021 ^{c/}	13,872	247,302	31,960	0	2,829	194	0	253,103	79,800	143,603	1,228	224,631	0.9
2022 ^{c/}	15,421	302,304	51,241	0	3,206	299	0	259,930	118,812	140,228	0	259,039	1.0

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 5 of 5)

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- 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.
- f/ Recreational estimates for California do not include May and June due to restrictions on sampling caused by the COVID-19 pandemic.

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

Year	COMMERCIAL TROLL				RECREATIONAL					
	Effort ^{a/} (days fished)	Catch (numbers of fish)			Effort (salmon angler trips)	Catch (numbers of fish)			Salmon Per Total Angler Trip	
		Chinook	Coho	Pink		Chinook	Coho	Pink		
----- U.S./CANADA BORDER TO CAPE FALCON -----										
Treaty Indian (U.S./Canada Border to Leadbetter Point) ^{b/} :										
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	881	23,903	11,802	0	-	-	-	-	-	-
2019	898	18,321	55,505	513	-	-	-	-	-	-
2020	185	2,437	14,391	0	-	-	-	-	-	-
2021	447	8,235	26,361	58	-	-	-	-	-	-
2022 ^{c/}	521	34,677	36,152	0	-	-	-	-	-	-
Non-Indian:										
2013	2,595	42,035	6,493	141	86,153	30,836	50,153	7,668	88,657	1.0
2014	2,838	54,889	23,109	0	131,872	42,331	139,797	0	182,128	1.4
2015	3,463	66,195	5,085	68	105,743	42,188	83,577	8,631	134,396	1.3
2016	1,853	19,402	-	0	55,769	17,947	18,713	0	36,660	0.7
2017	2,715	35,560	1,838	13	70,021	21,945	42,657	732	65,334	0.9
2018	2,247	23,889	1,384	0	55,667	10,602	41,838	0	52,440	0.9
2019	1,925	23,284	5,409	483	80,362	10,878	81,649	1,775	94,302	1.2
2020	1,041	12,500	767	0	37,338	7,661	23,971	0	31,632	0.8
2021	1,640	19,263	3,511	33	78,724	17,813	64,173	1,228	83,214	1.1
2022 ^{c/}	1,411	25,978	12,934	0	81,945	24,829	81,361	0	106,189	1.3
----- CAPE FALCON TO HUMBUG MOUNTAIN -----										
2013	7,992	103,990	-	0	59,352	17,867	10,084	0	27,951	0.5
2014	9,117	176,823	3,295	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	2,000	20,229	-	0	49,132	2,708	18,526	0	21,234	0.4
2019	2,120	26,604	-	0	75,184	4,739	48,547	0	53,286	0.7
2020	1,782	11,797	-	0	47,300	5,400	17,079	0	22,479	0.5
2021	1,744	16,925	2,088	0	79,973	5,545	78,124	0	83,669	1.0
2022 ^{c/}	2,320	29,680	2,155	0	76,324	4,626	57,410	0	62,036	0.8
----- HUMBUG MOUNTAIN TO 40°10' LINE (KMZ) ^{e/} -----										
2013	1,368	16,994	-	0	49,881	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	1,174	12,910	-	0	14,369	5,331	120	0	5,451	0.4
2019	540	7,729	-	0	12,069	5,529	697	0	6,226	0.5
2020	123	825	-	0	11,230	3,466	18	0	3,484	0.3
2021	119	424	-	0	8,124	1,542	775	0	2,317	0.3
2022 ^{c/}	158	783	-	0	8,435	4,750	959	0	5,709	0.7
----- 40°10' LINE TO U.S./MEXICO BORDER ^{e/} -----										
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	6,878	69,405	-	0	89,256	83,576	93	0	83,669	0.9
2019	15,486	265,632	-	0	95,990	83,503	541	0	84,044	0.9
2020 ^{d/}	12,286	177,800	-	0	54,870	38,310	34	0	38,344	0.7
2021 ^{e/}	9,922	202,455	-	0	86,282	54,900	531	0	55,431	0.6
2022 ^{c/}	11,011	211,186	-	0	93,226	84,607	498	0	85,105	0.9

a/ Treaty Indian troll effort in number of deliveries.

b/ May through September only.

c/ Preliminary.

d/ Recreational estimates for California do not include May and June due to restrictions on sampling caused by the COVID-19 pandemic.

e/ In 2021, the southern boundary of the KMZ was officially moved five nautical miles north from Horse Mountain to latitude 40°10' N.

TABLE I-6. Coho and Chinook harvest quotas and guidelines (*) for 2022 Council managed fisheries compared with actual harvest by management area and fishery.

Fishery Governed by Quota or Guideline	Chinook			Coho		
	Quota or Guideline ^{a/}	Catch	Catch/Quota	Quota	Catch	Catch/Quota
NORTH OF CAPE FALCON						
TREATY INDIAN COMMERCIAL TROLL						
May-June, All salmon except coho	20,000	5,517	0.28	-	-	-
July-Sept., All salmon	34,483 ^{b/}	29,160	0.85	52,000	36,152	0.70
Subtotal Treaty Indian Commercial Troll	40,000	34,677	0.87	52,000	36,152	0.70
NON-INDIAN COMMERCIAL TROLL						
May-June, All salmon except coho	18,000 *	17,450	0.97	-	-	-
July-Aug. 25, All salmon coho mark-selective	9,000 ^{*b/c/}	8,528	0.95	32,000	4,985	0.16
Aug. 26-Sep. 30, All salmon coho non-mark-selective				9,700 ^{b/}	7,939	0.82
Subtotal Non-Indian Commercial Troll	27,000	25,978	0.96	32,000	12,924	0.40
RECREATIONAL						
U.S./Canada Border to Cape Alava						
June 18-Sept. 30, All salmon coho mark-selective	5,510 ^{*b/}	4,877	0.89	17,470	2,633	0.15
Cape Alava to Queets River						
June 18-Sept. 30, All salmon coho mark-selective	995 *	769 ^{c/}	0.77	4,370	2,161	0.49
Oct. 5-8, Chinook only	125	127	1.02	-	2	-
Queets River to Leadbetter Pt.						
July 2-Aug. 26, All salmon coho mark-selective	12,070 *	11,257	0.93	62,160	23,243	0.37
Aug. 27-Sept. 30, All salmon coho non-mark-selective				14,000 ^{b/}	9,273	0.66
Leadbetter Pt. to Cape Falcon						
June 25-Sept. 30, All salmon coho mark-selective	8,090 ^{*b/}	7,798 ^{c/}	0.96	84,000	44,048	0.52
Subtotal Recreational	26,790 ^{b/}	24,829 ^{c/}	0.93	168,000 ^{b/}	81,361	0.48
TOTAL NORTH OF CAPE FALCON	93,790 ^{b/}	85,484	0.91	252,000 ^{b/}	130,437	0.52
SOUTH OF CAPE FALCON						
COMMERCIAL TROLL (all except coho)						
Cape Falcon to Humbug Mt., All salmon, coho mark-selective	-	-	-	10,000	2,155	0.22
Cape Falcon to Heceta Bank Line: July 5-9, 17-21,25-31; Aug. 4-11						
Heceta Bank Line to Humbug Mt: Aug. 4-11						
Humbug Mt. to OR/CA Border (June 1-30)	800	335	0.42	-	-	-
Humbug Mt. to OR/CA Border (July 1-31)	687 ^{b/}	59	0.09	-	-	-
Humbug Mt. to OR/CA Border (Aug. 1-28)	658 ^{b/}	373	0.57	-	-	-
Subtotal Troll	2,145	776	0.36	10,000	2,155	0.22
RECREATIONAL						
Cape Falcon to OR/CA Border						
June 18-Aug.21, coho mark-selective	-	-	-	100,000	40,687	0.41
Cape Falcon to Humbug Mt.						
Sept. 9-30, coho non-mark-selective	-	-	-	26,800 ^{b/}	17,677	0.66
TOTAL SOUTH OF CAPE FALCON	2,145	776	0.36	136,800 ^{b/}	60,519	0.44
GRAND TOTAL COUNCIL AREA	95,935 ^{b/}	86,260	0.90	388,800 ^{b/}	190,956	0.49

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.

c/ Chinook catch does not include landed-catch-equivalent of Chinook non-retention mortality that was projected inseason and assessed toward fishery guidelines.

TABLE I-7. Estimated incidental mortality of Chinook and coho in 2022 ocean salmon fisheries. Observed incidental mortality was calculated by scaling preseason projections of incidental mortality by the ratio of observed to projected catch.

Area and Fishery	2022	2022 Bycatch	2022	Observed in 2022	
	Catch Projection	Mortality ^{a/} Projection	Bycatch Projection ^{b/}	Catch	Bycatch Mortality ^{a/}
CHINOOK (thousands of fish)					
<u>OCEAN FISHERIES:</u>					
NORTH OF CAPE FALCON					
Treaty Indian Ocean Troll	40.0	4.1	10.2	34.7	3.5
Non-Indian Commercial Troll	27.0	11.6	41.5	26.0	11.1
Recreational	27.0	3.3	15.1	24.8	3.4
CAPE FALCON TO HUMBUGH MT. ^{c/}					
Commercial Troll	45.7	10.6	30.3	29.7	6.9
Recreational	11.9	1.3	4.8	4.6	0.5
HUMBUGH MT. TO OR/CA BORDER ^{c/}					
Commercial Troll	1.5	0.3	1.0	0.8	0.2
Recreational	1.6	0.2	0.9	0.4	0.0 ^{d/}
OR/CA BORDER TO 40°10' LINE					
Commercial Troll	0.0	0.0	0.0	0.0	-
Recreational	2.2	0.2	0.9	4.4	0.5 ^{d/}
40°10' LINE TO PT. ARENA					
Commercial Troll	22.1	5.1	14.6	21.7	6.3 ^{d/}
Recreational	8.3	0.9	3.3	2.6	0.3 ^{d/}
PT. ARENA TO PIGEON PT.					
Commercial Troll	24.5	5.7	16.2	97.6	24.4 ^{d/}
Recreational	53.8	6.1	19.9	66.1	7.6 ^{d/}
SOUTH OF PIGEON PT.					
Commercial Troll	37.8	8.7	25.1	92.0	11.2 ^{d/}
Recreational	20.7	2.4	7.7	15.9	1.4 ^{d/}
TOTAL OCEAN FISHERIES					
Commercial Troll	198.5	46.0	138.8	302.3	63.7
Recreational	125.4	14.5	52.6	118.8	13.8
<u>INSIDE FISHERIES:</u>					
Area 4B	-	-	-	-	-
Buoy 10	29.8	16.8	3.2	28.4	5.6 ^{d/}
COHO (thousands of fish)					
<u>OCEAN FISHERIES:</u>					
NORTH OF CAPE FALCON					
Treaty Indian Ocean Troll	52.0	3.4	5.6	36.2	2.3
Non-Indian Commercial Troll	32.0	12.8	40.6	12.9	4.2
Recreational	168.0	30.7	131.7	81.4	15.9
SOUTH OF CAPE FALCON					
Commercial Troll	10.0	10.1	36.0	2.2	2.9
Recreational	117.0	27.1	127.6	58.3	14.3
TOTAL OCEAN FISHERIES					
Commercial Troll	94.0	26.3	82.2	51.2	9.4
Recreational	285.0	57.8	259.4	139.6	30.2
<u>INSIDE FISHERIES:</u>					
Area 4B	-	-	-	-	-
Buoy 10	55.0	10.6	46.1	8.8	1.4 ^{d/}

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/ 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 2022 recreational fisheries selective for marked hatchery Chinook (preliminary data).

TABLE 10. Summary of 2022 recreational fisheries selective for marked hatchery Chinook (preliminary data).											
Area	Anticipated Mark Rate	Observed Mark Rate	Preseason Quota	Anticipated Nonretention Mortality ^{a/}	Landed Chinook Catch			Legal sized Chinook Released ^{b/}	Sub-legal Sized Chinook Released ^{b/}	Estimated Nonretention Mortality ^{a/}	Effort ^{c/}
					Total	Marked	Unmarked				
Recreational											
Ocean Fisheries (no mark-selective fisheries in 2022)											
Neah Bay/La Push	-	-	-	-	-	-	-	-	-	-	-
Westport	-	-	-	-	-	-	-	-	-	-	-
Columbia River	-	-	-	-	-	-	-	-	-	-	-
North of Cape Falcon Total	-	-	-	-	-	-	-	-	-	-	-
Inside Fisheries											
Strait of Juan de Fuca ^{d/}	57%	77%	3,891 ^{e/}	3,818	3,945	3,936	9	4,466	32,200	7,293	13,084
Grand Total	-	-	3,891	3,818	3,945	3,936	9	4,466	32,200	7,293	13,084

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 2022 recreational and commercial fisheries selective for marked hatchery coho (preliminary data).

TABLE 10: Summary of 2022 Recreational and Commercial Fisheries selective for marked hatchery coho (preliminary data).										
Area	Anticipated Mark Rate	Observed Mark Rate	Preseason Quota	Anticipated Nonretention Mortality ^{a/}	Landed Coho Catch			Unmarked Coho Released ^{b/}	Estimated Nonretention Mortality ^{a/}	Effort ^{c/}
					Total	Marked	Unmarked			
Recreational Ocean Fisheries										
Ocean Fisheries										
Neah Bay	51%	49%	17,470	4,386	2,633	2,586	47	3,002	751	9,437
La Push	58%	45%	4,370	903	2,161	2,156	5	2,914	707	2,478
Westport	62%	49%	62,160	11,719	23,243	23,175	68	18,611	4,987	23,763
Columbia River	67%	51%	84,000	13,706	44,048	43,958	90	33,849	8,995	40,675
North of Cape Falcon Total	-	-	168,000	30,715	72,085	71,875	210	58,376	15,440	76,352
Cape Falcon to OR/CA Border	54%	43%	100,000	23,420	40,642	39,839	803	51,430	11,804	53,865
Recreational Ocean Total	-	-	268,000	54,135	112,727	111,714	1,013	109,806	27,243	130,217
Inside Fisheries										
4B Add-on	-	-	-	-	-	-	-	-	-	-
Strait of Juan de Fuca ^{d/}	46%	39%	18,562 ^{e/}	4,443	16,303	16,146	157	27,497	4,241	30,722
Buoy 10	62%	64%	55,000 ^{e/}	10,601	8,847	8,785	62	4,861	1,366	85,187
Inside Fisheries Total	-	-	73,562	15,044	25,150	24,930	220	32,358	5,607	115,909
Commercial Ocean Fisheries										
Neah Bay	52%	-	-	579	24	24	0	25	9	15
La Push	52%	-	-	2,223	1,153	1,153	0	1,191	427	142
Westport	60%	-	-	3,537	1,732	1,732	0	1,320	496	247
Columbia River	60%	-	-	3,673	2,076	2,076	0	1,608	602	126
North of Cape Falcon Total	-	-	32,000	10,011	4,985	4,985	0	4,144	1,534	530
Cape Falcon to Humbug Mt.	52%	-	10,000	3,765	2,155	2,155	0	2,238	801	579
Commercial Ocean Total	-	-	42,000	13,776	7,140	7,140	0	6,382	2,335	1,109
Grand Total	-	-	383,562	82,956	145,017	143,784	1,233	148,546	35,185	-

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-Humbug Mt. 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 28).

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 ^{a/}	Hatchery Add-On ^{b/}
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	25.1	52.3	123.7	7.6	44.1	0.0	31.6
2018	107.6	30.8	26.4	101.5	5.1	21.2	0.0	37.0
2019	109.4	36.0	29.7	103.1	12.6	24.6	0.2	34.6
2020	169.9	29.8	35.1	165.4	8.7	30.6	0.0	30.2
2021	163.2	31.0	42.0	155.6	9.6	36.9	0.0	34.1
2022 ^{c/}	196.8	37.8	41.2	187.6	16.8	34.2	0.0	37.2

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.	North/Central B.C.			WCVI			Strait of Georgia ^{a/}			Juan de Fuca		
	Troll	Net	Sport	Troll	Net	Sport ^{b/}	Troll	Net ^{c/}	Sport	Troll	Net	Sport
CHINOOK												
1986-1990	215.0	42.1	17.8	327.9	17.8	27.7	35.3	17.2	133.4	0.0	11.5	30.6
1991-1995	169.1	43.8	30.9	210.3	20.4	21.1	25.3	10.0	108.0	0.0	6.2	16.6
1996-2000	54.0	22.0	35.6	26.0	0.2	15.2	1.1	0.5	53.6	0.0	0.6	14.3
2001-2005	119.8	18.5	72.1	135.6	9.1	37.7	0.6	0.4	35.9	0.0	0.3	29.1
2006-2010	90.5	9.6	64.0	88.2	13.4	50.9	0.0	0.2	23.0	0.0	0.2	23.3
2011	74.7	8.4	70.4	129.0	21.8	75.2	0.0	0.0	33.6	0.0	0.3	21.1
2012	80.3	4.4	52.9	69.1	10.2	66.2	0.0	0.0	36.7	0.0	0.3	24.5
2013	69.3	7.4	61.4	49.5	8.9	67.3	0.0	0.0	54.7	0.0	0.3	34.7
2014	172.0	4.9	64.7	133.5	19.1	59.2	0.0	0.3	61.8	0.0	0.1	21.7
2015	106.7	7.8	75.6	68.5	10.1	50.5	0.0	0.1	90.2	0.0	0.0	47.1
2016	147.4	4.4	58.6	60.5	5.1	42.6	0.0	0.0	60.0	0.0	0.0	30.9
2017	97.7	4.8	62.4	60.4	30.5	57.1	0.0	0.0	82.3	0.0	0.1	37.6
2018	72.3	5.2	50.2	36.1	21.7	49.3	0.0	0.0	90.2	0.0	0.0	37.6
2019	42.8	6.1	71.1	36.8	45.5	36.6	0.0	0.1	62.1	0.0	0.2	25.8
2020	30.1	4.1	15.7	24.2	42.9	19.4	0.0	0.0	43.4	0.0	0.1	16.2
2021	64.5	1.9	36.2	47.0	31.6	28.8	0.0	0.0	63.5	1.0	0.4	20.2
2022 ^{g/}	57.5	0.5	36.3	53.0	28.6	33.1	0.0	0.0	60.7	0.0	0.0	14.8
COHO												
1986-1990	991.5	272.1	28.0	1877.9	14.2	19.1	178.4	109.2	618.9	0.7	194.4	66.2
1991-1995	672.7	202.7	42.2	1422.5	4.9	31.7	95.1	56.2	288.6	0.0	92.1	105.9
1996-2000	120.8	39.0	24.1	157.7	0.2	11.1	0.0	2.3	9.1	0.1	0.9	38.9
2001-2005	181.9	39.3	38.2	0.4	2.9	11.4	0.0	0.0	5.7	0.0	0.0	7.1
2006-2010	119.3	20.6	60.5	1.0	2.7	30.4	0.0	0.1	3.8	0.0	0.0	4.2
2011	296.6	11.2	97.5 ^{d/}	0.0	1.0	54.0	0.0	0.3	1.2	0.0	15.6	10.2
2012	215.5	0.5	6.0 ^{e/}	2.1	0.4	46.2	0.0	0.0	3.7	0.0	0.0	16.6
2013	399.3	45.5	NA	6.1	1.1	72.3	0.0	2.6	24.3 ^{f/}	0.0	0.0	19.7
2014	177.5	38.3	NA	35.0	0.6	23.4	0.0	1.9	14.2 ^{f/}	0.0	0.0	21.1
2015	255.7	21.2	96.7	6.2	0.3	29.3	0.0	0.0	2.7	0.0	0.0	10.7
2016	215.0	37.9	69.2	0.2	0.8	20.1	0.0	0.2	17.3	0.0	0.0	7.6
2017	339.7	13.4	93.8	7.3	1.5	15.1	0.0	0.3	9.9	0.0	0.0	8.2
2018	176.9	0.7	60.8	6.1	4.1	22.1	0.0	1.7	19.0	0.0	0.0	11.2
2019	181.9	6.0	79.7	0.0	2.9	36.3	0.0	0.0	6.5	0.0	0.0	10.2
2020	89.4	0.0	30	0.0	0.0	15.1	0.0	0.1	8.9	0.0	0.0	22.8
2021	67.4	0.0	64	0.1	0.1	27.4	0.0	0.0	7.6	0.0	0.0	14.5
2022 ^{g/}	102.9	0.0	46	0.0	0.1	35.9	0.0	0.1	10.7	0.0	0.0	29.5

a/ Includes Johnstone Strait.

b/ For Chinook, includes AABM catch only.

c/ For coho, includes Fraser seine.

d/ Does not include catch from Area 6.

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

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

g/ Preliminary, catch estimates in some areas may be incomplete.

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

Season ^{a/}	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug. ^{b/}	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	178	13	1	51	342	315	6,456	31,799	-	-	7,574	2,390	49,119
2016-2017	-	-	-	72	276	358	4,065	23,557	-	8,169	6,758	4,279	47,534
2017-2018	-	-	-	74	141	297	-	11,009	-	-	5,063	2,572	19,156
2018-2019	-	-	-	-	-	-	-	-	-	-	20,113	3,082	23,195
2019-2020	-	-	-	-	-	-	-	-	-	-	9,524	1,781	11,305
2020-2021	-	-	-	-	-	-	-	-	-	-	24,485	740	25,225
2021-2022 ^{c/}	-	-	-	-	430	242	-	-	-	-	21,946	2,068	24,686

a/ Includes commercial Area G troll only since the 2015-2016 season.

b/ Fishery restricted to plugs only.

c/ Preliminary.

TABLE I-13. Summary of 2022 coho catch and release in British Columbia commercial fisheries.

Gear/Area	Coho Kept	Coho Released
Northern Troll	102,908	182
Northern Net	0	8,588
North Central Troll	0	0
South Central Troll	0	0
Central Net	0	0
Johnstone Strait Troll	0	33
Johnstone Strait Net	0	29
Strait of Georgia Net	87	152
Strait of Georgia Troll	0	237
Fraser Gill Net	0	0
Northw est Vancouver Island Troll	0	2,347
Southw est Vancouver Island Troll	29	1,499
Northw est Vancouver Island Net	0	0
Southw est Vancouver Island Net	65	685

TABLE I-14. Summary of 2022 coho catch and release in British Columbia recreational fisheries.

Area	Kept	Released
Juan de Fuca Strait	29,470	87,709
Strait of Georgia	8,027	19,537
Johnstone Strait	2,680	3,879
WCVI ^{a/}	35,897	20,967
Total	76,074	132,092

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

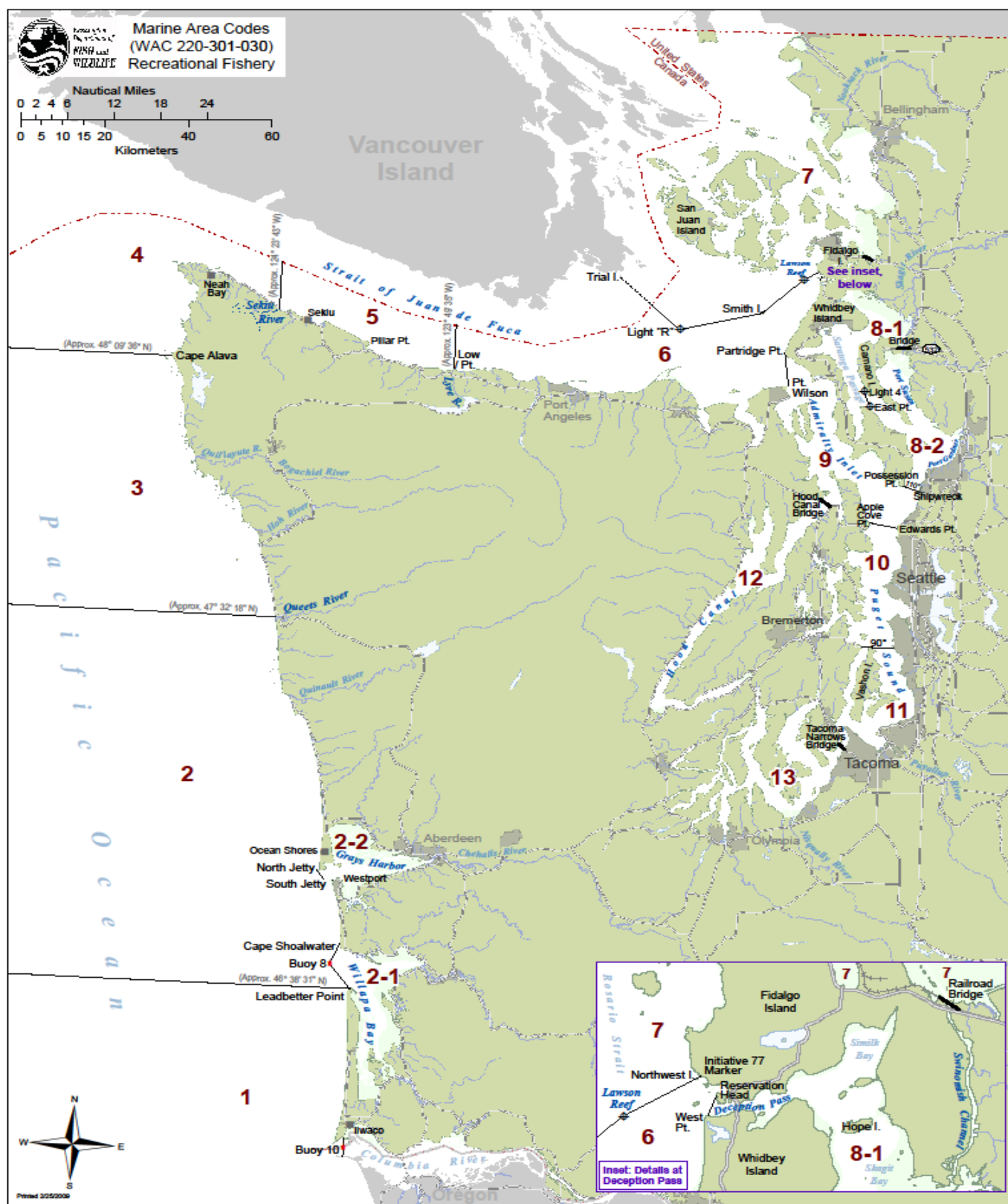


Figure I-1. Washington marine area code numbers and locations.

2 CHAPTER II – CHINOOK SALMON MANAGEMENT

2.1 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 threatened in August 1989 and 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 2022 fisheries: (1) for SRFC, a spawner escapement of no less than 180,000 hatchery and natural area adults, consistent with 2022 Council guidance; and (2) for SRWC, the harvest control rule-specified a maximum allowable age-3 ocean impact rate of 20.0 percent in fisheries south of Point Arena and the ESA consultation standard restrictions concerning the duration, timing, and minimum size limits in the same ocean area.

Regulations to Achieve Objectives

In 2022, fishing opportunity south of Cape Falcon was primarily constrained by NMFS guidance for a KRFC age-4 ocean harvest rate of no greater than 10.0 percent to protect California Coastal Chinook salmon. Central Valley Chinook stocks were not the primary constraint to ocean fisheries in 2022. Season and size limit details are presented in Tables I-1 and I-3.

Commercial

The fishery south of Pigeon Point (the Monterey management area) was open for three periods in May (totaling 16 days), 12 days in early June, two five-day openings in July, and 10 days in early August. The region from Point Arena to Pigeon Point (the San Francisco management area) was open for two short periods in July and one in August, which were concurrent with the open days in the Monterey management area. After a brief closure, the fishery re-opened for the full month of September. Finally, there was a fall area target zone fishery between Point Reyes and Point San Pedro for two periods in early October, open Monday through Friday. The area between latitude 40°10'N and Point Arena (the Fort Bragg management area) was open concurrently with the Monterey and San Francisco management areas in July and August.

The California portion of the KMZ (Oregon/California border to Latitude 40°10' N) was closed to commercial fishing in 2022. The Oregon portion of the KMZ (Humbug Mountain, OR to the Oregon/California border) was open without a quota for portions of March and April, followed by monthly quotas in June, July, and August.

The Oregon coast between Cape Falcon and the Heceta Bank line was open for a portion of March through April. Chinook fisheries between Cape Falcon and the Heceta Bank line were open for portions of May through August. The July and August fisheries allowed for the retention of marked coho. From the Heceta Bank line to Humbug Mountain Chinook fisheries were open for portions of May and August with marked coho retention in August. Chinook fisheries between Cape Falcon and Humbug Mountain were also open for a portion of September and all of October with weekly landing and possession limits.

Commercial fisheries had a 27-inch minimum size limit in California, except for September in the San Francisco management area and the October Point Reyes to Point San Pedro fishery, where the minimum size limit was 26 inches. Oregon fisheries had a 28-inch minimum size limit.

Recreational

The Monterey management area was open from April 2 through October 2, with a 24-inch minimum size limit through May 15 and a 20-inch minimum size limit thereafter.

The San Francisco management area was first open from April 2 through May 31. After a closure the fishery re-opened on June 23 and remained open until October 31. The minimum size limit was 24 inches through May 15, and 20-inches thereafter.

The Fort Bragg management area was first open from May 1 through July 4. After a closure the fishery re-opened on July 22 and remained open until September 5. The minimum size limit was 20 inches.

The California KMZ was first open for the month of May. Following a closure, the fishery re-opened on August 1 and remained open until September 5. The minimum size limit was 20 inches.

The Oregon KMZ was open for mark-selective coho fishing with no Chinook retention from June 18 through June 24. Chinook and mark-selective coho retention was then allowed from June 25 through August 21.

The Chinook fishery between Cape Falcon and Humbug Mountain extended from mid-March through the end of October. There was a mark-selective coho quota open from June 18 through August 21 and a non-mark-selective coho quota in September.

Recreational Chinook fisheries in Oregon had a 24-inch minimum size limit.

Inside Harvest

Recreational angling for salmon in the Sacramento River and its tributaries was expected to result in a catch of 32,345 adult SRFC. Actual harvest of SRFC in 2022 totaled 4,860 adults and 540 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 that is accessible to salmon, 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 river harvest. Foregone harvest in Nimbus Basin now contributes 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. Estimated harvest in the Mokelumne River fishery in 2022 was not available at the time of printing.

Escapement and Management Performance

Commercial harvest in areas from Cape Falcon to latitude 40°10'N were below preseason expectations, while the Fort Bragg, San Francisco, and Monterey management areas substantially exceeded expectations (Table I-7). The June, July, and August commercial quotas in the Oregon KMZ were not attained (Table I-6). Recreational harvest estimates for California areas north of Point Arena were below preseason expectations while more southern areas exceeded harvest expectations. In Oregon, recreational harvest between Cape Falcon and the Oregon/California border was below preseason expectations (Table I-7).

2.1.1 Sacramento River Fall Chinook

Under the 2022 regulations, the projected spawning escapement in the Sacramento River Basin was 198,694 hatchery and natural area fall Chinook adults. A total of 61,850 hatchery and natural area adult spawners were estimated to have returned to the Sacramento River Basin in 2022 (Table II-1, Figure II-1).

Fall Chinook returns to Sacramento River hatcheries in 2022 totaled 29,138 adults and 3,926 jacks, and escapement to natural areas was 32,712 adults and 3,070 jacks. Table II-1 and Figure II-1 display historical natural area and hatchery adult 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.

In 2018, SRFC met the criteria for overfished status. Under the terms the salmon FMP, SRFC are considered 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. SRFC met this criterion and were determined to be rebuilt in 2021. The geometric mean of adult spawning escapement for years 2020-2022 is 96,613, which is greater than the minimum stock size threshold (MSST) of 91,500 and therefore SRFC should not be considered 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 2022 SRFC exploitation rate is not yet available. However, fisheries in 2021 resulted in a preliminary exploitation rate of 0.68, which is below the MFMT. Therefore, overfishing did not occur in 2021 (Table II-6).

2.1.2 Sacramento River Winter and Spring Chinook

Spawner escapement of endangered SRWC in 2022 was estimated to be 5,561 adults and 477 jacks. This estimate was derived from three sources: a carcass survey conducted on the upper Sacramento River, SRWC captured in the Keswick trap which provides broodstock to Livingston Stone National Fish Hatchery, and SRWC returns to Battle Creek into and upstream of Coleman National Fish Hatchery as part of the Battle Creek “jumpstart” reintroduction effort.

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 2022 totaled 6,245 fish (jacks and adults), with an estimated return of 4,473 to upper Sacramento River tributaries and the remaining 1,772 fish returning 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.

2.1.3 Sacramento River Late-Fall Chinook

Late-fall Chinook spawning escapement in 2022 was estimated to be 7,035 adults and 228 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).

2.1.4 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 2022 totaled 6,086 fish (jacks and adults) in natural areas, and 5,097 fish (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 between 1986 and 2014, spawner returns to the San Joaquin River constituted less than 10 percent of the total Central Valley escapement for fall run Chinook. Since 2015, the San Joaquin contribution has exceeded 10 percent in several years with an average contribution of 14 percent. In 2022, San Joaquin fall Chinook spawners constituted 14.0 percent of the total fall run escapement to the Central Valley.

2.2 Northern California 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 2022 specified a maximum exploitation rate of 25.0 percent, resulting in an expected spawner escapement of 38,180 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 limits the ocean harvest rate on age-4 KRFC to a maximum of 16 percent. However, NMFS guidance for 2022 fisheries was to limit the forecast KRFC age-4 ocean harvest rate to a maximum of 10.0 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 66,759 fall Chinook adults, resulting in a spawner escapement of 38,180 adults to natural areas, taking into account projected river fishery impacts of 12,417 adults and returns to basin hatcheries; (2) 50 percent (9,434) of the allowable adult harvest for tribal subsistence and commercial fisheries; (3) 22.5 percent (2,119) of the non-tribal harvest to the Klamath River recreational fishery; and (4) 6.8 percent (500) of the ocean harvest to the KMZ recreational fishery. The age-4 ocean harvest rate resulting from the above configuration was forecast to be 10.0 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 2022 was meeting NMFS guidance for a maximum KRFC age-4 ocean harvest rate of 10.0 percent.

Commercial

The Oregon coast between Cape Falcon and the Heceta Bank line was open for a portion of March through April. Chinook fisheries between Cape Falcon and the Heceta Bank line were open for portions of May through August. July and August included the retention of marked coho. From the Heceta Bank line to Humbug Mountain, Chinook fisheries were open for portions of May and August with marked coho retention in August. Chinook fisheries between Cape Falcon and Humbug Mountain were open for a portion of September and all of October with weekly landing and possession limits. The Oregon portion of the KMZ was open without a quota for a portion of March through April followed by monthly quotas in June, July, and August (see table I-6). Quotas were adjusted in-season (see table C-9). The California portion of the KMZ was closed to

commercial fishing in 2022. The Fort Bragg management area was open for two five-day periods in July, and one opener in August for 10 days (Table I-3).

Recreational

The Chinook fishery between Cape Falcon and Humbug Mountain was open from March 15 through October 31. The Oregon KMZ was open for Chinook retention from June 25 through August 21, while the California KMZ was open for the month of May and August 1 through September 5. The Fort Bragg management area was open from May 1 through July 4. After a closure, the area was open from July 22 through September 5 (Table I-3).

Inside Harvest

Yurok and Hoopa Valley tribes shared a federally-reserved right of 50 percent (9,434) of the available harvest surplus of adult Klamath fall Chinook. Tribal adult harvest was 8,199 (Yurok: 6,421 adults; Hoopa Valley: 1,778 adults), which was 87 percent of the tribal allocation (Appendix B, Tables B-4, and B-5). An estimated 2,461 fall Chinook adults were harvested in the Klamath River basin recreational fishery in 2022, exceeding the expected harvest. Harvest estimates for streams outside the Klamath River Basin were not available.

Escapement and Management Performance

Commercial harvest in areas from Cape Falcon to latitude 40°10'N were below preseason expectations, while the Fort Bragg, San Francisco, and Monterey management areas substantially exceeded expectations (Table I-7). The commercial quotas in the Oregon KMZ were not attained (Table I-6). Recreational harvest estimates for California were lower than projected north of Point Arena, while more southern areas exceeded expectations. In Oregon, recreational harvest between Cape Falcon and Humbug Mountain, and the Oregon KMZ, were below preseason expectations (Table I-7).

2.2.1 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 have been limited. Cursory, nonsystematic surveys had been conducted on Tomki Creek (Eel River Basin), Sprowl Creek (Eel River Basin), and Cañon Creek (Mad River Basin), but the surveys on Sprowl and Cañon creeks were discontinued in 2016. However, there have been recent increases in survey effort. Video counts of Chinook passage at Mirabel Dam on the Russian River began in 2000. Additional Chinook escapement estimates or redd counts for Redwood Creek, the Mad River, the mainstem Eel River, the South Fork Eel River, and the Mattole River are now available and will be reported on an annual basis. These streams are considered 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.

2.2.2 Klamath River Fall Chinook

The 2022 preliminary postseason river run size estimate for KRFC was 46,690 adults compared to the preseason-predicted ocean escapement (river run size) of 66,759 adults. The escapement to natural spawning areas was 22,050 adults, which was 58 percent of the preseason prediction of 38,180 adults. The estimated hatchery return was 13,235 adults. Jack returns to the Klamath Basin

totaled 7,581 including 4,151 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 6,604 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 2022 to the Shasta River was 4,403 adults. Escapement to the Salmon and Scott rivers was 1,274 and 927 adults, respectively (Appendix B, Table B-6).

In 2018, KRFC met the criteria for overfished status. Under the terms of the salmon FMP, KRFC are considered rebuilt when the 3-year geometric mean spawning escapement 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 2020-2022 is 25,857, 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 2022 KRFC exploitation rate is not yet available. However, fisheries in 2021 resulted in a preliminary exploitation rate of 0.38, which is lower than the MFMT. Therefore, overfishing did not occur in 2021 (Table II-6)

2.3 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, except for 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 South/Local Oregon Coast Chinook stock complex, the conservation objective is assessed using the escapement estimate at Huntley Park on the Rogue River with the goal of 34,992 natural adult passage. 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.

In some years, Oregon State waters terminal area fisheries are adopted to provide additional harvest on robust hatchery or naturally produced fall Chinook. When in place, special regulations for each of these seasons are implemented to maintain fishery impacts within conservation objectives. These regulations would include 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. No seasons were adopted for 2021 or 2022. If fisheries occur, the 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. In 2022, fishery regulations were adopted with the intention of reducing impacts on some of these stocks.

Estimates of recreational harvest of spring and fall Chinook are reported in Table II-3. Estimates prior to 2019 were derived from Oregon Department of Fish and Wildlife (ODFW) salmon and steelhead angler catch record cards and estimates from 2019 to present were derived from the self-reported catch from anglers using ODFW's electronic licensing system,

Escapement and Management Performance

Under the 2022 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 and KRFC. 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.). ODFW is developing alternative methodologies for establishing escapement goals for these Oregon coastal Chinook stocks, including fall Chinook PSC indicator stocks. The aggregate South/Local Oregon

Coast Chinook conservation objective is the achievement of at least 34,992 naturally produced Chinook adults passing Huntley Park in the lower Rogue River, which was not met in 2022.

2.3.1 North Migrating Chinook

In 2022, index counts of adult spawners (peak count per index mile) were conducted for six of the nine standard streams and used to measure natural spawner escapement trends for north-migrating fall Chinook. Data have been collected since about 1950 for most systems. Overall peak Chinook adult index spawner counts in 2022 were preliminarily estimated at 64 adults per mile, higher than the maximum sustainable yield (MSY) spawner escapement level of 60 adults per mile (Appendix B, Table 11).

The geometric mean of north-migrating Oregon Coast Chinook adult escapement in 2020, 2021, and 2022 was 91 fish per mile, which exceeded both the MSST (30) and the MSY spawner escapement level. Estimates of exploitation rates were not available for 2021 and 2022, 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).

2.3.2 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 2022 preliminary estimate was reported at 19 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 Appendix B, Table B-10.

The geometric mean of south/local migrating Oregon Coast Chinook adult escapement in 2020, 2021, and 2022 was 31,857, 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).

2.4 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

In 2022, Council-area fisheries north of Cape Falcon were managed to access URB, 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 10,800. 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 tule Chinook was a key consideration for management of Council-area Chinook fisheries north of Cape Falcon. However, the impacts on LCR natural tule Chinook did not limit, by itself, the fisheries north of Cape Falcon in 2022.

Regulations to Achieve Objectives

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 2022 forecast for the combined abundance of Chinook stocks contributing to AABM fisheries was lower than in 2021 and was 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 2022 overall non-Indian Chinook total allowable catch (TAC) for North of Cape Falcon was 54,000. This compares to a 2021 non-Indian TAC of 58,000. The 2022 overall TAC was divided into 27,000 commercial and 27,000 recreational. The 2022 treaty Indian ocean troll TAC was 40,000 Chinook and was applicable to the May-September period. This compares to a 2021 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 Spring season (May 1-June 29) with landing and possession limits of 80 Chinook per vessel per landing week (Thursday-Wednesday) in the management areas north of the Queets River and south of Leadbetter Point. This fishery had a preseason quota of 18,000 Chinook, no more than 6,040 of which may be caught in the area between the U.S./Canada border and the Queets River, and no more than 4,840 of which may be caught in the area between Leadbetter Pt. and Cape Falcon.

The Summer season (July 1-September 30) non-Indian commercial all-salmon fishery had a preseason quota of 9,000 Chinook with landing and possession limits of 150 marked coho per vessel per landing week (Thursday-Wednesday).

The Chinook minimum size limit was 27 inches.

Recreational

In the area between the U.S./Canada Border and Cape Falcon, the coastwide quota was 27,000 Chinook. The Neah Bay and La Push subareas opened June 18, the Columbia River subarea opened June 25, and the Westport subarea opened July 2. All subareas were scheduled to close September 30. The La Push subarea was scheduled for a limited area, Chinook only La Push Late Season fishery October 5-8. The Neah Bay and La Push management areas had a two-salmon daily bag limit and a minimum size of 24 inches. In the Westport and Columbia River management areas, the two-salmon daily bag limit was set to include only one Chinook, and the minimum size limit was 22 inches.

Treaty Indian Ocean Harvest

The Tribal troll ocean fishery (also known as the Treaty troll fishery) quotas were limited by the conservation concerns for ESA-listed Chinook and select coho stocks that have been declared overfished. The 2022 Chinook Tribal troll quota of 40,000 was split 50/50 between the May-June and July-September 15 sub-quotas. The 2022 coho Tribal troll quota of 52,000 was an increase when compared to the 2021 quota of 26,500. The Tribal troll fishery takes place in Washington ocean areas 2, 3, 4 and 4B. The Chinook only fishery was open May 1 through June 30 with a 20,000 sub-quota. The all-salmon fishery was open July 1 through September 15 with a sub-quota of 34,483 Chinook (includes a rollover of 14,483 Chinook from the Chinook only season) and a coho quota of 52,000.

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 120,000 to 200,000 URB, including at least 8,000 SRW fall Chinook, the allowable URB impact rate would be 31.25 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 2022, the fall fisheries were managed to achieve the NMFS ESA consultation standards for threatened LCR natural tule and SRW Chinook, and the 2022 URB and SRW preseason forecast run sizes (230,400 and 11,000, respectively) were both large enough to allow a 31.25 percent harvest rate in inriver fisheries.

Within the ESA limitations there were harvestable numbers of salmon available for most major stocks in 2022. While preliminary postseason run reconstructions were complete for spring and summer Chinook salmon, the postseason fall Chinook run reconstruction was not completed in time for this report. The preliminary catch estimates (adults) for the non-Indian commercial net fisheries were 992 spring and 65 summer Chinook. The preliminary catch estimate (adults) for the recreational fisheries totaled 13,066 spring Chinook and 3,851 summer Chinook in mainstem sport fisheries below and above Bonneville Dam (Appendix B, Table B-20).

Escapement and Management Performance

2.4.1 Upper Columbia Summer Chinook

Upper Columbia summer Chinook met the escapement objective, and Columbia River fall Chinook are expected to also meet the escapement objectives (Table II-5). The number of URB fall Chinook counted at McNary Dam was 156,134, and the natural area spawner escapement is expected to exceed the MSY level of 39,625 adults established under FMP Amendment 16. The upper Columbia summer Chinook escapement (Rock Island Dam count) in 2022 was 61,932, exceeding the MSY spawner escapement objective of 12,143 adults established under FMP Amendment 16.

The geometric mean of upper Columbia summer Chinook adult escapement in 2020, 2021, and 2022 was 61,911, which exceeded the MSST (6,072); therefore, upper Columbia summer Chinook should not be considered overfished (Table II-6). Estimates of combined ocean and in-river exploitation rates were not available for 2021 or 2022, but the 2020 exploitation rate of 0.30 was below the MFMT (0.75); therefore, upper Columbia summer Chinook did not experience overfishing in 2020 (Table II-6).

2.4.2 Upriver Bright Fall Chinook

The preliminary 2022 URB in-river harvest rate estimate was not available in time for this report. The total count of adult fall Chinook (SRW, hatchery, and supplementation) at Lower Granite Dam in 2022 was 46,173, which was greater than the count of 31,358 in 2021. The preliminary estimate of URB spawning escapement in 2022 was 82,295 adult Chinook.

The preliminary geometric mean of Columbia URB fall Chinook adult escapement in 2020, 2021, and 2022 was 88,859, which exceeded the MSST (19,182); therefore, Columbia URB fall Chinook should not be considered overfished (Table II-6). Estimates of combined ocean and in-river exploitation rates were not available for 2021 or 2022, but the 2020 exploitation rate of 0.29 was below the MFMT (0.86); therefore, Columbia URB fall Chinook did not experience overfishing in 2020 (Table II-6).

2.4.3 Snake River Wild Fall Chinook

The preliminary estimate of SRW adult fall Chinook at Lower Granite Dam in 2022 was 13,308. Postseason estimates of the exploitation rate on SRW fall Chinook in ocean fisheries were unavailable.

2.4.4 Lower Columbia River Natural Tule Fall Chinook

Table II-7 provides conservation objective and fishery impacts for Lower Columbia River (LCR) Natural tule fall Chinook. Recent year estimates are preliminary.

2.5 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 pre-season 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 13,326 for Grays Harbor fall Chinook salmon. No alternate agreements on annual spawning targets for Washington coastal Chinook, other than those in the FMP, were made in 2022.

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.

2.5.1 Willapa Bay Chinook

Inside Harvest

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

The 2022 preseason forecast of Chinook returning to Willapa Bay was 33,142 fish (3,071 natural and 30,071 hatchery). A Chinook directed non-tribal gillnet fishery was not conducted until late August 2022. Beginning in 2015, the Willapa Bay Salmon Management Policy (C-3622) prohibits Chinook directed non-tribal gillnet fisheries until after Labor Day. There were 35 12-hour Chinook and coho directed openings from August 26 through November 16. Retention of unmarked Chinook was prohibited. Total Chinook harvest in the non-tribal gillnet fishery was 2,405 fish, based on preliminary data. There were no in-season actions needed for this commercial salmon fishery.

Recreational salmon fisheries in the marine waters of Willapa Bay (Area 2-1) were open from July 2 through July 31, 2022, concurrent with Marine Area 2 (ocean rules applied). From August 1, 2022, through January 31, 2023, Willapa Bay marine waters 2-1 were scheduled to be open to recreational salmon fishing with a daily bag limit of 6 salmon, only 2 may be adults. The Willapa Bay Control Zone was closed to fishing from August 1 through September 30. Anglers were required to release unmarked Chinook. Anglers could 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, 2022, and remained open through January 31, 2023. All freshwater systems in Willapa Bay were open to recreational salmon fishing with a daily bag limit of 6 salmon, only 2 may be adults. Anglers were required to release unmarked Chinook. Single-point, barbless hooks were required in all areas except Naselle, South Fork Willapa, and Bear rivers, where only barbless hooks were required. Anglers could fish with two poles in sections of the Naselle and Willapa rivers with the Two-Pole Endorsement.

There were two emergency regulations issued in-season for the freshwater recreational fishery for the 2022 season.

- Recreational emergency regulation closed all coastal rivers for salmon and all other game fish effective October due to historic, low stream flows.
- Recreational emergency regulation reopened coastal rivers to salmon fishing effective October 29.

Expected Chinook harvest in all recreational fisheries based on preseason forecast abundances was 4,918 hatchery Chinook for the 2022 season. Retention of unmarked Chinook was prohibited. Marine and freshwater recreational harvest estimates were unavailable for 2022, but the 2021 marine area 2-1 and freshwater recreational estimates totaled 5,831 Chinook.

Escapement and Management Performance

The 2022 escapement estimate was unavailable. In 2021, hatchery-origin Chinook returning to the Willapa Bay watershed totaled 24,411 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.

The 2022 escapement estimate was unavailable. The 2021 natural escapement was 2,966 Chinook, below the FMP objective of 3,393.

The geometric mean of Willapa fall Chinook adult escapement in 2019, 2020, and 2021 was 3,134 which exceeded the MSST (1,696); therefore, Willapa Bay fall Chinook should not be considered overfished (Table II-6).

Exploitation rate estimates for Willapa Bay fall Chinook were available through 2020 and calculated using Queets River fall Chinook CWTs as a surrogate for ocean fishery exploitation rates. For terminal fisheries, adjustments were made to the Queets River CWT-based exploitation rates to account for harvest rates that occurred in the Willapa Bay terminal area. In 2018, 2019, and 2020 the Willapa Bay fall Chinook exploitation rates were 0.61, 0.66, and 0.51 respectively; all of which were below the MFMT (0.78); 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.

2.5.2 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 has not conducted any spring/summer fishery on the Chehalis River or in Grays Harbor commercial fishing Areas 2A, 2A-1, and D since 2018 because of forecasts of low spring/summer Chinook stock abundances. No spring/summer fisheries were directed at salmon or white sturgeon in 2022.

There were no non-Indian recreational fisheries allowing the retention of spring Chinook in the Chehalis River during the spring Chinook management period. The Chehalis Tribe did not conduct a spring Chinook commercial fishery in 2022.

In 2022, The Quinault Indian Nation conducted a fall gillnet fishery harvesting a total of 1,448 fall Chinook in two separately scheduled areas: the first in the lower Chehalis River and adjacent areas of Grays Harbor, Areas 2D, 2A, and 2A-1, and the second in the lower Humptulips River and adjacent Area 2C of Grays Harbor. 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 2022 fishery was scheduled on the Chehalis side to run from week 40 to week 48. All weeks of Chehalis fishing were conducted with a 6 ½-inch maximum mesh size restriction. During weeks 40 through 43, beginning September 25, the number of days open per week were 3, 4, 3, and 2, respectively. The fishery closed during week 44, then re-opened weeks 45 through 48. This fishery began October 30, with a scheduled number of days open per week of 1, 2, 3, and 3, respectively. During week 46, the original schedule was to open November 6 and close November 8, but due to high flows, this schedule was changed to open November 8 and close November 10. The Chehalis side fishery opened for 3 days per week during weeks 49 through 51, then remained closed through the following winter steelhead season, due to a low forecast of wild returns. The Chehalis area treaty Indian fishery catch of 1,089 Chinook was lower than the expected catch of 3,560 (~30 percent of the expected catch).

The Humptulips area treaty Indian fishery schedule was also set with a 6½-inch maximum mesh restriction through the fall period from weeks 39 through 48. The number of days open per week during weeks 39 through 42 were 3, 5, 4, and 4, respectively. During weeks 43 through 46 fisheries were open for 2 days per week, and then went to 3 days per week in weeks 47 and 48. As with the Chehalis side, fisheries were open 3 days per week in weeks 49 through 51, then closed through the following winter steelhead season due to a low forecast of wild returns. The Humptulips reported catch of 359 Chinook was lower than the expected catch of 2,100 (~17% of the expected catch). The combined Grays Harbor Chinook catch of 1,448 was lower than the expected catch of 5,660 (26 percent of the expected catch).

In 2022, the non-Indian gillnet fishery harvested a total of 53 fall Chinook two separately scheduled areas: The Humptulips 2C and the Chehalis River 2A and 2D areas. The non-Indian gillnet fishery in Humptulips commercial Area 2C harvested one Chinook in a 36-hour fishery during week 43 and a 12-hour fishery in week 44. The non-Indian gillnet mark-selective fishery in the Chehalis River commercial Areas 2A and 2D harvested three hatchery-origin Chinook. Chehalis River fisheries consisted of two 7-hour days during weeks 40 and 42, and seven 12-hour days during weeks 43 through 45 (the number of days open per week were 2, 3, and 2, respectively). It is estimated that 47 unmarked Chinook mortalities occurred during this fishery based on data collected during on-board monitoring, catch accounting, and a 56 percent mortality rate of encountered unmarked Chinook. It is estimated that another two Chinook mortalities occurred due to net drop out. During weeks 40 and 42, the “South Channel” was closed; during the rest of the fishery all areas of 2D were open, however, live boxes were required, and wild Chinook retention was prohibited.

A recreational fishery in the northern portion of Marine Area 2-2 and Commercial Area 2C occurred August 1 through September 15. The daily bag limit was 1 adult salmon, and wild coho were required to be released. The portion of Marine Area 2-2 east of a line from the mouth of Johns River to Brackenridge Bluff Tripod occurred October 1 through September 16. The daily bag limit was 1 adult salmon, and all Chinook were required to be released.

A recreational Chinook fishery occurred on the mainstem Humptulips River from the mouth to the confluence of the East and West forks from September 1 through December 16. In September, a daily limit was 2 adult salmon, of which only 1 could be a wild Chinook. In October, the daily limit remained at 2 adults, but only 1 could be a Chinook. In November and December, the daily limit was reduced to 1 adult salmon and all Chinook were required to be released. In-season adjustments to these fisheries occurred due to environmental conditions and concerns about wild steelhead impacts. The recreational Chinook fishery in the Humptulips River was closed from October 8 through October 29 due to abnormally low flows. The fishery was scheduled through December 31 but closed early (December 16) due to concerns for winter steelhead.

No recreational fisheries targeting Chinook were scheduled in 2022 in the Chehalis River or any of the tributaries, including the Hoquiam and Wishkah basins.

Escapement and Management Performance

Chehalis River spring Chinook, also referred to as Grays Harbor spring Chinook, are of natural origin and managed for an escapement goal of 1,400 adults. The 2022 terminal run forecast was 1,082 adult fish; a preliminary natural spawning escapement estimate is not yet available. The geometric mean of natural spawning escapement estimates in 2019, 2020, and 2021 is 1,927 fish, which exceeded the MSST (546); therefore, Grays Harbor spring Chinook should not be considered overfished (Table II-6).

The 2022 Grays Harbor fall Chinook run size forecast of 17,909 included 12,810 natural and 5,099 hatchery adults. The return of hatchery-origin fall Chinook to Grays Harbor hatchery programs to date are 776 fish, sufficient to provide for 2023 fall Chinook production goals. The 2021 Grays Harbor fall Chinook actual run size of 19,068 included 14,247 natural and 4,822 hatchery adults. The 2021 preseason forecast of 15,520 was approximately 81% of the combined components of the 2021 return.

Grays Harbor fall Chinook are managed for a natural spawning escapement goal of 13,326 adults. The preliminary natural spawning escapement estimate for 2022 was not available. The final 2022 spawning ground escapement estimate for the Grays Harbor fall Chinook is in development by QIN and WDFW. The 2021 natural origin spawning escapement estimate was 12,050 out of a total natural escapement of 13,207. The geometric mean of natural spawning escapement estimates in 2019, 2020, and 2021 was 16,009, which exceeded the MSST (5,694); therefore, Grays Harbor fall Chinook should not be considered overfished (Table II-6).

Exploitation rate estimates for Grays Harbor fall Chinook were available through 2020 and calculated using Queets River fall Chinook CWTs as a surrogate for ocean fishery exploitation rates. For terminal fisheries, adjustments were made to the Queets River CWT-based exploitation rates to account for harvest rates that occurred in the Grays Harbor terminal area. Exploitation

rate estimates in the most recent years available were below the MFMT (0.78); therefore, Grays Harbor fall Chinook should not be considered subject to overfishing (Table II-6).

2.5.3 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 Quinault 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 2022, the tribal fishery had a reported harvest of 23 spring/summer Chinook during the mid-summer fishery running from mid-June through the first week of July during a fishery directed on sockeye. Subsequent commercial salmon fisheries were closed until the fall fishing period.

The 2022 recreational fishery within the Quinault Indian Reservation was conducted from September 1 through December 1 with a daily bag limit of 1 adult Chinook.

Non-treaty recreational fishery upstream of Lake Quinault was open from July 1 through September 30 for jack salmon only. From October 1 through November 30 anglers are allowed a daily limit of 2 adult salmon but required to release sockeye and chum salmon.

The 2022 treaty Indian gillnet fishery harvested 6,620 fall Chinook. The Quinault River Fall gillnet fishery is designed to maximize harvest opportunity during hatchery Chinook and coho entry while reduced effort occurs during the scheduled fishing days later in the season during primarily wild Chinook and wild coho entry.

Escapement and Management Performance

Quinault fall Chinook are managed for hatchery production. The 2021 fall Chinook natural spawning escapement is expected to be available for 2022 management planning. Hatchery fall Chinook egg-take goals for the Quinault River were attained at the Lake Quinault tribal hatchery.

2.5.4 Queets River Chinook

Inside Harvest

Historical terminal run size, catch, and escapement data for Queets River Chinook stocks are presented in Appendix B, Tables B-29, and B-30.

The 2022 treaty Indian gillnet harvest of spring/summer Chinook remained closed through the spring/summer management period.

There were no non-Indian recreational fisheries allowing the retention of spring Chinook in the Queets River basin during the spring/summer Chinook management period.

The 2022 recreational fishery within the Quinault Indian Reservation was opened September 1 and closed by emergency regulation on October 21. The fishery allowed the retention of 1 adult Chinook per day. The fishery was reopened November 3-30 for coho retention. Retention of Chinook was prohibited.

The 2022 non-Indian in-river recreational fishery opened September 1 and closed by emergency regulation on October 8. Anglers were allowed to retain one Chinook per day. In the Queets River, within the Olympic National Park (ONP), the fishery opened September 1 and closed by emergency regulation on October 8, and anglers were required to release all wild fish encountered. Catch during these fisheries are not available for 2022. No adult fall Chinook were reported harvested during the 2021 season.

The 2022 treaty commercial gillnet fishery began Sunday, August 28 and included the following weekly openers: 5 days per week from August 28 – September 16, 4 days the week of September 18, 3 days the week of September 25, 2 days the week of October 2, closed the week of October 9 and 1 day the week of October 16. The fishery was closed by emergency regulation after the October 16 opener to evaluate the Chinook harvest which was larger than the preseason modeled harvest. The fishery remained closed for the remainder of the Fall management period. A total of eight commercial fishing days included in the preseason schedule were not fished during November. The treaty commercial gillnet fishery harvested 3,242 fall Chinook compared to a preseason expected commercial catch of 1,717.

The 2022 Queets mainstem recreational fishery was regulated with a bag limit of 1 Chinook beginning September 1 through October 21. The Salmon River recreational salmon fishery was open from September 1 through October 21 in order to target hatchery coho along with requiring non-retention of fall Chinook. Catch estimates for 2022 recreational salmon fisheries are unavailable. The catch estimate for the 2021 recreational salmon fisheries occurring within the Quinault reservation boundaries was 133 adult fall Chinook.

Escapement and Management Performance

The 2022 Queets River spring/summer Chinook spawning escapement estimate is currently under development and review. The 2021 Queets River spring/summer Chinook spawning escapement estimate is 280.

No terminal fisheries occurred in Queets River basin for spring/summer Chinook in 2022.

The geometric mean of the spring/summer Chinook adult spawning escapement in 2019, 2020, and 2021 is 314, which is below the MSST (350) therefore, Queets River spring/summer Chinook meet the criteria for ‘overfished’ status (Table II-6).

The 2022 Queets River fall Chinook spawner survey estimate is not available. The indicator Chinook originate from wild broodstock taken each year in the river. The 2021 spawning escapement estimate for Queets River fall Chinook was 2,852 natural-origin, 326 indicator returns with an additional 186 Chinook (including 7 indicator Chinook) taken for broodstock. In Appendix Table B-30, fish removed from the river for hatchery (indicator) brood stock are

included in the escapement columns (footnote b/) and only natural broodstock are included in the terminal natural run size columns.

The geometric mean of Queets River fall Chinook adult spawning escapement in 2019, 2020 and 2021 is 3,190, which exceeded the MSST (1,250); therefore, Queets River fall Chinook should not be considered overfished (Table II-6). Exploitation rates were not available for Queets River fall Chinook for 2021 and 2022, but between 2017 and 2020 the exploitation rates ranged from 0.55 to 0.73 percent, all of which were below the MFMT (0.87); therefore, Queets River fall Chinook should not be considered subject to overfishing (Table II-6).

2.5.5 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 2022 Hoh River spring/summer Chinook terminal abundance forecast was 696 fish. The tribal fishery targeted 2.2 percent of the terminal run with commercial and ceremonial and subsistence fisheries. The treaty Indian gillnet fishery was closed during the 2022 season. The tribal commercial fishery harvested 4 natural spring/summer Chinook and 6 hatchery spring/summer Chinook for a total of 10 spring/summer Chinook.

The non-tribal recreational salmon fishery was closed June 1 through September 15.

Hoh River fisheries for fall Chinook were based on an expected terminal run size of 3,380 adults, allowing for a terminal harvest rate of 37 percent. The spawning escapement was expected to be 2,131 adults.

The treaty Indian fishery targeted 30 percent of the terminal run. The treaty Indian gillnet fishery was closed during weeks 36-39 and 42-43, open one day per week during weeks 40-41 and 46-49, and open two days per week during weeks 44-45. The Hoh treaty commercial fishery caught approximately 440 Chinook.

The non-tribal recreational salmon fishery was open September 16 through December 15, from the Olympic National Park boundary upstream to the Oxbow Campground boat launch, and open October 16 through December 15 from the Oxbow Campground upstream to Morgans Crossing Boat Launch. Due to extreme low water conditions, emergency regulation closed the Hoh River to all recreational fishing October 8 through October 30. Starting December 1, all fishing from a floating device in the Hoh River was prohibited. The daily bag limit through November 30 was 2 salmon, of which 1 adult could be retained. The daily bag limit December 1 through December 15 was 1 salmon release all Chinook. Only 1 single-point barbless hook was allowed. Sport catch is not yet available for 2022.

Escapement and Management Performance

The preliminary 2022 spawning escapement estimate for Hoh River spring/summer Chinook is not available. The geometric mean of Hoh River spring/summer Chinook spawner escapement in

2019, 2020, and 2021 was 921, 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. 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 recent years (Table II-6).

The preliminary 2022 spawning escapement estimate for Hoh River fall Chinook is not available. The geometric mean of Hoh River fall Chinook adult spawning escapement in 2019, 2020, and 2021 was 2,099, which exceeded the MSST (600); therefore, Hoh River fall Chinook should not be considered overfished (Table II-6).

Exploitation rate estimates for Hoh River fall Chinook were available through 2020 and calculated using Queets River fall Chinook CWTs as a surrogate for ocean fishery exploitation rates. For terminal fisheries, adjustments were made to the Queets River CWT-based exploitation rates to account for harvest rates that occurred in the Hoh River terminal area. Exploitation rate estimates were not available for 2021 and 2022 but ranged from 0.51 to 0.73 between 2017 and 2020, all of which were below the MFMT (0.90); therefore, Hoh River fall Chinook should not be considered subject to overfishing (Table II-6).

2.5.6 Quillayute River Chinook

Inside Harvest

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 2022 was 1,201 hatchery and 159 natural spring/summer Chinook. Chinook taken in the ceremonial and subsistence fishery are included in the IGN catch. The Quillayute system was closed to all recreational fishing April 1 through April 30 by the preseason management plan. The fishery was also closed October 8 through October 30 in-season by emergency regulation due to extreme low flows. WDFW required the release of unmarked Chinook in fisheries through August to reduce impacts of the recreational fishery on the natural spring/summer Chinook stock. The catch estimate for the 2022 recreational spring/summer Chinook fishery is not yet available; recent year averages are used as a placeholder for 2022 in the Appendix B tables until those estimates are available.

The recreational and tribal fisheries for fall Chinook were established by a preseason management agreement between WDFW and the Quileute Tribe. The 2022 Quileute IGN harvest of fall (natural) Chinook was 1,353 and catch of stray fall hatchery Chinook was eight fish, for a total harvest of 1,361. Catch for ceremonial and subsistence use is included in the IGN harvest numbers. The catch estimate for the 2022 fall Chinook recreational fishery is not yet available.

Both the treaty and non-treaty fall fisheries were reduced from previous years for conservation reasons. In-river recreational fisheries were closed to all fishing April 1 through April 30 by preseason management plan. In-river recreational fisheries were also closed in-season through emergency regulations in effect March 1 through March 31, due to concerns over low steelhead returns and October 8 through October 30, due to extreme low flows.

The 2022 recreational fishery in the Quillayute (park boundary to confluence of Bogachiel and Sol Duc) and Sol Duc (mouth to Sol Duc hatchery) rivers was open:

- February 1 through March 31 and May 1 through July 31 by preseason management agreement with up to 2 adults retained, release wild adult Chinook, wild adult coho, and sockeye. In-season emergency rules issued to protect steelhead closed the Quillayute and Sol Duc rivers to all sport fishing for the month of March.
- September 1 through December 15 with up to 3 adult salmon of which 1 could be a natural Chinook, release sockeye and wild adult coho through September 15. The Quillayute River was closed Mondays and Tuesdays August 29 through October 11 to avoid gear conflicts with tribal fisheries during low flows. In-season emergency rules issued due to extreme low flows closed the rivers to all fishing October 8 through October 30.

The 2022 recreational fishery in the Bogachiel (mouth to highway 101 bridge), Dickey (ONP boundary to confluence with East and West Forks) and Calawah (mouth to highway 101 bridge) was open:

- July 1 through August 31 with up to 2 adult salmon allowed, release wild adult coho and wild adult Chinook; September 1 through December 15 with a limit of 1 adult salmon, release wild adult coho through September 15.
- September 1 through December 15 with a limit of one adult salmon, release wild adult coho through September 15. Emergency rules due to extreme low flows closed the rivers to all sport fishing from October 8 through October 30

The Quileute Tribe greatly reduced the total number of days fished in their 2022 fall IGN fishery by being closed to fishing weeks 42 through 44 due to extreme low flows and fish compression in the lower Quillayute River. Weekly open periods in weeks 36 through 40 were restricted to only 2 half days (6am-6pm), and week 41 was restricted to one half day only. Additionally, week 37 through 41 was restricted to 7¾ inch minimum mesh, set net only, 25 fathom maximum length, and weeks 45 through 46 were restricted to 6-inch minimum mesh.

Escapement and Management Performance

The 2022 management agreement called for an escapement goal of 900 hatchery spring Chinook. The actual hatchery rack return was 844 plus 237 jacks, which was just under hatchery requirements. A total of 1,217,600 eggs were taken.

The summer Chinook run was managed to achieve an MSY spawner escapement of 1,200 adults, jacks, and brood stock collection combined. The 2022 preliminary natural spawning summer Chinook escapement estimate was 1,402, which excludes 39 wild broodstock fish.

The geometric mean of Quillayute River summer Chinook spawner escapement in 2020, 2021, and 2022 is 1,128, which exceeded the MSST (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 2022 escapement estimate of 6,761 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 5,314).

The geometric mean of the Quillayute River fall Chinook adult spawning escapement in 2020, 2021, and 2022 was 6,886, which exceeded the MSST (1,500); therefore, Quillayute River fall Chinook should not be considered overfished (Table II-6).

Exploitation rate estimates for Quillayute River fall Chinook were available through 2020 and calculated using Queets River fall Chinook CWTs as a surrogate for ocean fishery exploitation rates. For terminal fisheries, adjustments were made to the Queets River CWT-based exploitation rates to account for harvest rates that occurred in the Quillayute River terminal area. Estimates of exploitation rates were not available for 2021 and 2022 but ranged from 0.55 to 0.72 between 2017 and 2020, all of which were below the MFMT (0.87); therefore, Quillayute River fall Chinook should not be considered subject to overfishing (Table II-6).

2.5.7 Hoko River Chinook

Inside Harvest

Hoko River Chinook are harvested primarily 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 terminal catch is occasionally reported by anglers on WDFW Catch Record Cards. Historical terminal run size, catch, and escapement data for Hoko River summer/fall Chinook are presented in Appendix B, Table B-38.

Escapement and Management Performance

The 2022 escapement and terminal run size estimates for Hoko Chinook are not available. 2021 escapement estimate for Hoko Chinook is 1,881 spawning in the river (natural origin and hatchery strays combined) and 375 spawned at the Hoko Falls Hatchery. These two components amounted to a terminal run size of 2,256.

The geometric mean of Hoko River summer/fall Chinook escapement in 2019, 2020, and 2021 is 1,767 which exceeds the MSST (425); therefore, Hoko River summer/fall Chinook should not be considered overfished (Table II-6). Exploitation rate estimates were not available for 2021 and 2022, but ranged from 0.22 to 0.57 in earlier years, where available, below the MFMT (0.78); therefore, Hoko River summer/fall Chinook should not be considered subject to overfishing (Table II-6).

2.6 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 were 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 preseason. 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 for 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 2022 was 107,098 Chinook, compared to 86,845 Chinook caught in 2021. The 2022 non-Indian net catch was 17,757 Chinook, compared to 7,316 Chinook caught in 2021. The 2022 treaty Indian net and troll harvest was 89,341 Chinook, compared to 79,529 Chinook caught in 2021.

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 2022 Puget Sound recreational fishery were unavailable.

Escapement and Management Performance

Puget Sound Chinook management goals for fishery planning processes in 2022 were compared to predicted escapements and 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, Table 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.

Escapement and hatchery estimates for 2022 were not available for most runs. In many natural spawning areas, hatchery-origin Chinook comprise a large component of the natural spawning population.

2.7 Coastwide Goal Assessment Summary

In 2022, the SRFC and KRFC adult spawner escapement fell below their FMP objectives. Information to assess compliance with FMP conservation objectives and ESA consultation standards was unavailable for LCR natural tule Chinook, several Washington coast Chinook stocks, and all Puget Sound natural Chinook stocks.

2.8 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.

In June 2018, NMFS published an overfished designation for SRFC and KRFC based on the geometric mean of escapement in 2015 – 2017. Rebuilding plans for both of these Chinook stocks were completed in July 2019 and SRFC were declared rebuilt in 2021. KRFC continue to meet the criteria for overfished status based on spawner escapement estimates from 2020 – 2022. The Queets River spring/summer Chinook stock also meets the criteria for overfished status based on spawner escapement estimates from 2019 – 2021. Based on the most recent year exploitation rate estimates available, no stocks were subject to overfishing

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

Year or Average	Upper River ^{a/}			Lower River			Total		Grand Total
	Hatchery	Natural ^{b/}	Subtotal	Hatchery	Natural ^{b/}	Subtotal	Hatchery	Natural ^{b/}	
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 ^{c/}	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	17,937	80,407	98,344	25,872	88,260	114,132	43,809	168,667	212,476
2015	13,861	40,696	54,557	25,103	33,808	58,911	38,964	74,504	113,468
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	25,162	16,325	41,487	26,478	17,851	44,329
2018	8,207	18,317	26,524	25,570	53,372	78,942	33,777	71,689	105,466
2019	13,065	53,706	66,771	29,073	67,923	96,996	42,138	121,629	163,767
2020	12,478	36,447	48,925	25,444	63,722	89,166	37,922	100,169	138,091
2021	14,556	51,822	66,378	18,259	20,947	39,206	32,815	72,769	105,584
2022 ^{d/}	8,918	8,993	17,911	20,220	23,719	43,939	29,138	32,712	61,850
Goal ^{e/}									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 ^{a/}	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 ^{b/}
2015	11,085	28,112	39,197	50%	7,842	10%	28,048	36%	2,611	3%	77,821 ^{b/}
2016	3,578	13,937	17,515	71%	1,310	5%	5,160	21%	486	2%	24,582 ^{b/}
2017	11,213	19,904	31,117	94%	71	0%	1,880	6%	164	0%	33,232
2018	18,567	52,352	70,919	78%	4,110	5%	14,769	16%	1,262	1%	91,060
2019	5,178	20,022	25,200	68%	5,376	14%	5,989	16%	511	1%	37,084 ^{b/}
2020	8,331	26,185	34,516	76%	5,123	11%	5,212	11%	558	1%	45,409
2021	12,850	29,942	42,792	79%	2,265	4%	8,066	15%	717	1%	53,954 ^{b/}
2022 ^{c/}	13,235	22,050	35,285	76%	2,461	5%	8,035	17%	744	2%	46,639 ^{b/}
Goal	≥40,700 ^{d/e/}										

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, 2019 - 8 adults, 2021 - 113 adults and 6 jacks.

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 SMSY 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 SMSY in some years due to meeting SACL 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 ^{b/}	
	Public Hatchery ^{a/}		Private		
	Spring	Fall	All	Spring	Fall
THOUSANDS OF CHINOOK					
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	75.1
2015	10.7	9.6	-	18.3	117.2
2016	4.2	5.8	-	10.1	54.8
2017	5.1	3.1	-	9.8	56.0
2018	5.2	1.5	-	6.8	34.7
2019	5.2	2.5	-	17.0	35.0
2020	3.0	3.9	-	23.9	50.6
2021	3.0	3.4	-	31.6	61.6
2022 ^{c/}	6.2	4.8	-	10.3	21.3

a/ Adults only.

b/ Freshwater harvests prior to 2019 are derived from ODFW salmon/steelhead angler catch record card information and harvest estimates from 2019-2022 estimates are derived from the self-reported catch from anglers using ODFW's electronic licensing system. Harvest estimates 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.^{a/}

Year or Average	Fall Chinook Spaw ner Indices		South/local Migrating Spring Chinook Spaw ner Indices (1000's of fish)	
	North Migrating Peak Count Adults Per Mile	Rogue River (South/local migrating) Adult Carcass Counts	Rogue River	
			Gold Ray Dam Counts ^{b/}	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 ^{c/}	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	92	d/	10	3
2019	65	d/	5	4
2020	137	d/	4	6
2021	85	d/	5	2
2022 ^{e/}	64	d/	9	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 2022 preseason conservation objectives (preliminary data).
(Page 1 of 2)

System and Stock	2022 Conservation/Management Objective(s)	2022 Achievement
Sacramento River Chinook		
Fall	Minimum escapement of 180,000 natural area and hatchery adults.	Preliminary estimate of 61,850 hatchery and natural area adult fall Chinook is below the 2022 management objective.
Winter (Endangered)	Age-3 impact rate for the area south of Point Arena, CA no greater than 20.0% (NMFS ESA consultation standard).	Preseason projection of 15.2%; no postseason estimate was available at time of printing.
Spring (Threatened)	No management objective	No management objective
California North Coast Chinook		
Klamath River Fall	Minimum escapement of 38,180 natural area adult spaw ners.	Preliminary estimate of 22,050 is below the 2022 management objective.
California Coastal (Threatened)	No greater than a 10.0% ocean harvest rate on age-4 Klamath River fall Chinook (NMFS guidance).	Preseason projection of 10.0%; no postseason estimate was available at time of printing.
Oregon Coast Chinook		
North Migrating Stocks	150,000-200,000 natural adult spaw ners (equivalent to peak spaw ner index counts of 60-90 adults per mile).	64 natural adult spaw ners per mile, within the aggregate stock index range.
South/Local Migrating Stocks	34,992 natural adult passage estimate at Huntley Park in the lower Rogue River.	17,615 natural adult passage estimate at Huntley Park, below the conservation objective.
Columbia River Basin Fall Chinook		
LRW (Component of threatened lower Columbia River Chinook ESU)	MSY objective of 5,700 natural North Lewis River adult spaw ners.	Preseason LRW forecast was 10,900. Postseason estimate not available.
LCR natural tules (Component of threatened lower Columbia River)	Total (ocean plus inriver) AEQ exploitation rate on ESA-listed natural tules of no more than 38.0%.	Preseason projection of 38.0%. Postseason estimate not available.
LRH	14,800 adult hatchery spaw ners.	Preseason LRH forecast was 73,600. Postseason estimate not available.
SCH	6,000 adult hatchery spaw ners.	82,296 adult hatchery spaw ners, above the goal.
MCB	No FMP objective; target of 7,900 hatchery adults.	7,218 adult hatchery spaw ners, below the target.
URB	Minimum 40,000 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.	156,134 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 2022 preseason conservation objectives (preliminary data).
(Page 2 of 2)

2022 Conservation/Management																																																																																												
System and Stock	Objective(s)	2022 Achievement																																																																																										
Columbia River Basin Fall Chinook (continued)																																																																																												
Snake River Fall Chinook (Threatened; component of URB)	SRFI ≤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 0.531. Postseason estimate was not available.																																																																																										
Washington Coastal Chinook																																																																																												
Fall	Natural spawner escapement objectives as provided in state-tribal agreements; meet hatchery egg-take goals and meet treaty Indian obligations.	Preliminary estimates: Quillayute was above the goal. Estimates for other fall stocks were not available.																																																																																										
Spring/Summer	Natural spawner escapement objectives as provided in state-tribal agreements; meet hatchery egg-take goals and meet treaty Indian obligations.	Preliminary estimates: Quillayute was above the goal. Estimates for other spring/summer stocks were not available.																																																																																										
Puget Sound Chinook																																																																																												
(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:																																																																																										
	<table><tr><th>Exploitation Rate</th><th>Spawner Esc.</th><th>ISBM</th></tr><tr><td>· Nooksack spring</td><td>≤10.9% SUS</td><td>-</td></tr><tr><td>· Skagit summer/fall</td><td>≤41.2% Total</td><td>-</td></tr><tr><td>· Skagit spring</td><td>≤36% Total</td><td>-</td></tr><tr><td>· Stillaguamish summer/fall</td><td>≤9% SUS</td><td>-</td></tr><tr><td>· Snohomish summer/fall</td><td>≤8.3% SUS</td><td>-</td></tr><tr><td>· Lake Wash. summer/fall</td><td>-</td><td>>0.500</td></tr><tr><td>· White River spring</td><td>≤22% SUS</td><td>-</td></tr><tr><td>· Green River summer/fall</td><td>-</td><td>>2.744</td></tr><tr><td>· Puyallup summer/fall</td><td>-</td><td>>1.170</td></tr><tr><td>· Nisqually summer/fall</td><td>≤47% Totalb/</td><td>-</td></tr><tr><td>· Skokomish summer/fall</td><td>≤50% Total</td><td>-</td></tr><tr><td>· Mid-Hood Canal fall</td><td>≤15.2% PTSUS</td><td>-</td></tr><tr><td>· Dungeness spring</td><td>≤10% SUS</td><td>-</td></tr><tr><td>· Elwha summer/fall</td><td>≤10% SUS</td><td>-</td></tr></table>	Exploitation Rate	Spawner Esc.	ISBM	· Nooksack spring	≤10.9% SUS	-	· Skagit summer/fall	≤41.2% Total	-	· Skagit spring	≤36% Total	-	· Stillaguamish summer/fall	≤9% SUS	-	· Snohomish summer/fall	≤8.3% SUS	-	· Lake Wash. summer/fall	-	>0.500	· White River spring	≤22% SUS	-	· Green River summer/fall	-	>2.744	· Puyallup summer/fall	-	>1.170	· Nisqually summer/fall	≤47% Totalb/	-	· Skokomish summer/fall	≤50% Total	-	· Mid-Hood Canal fall	≤15.2% PTSUS	-	· Dungeness spring	≤10% SUS	-	· Elwha summer/fall	≤10% SUS	-	<table><tr><th>Exploitation Rate</th><th>Spawner Esc.</th><th>ISBM</th></tr><tr><td>10.7%</td><td>-</td><td>0.95</td></tr><tr><td>41.2%</td><td>-</td><td>NAa/</td></tr><tr><td>21.7%</td><td>-</td><td>NAa/</td></tr><tr><td>8.9%</td><td>-</td><td>0.62</td></tr><tr><td>6.8%</td><td>-</td><td>0.69</td></tr><tr><td>-</td><td>0.714</td><td>-</td></tr><tr><td>17.0%</td><td>-</td><td>-</td></tr><tr><td>-</td><td>3.865</td><td>-</td></tr><tr><td>-</td><td>2.439</td><td>-</td></tr><tr><td>47.5%</td><td>-</td><td>-</td></tr><tr><td>50.0%</td><td>-</td><td>-</td></tr><tr><td>15.2%</td><td>-</td><td>-</td></tr><tr><td>4.4%</td><td>-</td><td>-</td></tr><tr><td>4.5%</td><td>-</td><td>-</td></tr></table>	Exploitation Rate	Spawner Esc.	ISBM	10.7%	-	0.95	41.2%	-	NAa/	21.7%	-	NAa/	8.9%	-	0.62	6.8%	-	0.69	-	0.714	-	17.0%	-	-	-	3.865	-	-	2.439	-	47.5%	-	-	50.0%	-	-	15.2%	-	-	4.4%	-	-	4.5%	-	-
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a/ ISBM obligation not applicable because escapement goal expected to be met.

b/ An additional 2% ER may be added to facilitate inriver selective gear studies.

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						3-yr Geo			Exploitation Rate						
	2017	2018	2019	2020	2021	2022	Mean	MSST	S _{MSY}	2017	2018	2019	2020	2021	2022	MFMT
Sacramento Fall	44,329	105,466	163,767	138,091	105,584	61,850	96,613	91,500	122,000	0.68	0.52	0.68	0.61	0.68	NA	0.78
Klamath River Fall	19,904	52,352	20,022	26,185	29,942	22,050	25,857	30,525	40,700	0.10	0.32	0.43	0.30	0.38	NA	0.71
Southern Oregon	91,977	39,507	18,436	29,387	48,979	17,615	29,378	20,500	34,992	NA	NA	NA	NA	NA	NA	0.78
Central and Northern OR ^{a/}	114	92	65	137	85	64	91	30 fish/mile	150k-200k	0.44	0.66	0.50	0.42	NA	NA	0.78
Upper River Bright - Fall ^{a/}	96,096	58,540	77,880	98,401	86,644	82,295	88,859	19,182	39,625	0.49	0.34	0.38	0.29	NA	NA	0.86
Upper River - Summer ^{a/}	56,265	38,816	41,090	70,654	52,076	64,497	61,911	6,072	12,143	0.46	0.44	0.17	0.30	NA	NA	0.75
Willapa Bay - Fall ^{b/}	3,147	2,847	2,894	3,585	2,966	NA	3,134	1,696	3,393	0.51	0.61	0.66	0.51	NA	NA	0.78
Grays Harbor Fall ^{a/b/}	17,145	20,741	14,880	20,879	13,207	NA	16,009	5,694	13,326	0.48	0.63	0.65	0.54	NA	NA	0.78
Grays Harbor Spring	1,384	493	983	2,828	2,573	NA	1,927	546	1,400	NA	NA	NA	NA	NA	NA	0.78
Queets - Fall ^{a/}	2,822	2,207	2,663	3,622	3,364	NA	3,190	1,250	2,500	0.55	0.66	0.73	0.71	NA	NA	0.87
Queets - Sp/Su	825	484	322	342	280	NA	314	350	700	NA	NA	NA	NA	NA	NA	0.78
Hoh - Fall ^{a/b/}	1,808	2,478	1,552	2,273	2,622	NA	2,099	600	1,200	0.51	0.56	0.73	0.64	NA	NA	0.90
Hoh Sp/Su	1,364	793	766	1,248	817	NA	921	450	900	NA	NA	NA	NA	NA	NA	0.78
Quillayute - Fall ^{a/b/}	3,604	3,937	7,765	8,672	5,568	6,761	6,886	1,500	3,000	0.69	0.72	0.65	0.55	NA	NA	0.87
Quillayute - Sp/Su	1,097	990	1,442	942	1,056	1,441	1,128	600	1,200	NA	NA	NA	NA	NA	NA	0.78
Hoko -Su/Fa ^{a/}	1,188	2,179	1,815	1,347	2,256	NA	1,767	425	850	0.27	0.57	NA ^{c/}	0.22	NA	NA	0.78

a/ CWT based exploitation rates from PSC-CTC 2022 Exploitation Rate Analysis (TCCHINOOK (23)-01).

b/ Queets River fall Chinook coded-wire-tag (CWT) exploitation rates used as a proxy. Adjustments made to terminal fishery impacts to account for differential harvest rates.

c/ Calculation of a reliable exploitation rate estimate was not possible due to insufficient CWT information.

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 ^{a/}
2002	≤0.49	0.45	-
2003	≤0.49	0.47	0.39
2004	≤0.49	0.46	0.44
2005	≤0.49	0.44	0.51
2006	≤0.49	0.47	0.43
2007	≤0.42	0.42	0.47
2008	≤0.41	0.36	0.35
2009	≤0.38	0.38	0.38
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	0.35
2014	≤0.41	0.41	0.44
2015	≤0.41	0.40	0.36
2016	≤0.41	0.38	0.37
2017	≤0.41	0.37	0.37
2018	≤0.38	0.38	0.36
2019 ^{b/}	≤0.38	0.36	0.32
2020 ^{b/}	≤0.38	0.38	0.27
2021 ^{b/}	≤0.38	0.38	0.38
2022	≤0.38	0.38	NA

a/ Post season estimates for 2003-20 are from FRAM postseason runs based on calibration Round 7.1.

b/ Postseason estimates preliminary.

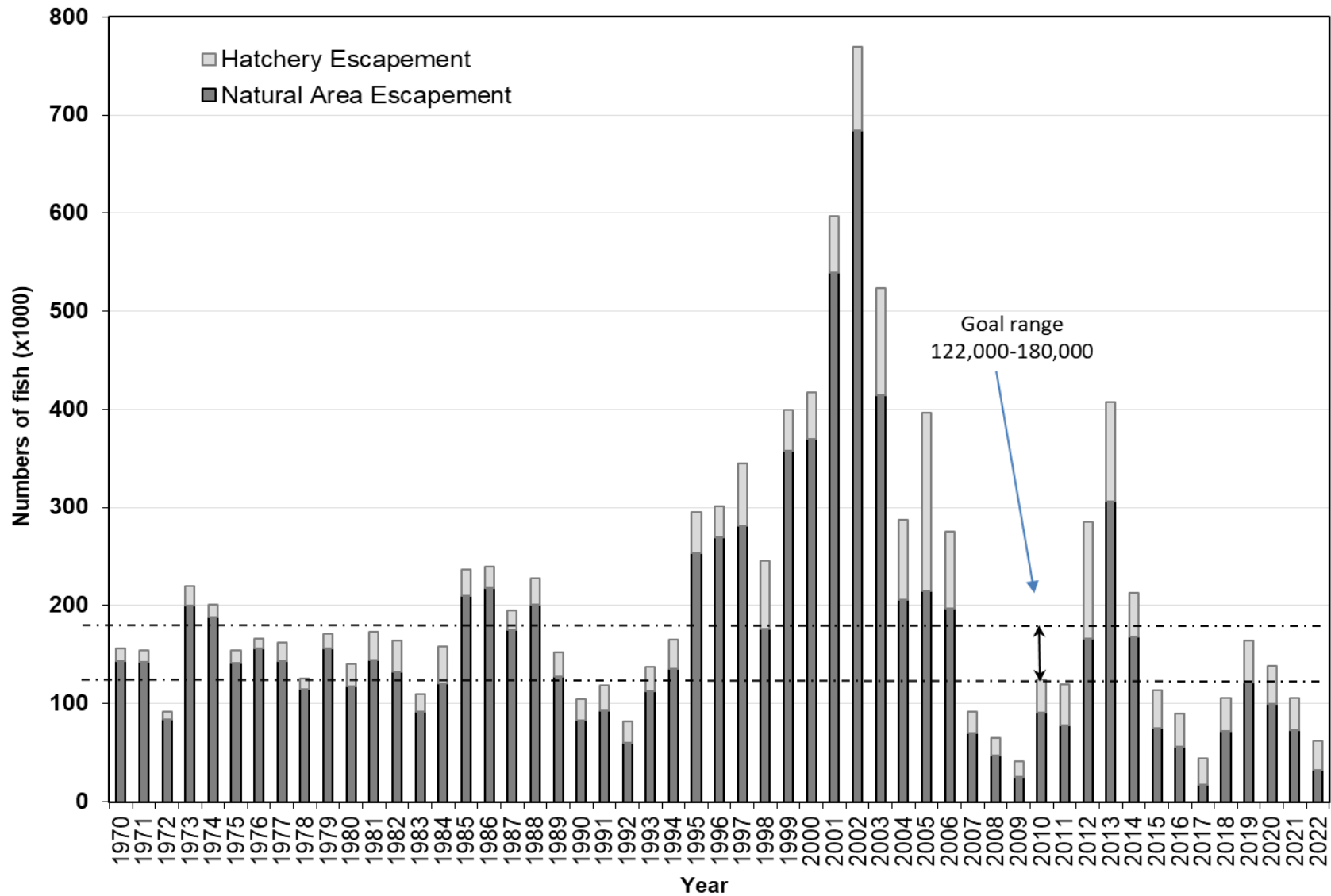


Figure II-1. Sacramento River adult fall Chinook spawning escapement, 1970-2022.

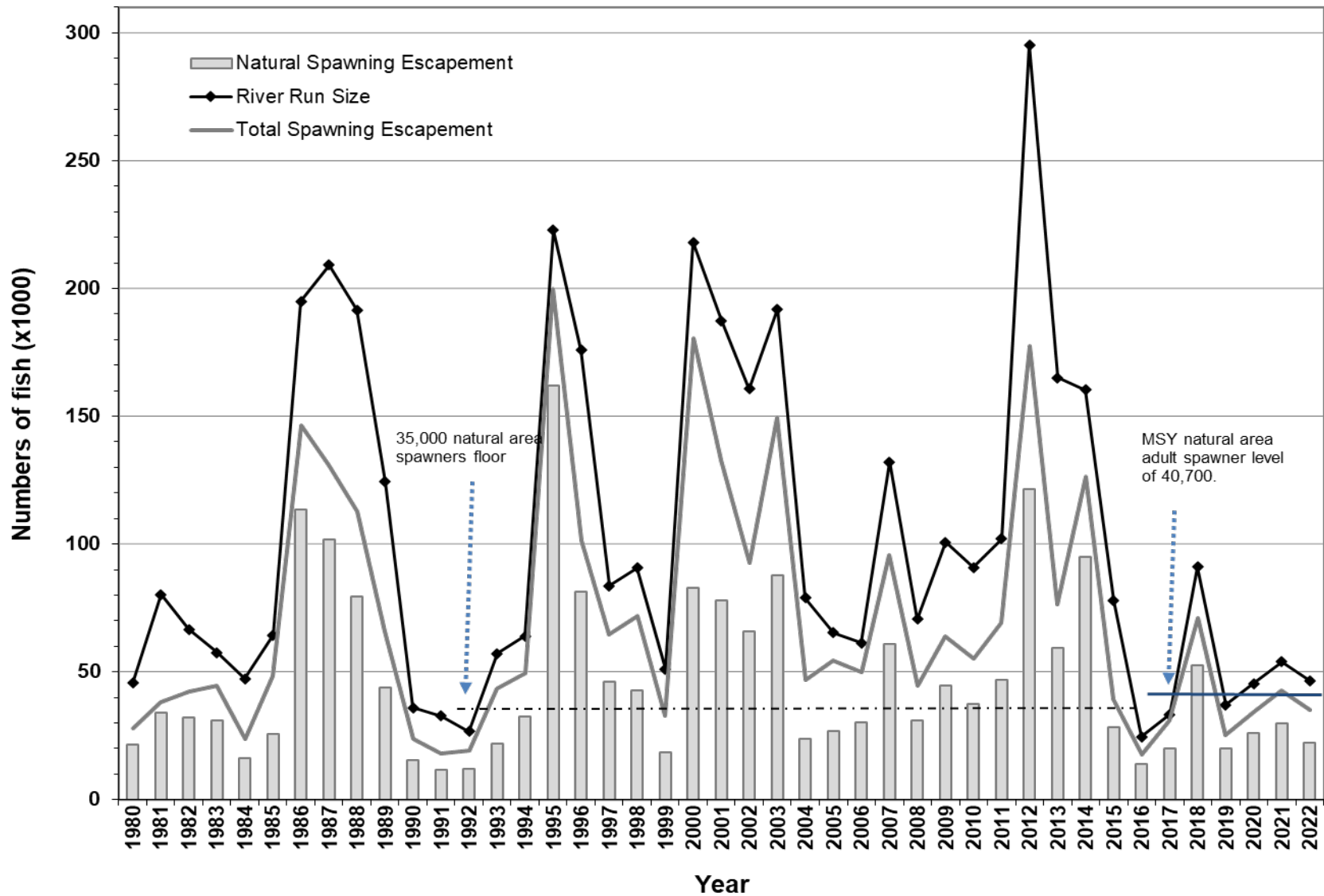


Figure II-2. Klamath River adult fall Chinook returns and spawning escapement, 1980-2022.

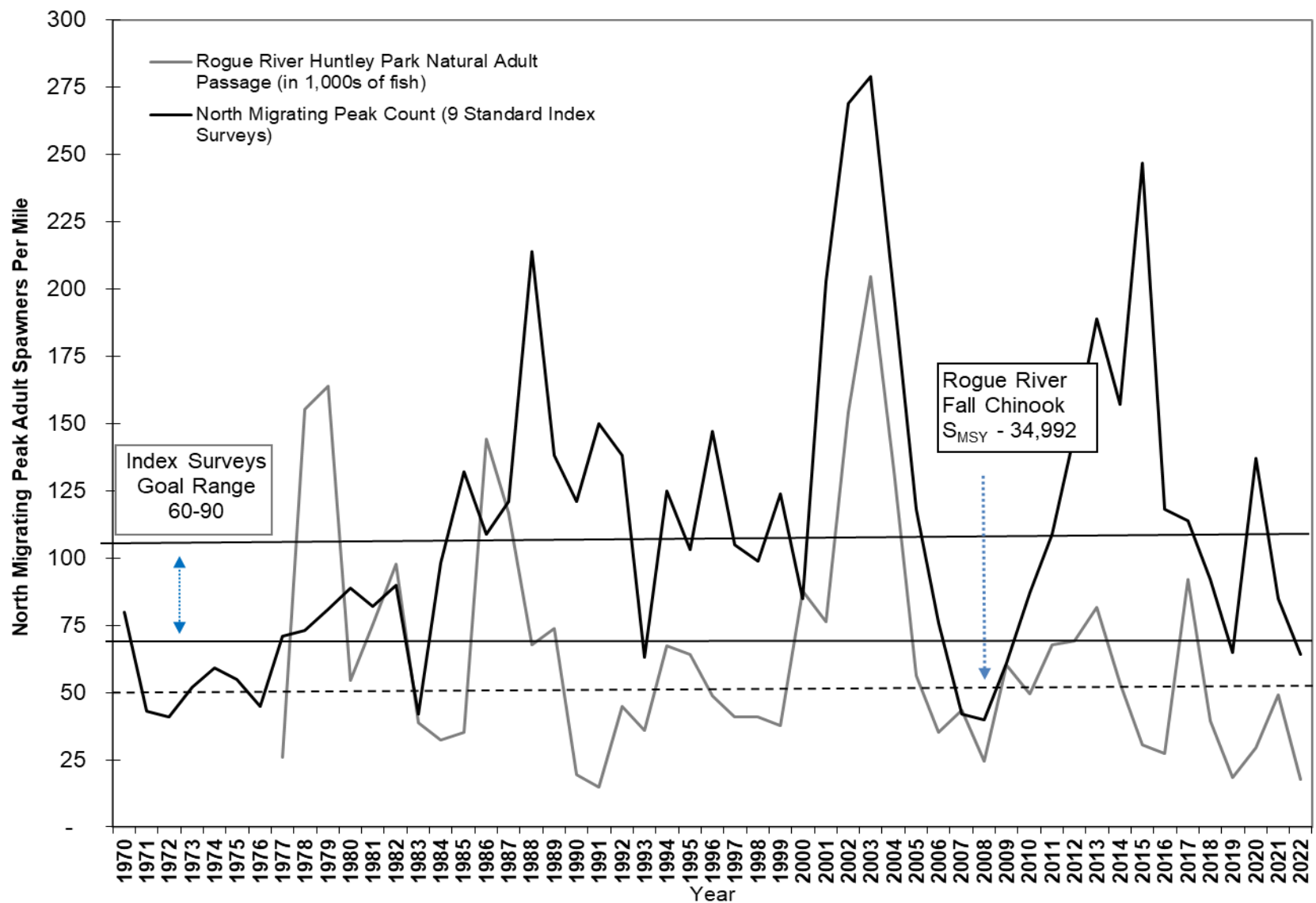


Figure II-3. Spawner indices for naturally produced Oregon coastal fall Chinook, 1970-2022.

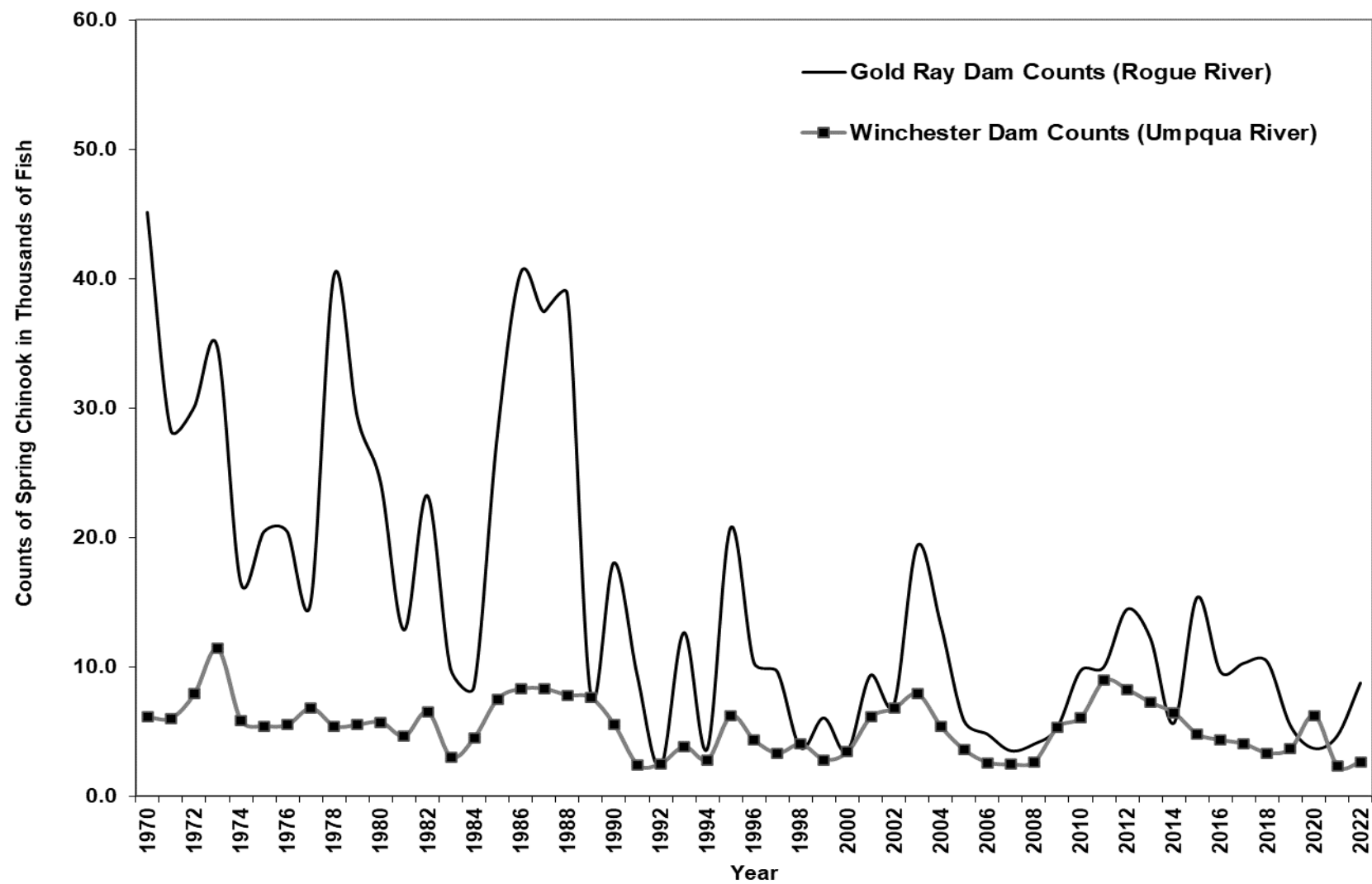


Figure II-4. Escapement indices for naturally produced Oregon coastal south/local migrating spring Chinook, 1970-2022.

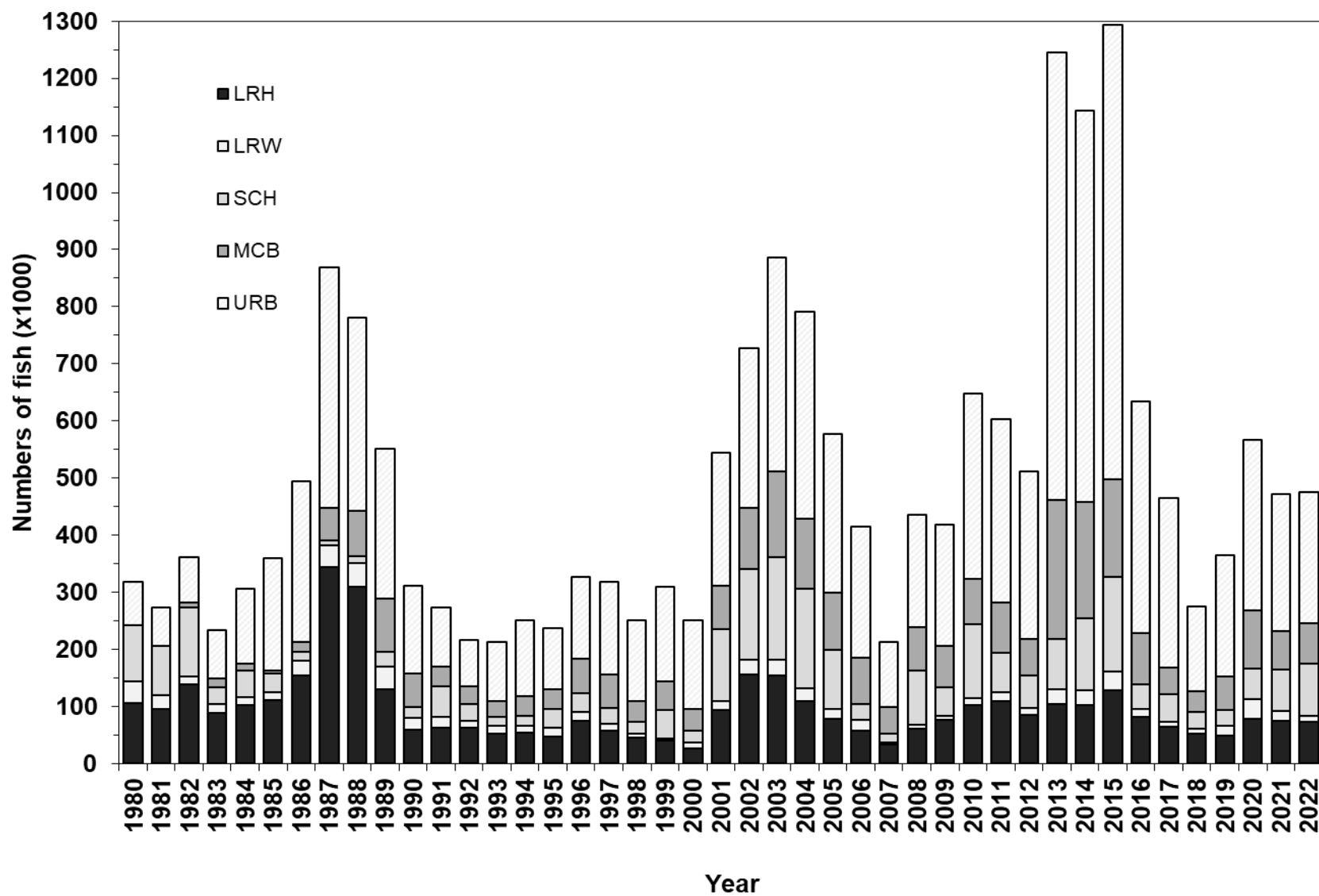


Figure II-5. Columbia River mouth adult returns of the five major fall Chinook stock groups, 1980-2022.

3 CHAPTER III – COHO SALMON MANAGEMENT

3.1 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 2022 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. A total exploitation rate not to exceed 16.0 percent for the Trinity River component of the SONCC coho ESU and a total exploitation rate not to exceed 15.0 percent for all other components of the SONCC coho ESU.
3. The LCN coho ESA consultation standard requirement of no greater than a 23.0 percent exploitation rate (marine and mainstem Columbia River combined).
4. The OCN coho allowable exploitation rate (marine and freshwater combined) of no greater than 15.0 percent for the north-central sub-aggregate and 30.0 percent for the northern and south-central sub-aggregates 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.

The harvest management matrix specified by the Salmon FMP (Amendment 13) is based on the on parental escapement levels and the marine survival for the three sub-aggregates of OCN stock. The total allowable OCN coho exploitation rate for marine and freshwater for those three sub-aggregates (listed above in item 4) are recommended by Amendment 13 and the matrix developed

by the OCN Coho Workgroup during their review of Amendment 13. The Workgroup 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 2.9 percent for SONCC coho in marine fisheries, 15.0 percent for OCN coho in marine and freshwater fisheries combined and 17.5 percent for LCN coho in marine and freshwater fisheries combined.

Total coastwide allowable harvest set preseason for treaty Indian troll fisheries, non-Indian commercial troll fisheries, and recreational fisheries were 52,000, 42,000, and 285,000 coho, respectively. 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 except for limited fisheries in 2007, 2009, 2014, 2021, and 2022. In 2022, a fishery from Cape Falcon to Humbug Mountain had a quota of 10,000 marked 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 52,000 coho (Table I-2).

Non-Indian commercial troll fisheries from Cape Falcon to the U.S./Canada border in 2022 had an overall quota of 32,000 marked coho. (Table I-1). The fisheries were restricted to mark-selective retention of coho.

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 2022, the recreational coho fisheries north of Cape Falcon operated with a mark-selective quota of 168,000 (Table I-3). The recreational fishery between Cape Falcon and the Oregon/California

border operated with a mark-selective quota of 100,000. After inseason adjustments, a non-mark-selective fishery with a quota of 26,800 occurred in September between Cape Falcon and Humbug Mountain (Table I-3).

Inside Harvest

Coho retention in all California fisheries was prohibited.

The 2022 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. 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 and nine rivers in 2022. The preliminary total catch estimate for these fisheries was 8,130 coho.

The 2022 Columbia River non-Indian commercial net fishery harvested 83,925 adult coho. Select Area fisheries in both Oregon and Washington accounted for 77,976 of the total 2022 Columbia River commercial coho catch. The Columbia River treaty Indian mainstem commercial gillnet catch was approximately 11,165 coho. Columbia River commercial coho fishery harvest was mostly mark-selective in 2022. Coho harvest information for Columbia River commercial and recreational fisheries are reported in Appendix B, Table B-21.

In 2022, all lower Columbia River recreational fisheries were mark-selective for coho, and barbless hooks were required in mainstem fisheries. The upriver boundary for the Buoy 10 fishery was at the Tongue Point, Oregon to Rocky Point, Washington line. The Buoy 10 fishery opened August 1 for Chinook and marked coho with a daily bag limit of two fish. Chinook were restricted to marked only through August 24 and Chinook retention was closed from August 31 through September and October 8 through December 31. The daily bag limit increased to three fish on September 15 through the end of the year but only one Chinook when retention allowed. The 2021 Buoy 10 effort totaled 85,187 angler trips (Table III-2) and resulted in a harvest of 8,847 adult coho. Historical Buoy 10 catch and effort data are provided in Appendix B, Table B-22. Recreational coho harvest estimates for Columbia River mainstem downstream of Bonneville Dam are reported in Appendix B, Table B-21.

Escapement and Management Performance

The overall postseason abundance estimate for OPI area stocks in 2022 was 896,800 compared to 1,126,900 in 2021, and to the recent ten-year average of 593,000 (Table III-3; Figure III-1). All Council-area coho fisheries and quota limits are included in Table I-6.

3.1.1 Central California Coast and Northern California Coho

Table B-7 displays natural area coho spawning stock estimates for nine watersheds that have only recently been reported in this document, although estimates are mostly unavailable for the 2022/23 escapements.

For SONCC coho, redd counts are conducted in Redwood Creek, four tributaries to Humboldt Bay, and the South Fork Eel River. During the 2021/22 season there were 941 redds counted in the Humboldt Bay tributaries and 617 redds counted in the South Fork Eel River (redd counts were not available for Redwood Creek). In Freshwater Creek, one of the tributaries to Humboldt Bay that is included in the redd count, there are also escapement estimates derived from mark-recapture surveys. In 2021/22, 872 coho were estimated to have entered Freshwater Creek. In the Klamath Basin, estimates are available for escapement to hatcheries. In 2022/23, a total of 3,390 coho returned to Trinity River Hatchery and 690 coho returned to Iron Gate Hatchery (hatchery spawners are not reported in Table B-7).

For CCC coho, Table B-7 displays escapement estimates for Ten Mile River, Pudding Creek, Noyo River, Big River and Little River. During the 2021/22 season, an estimated 663, 256, 1,332, 513, and 20 coho returned to these watersheds, respectively. Further south in the CCC coho ESU, redd counts are conducted in the Lagunitas Creek basin. In 2021/22 and 2022/23, 273 and 82 redds were counted, respectively. The 2022/23 spawning season for this watershed was not complete at the time of this report's publication, and the final redd count will likely change.

3.1.2 Oregon Coast Natural Coho

The 2022 preliminary estimate of natural spawner escapement to Oregon coastal river and lake systems from the Sixes River north (Oregon Coast ESU) was 163,500 adult coho. This compares to 242,400 adults in 2021. 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 second highest since 2014. The total estimate of the natural spawning population in 2022 was 169,800, 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 for the North-Central stock component of OCN coho is 13.8 percent which is less than the 15.0 percent maximum allowed under the OCN work group matrix. The maximum exploitation rate for the North and South-Central stock components of OCN coho was 30% and the preliminary postseason estimates were lower than the limit at 13.2 and 20.0 percent, respectively.

The preliminary postseason estimate of marine exploitation on SONCC coho is 2.1 percent, which is lower than the preseason projection of 2.9 percent. Postseason estimates of total exploitation rate for each of the SONCC coho populations are unavailable for comparison against the 16 percent exploitation rate limit for the Trinity River population and 15.0 percent limit for all other populations.

3.1.3 Oregon Coastal Hatchery Coho

The preliminary estimate of total coho returns to Oregon coastal public hatcheries in 2022 is 5,800 adults (Table III-1).

3.1.4 Columbia River Coho

The 2022 ocean escapement of adult early and late Columbia River coho stocks was 524,500 fish, compared to 665,600 adults in 2021 (Appendix B, Table B-21).

Preliminary postseason estimates of marine exploitation on LCN coho was 10.2 percent, which is lower than the preseason projected 13.8 percent. The total exploitation rate (marine and freshwater) was estimated at 11.6 percent, less than the 23.0 percent allowed (Table III-5).

3.2 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, 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 for Grays Harbor and Olympic Peninsula coho stocks include 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 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 2022 Council-area ocean fishery management, particularly north of Cape Falcon. All ocean non-tribal 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.

3.2.1 Willapa Bay Coho

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Historical terminal run size, harvest, and escapement data for Willapa Bay coho are presented in Appendix B, Table B-24.

In 2022, the Willapa Bay non-tribal commercial gillnet fishery harvested 47,232 coho. Based on the preseason forecast for a terminal run of 85,930 (54,078 hatchery and 31,852 natural) fish, the scheduled fisheries were expected to harvest approximately 31,195 total coho. The season consisted of 35 12-hour Chinook and coho directed openings from August 26 through November 16. Retention of both marked and unmarked coho was allowed. Unmarked Chinook retention was prohibited. There were no in-season emergency regulations issued for this fishery.

In 2022, the recreational fishery was open from July 2 through July 31 in Willapa Bay (Marine Area 2-1) concurrent with Marine Area 2 (ocean rules applied). From August 1, 2022, through January 31, 2023, Willapa Bay Marine Area 2-1 was scheduled to be open with a daily bag limit of 6 salmon, only 2 may be adults. The Willapa Bay Control Zone was closed to fishing from August 1 through September 30. Anglers were required to release unmarked Chinook. Anglers could fish with two poles, if they had a Two-Pole Endorsement.

In 2022, freshwater recreational fisheries in the Willapa Bay watersheds varied in duration but were generally open for salmon fishing as early as August 1, 2022 and remained open through January 31, 2023, with a daily bag limit of 6 salmon, only 2 may be adults. Anglers were required to release unmarked Chinook salmon. Barbless hooks were required when fishing for salmon. Anglers could fish with two poles, if they had a Two-Pole Endorsement.

In 2022, there were two emergency regulations issued in-season for the freshwater recreational fishery for the 2022 season.

- Recreational emergency regulation closed all coastal rivers for salmon and all other game fish effective October 8 due to historic, low stream flows.
- Recreational emergency regulation reopened coastal rivers to salmon fishing effective October 29.

In 2022, the expected coho catch in all recreational fisheries was 4,912 hatchery and wild coho combined based on preseason forecast abundances. Marine and freshwater recreational harvest estimates were unavailable for 2022.

In 2021 Marine Area 2-1 and freshwater recreational catch estimates totaled 4,003 coho, compared to the preseason catch projection of 5,268 coho.

Escapement and Management Performance

Willapa Bay coho were managed primarily for natural production. Estimates of natural spawning escapement for 2022 were unavailable. The most recent but still preliminary natural area spawner escapement estimate available was 31,369 in 2021, which was above the FMP escapement objective of 17,200 natural area spawners. Escapement to Willapa Bay hatcheries in 2021 was estimated at 49,163 coho, which met the WDFW escapement objective of 6,100 spawners.

The geometric mean of Willapa Bay coho natural spawning escapements in 2019, 2020, and 2021 is 19,842, 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 2021 and 2022; 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).

3.2.2 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 2021 terminal run size estimates for Grays Harbor coho, after execution of the ocean fishery were 72,082 natural origin and 43,352 hatchery origin coho. The 2022 terminal run size data are not available.

In 2021, treaty Indian and non-Treaty gillnet fisheries reported a combined harvest of 15,365 coho (natural, hatchery, and net-pen origin). The Chehalis Tribe did not conduct a commercial fishery for coho in 2021. The 2021 recreational fishery coho catch is estimated at 5,805, which due to concerns for wild steelhead, closed on December 1 rather than the scheduled end date of December 31. The 2021 pre-terminal fishery was conducted to limit the impact to Queets coho and other limiting coho stocks, while the Grays Harbor terminal fisheries were conducted with regulations designed to minimize impacts on Grays Harbor coho.

In 2022, the Quinault Indian Nation operated two separately scheduled gillnet fisheries for Chinook, coho, and chum in the Lower Humptulips and 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 Chinook in the Lower Chehalis side of the fishery. The combined Grays Harbor Treaty fishery catch of 22,100 coho was lower than the preseason expected total coho catch of 34,604 (~64 percent of the expected catch).

In 2022, the non-tribal gillnet fishery operated in two separately scheduled areas: Humptulips 2C and the Chehalis River 2A and 2D area. The Humptulips Area 2C fishery harvested two coho during a 36-hour period in week 43 (7:00 a.m. October 17 to 7:00 p.m. October 18) and a 12-hour period in week 44 (week of October 23). This is lower than the Area 2C preseason expected catch of 67 coho. The Chehalis River 2A and 2D area was scheduled for two seven-hour periods, one each in weeks 40 and 42, and seven 12-hours periods during weeks 43 through 45 with two days in weeks 43 and 45 and three in week 44. During weeks 40 and 42 the south channel was closed to provide additional protection to Chinook. During weeks 43 through 45 all areas of 2D were open with live boxes required and wild Chinook retention prohibited. The non-tribal gillnet fishery catch for areas 2A and 2D is 3,516 coho, which is lower than the preseason expected coho catch of 5,741 (~61 percent of the expected catch).

In 2022, the Chehalis Tribe did not conduct a commercial fishery for coho. Opportunities were limited by flows and concern for Chehalis River steelhead.

The 2022 recreational fisheries were conducted in three general areas: Marine Area 2-2, the Chehalis River including its tributaries, and the Humptulips River. Catch estimates are not currently available.

In 2022, a recreational fishery in the northern portion of Marine Area 2-2, Commercial Area 2C, was open from August 1 through September 15 with a daily bag limit of one adult salmon, wild coho must be released. From September 16 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 with a daily bag limit of one adult salmon; all Chinook must be released.

In 2022, 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 Fuller Bridge: August 1 through September 15 the daily bag limit was 6 salmon, all adults must be released. September 16 through October 31 the daily bag limit was 2 adult salmon, adult Chinook must be released. November, the daily bag limit was 1 adult salmon, all Chinook must be released. December, the daily bag limit was 1 adult salmon, all Chinook and wild coho must be released.
- Fuller Bridge to the South Elma Bridge (Wakefield Road): August 1 through September 15 the daily bag limit was 6 salmon, all adults must be released. In October, the daily bag limit was 2 adult salmon, adult Chinook must be released. In November, the daily bag limit was 1 adult, all Chinook must be released. In December, the daily bag limit was 1 adult, all Chinook and wild coho must be released.
- Upstream of the South Elma Bridge (Wakefield Road) to the high bridge on Weyerhaeuser 1000 line approximately 400 yards downstream from Roger Creek and tributaries. In October, the adult daily bag limit was 2 adult salmon, adult Chinook must be released. In November, the daily bag limit was 1 adult, all Chinook must be released. In December, the daily bag limit was 1 adult salmon, all Chinook and wild coho must be released.

In-season adjustments to these fisheries occurred in 2022 due to environmental conditions and impact concerns to wild steelhead. Recreational salmon fisheries in the Humptulips and Chehalis Rivers (including all tributaries) were closed from October 8 through October 28 due to abnormally low flows. These fisheries were then closed December 16 due to concerns for winter steelhead and did not reopen.

In 2022, the Humptulips River recreational fishery was scheduled to open for coho fishing on the following dates from the mouth to the confluence of the East and West forks:

- September 1 through September 30: a daily limit of 6 salmon, 2 of which may be adults, only 1 of which may be a wild Chinook; wild coho must be released.
- October 1 through October 31: a daily limit of 6 salmon, 2 of which may be adults and only 1 may be a Chinook; wild coho must be released.
- November 1 through December 31: a daily limit of 6 salmon, 1 of which may be an adult; all Chinook and wild coho must be released.

In-season adjustments to these fisheries occurred in 2022 due to environmental conditions and impact concerns to wild steelhead. Recreational salmon fisheries in the Humptulips and Chehalis (including all tributaries) were closed from October 8 through October 28 due to abnormally low flows. The mouth to the Highway 101 bridge fishery closed December 16 and from the Highway

101 bridge to the confluence of the East and West forks closed December 1 due to concerns for winter steelhead and did not reopen.

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 exceeds the FMP S_{MSY} of 24,426.

The 2021 preliminary escapement estimate for natural spawning coho is 62,762. The 2021 terminal run sizes are estimated at 72,082 natural-origin coho and 43,352 hatchery-origin coho. The returns of hatchery-origin coho to Grays Harbor hatchery programs were sufficient to provide for 2022 coho production goals.

The 2022 spawning escapement and terminal run size estimates for Grays Harbor coho are currently unavailable. Coho from this return are still spawning and are being enumerated at this time. The 2022 escapement has not been determined, but more than 1,000 natural origin fish were taken for hatchery broodstock.

The geometric mean of Grays Harbor coho natural spawning escapements in 2019, 2020, and 2021 is 35,710, which exceeded 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 2021 and 2022; 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).

3.2.3 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 23,546 coho were harvested by the gillnet fishery during the 2022 season.

Freshwater sport fisheries are regulated by the Quinault Indian Nation (QIN) within the boundaries of the Quinault Reservation and the Washington Department of Fish and Wildlife (WDFW) and Olympic National Park (ONP) regulate freshwater fisheries within their respective jurisdictions. Salmon-directed sport fisheries regulated under Quinault Indian Nation authority occur within the Lower Quinault River and its tributaries, while WDFW and ONP regulate sport fisheries upstream of Lake Quinault. Coho harvest during these fisheries is not available for 2022. In 2021, Sport fisheries regulated under QIN regulations harvested 1,958 coho and sport fisheries regulated under WDFW regulations harvested 34 coho.

Escapement and Management Performance

Quinault River coho were managed for hatchery production. Escapement estimates for Quinault River coho in 2022 were unavailable. The Quinault National Fish Hatchery egg take objectives for 2022 were achieved.

3.2.4 Queets River Coho

Inside Harvest

Historical terminal run size, harvest, and escapement for Queets River coho are presented in Appendix B, Table B-31.

The 2022 Queets sport fishery within the Quinault Indian Reservation was open from September 1 through October 21 when it was closed by emergency regulation in response to severe drought conditions. The fishery was reopened on November 3 with a 2 coho daily bag limit and no retention of Chinook salmon. The 2022 sport catch estimates are not available. The 2021 Tribal-regulated sport catch estimate was 788 adult coho.

State regulated recreational fisheries, outside of the Quinault Indian Reservation, on Clearwater and Salmon rivers occurred from September 1 until October 8 when these fisheries closed by emergency regulations. One adult salmon per day was allowed during these fisheries. In Queets River within the ONP, the fisheries were opened September 1 and closed by emergency regulations on October 8, anglers were required to release all wild fish encountered. Catch during 2022 State and ONP regulated recreational fishery is currently not available. During State and ONP regulated recreational fisheries in 2021, 324 coho were harvested in the Queets River basin.

Escapement and Management Performance

The spawning escapement objective in the FMP for Queets River coho is a range of 5,800-14,500 natural adult spawners.

In 2022, comanagers agreed to a spawning escapement objective of 11,819 natural origin adult coho. The preliminary 2022 spawning escapement estimate is not available.

In 2021, the comanagers had agreed to a spawning escapement objective of 3,154 with a forecasted ocean January age-3 abundance of only 4,827 (3,919 ocean age-3). The 2021 final natural coho escapement estimate was 5,752 adult fish. The final natural coho escapement estimates in 2019 and 2020, were 1,700 and 4,181 respectively.

The geometric mean of Queets River coho escapement in 2019, 2020 and 2021 was 3,445, which is 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. A rebuilding plan was adopted by the Council in September 2019. The stock continues to meet the criteria for 'overfished' status (Table III-7). Estimates of Queets River coho exploitation rates were not available for 2021 and 2022; 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 (Table III-7).

3.2.5 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 2022 forecast for the terminal runsize of Hoh River natural coho was 3,922.

In 2022, the tribal fishery targeted 29.4 percent of the terminal run with commercial and ceremonial and subsistence fisheries. The treaty Indian gillnet fishery occurred from the week of September 26 to the week of December 5 as described in Chapter II under the section labeled Hoh River Chinook. The tribal commercial fishery harvested 2,101 natural coho and 330 hatchery coho for a total of 2,431 coho.

In 2022, the non-tribal recreational fishery was open September 16 through December 15, from the Olympic National Park boundary upstream to the Oxbow Campground boat launch, and open October 16 through December 15 from the Oxbow Campground upstream to Morgans Crossing Boat Launch. Due to extreme low water conditions, emergency regulation closed the Hoh River to all recreational fishing October 8 through October 30. Starting December 1, all fishing from a floating device in the Hoh River was prohibited. During September 16 through November 30, the daily bag limit was 2 salmon, of which only 1 adult could be retained. During December 1 through December 15, the daily bag limit was 1 coho. Only one single-point barbless hook was allowed. A catch estimate for the 2022 coho recreational fishery was not yet available.

Escapement and Management Performance

The preliminary 2022 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 2019, 2020, and 2021 was 3,541, which exceeds 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 2021 and 2022; however, fisheries in earlier years resulted in exploitation rates well below the MFMT (0.65); therefore, Hoh River coho should not be considered subject to overfishing (Table III-7).

3.2.6 Quillayute River Coho

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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. The 2022 Quileute Tribe's commercial, ceremonial, and subsistence fisheries harvested 861 summer coho (510 hatchery and 351 natural). The Quileute Tribe restricted the Indian Gill Net (IGN) fishery to 7¾ inch minimum mesh, set net only, 25

fathom maximum length if the Sol Duc River flow gauge went below 15.30 feet for coho and Chinook conservation measures. The 2022 recreational fishery catch estimates are not yet available for summer coho; a recent three-year average is used as a placeholder for 2022 in the Appendix B tables until those estimates are available.

In 2022, tribal fall fisheries were reduced from previous years for conservation reasons. The Quileute Tribe greatly reduced the total number of days fished in their 2022 fall IGN fishery by being closed to fishing weeks 42 through 44 due to extreme low flows and fish compression in the lower Quillayute River. Weeks 36 through 40 were restricted to weekly open periods to only two half days (6 a.m.-6 p.m.) and week 41 was one half day only. Additionally, week 37 through 41 was restricted to 7¾ inch minimum mesh, set net only, 25 fathom maximum length and weeks 45 through 46 were restricted to 6-inch minimum mesh. The 2022 tribal harvest of fall coho was 3,575 (1,503 hatchery and 2,072 natural). Fall coho taken in the ceremonial and subsistence fishery are included in the IGN catch.

In 2022, recreational fall fisheries were reduced from previous years for conservation reasons. The preliminary 2022 recreational fishery catch estimate is 2,147 fall coho (1,577 hatchery and 570 natural) based on creel surveys November and December and recent 3-year catch record card average for August 16 through October 7).

In-river recreational fisheries were closed to all fishing April 1 through April 30 consistent with the preseason management plan and were also closed by emergency regulation March 1 through 30 (concerns over low steelhead run) and October 8 through October 30, 2022 (concerns over extreme low flows).

The 2022 recreational coho fishery in the Quillayute (park boundary to confluence of Bogachiel and Sol Duc) and Sol Duc (mouth to Sol Duc hatchery) consisted of:

- Preseason rules included a season of February 1 through March 31 and May 1 through August 31, up to 2 adults retained, release wild Chinook, wild coho, and sockeye. Emergency rules to protect steelhead closed the Quillayute and Sol Duc rivers to all sport fishing for the month of March.
- Preseason rules included a season of September 1 through December 15, up to 3 adult salmon retained, release wild coho through September 15, retention of 1 wild coho allowed as part of the 3 fish limit, September 16 through December 15 release sockeye.
- The Quillayute River was closed Mondays and Tuesdays August 29 through October 11 to avoid gear conflicts with tribal fisheries during low flows. Emergency rules due to extreme low flows closed the rivers to all recreational fishing October 8 through October 30.

The 2022 recreational coho fishery in the Bogachiel (mouth to highway 101 bridge), Dickey (ONP boundary to confluence with East and West Forks) and Calawah (mouth to highway 101 bridge) was open:

- July 1 through August 31 with up to 2 adult salmon allowed, release wild coho and wild Chinook.

- Preseason schedule included a season of September 1 through December 15 with a limit of 1 adult salmon, release wild adult coho through September 15.
- Emergency rules due to extreme low flows closed the rivers to all recreational fishing October 8 through October 30.

Escapement and Management Performance

The 2022 summer coho hatchery rack return was 4,786, which exceeds the goal of 300 hatchery summer coho. The 2022 wild summer coho escapement estimate was 432 fish.

In 2022, the preliminary escapement estimate for Quillayute natural fall coho was 13,000, which includes 21 brood stock fish. The Sol Duc Hatchery rack return for fall coho was 14,462 adults and 280 jacks. Based on the WDFW In-Season Hatchery Escapement Report the fall coho egg take goal for Sol Duc Hatchery was met with a total of 843,500 eggs.

The geometric mean of natural Quillayute fall coho escapement in 2020, 2021, and 2022 was 9,980, which exceeds the MSST of 4,725; therefore, Quillayute fall coho should not be considered overfished. Estimates of Quillayute fall coho exploitation rates were not available for 2021 and 2022; however, fisheries in earlier years resulted in exploitation rates below the MFMT (0.59); therefore, Quillayute Fall coho should not be considered subject to overfishing (Table III-7).

3.3 *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 tribal, federal, and state 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 Tribal/WDFW 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]).

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 2022, the objectives and categorical status under the PST Southern Coho Management Plan were as follows:

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Historical coho catches in the Puget Sound recreational fishery beginning in 1971 are listed in Appendix B, Table B-40. Catch estimates for the 2022 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. 2022 postseason estimates were not available for SUS harvest impacts on Puget Sound coho stocks; therefore, the 2022 preseason exploitation rate objectives could not be evaluated. Preliminary 2022 escapement information was not available for natural Puget Sound coho.

3.3.1 Strait of Juan de Fuca Coho

The geometric mean of Strait of Juan de Fuca natural coho escapement (combined Western and Eastern; the current stock designation) in 2019, 2020, and 2021 was 9,374, which was above the MSST of 7,000 but below the S_{MSY} estimate of 11,000. In June 2018, NMFSs published an overfished designation for Strait of Juan de Fuca coho based on the geometric mean of escapement in 2014-16 of 6,842, and a rebuilding plan was adopted by the Council in September 2019. The stock now meets the criteria for ‘not overfished/rebuilding’ status. Estimates of Strait of Juan de Fuca coho exploitation rates were not available for 2021 and 2022; 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).

3.3.2 Hood Canal Coho

The geometric mean of Hood Canal natural coho escapement in 2019, 2020, and 2021 was 16,870, 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 2020 and 2021; however, fisheries in earlier years resulted in exploitation rates well below the MFMT (0.65); therefore, Hood Canal coho should not be considered subject to overfishing (Table III-7).

3.3.3 Skagit River Natural Coho

The geometric mean of Skagit natural coho escapement in 2019, 2020, and 2021 was 29,479, 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 2020 and 2021; however, fisheries in earlier years have resulted in exploitation rates below the MFMT (0.60) therefore, Skagit coho should not be considered subject to overfishing (Table III-7).

3.3.4 Stillaguamish River Natural Coho

The geometric mean of Stillaguamish natural coho escapement in 2019, 2020, and 2021 was 21,970, 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 2020 and 2021; 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).

3.3.5 Snohomish River Natural Coho

The geometric mean of Snohomish natural coho escapement in 2019, 2020 and 2021 was 55,154, which was above the MSST of 31,000 and above the S_{MSY} estimate of 50,000. In June 2018, NMFS published an overfished designation for Snohomish natural coho based on the geometric mean of escapement in 2014-16 of 29,677, and a rebuilding plan was adopted by the Council in September 2019. The stock now meets the criteria for ‘rebuilt’ status. Estimates of Snohomish coho exploitation rates were not available for 2020 and 2021; 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).

3.4 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 2022 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 projected SUS fishery exploitation rate on Interior Fraser coho was 9.5 percent (4.8 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.

3.5 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 2022 were met for OCN and LCN coho stocks (Table III-6). The 2022 data needed to assess compliance with ESA consultation standards and FMP conservation objectives for SONCC coho populations and most Washington coastal, and Puget Sound coho stocks were unavailable.

3.6 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 SDC as required by the FMP. Stock specific reference points and recent year estimates for relevant stocks are presented in Table III-7.

In June 2018, NMFS published an overfished designation for Queets, Strait of Juan de Fuca, and Snohomish natural coho based on the geometric mean of escapement in 2014 – 2016. A rebuilding plan was adopted by the Council in September 2019 for each of these stocks. Since then, Queets and Strait of Juan de Fuca natural coho have continued to meet the criteria for overfished status, while Snohomish natural coho have met the criteria for ‘not overfished/rebuilding’ since 2020. Based on spawner escapement estimates for 2019 – 2021, Snohomish natural coho now meet the criteria for ‘rebuilt’ status, Strait of Juan de Fuca coho now meet the criteria for ‘not overfished/rebuilding,’ status, and Queets natural coho continue to meet the criteria for ‘overfished’ status. Exploitation rate estimates for these stocks are not available for 2021 and 2022. The most recent year where exploitation rates are available is 2020, and no stocks were subject to overfishing.

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

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 ^{a/}			Inside	Ocean
	Private	Public	STEP ^{b/}	Count ^{c/} (North Umpqua)	Lakes	Rivers	Total	Harvest Impacts ^{d/}	Escapement to Oregon Coast ^{a/}
1970-1975	-	-	-	-	-	-	-	-	-
1976-1980	26.1	19.0	-	0.4	4.0	26.6	30.6	9.1	79.9
1981-1985	176.8	18.0	-	2.2	7.2	46.1	53.3	12.9	263.2
1986-1990	154.3	26.9	1.3	3.6	6.2	37.1	43.3	15.2	244.6
1991-1995	35.1	26.3	1.9	3.2	7.2	43.9	51.1	13.9	103.5
1996-2000	-	16.9	0.5	6.4	11.7	40.4	52.0	4.2	80.0
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	-	1.1	0.0	0.2	6.7	67.8	74.5	1.1	76.9
2019	-	1.6	0.0	0.4	7.4	87.7	95.1	1.6	98.7
2020	-	4.2	0.0	0.2	9.7	101.7	111.5	2.5	118.3
2021	-	6.7	0.0	0.4	19.6	222.8	242.4	8.7	258.2
2022 ^{e/}	-	5.8	0.0	0.0	8.1	155.5	163.5	10.4	179.8

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 2022 Buoy 10 recreational fisheries (all data are preliminary).^{a/}

Week Number	Ending Date of Period	Angler Trips	Catch ^{b/}		Catch Per Trip
			Chinook	Coho	
32	Aug.-7	7,078	1,610	150	0.25
33	Aug.-14	10,665	2,549	339	0.27
34	Aug.-21	24,073	9,410	1,227	0.44
35	Aug.-28	27,720	12,055	3,627	0.57
36	Sept.-4	6,768	2,726	2,179	0.72
37	Sept.-11	0	0	0	0.00
38	Sept.-18	3,625	4	687	0.19
39	Sept.-25	2,943	0	339	0.12
40	Oct.-2	1,020	1	167	0.16
41	Oct.-9	778	0	76	0.10
42	Oct.-16	376	0	56	0.15
43-44	Oct.-30	141	0	0	0.00
Total		85,187	28,355	8,847	0.44

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. Youngs Bay bubble closure in effect August 1 through September 15. Fishery opened August 1 for Chinook and marked coho with a two fish daily-bag-limit. Chinook were restricted to marked only through August 24 and Chinook retention was closed from August 31 through September 30 and October 8 through December 31. All angling was closed September 2-14. The daily-bag-limit increased to three fish on September 15 through the end of the year but only one Chinook when retention allowed.

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.^{a/}

Year or Avg.	Oregon and California Coastal Returns							
	Ocean Fisheries ^{b/}		Hatcheries and			Columbia River		Ocean Exploitation
	Troll	Sport	Freshwater Harvest ^{c/}	OCN Spawners ^{d/}	Private Hatcheries	Returns	Abundance ^{e/}	Rate Based on OPI Abundance ^{f/}
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
1996-2000	8.9	35.6	33.0	57.5	-	259.4	391.2	0.1
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	198.5	-	463.5	904.5	0.21
2005	10.5	58.2	42.7	165.1	-	354.7	629.9	0.11
2006	4.5	47.5	29.5	133.1	-	409.7	674.1	0.08
2007	26.2	128.5	10.9	71.6	-	349.0	631.3	0.25
2008	0.6	26.4	16.0	180.2	-	520.8	769.8	0.04
2009	27.7	201.2	16.5	265.5	-	760.2	1,341.3	0.17
2010	5.8	48.8	18.5	287.7	-	466.5	848.4	0.06
2011	4.2	54.7	20.0	361.3	-	378.1	836.4	0.07
2012	4.7	45.5	18.5	104.9	-	152.4	311.3	0.16
2013	8.4	48.3	26.5	136.8	-	252.8	494.1	0.11
2014	35.6	197.4	42.0	362.4	-	1,019.5	1,724.8	0.14
2015	11.7	84.4	11.8	61.6	-	169.5	350.5	0.27
2016	2.8	31.7	11.4	83.5	-	203.6	340.3	0.10
2017	2.1	50.0	3.9	66.2	-	235.9	362.4	0.14
2018	1.5	53.8	3.1	83.8	-	137.2	265.8	0.21
2019	5.0	135.4	4.3	97.8	-	212.4	454.3	0.31
2020	2.3	40.2	8.1	111.8	-	338.6	499.7	0.08
2021	5.0	158.6	21.1	251.1	-	665.7	1,126.9	0.15
2022 ^{g/}	8.4	127.4	15.8	169.8	-	524.5	896.8	0.15

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 Coho Spawner Population Estimates in Thousands of Spawners by Stock Component ^{a/}					Adult Coho Spawners Per Spawner Habitat Mile				
	Northern ^{b/}	North	South	Southern ^{e/}	Coast- wide	Northern ^{b/}	North	South	Southern ^{e/}	Coast-wide ave.
		Central ^{c/}	Central ^{d/}				Central ^{c/}	Central ^{d/}		
1990-1995	4.3	9.8	28.3	2.3	44.4	5	8	17	6	11
1996-2000	7.0	10.1	32.9	5.6	55.5	8	9	20	14	14
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	25.8	198.5	32	36	63	63	48
2005	16.5	51.4	86.7	10.5	165.1	18	44	53	26	40
2006	24.1	21.2	83.5	4.3	133.1	27	18	51	10	33
2007	17.5	12.3	36.5	5.3	71.6	19	11	22	13	17
2008	25.6	68.1	86.0	0.5	180.2	28	59	53	1	44
2009	48.1	86.4	128.2	2.8	265.5	54	74	79	7	65
2010	55.0	56.5	171.9	4.3	287.7	61	49	106	10	70
2011	45.9	119.1	191.3	5.0	361.3	51	102	118	12	88
2012	7.5	33.8	57.8	5.8	104.9	8	29	36	14	26
2013	11.0	39.7	73.7	12.4	136.8	12	34	45	30	33
2014	67.4	122.0	170.4	2.7	362.4	75	105	105	6	89
2015	6.7	22.7	27.7	4.5	61.6	7	19	17	11	15
2016	18.7	26.5	30.7	7.6	83.5	21	23	19	18	20
2017	13.6	22.8	24.9	4.8	66.2	15	20	15	12	16
2018	8.0	22.0	44.5	9.2	83.8	9	19	27	23	20
2019	22.3	20.1	52.8	2.7	97.8	25	17	33	7	24
2020	21.5	30.8	57.6	1.8	111.8	24	27	36	4	27
2021	42.8	88.6	110.8	9.0	251.2	48	76	68	22	61
2022 ^{f/}	46.7	70.0	45.3	7.9	169.8	52	60	28	19	41

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/ Preliminary.

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

Year	OCN Fishery Impact			LCN Fishery Impact		
	(Total Marine and Freshwater Exploitation Rate)			(Total Marine and Freshwater Exploitation Rate)		
	Conservation Objective ^{a/}	Preseason Projection	Postseason Estimate ^{b/}	Conservation Objective ^{c/}	Preseason Projection	Postseason Estimate ^{b/}
1990-1995	≤0.20	0.274	0.366	-	-	-
1996-2000	≤0.13-≤0.20	0.105	0.316	-	-	-
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 ^{d/}	0.179
2006	≤0.15	0.096	0.076	≤0.15	0.10 ^{d/}	0.146
2007	≤0.20	0.113	0.118	≤0.20	0.13 ^{d/}	0.208
2008	≤0.08	0.069	0.019	≤0.08	0.080	0.073
2009	≤0.15	0.130	0.067	≤0.20	0.20	0.187
2010	≤0.15	0.112	0.045	≤0.15	0.150	0.107
2011	≤0.15	0.132	0.059	≤0.15	0.150	0.111
2012	≤0.15	0.150	0.183	≤0.15	0.150	0.140
2013	≤0.30	0.231	0.149	≤0.15	0.150	0.143
2014	≤0.30	0.253	0.141	≤0.225	0.225	0.164
2015	≤0.15	0.149	0.198	≤0.23	0.230	0.244
2016	≤0.20	0.131	0.087	≤0.18	0.130	0.089
2017	≤0.30	0.093	0.116	≤0.18	0.114	0.108
2018	≤0.15	0.129	0.127	≤0.18	0.162	0.146
2019	≤0.15	0.137	0.147	≤0.23	0.180	0.193
2020	≤0.15	0.116	0.074	≤0.18	0.169	0.065
2021	≤0.15	0.128	0.113	≤0.30	0.101	0.104
2022 ^{e/f/}	≤0.15	0.150	0.155	≤0.23	0.175	0.116

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/ For 2022, the 15% ER limit applies to the North-Central stock component. The limit for the North and South-Central stock components was 30%. Preliminary postseason total exploitation rates were 13.2%, 13.8%, and 20.0% for the North, North-Central, and South-Central stock components, respectively.

f/ Preliminary.

TABLE III-6. Performance of coho salmon stocks in relation to 2022 preseason conservation objectives (preliminary data).
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System and Stock	2022 FMP Conservation/Management Objectives	2022 Achievement
OPI Area Coho		
(Columbia River and coastal stocks south of Leadbetter Point)	Natural spaw ner escapement objectives as provided below ; meet hatchery egg-take goals; meet treaty Indian obligations.	Hatchery egg-take goals achieved. Treaty obligations met.
Southern Oregon/ Northern California (Threatened) and CCC (Endangered)	No directed coho fisheries or retention of coho south of the OR/CA border. Total exploitation $\leq 16\%$ for the Trinity River population and $\leq 15\%$ for all other populations.	No coho retention w as allow ed south of the California/Oregon border. Postseason total exploitation rate estimates unavailable. Preliminary postseason ocean exploitation rate estimate of 2.1%.
OCN	Combined marine and freshw ater exploitation rate $\leq 15.0\%$ for the North-Central stock component and $\leq 30.0\%$ for the North and South-Central stock components.	Preliminary postseason estimate is 15.5% for the OCN aggregate and 13.2%, 13.8%, and 20.0% for the North, North-Central, and South-Central stock components.
LCN-Columbia River Natural (Threatened)	Combined marine and mainstem Columbia River exploitation rate $\leq 23.0\%$.	Preliminary postseason estimate of 11.6% exploitation rate in marine and mainstem Columbia River fisheries.
Washington Coast Coho		
	Natural spaw ner 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 spaw ners.	Escapement estimate w as unavailable; preseason projection w as 43,289 ocean escapement.
Grays Harbor	24,400 natural adult spaw ners.	Escapement estimate w as unavailable; preseason projection w as 118,886 ocean escapement.
Queets	5,800 comanager adult spaw ner agreement.	Escapement estimate w as unavailable; preseason projection w as 15,214 ocean escapement.
Hoh	2,000 adult spaw ners.	Escapement estimate w as unavailable; preseason projection w as 3,922 ocean escapement.
Quillayute Fall	6,300 adult spaw ners.	Preliminary postseason escapement estimate w as 13,000.

TABLE III-6. Performance of coho salmon stocks in relation to 2022 preseason conservation objectives (preliminary data).
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System and Stock	2022 FMP Conservation/Management Objectives	2022 Achievement
Puget Sound Coho	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 2022 natural spawner escapements. Hatchery egg-take goals will be met.
Strait of Juan de Fuca	≤20% total exploitation rate.	Preseason expectation of a 10.9% total exploitation rate; postseason estimate unavailable.
Hood Canal	≤45% total exploitation rate.	Preseason expectation of a 44.1% total exploitation rate; postseason estimate unavailable.
Skagit	≤60% total exploitation rate.	Preseason expectation of a 43.2% total exploitation rate; postseason estimate unavailable.
Stillaguamish	≤50% total exploitation rate.	Preseason expectation of a 35.9% 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).

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						
							3-yr Geo									MFMT
	2017	2018	2019	2020	2021	2022	Mean	MSST	S _{MSY}	2017	2018	2019	2020	2021	2022	
Willapa Bay	11,379	17,228	15,115	16,476	31,369	NA	19,842	8,600	17,200	0.34	0.35	0.39	0.33	NA	NA	0.74
Grays Harbor	26,907	49,622	30,468	23,814	62,762	NA	35,710	18,320	24,426	0.32	0.22	0.39	0.29	NA	NA	0.65
Queets ^{a/}	5,232	2,631	1,700	4,181	5,752	NA	3,445	4,350	5,800	0.23	0.23	0.57	0.22	NA	NA	0.65
Hoh	4,478	2,463	2,445	2,840	6,396	NA	3,541	1,890	2,520	0.43	0.34	0.57	0.49	NA	NA	0.65
Quillayute Fall	7,474	6,091	6,852	7,695	9,938	13,000	9,980	4,725	6,300	0.42	0.30	0.37	0.16	NA	NA	0.59
Juan de Fuca ^{a/}	5,530	5,470	4,625	8,548	20,837	NA	9,374	7,000	11,000	0.05	0.08	0.12	0.07	NA	NA	0.60
Hood Canal	23,871	7,512	7,884	17,312	35,178	NA	16,870	10,750	14,350	0.35	0.57	0.46	0.29	NA	NA	0.65
Skagit	20,184	19,047	14,246	23,808	75,532	NA	29,479	14,875	25,000	0.09	0.49	0.48	0.43	NA	NA	0.60
Stillaguamish	6,099	23,937	12,887	21,555	38,176	NA	21,970	6,100	10,000	0.12	0.22	0.20	0.13	NA	NA	0.50
Snohomish ^{b/}	18,195	58,135	40,314	42,675	97,523	NA	55,154	31,000	50,000	0.21	0.25	0.17	0.11	NA	NA	0.60

a/ Categorized as overfished in 2018. Rebuilding plan in place.

b/ Categorized as overfished in 2018, categorized as 'not overfished-rebuilding in 2021. Rebuilding plan in place.

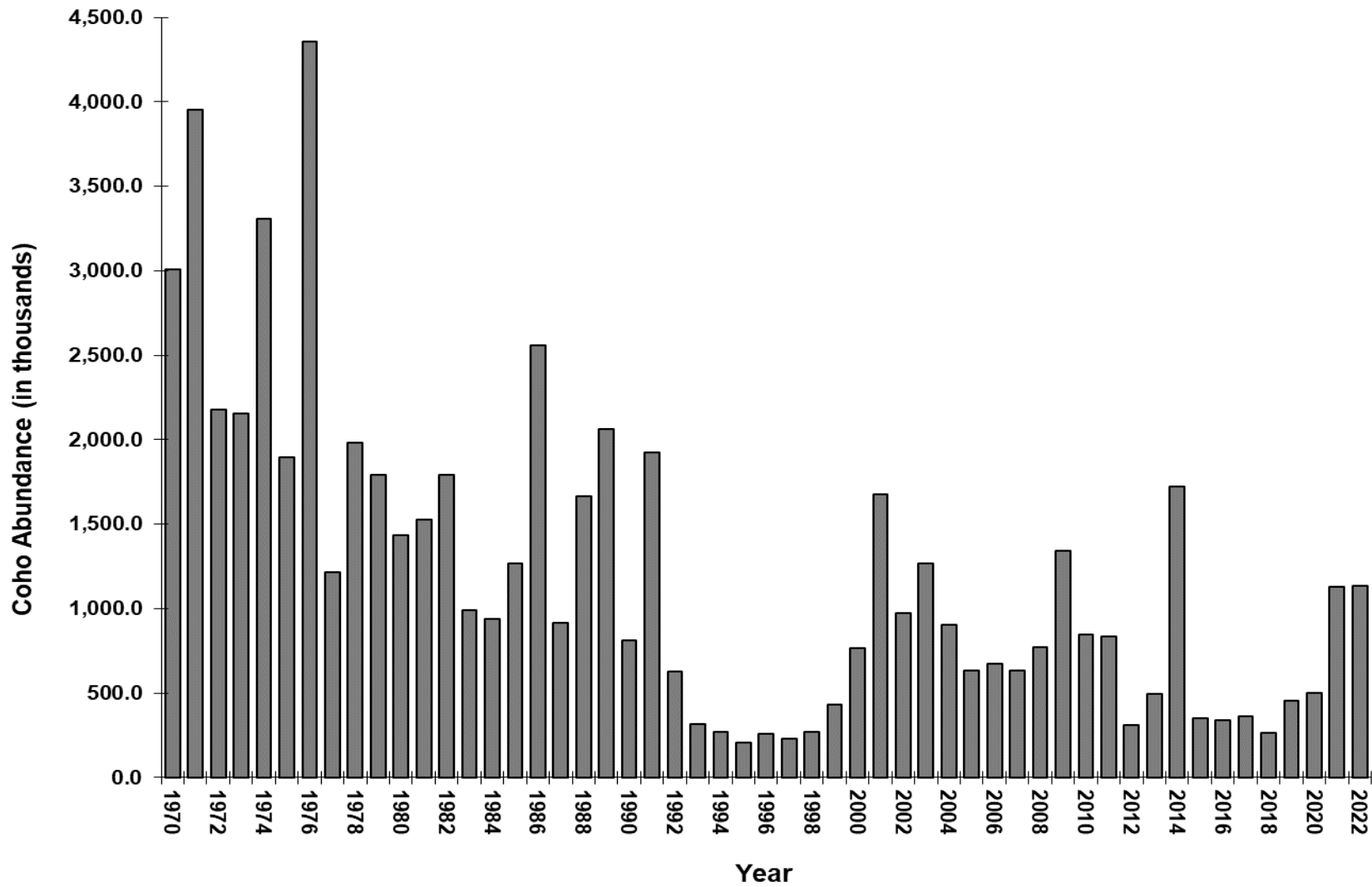


Figure III-1. Oregon Production Index (OPI) area coho abundance estimates, 1970-2022.

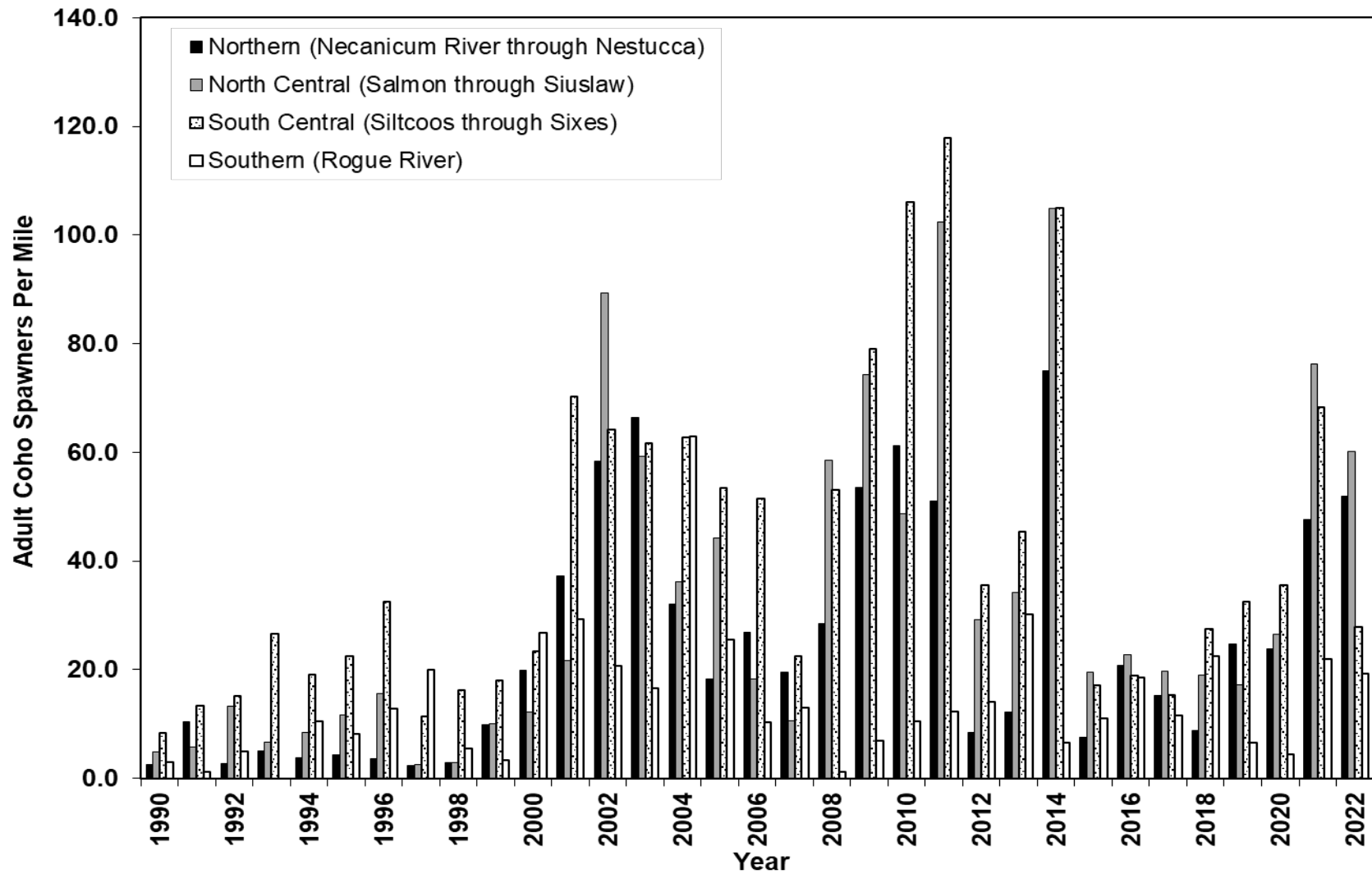


Figure III-2. Oregon coastal natural (OCN) adult coho spawners per habitat mile by coastal region based on SRS accounting methods, 1990-2022.

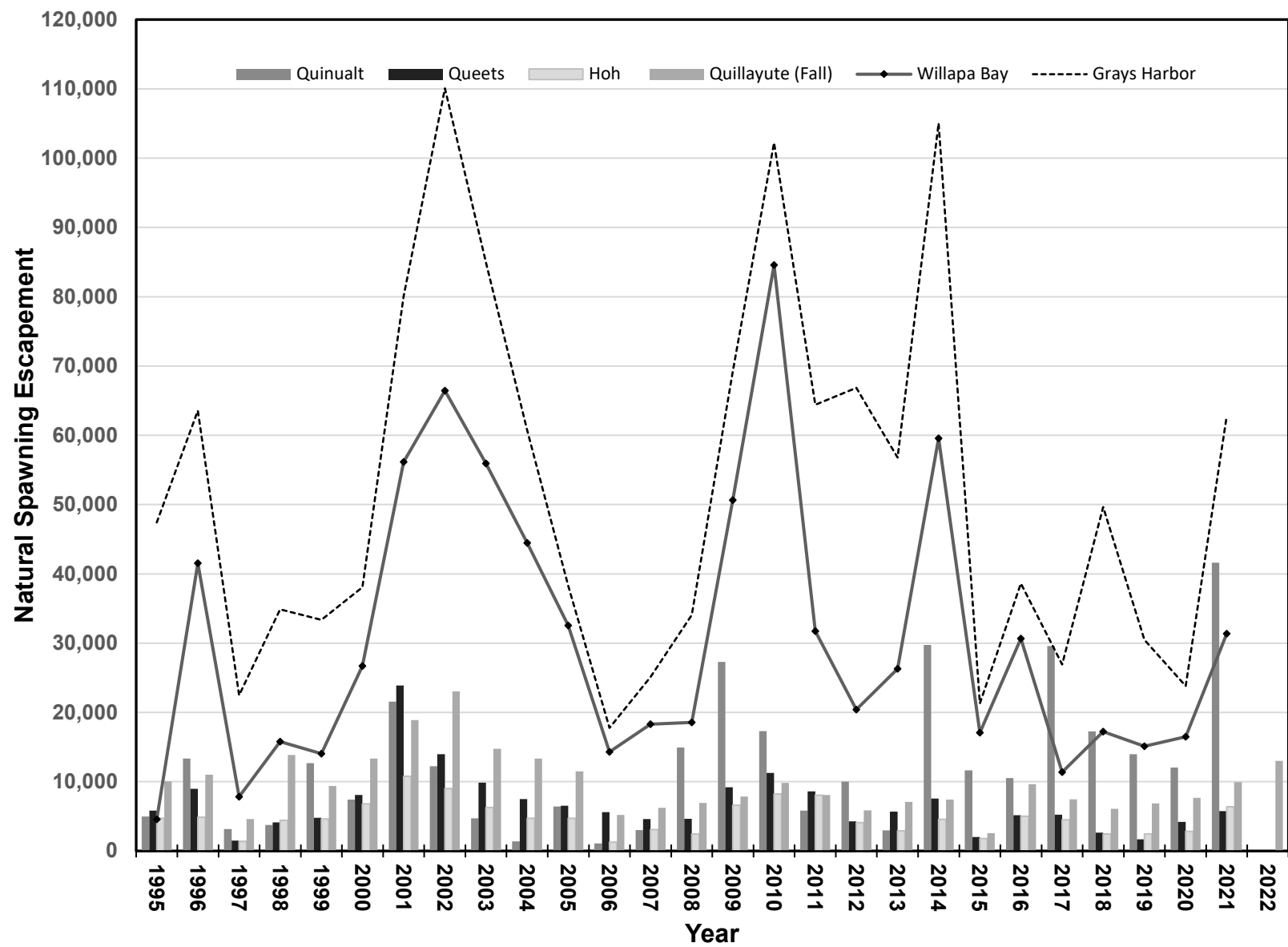


Figure III-3. Washington Coast adult coho natural spawning escapement, 1995-2022.

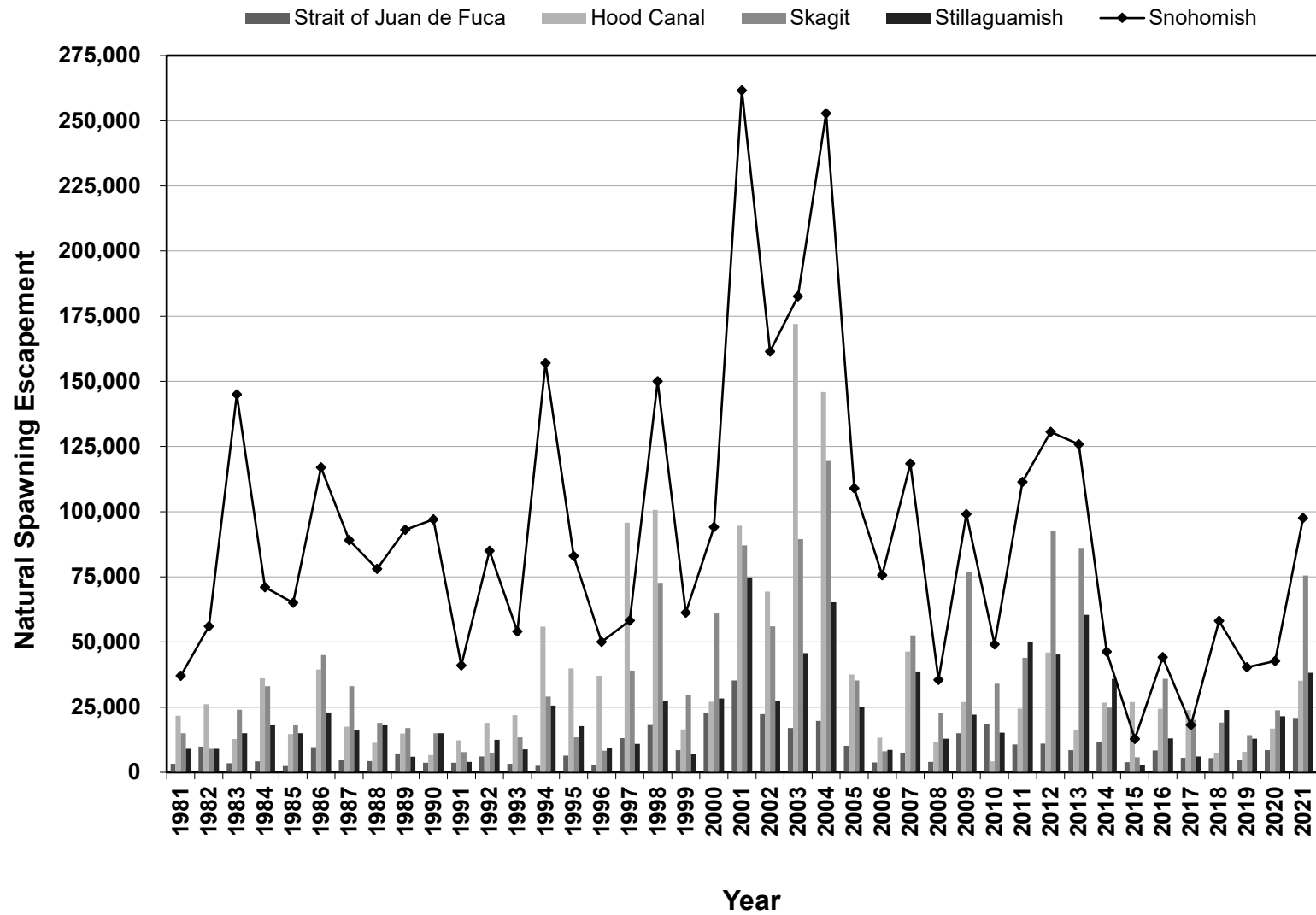


Figure III-4. Puget Sound adult coho natural spawning escapement, 1981-2021.

4 CHAPTER IV – SOCIOECONOMIC ASSESSMENT

4.1 *Socioeconomic Assessment Summary of 2022 Ocean Salmon Fisheries*

Total 2022 exvessel value of the Council-managed non-Indian troll commercial salmon fishery was \$22.2 million. This was nine percent below the prior year's total of \$24.5 million, 16 percent above the 2020 level of \$19.2 million, and 18 percent above the 2017-2021 average of \$18.9 million, but 71 percent below the 1979-1990 average of \$76.6 million (including pink salmon, all dollar values adjusted for inflation). The coastwide average exvessel price for Chinook in 2022 was \$7.67 per pound, 14 percent below the prior year's average of \$8.87, nine percent below the 2020 average of \$8.43 and 16 percent below the 2017-2021 average of \$9.10 (all dollar values adjusted for inflation). Nearly 99 percent of total coastwide exvessel value of non-Indian commercial troll salmon landed in 2022 was from Chinook. Approximately \$247,100 exvessel value of coho were landed in the ocean commercial troll fishery in 2022, 73 percent above the \$142,700 landed the prior year and the highest value in inflation-adjusted terms since \$280,000 in 2014. The coastwide average exvessel price for coho in 2022 was \$2.95, 30 percent below the prior year's value of \$4.24, which was the highest since \$4.92 in 1988 (all dollar values adjusted for inflation).

The preliminary number of vessel-based ocean salmon recreational angler trips taken on the West Coast in 2022 was 264,200, an increase of six percent from 248,100 taken the prior year, and 75 percent above the 150,600 trips in 2020, which was the lowest since 2008 due to the effects of the COVID-19 pandemic on fishing activity. The number of recreational angler trips in 2022 was also 26 percent above the 2017-2021 average of 209,100.

Total West Coast income impacts associated with commercial and recreational ocean salmon fisheries in 2022 for Washington, Oregon, and California combined were an estimated \$77.5 million, two percent below the prior year's total of \$79.1 million, 38 percent above the 2020 total of \$56.3 million, and 21 percent above the 2017-2021 average of \$70.1 million (all dollar values adjusted for inflation).¹

4.2 *Allocation of the Salmon Resource*

Salmon management by the Council involves numerous allocation issues including:

- Determining the number 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.

¹A change in methodology from Fisheries Economic Assessment Model (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.

The number 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). Most of the annual variation in available ocean harvest is usually taken up in the commercial fishery. However, both 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 2022 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.

4.3 Commercial Salmon Fisheries

4.3.1 West Coast Non-Indian Commercial Ocean Fishery

In-season Price Trends

Monthly average exvessel price data provide information on price trends over the season (Table IV-1). The coastwide weighted-average exvessel prices for salmon caught in the 2022 ocean commercial troll fishery were \$7.67 per dressed pound for Chinook and \$2.95 per dressed pound for coho. California Chinook prices averaged \$7.51 for the season and were at their highest in October, September, and May, averaging \$10.82, \$10.04, and \$9.11 per pound, respectively, in those months. Weighted-average Chinook prices in Oregon were \$8.82 for the season and highest in March, April, and May at \$13.13, \$13.05, and \$10.25 per pound, respectively. Weighted-average Chinook prices in Washington were \$7.45 for the season, and highest in May, June, and September, at \$8.23, \$7.71, and \$7.26 per pound, respectively. The lowest weighted-average Chinook exvessel prices were recorded in July in all three states: \$6.20 in California, \$6.91 in Oregon, and \$5.87 per pound in Washington. (Tables IV-3 and IV-4).

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

Average Chinook and coho troll exvessel prices 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 2022, the total coastwide exvessel value of the Council-managed non-Indian commercial troll salmon fishery was \$22.2 million, nine percent below the prior year's \$24.5 million, 16 percent above the 2020 level of \$19.2 million, and 18 percent above the 2017-2021 average of \$18.9 million, all values adjusted for inflation (Figure IV-4). Nearly 99 percent of total coastwide exvessel value of non-Indian commercial troll salmon landed in 2022 was from Chinook. Exvessel revenues from coho landings in 2022 were \$247,100, 73 percent above the prior year's \$142,700, more than 14 times the 2020 level of \$17,300, nearly four times the 2017-2021 average of \$64,900, and the highest value since \$280,000 in 2014 (all values adjusted for inflation).

In 2022, California achieved \$17.1 million in non-Indian commercial troll salmon exvessel landings value, 14 percent below the prior year's level of \$19.9 million, six percent above the 2020 level of \$16.2 million, 21 percent above the 2017-2021 average of \$16.4 million, but 58 percent below the 1979-1990 average of \$40.5 million (which include coho landings during that period). All values are adjusted for inflation.

The 2022 exvessel value of the Oregon non-Indian commercial troll harvest (\$3.2 million) was 33 percent above the prior year's level of \$2.4 million, 87 percent above the \$1.7 million recorded in 2020 (which was the lowest recorded since \$0.5 million in 2009), 35 percent above the 2017-2021 average of \$2.4 million, and 87 percent below the 1979-1990 average of \$24.4 million. All values are adjusted for inflation.

The \$1.8 million exvessel value of Washington's 2022 non-Indian troll harvest was 16 percent below the prior year's value of \$2.2 million, 41 percent above the 2020 value (which was the lowest value since \$1 million in 2008), 22 percent below the 2017-2021 average of \$2.4 million, and 83 percent below the 1979-1990 average of \$11 million. All values are adjusted for inflation.

The 2022 average West Coast ocean harvest Chinook price of \$7.67 per pound was 14 percent below the prior year's value of \$8.87 per pound, nine percent below the 2020 value of \$8.43 per pound, 16 percent below the 2017-2021 average of \$9.10 per pound, but 25 percent above the 1979-1990 average of \$6.13. During 2022, Chinook exvessel prices in California, Oregon, and Washington averaged \$7.51, \$8.82, and \$7.45 per pound, respectively, below the prior year's inflation-adjusted state-level averages by 13 percent, 18 percent, and 19 percent, respectively. Coho exvessel prices were highest in Oregon in August at \$3.37 per pound and in Washington during September at \$3.06 per pound. For the season coho exvessel prices averaged \$3.04 and \$2.93 per pound in Oregon and Washington, respectively. All values are adjusted for inflation.

In terms of numbers of fish, the 2022 coastwide non-Indian commercial troll harvest of 267,600 Chinook was 12 percent above the prior year's level of 239,100, 32 percent above 2020's harvest of 202,900, 35 percent above the 2017-2021 five-year average of 197,800 fish, but 53 percent below the 1976-2021 long-term average harvest of 570,000 Chinook (Figure IV-1). The 2022 coastwide average weight per non-Indian commercial troll harvested Chinook of 10.7 pounds per fish was seven percent below the prior year's average of 11.5 pounds, four percent below the 2020 average weight of 11.2 pounds, and four percent below the previous five-year (2017-2021) average of 11.1 pounds per fish (Appendix D Tables D-1, D-2, and D-3).

The coastwide non-Indian commercial troll fishery landed 15,100 coho in 2022, 169 percent more than the number landed the prior year, nearly twenty times the 800 coho landed in 2020 (landings in 2020 were the lowest recorded non-zero coho harvest in the non-Indian commercial troll fishery since at least 1976), five times the recent 2017-2021 average of 3,000 coho, and the largest number since 26,400 coho were landed in 2014. (Note: Zero coho were harvested in the non-Indian commercial troll fishery in 1994, 1997, 1998 and 2016).

On average over the last four years (2019-2022), more than half of coastwide non-Indian commercial troll Chinook landings (by weight) were landed in ports in the San Francisco management area, and 79 to 85 percent of coastwide landings were made in the three, combined southern-most port areas—Fort Bragg, San Francisco, and Monterey. Most of the between port fluctuation during this period has been among those three port areas. West Coast port areas with the highest landings shares by weight in 2022 were San Francisco (53 percent), Monterey (18 percent), Fort Bragg (8 percent), Newport (6 percent), and Westport (6 percent). This compares with the leading ports last year: San Francisco (47 percent), Fort Bragg (21 percent), Monterey (14 percent), Westport (6 percent), and Newport (5 percent). Prior to 2019 the average annual share landed in San Francisco during 2011 to 2018 was approximately 25 percent with an average of approximately 40 percent of coastwide landings made in the three, combined southern-most port areas.

In 2022, the ports north of Cape Falcon (from the Astoria port area north) accounted for less than nine percent of aggregate coastwide Chinook harvest by weight, five percent above the prior year's share of eight percent. By way of historical comparison, ports north of Cape Falcon accounted for approximately seven percent of aggregate coastwide Chinook harvest in 2020 (2020 had the lowest share north of Cape Falcon since 2004), nine percent in 2019, 17 percent in 2018, and 32 percent in 2017. In the years since 2008 and 2009, during which time there was no commercial ocean salmon harvest in California, ports north of Cape Falcon have accounted for an average of approximately 18 percent of coastwide Chinook landings by weight.

Compared with the prior year, non-Indian commercial troll Chinook harvest by weight in 2022 was up five percent coastwide to 2.9 million pounds, up in Oregon by 63 percent to 357,000 pounds and in Washington by four percent to 224,000 pounds, but down in California by less than one percent to approximately 2.3 million pounds. Total non-Indian commercial troll coho harvest in 2022 was approximately 84,000 pounds, 176 percent more than coastwide coho landings by weight the prior year (30,600 pounds). Compared with the prior year, 2022 coho harvests by weight were 38 percent higher in Oregon to 18,000 pounds, and more than triple last year's harvest in Washington to 66,400 pounds. In 2022 approximately 79 percent of non-Indian commercial troll coho harvest by weight was landed in Washington, compared with approximately 58 percent the prior year and 85 percent in 2020. In each of those years the remainder of coho landings was in Oregon. Commercial harvest of coho in California has been prohibited since 1992.

4.3.1.1 *Ocean Commercial Salmon Harvesters*

Based on preliminary Pacific Coast Fisheries Information Network (PacFIN) data extracted January 19, 2023, a total of 563 harvesting vessels participated in the West Coast non-Indian commercial troll salmon fishery in 2022. This is four (less than one percent) fewer than participated in the prior year (567), two percent more than participated in 2020 (553), 16 percent

fewer vessels than participated in 2019 (668), and the second fewest since 313 vessels participated in 2009. 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 when summing the three state-level tables.

In 2022, 464 non-Indian commercial vessels made salmon landings in California, 22 fewer than participated the prior year, nine fewer than in 2020, 107 fewer vessels than made landings in California in 2019, but eight more than in 2018. In Oregon, the active fleet decreased by seven vessels to 180 in 2022 from 187 the prior year. The 180 vessels in 2022 was six more than participated in 2020 but 38 fewer than participated in 2019, and 50 fewer than in 2018. The preliminary number of active vessels in Washington in 2022 was 79, three more than participated the prior year, 19 more than in 2020, but nine fewer than in 2019, and 29 fewer than in 2019 (Note: The 60 vessels participating in 2020 was the lowest number of vessels landing salmon in Washington since 2001).

Coastwide, the number of limited entry salmon permits issued by the three states in 2022 (2,011) decreased by 51 from the prior year (2,062). This is the lowest number of coastwide salmon permits on record, with declines over the prior year (which had previously been the lowest number) occurring in all three states: California (-20), Oregon (-30) and Washington (-1).

Landings were made on 36 percent of all permits coastwide in 2022, approximately the same as in the prior year (36 percent), and above the share in 2020 (34 percent), but lower than the shares in 2019 (41 percent) and 2018 (37 percent), and below the 10-year (2012-2021) average share of 42 percent. Note that the years in which the salmon fishery was closed in California are the two years with lowest recorded rate of participation by permitted vessel since 1982, i.e., 2008 (9 percent) and 2009 (13 percent). 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 removed in a buyback program. See Appendix D, tables D-4, D-5, and D-6 for details.

In 2022, coastwide average inflation-adjusted exvessel value of salmon landings per vessel decreased by six percent compared with the prior year to \$30,680 per vessel. Compared to the prior year, average state-level exvessel revenue per vessel in 2022 was lower by 10 percent (to \$36,621) in California and by 19 percent (to \$23,402) in Washington, but higher than the prior year by 38 percent to \$17,784 in Oregon. 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 relatively 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 detailed historical information on landings by vessel size, percentages of the fleet responsible for most of the harvest, and harvest by residence of participants in each state's fishery is included in Appendix D.

4.3.2 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 2022, the treaty Indian ocean troll fishery harvested approximately 36,600 Chinook (279,300 pounds) and 36,200 coho (213,300 pounds) compared with 8,300 Chinook (67,700 pounds) and 26,400 coho (134,400 pounds) last year, 3,100 Chinook (35,600 pounds) and 14,400 coho (89,200 pounds) in 2020, and 19,400 Chinook (188,700 pounds) and 55,500 coho (280,900 pounds) in 2019. Chinook landings in 2022 by weight were more than four times the prior year's harvest and nearly eight times the harvest in 2020 which was the lowest on record both in terms of weight and numbers of fish. In terms of weight, coho landings in 2022 were 59 percent above the prior year and 63 percent above the recent five-year (2017-2021) average treaty Indian coho harvest of 130,700 pounds. Recent inflation-adjusted values were an estimated \$0.8 million in 2021 and \$0.4 million in 2020. Values for 2022 are not included here because they are too incomplete.²

4.3.3 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 2022 was \$7.5 million. This was three percent below the prior year's level of \$7.7 million, 11 percent above the 2020 level of \$6.7 million, 79 percent above the 2019 level of \$4.2 million (which was the lowest level since \$3.5 million in 2007), and three percent above the recent five-year (2017-2021) average of \$7.2 million (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 2022 was \$3.3 million, 11 percent below the prior year's level of \$3.8 million, 28 percent above the \$2.6 million harvested in 2020, more than double the \$1.3 million harvested in 2019 (which was the lowest since \$0.5 million in 1998), and 17 percent above the recent five-year (2017-2021) average of \$2.9 million (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 in 2022 was \$4.1 million. This is four percent above the \$4.0 million harvested the prior year, slightly above the \$4.1 million in 2020, 43 percent above the \$2.9 million harvested in 2019 (which was the lowest since \$2.1 million in 2009), but six percent below the recent five-year (2017-2021) average of \$4.4 million (all values adjusted for inflation). Note that these values include

² Numbers of fish are from Table A-15, average weights are from Table D-3, and revenue values are based on incomplete PacFIN data extracted January 19, 2023.

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.

4.3.4 Puget Sound and Washington Coastal Inside Fisheries

Information on 2022 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 following publication of this review. Based on PacFIN data (as of January 19, 2023) the preliminary 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 2022 was approximately \$7.4 million. This was nearly triple the prior year's value of \$2.6 million, more than four times the \$1.8 million harvested in 2020, more than triple the value landed in 2019 (\$2 million), and the highest value since \$10.3 million in 2018. Of total Puget Sound and Washington coastal inside fisheries non-Indian commercial landings in 2022, \$1.4 million were Chinook and coho, compared with \$1 million in 2021, \$0.7 million in 2020, and \$0.6 million in 2019. The 1981-2021 inflation-adjusted average annual exvessel value from Puget Sound and Washington coastal inside non-Indian commercial salmon landings was \$18.4 million, of which approximately \$4.4 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 1995.

The preliminary 2022 exvessel values reported by PacFIN (as of January 19, 2023) for all salmon species taken in Puget Sound and Washington coastal inside commercial treaty Indian fisheries (excluding the Columbia River) were not complete enough for this report. For reference, the revised inflation-adjusted total exvessel value for the 2021 commercial treaty Indian harvest in Puget Sound and Washington coastal inside fisheries (excluding the Columbia River) is \$7.9 million for all salmon species, of which \$5.7 million were Chinook and coho³. From 1981 through 2021, the inflation-adjusted average annual exvessel value of commercial treaty Indian salmon fisheries in Puget Sound and Washington coastal inside areas was \$24.6 million, of which on average \$9.8 million were Chinook and coho.

4.3.5 Klamath River Tribal Fisheries

Commercial sales from the Yurok and Hoopa Valley tribal spring and fall gillnet fisheries on the Klamath and Trinity rivers occur periodically. The 1,900 fall Chinook harvested commercially in 2019 were the first since 2015 when 17,100 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 1,100 fish. Sales from the fall Chinook fishery occurred in 1987-1989, 1996, 1999-2004, 2007-2015, and 2019. The average annual commercial catch of fall Chinook during years that the fishery was open was 21,200 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, after which each Indian fisher began marketing their fish independently. Exvessel values associated with the 1989 and 1996 Klamath River commercial fisheries were last provided in the *Review of 2021 Ocean Salmon Fisheries*.

³ Based on PacFIN data extracted January 19, 2023.

4.3.5.1 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 number 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.

4.4 Recreational Salmon Fisheries

4.4.1 West Coast Recreational Ocean Fishery

The preliminary number of vessel-based ocean salmon recreational angler trips taken on the West Coast in 2022 was 264,200 representing a six percent increase over the prior year's 248,100 trips, a 75 percent increase over the 150,600 trips in 2020, and 26 percent above the 2017-2021 average of 209,100 trips, but 56 percent below the 1979-1990 average of 599,700 angler-trips per year. Compared with the prior year, preliminary estimates of the number of trips taken in 2022 increased by 11 percent in California and by 14 percent in Washington but decreased by two percent in Oregon.⁴ 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 2022 (24 percent) was approximately equal to the prior year's ratio, five percent below the proportion of charter trips in 2020 (25 percent), and 13 percent below the 2017-2021 average of 26 percent. Underlying the changes in the proportion of coastwide charter trips in 2022 relative to the prior year were a slight decrease (less than one percent) in California, a decrease of 37 percent in Oregon, and an increase of two percent 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.

4.4.1.1 California

The number of ocean recreational salmon trips in California in 2022 (98,500) was 11 percent above the number last year (88,600), 65 percent above the value in 2020 (59,800), and 17 percent above the recent 2017-2021 average of 84,500 angler trips per year. Regionally, compared with the prior year, the number of recreational salmon trips in 2022 increased in three port areas: by 168 percent in Crescent City, 117 percent Eureka and by 36 percent in San Francisco; but decreased by 22 percent in Fort Bragg and by 24 percent in Monterey. A total of 89,000 Chinook were caught in California on the total of 98,500 trips, for an average success rate of 0.9 Chinook per trip, which is 44 percent above the prior year, and 16 percent above the recent five-year (2017-2021) average

⁴ Recreational fishery estimates for 2020 in California do not include private trips that occurred during May and June due to restrictions on sampling caused by the COVID-19 pandemic. Also note that Neah Bay and La Push were closed to public access in 2020, and Neah Bay remained closed to public access in 2021 while La Push did not open to public access until July 12, 2021, due to the COVID-19 pandemic. Values for Washington in 2020 and 2021 include catch and effort from ocean trips originating from Sekiu.

success rate of 0.78 Chinook per angler-trip. The charter industry's share of California recreational salmon trips in 2022 was 41 percent, approximately equal to the prior year's share, eight percent below the share in 2020, and 10 percent below the recent five-year (2017-2021) average charter share of California angler trips (Table IV-10, Table IV-11, and Figure IV-5).⁵

4.4.1.2 Oregon

The 96,400 ocean recreational salmon trips in Oregon in 2022 were two percent below the 98,700 trips taken last year, 69 percent above the 57,000 angler trips in 2020, and 35 percent above the recent five-year (2017-2021) average of 71,200 angler trips per year (Tables IV-10 and IV-12). Compared with the prior year, regional effort was up by 32 percent in Astoria, 12 percent in Tillamook and 17 percent in Coos Bay; but down by 22 percent in Newport and 46 percent in Brookings.

From 1979 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 (0.37 fish per angler day compared to an average of 0.99 for 1979 through 1993). Salmon retention rates increased with the opportunity to retain coho in mark-selective fisheries south of Cape Falcon beginning in 1999. From 1999 through 2021, retention rates have averaged 0.67 salmon per angler-day. The 2022 Oregon salmon retention rate of 0.91 was 12 percent below the prior year's 1.03, 84 percent above the 2020 value of 0.49, and 33 percent above the recent five-year (2017-2021) average retention rate of 0.68 salmon per angler-day. In 2022, coho contributed 90 percent of total Oregon recreational ocean salmon catch, two percent below the prior year's share of 92 percent, 22 percent above the 2020 value of 74 percent, and seven percent above the recent five-year (2017-2021) average of 85 percent.

The charter industry's share of Oregon recreational salmon trips in 2022 was five percent, 37 percent below the prior year's share, 25 percent above the share in 2020, and 27 percent below the recent five-year (2017-2021) annual average charter industry's share of Oregon recreational salmon trips (Table IV-10, Table IV-12, and Figure IV-5).

4.4.1.3 Washington

In 2022, 69,260 ocean angler salmon trips were taken on vessels on the Washington coast representing an increase of 14 percent above the 60,900 trips the prior year, 105 percent above the 33,800 trips taken in 2020 (which was the fewest number of trips since 12,300 recorded in 1998), and 30 percent above the recent five-year (2017-2021) average of 53,400 angler trips per year. Effort was higher than the prior year in all four Washington coastal regions, including Neah Bay (which had been closed in 2020 and 2021 due to COVID-19 restrictions), and increases of 73 percent in La Push, 17 percent in Westport and 21 percent in Ilwaco. The angler success rate in Washington (in terms of retained fish per angler-trip) was 1.18 in 2022, 11 percent above the prior year, 44 percent above the rate in 2020, and 21 percent above the recent five-year (2017-2021) average success rate of 0.98 fish per angler-trip. Approximately 28 percent of Washington angler

⁵ As noted, recreational estimates for California in 2020 do not include private trips that occurred during May and June of that year due to restrictions on sampling caused by the COVID-19 pandemic. Therefore, the 2020 values discussed in this section should be considered an underrepresentation of the actual recreational effort and harvest in California, and an overrepresentation of the charter industry's share of the effort.

trips in 2022 were taken on charter vessels, an increase of two percent from proportion the prior year, one percent below the proportion in 2020, and approximately two percent below the recent five-year (2017-2021) average charter trip share of 28 percent (Table IV-10, Table IV-13, and Figure IV-5). 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).

4.4.2 North of Cape Falcon Non-Salmon Recreational Fisheries

To offset the impact of reduced ocean recreational salmon trips on coastal communities, beginning in 1985 partial-week closures were instituted in the ocean recreational salmon fishery over the entire north of Cape Falcon area in hopes of increasing angler participation in non-salmon recreational fishing (e.g., bottomfish) and extending the overall length of the salmon season. 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 2022, there were approximately 55,300 total recreational bottomfish trips north of Cape Falcon (including trips taken inside Buoy-10 and from Columbia River jetties), 40 percent more than the 39,600 trips taken the prior year, 70 percent more than the 32,600 trips taken in 2020 (2020 had the fewest recorded bottomfish trips since at least 1986), and 11 percent above the recent five-year (2017-2021) annual average. Compared with the prior year, total bottomfish effort decreased in Westport, but increased in the Columbia River–Buoy 10 area, La Push and in Neah Bay–Area 4B (Table IV-14).

4.4.3 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 77,900 trips in the Buoy 10 fishery in 2022. This effort level is 21 percent less than the 98,900 trips the prior year, 17 percent more than the 66,700 trips recorded in 2020, and less than one percent below the 2017-2021 average of 78,400 angler-trips. The success/retention rate for anglers fishing from boats in the Buoy 10 fishery in 2022 was 0.46 salmon per angler trip, 17 percent below the 0.56 success rate the prior year, 48 percent above the 0.31 average success rate in 2020, and 10 percent above the average annual success rate of 0.42 salmon per angler trip in the Buoy 10 fishery during 2017-2021 (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.

4.5 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 occurring beginning with the 2010 salmon fishery, during which period the IO-PAC-based models and multipliers have been exclusively and consistently 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 measures 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 commercial salmon fisheries and trip-related expenditures made by recreational salmon anglers, expressed at the local community (county) and state levels.⁶ The income impacts reported in this chapter consist of the sum of 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 of impacts 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 a 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 engage in some other economic activity to compensate for the loss of income from commercial salmon harvesting and processing.

⁶ 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.).

Income impacts are presented at the local and state levels. Estimates of changes in income impacts may represent a disruption due to redistribution of activity within the local economy or a net loss from activity leaving the local economy. At higher levels, such as for the state, it is more likely that an estimate of change represents a disruption due to redistribution of activity within the economy rather than a net loss to the greater state economy.

Income impacts are estimated based on several data components, including reported commercial fishery landings and exvessel prices by port or area, an inventory of local harvesters and processors, estimates of operational expenditures by harvesters and processors, estimates of the number of angler trips and expenditure patterns of recreational anglers, and local and state-level total income impact coefficients generated using IMPLAN[®] 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 estimates of coastal community impacts but may be included in the overall state-level impacts.⁷

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 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 2022 dollars.

4.5.1 West Coast Ocean Fishery Commercial and Recreational Income Impacts

Total state-level income impacts associated with non-Indian commercial ocean troll and recreational salmon fisheries for all three states combined in 2022 were \$77.5 million, two percent below the prior year's level of \$79.1 million, 38 percent above the 2020 level of \$56.3 million, and 21 percent above the 2017-2021 annual average of \$64.2 million (all values adjusted for inflation) (Tables IV-16, IV-17, and IV-18). Total West Coast income impacts associated with the 2022 non-Indian commercial ocean troll fishery were \$39.2 million, 10 percent below the prior year's estimate (\$43.7 million), 14 percent above the 2020 level of \$34.4 million, and 21 percent above the 2017-2021 annual average of \$32.5 million (all values adjusted for inflation).⁸ Income impacts generated by the three states' combined 2022 ocean recreational salmon fisheries totaled \$38.3 million, eight percent above the prior year's level of \$35.4 million, 74 percent above the 2020 level of \$21.9 million, and 21 percent above the 2017-2021 average of \$31.6 million (all values adjusted for inflation).⁹ Note that these aggregated coastwide values may mask the underlying effects in individual states and communities. Tables IV-16, IV-17, and IV-18 provide

⁷ In 2020 Neah Bay and La Push were closed to public access in late March for the remainder of 2020 due to the COVID-19 pandemic. Puget Sound and state totals reported in this document include effects of ocean troll-caught salmon (36,000 pounds Chinook, 800 pounds coho) landed in Puget Sound ports of Sekiu and Port Angeles (authorized by emergency rule), and 7,016 recreational ocean salmon angler trips (276 charter, 6,740 private) that occurred from the port of Sekiu during 2020. The port of Neah Bay was also restricted to limited local access only in 2021 due to the COVID-19 pandemic. Vessels were allowed to land in the Puget Sound ports of Sekiu and Port Angeles by emergency rule, including ocean troll-caught salmon landings (9,100 pounds of Chinook, 1,300 pounds of coho) in Puget Sound ports during 2021. An additional 10,899 ocean recreational salmon angler trips (345 charter and 10,554 private) and 17,367 ocean bottomfish angler trips (1,005 charter, and 16,362 private) occurred from the port of Sekiu in 2021.

⁸ 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.

⁹ As noted previously, recreational fishery estimates for California do not include private trips that occurred during May and June in 2020 due to restrictions on sampling caused by the COVID-19 pandemic. Therefore, income impacts discussed here for the 2020 recreational fishery are likely lower than what actually occurred.

greater detail on the income impacts estimated for individual port areas in the three West Coast states.

4.5.2 Selected Inside Fisheries

Columbia River Commercial Fisheries

Historically the non-Indian and treaty Indian Columbia River commercial salmon fisheries have generated a substantial amount of income for Oregon and Washington communities on the Columbia River. In 2022, income impacts associated with the Columbia River commercial catch (combined non-Indian and treaty Indian) were estimated at \$11.5 million, 12 percent below the prior year's value of \$13.1 million, one percent above the estimate of \$11.4 million in 2020, and two percent above the recent five-year annual average for the 2017-2021 period of \$11.3 million (all values adjusted for inflation) (Table IV-19).

Buoy 10

Estimated local community income impacts associated with the 2022 Columbia River Buoy 10 recreational salmon fishery were \$6.3 million, 20 percent below the prior year's value of \$7.8 million, 16 percent above the 2020 value of \$5.4 million, one percent above the 2017-2021 annual average value of approximately \$6.2 million (all values adjusted for inflation) (Table IV-20).

TABLE IV-1. Average monthly exvessel troll salmon price in dollars per dressed pound for California, Oregon, and Washington in 2022.

Species/Grade	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Season ^{b/}
CALIFORNIA											
Chinook ^{a/}	-	-	9.11	7.90	6.20	6.92	10.04	10.82			7.51
Coho	-	-	-	-	-	-	-	-	-	-	-
OREGON											
Chinook											
Large (>11 Pounds)	13.05	13.19	11.18	9.10	6.04	5.90	7.50	10.00	-	-	9.43
Medium (7-11 Pounds)	12.92	12.42	9.36	8.07	6.28	5.64	-	10.00	-	-	8.38
Small (<7 Pounds)	12.00	11.72	8.01	7.15	5.26	-	-	10.00	-	-	7.41
Ungraded Chinook	13.17	13.22	10.34	9.63	7.28	7.42	8.43	10.56	-	-	8.78
Weighted Average	13.13	13.05	10.25	8.91	6.91	7.19	8.40	10.10	-	-	8.82
Mixed Coho	-	-	-	-	2.95	3.37	2.68		-	-	3.08
WASHINGTON^{b/}											
Chinook											
Large (>11 Pounds)	-	-	8.00	7.35	5.95	7.13	6.96	-	-	-	6.87
Medium (8-11 Pounds)	-	-	8.05	7.95	5.84	6.36	7.55	-	-	-	7.44
Small (<8 Pounds)	-	-	8.69	7.99	4.81	4.24	5.66	-	-	-	8.55
Ungraded Chinook	-	-	-	-	-	-	-	-	-	-	-
Weighted Average	-	-	8.23	7.71	5.87	6.95	7.26	-	-	-	7.45
Mixed Coho	-	-	-	-	2.41	2.64	3.06	-	-	-	2.93

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

b/ 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, 2022) dollars.^{a/}

Year or Avg	Chinook				Coho				Total ^{b/}	
	Nominal	Real	Nominal	Real	Nominal	Real	Nominal	Real	Nominal	Real
	Value (\$*1,000)	Value (\$*1,000)	Price Per Pound (\$)	Price Per Pound (\$)	Value (\$*1,000)	Value (\$*1,000)	Price Per Pound (\$)	Price Per Pound (\$)	Value (\$*1,000)	Value (\$*1,000)
1979	17,356	57,153	2.53	8.33	2,303	7,584	2.19	7.21	19,659	64,736
1980	12,741	38,479	2.27	6.86	408	1,232	1.36	4.11	13,149	39,712
1981-1985	10,945	27,944	2.42	6.10	554	1,431	1.62	4.10	11,499	29,374
1986-1990	21,151	45,926	2.56	5.51	490	1,047	1.81	3.89	21,641	46,973
1991-1995	7,335	13,545	2.28	4.25	143	277	0.63	1.21	7,478	13,822
1996	5,984	10,439	1.44	2.51	-	-	-	-	5,984	10,439
1997	7,288	12,498	1.38	2.37	-	-	-	-	7,288	12,498
1998	3,060	5,189	1.66	2.82	-	-	-	-	3,060	5,189
1999	7,429	12,423	1.93	3.23	-	-	-	-	7,429	12,423
2000	10,304	16,849	2.01	3.29	-	-	-	-	10,304	16,849
2001	4,773	7,633	1.98	3.17	-	-	-	-	4,773	7,633
2002	7,776	12,244	1.55	2.45	-	-	-	-	7,776	12,244
2003	12,181	18,809	1.91	2.95	-	-	-	-	12,181	18,809
2004	17,895	26,911	2.87	4.32	-	-	-	-	17,895	26,911
2005	12,913	18,828	2.97	4.33	-	-	-	-	12,913	18,828
2006	5,350	7,567	5.13	7.26	-	-	-	-	5,350	7,567
2007	7,902	10,883	5.18	7.13	-	-	-	-	7,902	10,883
2008	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	-
2010	1,246	1,653	5.47	7.26	-	-	-	-	1,246	1,653
2011	5,133	6,671	5.18	6.73	-	-	-	-	5,133	6,671
2012	13,521	17,252	5.34	6.81	-	-	-	-	13,521	17,252
2013	23,632	29,633	6.23	7.81	-	-	-	-	23,632	29,633
2014	12,521	15,413	5.56	6.84	-	-	-	-	12,521	15,413
2015	8,347	10,172	7.03	8.57	-	-	-	-	8,347	10,172
2016	5,312	6,410	8.63	10.41	-	-	-	-	5,312	6,410
2017	4,925	5,832	9.90	11.72	-	-	-	-	4,925	5,832
2018	7,932	9,172	8.53	9.86	-	-	-	-	7,932	9,172
2019	17,209	19,548	6.61	7.51	-	-	-	-	17,209	19,548
2020	14,408	16,156	7.47	8.38	-	-	-	-	14,408	16,156
2021	18,486	19,851	8.06	8.65	-	-	-	-	18,486	19,851
2022 ^{c/}	17,131	17,131	7.51	7.51	-	-	-	-	17,131	17,131

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, 2022) dollars.

Year or Avg.	Chinook				Coho				Total ^{a/}	
	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	9,847	0.89	4.38	3,658	18,117	0.64	3.12	5,694	27,964
1976-1980	5,290	18,636	2.17	7.61	6,389	23,186	1.51	5.30	11,679	41,823
1981-1985	3,582	9,097	2.46	6.21	2,248	5,956	1.45	3.67	5,830	15,053
1986-1990	9,381	20,337	2.47	5.32	3,203	6,960	1.54	3.32	12,584	27,296
1991-1995	1,971	3,648	2.24	4.17	326	631	0.64	1.21	2,297	4,279
1996	3,007	5,246	1.56	2.72	-	-	-	-	3,007	5,246
1997	2,469	4,234	1.60	2.74	-	-	-	-	2,469	4,234
1998	2,297	3,896	1.64	2.78	-	-	-	-	2,297	3,896
1999	1,400	2,341	1.94	3.24	1	2	1.03	1.72	1,401	2,343
2000	2,988	4,886	2.02	3.30	75	123	1.06	1.73	3,063	5,009
2001	4,680	7,484	1.61	2.57	41	66	0.79	1.26	4,721	7,550
2002	5,383	8,476	1.54	2.42	8	13	0.75	1.18	5,391	8,489
2003	7,186	11,096	1.97	3.04	36	56	0.85	1.31	7,222	11,152
2004	9,832	14,786	3.45	5.19	86	130	1.24	1.86	9,919	14,916
2005	8,466	12,344	3.17	4.62	37	54	1.87	2.73	8,503	12,398
2006	2,663	3,766	5.48	7.75	38	54	2.90	4.10	2,701	3,820
2007	2,630	3,621	5.66	7.80	193	265	1.90	2.62	2,822	3,887
2008	484	653	7.31	9.88	10	14	2.82	3.81	494	667
2009	77	104	5.06	6.79	267	359	2.04	2.74	345	463
2010	2,775	3,682	5.49	7.28	16	21	2.23	2.96	2,791	3,703
2011	2,396	3,114	5.96	7.75	5	7	2.01	2.61	2,401	3,121
2012	4,263	5,439	5.75	7.34	8	11	2.20	2.81	4,271	5,450
2013	7,604	9,535	5.88	7.37	7	8	2.56	3.21	7,611	9,543
2014	14,692	18,085	5.71	7.03	67	83	2.00	2.46	14,760	18,168
2015	7,313	8,912	6.15	7.50	21	25	1.88	2.29	7,334	8,938
2016	4,261	5,141	8.23	9.93	-	-	-	-	4,261	5,141
2017	2,121	2,512	8.03	9.51	8	10	3.03	3.59	2,129	2,522
2018	2,440	2,821	8.48	9.81	2	3	3.65	4.22	2,442	2,824
2019	2,085	2,368	6.66	7.57	18	20	2.66	3.02	2,103	2,389
2020	1,521	1,706	8.40	9.42	3	3	3.29	3.69	1,524	1,708
2021	2,196	2,358	10.04	10.78	53	57	4.12	4.42	2,249	2,415
2022 ^{b/}	3,145	3,145	8.82	8.82	56	56	3.04	3.04	3,201	3,201

a/ Does not include pink salmon landings.

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, 2022) dollars.^{a/}

Year or Avg.	Chinook				Coho				Total ^{b/}	
	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	13,293	0.89	4.39	3,060	15,023	0.66	3.26	5,775	28,317
1976-1980	5,313	19,110	2.39	8.34	6,086	21,837	1.67	5.84	11,399	40,946
1981-1985	1,954	5,107	2.46	6.21	1,272	3,338	1.32	3.33	3,225	8,445
1986-1990 ^{c/}	1,310	2,833	2.61	5.64	360	766	1.62	3.49	1,670	3,599
1991-1995 ^{d/}	550	1,043	2.17	4.05	120	228	0.86	1.61	670	1,271
1996 ^{d/}	d/	d/	d/	d/	59	102	0.86	1.50	d/	d/
1997	125	214	1.55	2.66	-	-	-	-	125	214
1998	123	208	1.51	2.56	-	-	-	-	123	208
1999	377	630	1.90	3.18	19	32	0.88	1.47	396	662
2000	224	367	1.71	2.80	34	56	1.09	1.78	258	423
2001	349	558	1.44	2.30	34	54	0.69	1.10	383	612
2002	756	1,190	1.11	1.75	2	3	1.58	2.49	758	1,193
2003	951	1,468	1.15	1.78	40	62	0.74	1.14	991	1,530
2004	1,079	1,623	2.14	3.22	106	159	1.16	1.74	1,185	1,782
2005	1,273	1,857	2.70	3.94	16	24	1.65	2.41	1,290	1,880
2006	1,029	1,455	4.64	6.56	16	23	1.69	2.39	1,045	1,478
2007	905	1,246	4.90	6.75	48	67	1.46	2.01	953	1,312
2008	673	910	6.73	9.09	36	48	2.49	3.36	709	958
2009	893	1,199	5.76	7.73	276	370	2.02	2.71	1,169	1,570
2010	3,083	4,090	5.61	7.44	32	43	2.14	2.84	3,115	4,133
2011	1,652	2,147	5.12	6.65	35	46	2.10	2.73	1,687	2,193
2012	2,323	2,964	5.34	6.81	35	45	1.99	2.54	2,358	3,008
2013	2,771	3,474	6.16	7.72	67	84	2.15	2.70	2,838	3,558
2014	2,549	3,137	5.50	6.77	160	197	1.83	2.25	2,709	3,334
2015	3,423	4,172	5.48	6.68	26	31	1.67	2.04	3,448	4,203
2016	1,606	1,938	8.00	9.65	-	-	-	-	1,606	1,938
2017	2,896	3,429	8.66	10.25	23	27	2.59	3.07	2,919	3,457
2018	2,326	2,690	9.16	10.59	24	28	2.81	3.25	2,350	2,717
2019	1,858	2,111	6.19	7.03	67	77	3.03	3.44	1,925	2,187
2020 ^{e/}	1,160	1,301	7.07	7.93	13	14	3.12	3.50	1,173	1,316
2021 ^{f/}	1,963	2,108	8.58	9.21	80	86	3.84	4.12	2,043	2,194
2022	1,658	1,658	7.45	7.45	191	191	2.93	2.93	1,849	1,849

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.

e/ The port of Neah Bay was closed to public access and the port of La Push was restricted to local access only in 2020 due to the COVID-19 pandemic. Vessels were allowed to land in the Puget Sound ports of Sekiu and Port Angeles by emergency rule. Totals include revenue from ocean troll-caught landings (36,000 pounds of Chinook, 800 pounds of coho) in Puget Sound ports authorized by the emergency rule.

f/ The port of Neah Bay was partially closed and restricted to limited local access only in 2021 due to the COVID-19 pandemic. Vessels were allowed to land in the Puget Sound ports of Sekiu and Port Angeles by emergency rule. Totals include revenue from ocean troll-caught landings (9,100 pounds of Chinook, 1,300 pounds of coho) in Puget Sound ports authorized by the emergency rule.

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, 2022) dollars.

Year or Avg. ^{a/}	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	615	0.75	2.62	1,200	4,170	0.54	1.91	1,367	4,785
1981-1985	129	332	0.74	1.87	287	749	0.41	1.05	416	1,082
1986-1990	41	91	0.77	1.66	57	119	0.66	1.43	98	210
1991-1995	1	3	0.88	1.62	38	72	0.64	1.19	39	75
1997	b/	b/	0.56	0.96	b/	b/	0.20	0.34	b/	b/
1999	b/	b/	0.67	1.12	b/	b/	0.38	0.64	b/	b/
2001	1	1	0.58	0.93	b/	b/	0.22	0.35	0.72	1.15
2003	b/	b/	0.85	1.31	b/	b/	0.30	0.46	b/	1
2005	b/	b/	1.25	1.82	b/	b/	0.52	0.76	b/	b/
2007	b/	b/	1.11	1.53	b/	b/	0.33	0.45	b/	b/
2009	b/	b/	0.51	0.68	b/	b/	0.33	0.44	b/	b/
2011	b/	b/	1.31	1.70	0.66	0.86	0.83	1.08	0.91	1.18
2013	b/	b/	1.35	1.69	b/	b/	0.61	0.76	b/	b/
2015	b/	b/	1.60	1.95	b/	b/	0.77	0.94	b/	b/
2017	-	-	-	-	b/	b/	b/	b/	b/	b/
2019	b/	b/	2.11	2.40	b/	b/	b/	b/	b/	b/
2021	-	-	2.42	2.60	b/	b/	0.66	0.71	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.^{a/b/}

Year or Avg.	Crescent City	Eureka	Fort Bragg	San Francisco	Monterey	State Total
CHINOOK (thousands of dressed pounds)						
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	42	43	123	577	145	930
2019	39	14	98	1,624	830	2,604
2020	-	3	123	1,448	354	1,928
2021 ^{e/}	26	39	564	1,282	384	2,294
2022 ^{d/e/}	2	15	215	1,523	527	2,283
COHO (thousands of dressed pounds)						
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	-	-	-	-	-	-
2019	-	-	-	-	-	-
2020	-	-	-	-	-	-
2021	-	-	-	-	-	-
2022	-	-	-	-	-	-

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, Mendocino, and Albion; San Francisco includes Point Arena, Bodega Bay, Richmond, Bolinas, Sausalito, Berkeley, Alameda, 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.

e/ Landings in 2021 and 2022 in Crescent City and Eureka port area are fish caught in the Fort Bragg and San Francisco areas and landed in Crescent City and Eureka ports.

TABLE IV-7. Pounds of salmon landed by the commercial troll ocean fishery for major Oregon port areas.^{a/}

Year or Avg.	Astoria	Tillamook	New port	Coos Bay	Brookings	State Total
CHINOOK (thousands of dressed pounds)						
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	3.0	8.0	131.0	87.0	59.0	288.0
2019	3.0	16.0	196.0	63.0	35.0	313.0
2020	2.0	10.0	122.0	24.0	24.0	182.0
2021	5.0	15.0	140.0	38.0	21.0	219.0
2022 ^{c/}	19.0	71.0	181.0	64.0	22.0	357.0
COHO (thousands of dressed pounds)						
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	b/	b/	-	-	-	0.6
2019	4.0	3.0	-	-	-	7.0
2020	b/	b/	-	-	-	0.8
2021	b/	2.0	10.0	1.0	-	13.0
2022 ^{c/}	5.0	3.0	8.0	2.0	-	18.0

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.^{a/b/}

Year or Avg.	Neah Bay	La Push	Westport	Ilwaco	Coastal Community	Puget Sound	State Total ^{c/}
					Total		
CHINOOK (thousands of dressed pounds)							
1991-1995 ^{d/}	137	29	123	9	204	30	234
1996-2000 ^{d/}	49	1	37	3	80	22	102
2001-2005	250	55	208	26	539	4	543
2005-2010	45	40	138	12	234	2	236
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
2019	133	59	105	3	300	-	300
2020 ^{f/}	-	17	102	8	128	36	164
2021 ^{g/}	32	9	162	4	207	9	216
2022	34	16	167	7	224	-	224
COHO (thousands of dressed pounds)							
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
2006-2010	8	9	17	7	41	1	42
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
2019	5	3	14	1	22	-	22
2020 ^{f/}	-	e/	3	e/	3	1	4
2021 ^{g/}	e/	1	14	2	16	1	18
2022	2	13	45	6	66	-	66

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.

f/ The port of Neah Bay was closed to public access and the port of La Push was restricted to local access only in 2020 due to the COVID-19 pandemic. Vessels were allowed to land in the Puget Sound ports of Sekiu and Port Angeles by emergency rule. Totals include revenue from ocean troll-caught landings (36,000 pounds of Chinook, 800 pounds of coho) in Puget Sound ports authorized by the emergency rule.

g/ The port of Neah Bay was partially closed and restricted to limited local access only in 2021 due to the COVID-19 pandemic. Vessels were allowed to land in the Puget Sound ports of Sekiu and Port Angeles by emergency rule. Totals include revenue from ocean troll-caught landings (9,100 pounds of Chinook, 1,300 pounds of coho) in Puget Sound ports authorized by the emergency rule.

TABLE IV-9. Landings, exvessel values and average prices (inflation adjusted, 2022 dollars) of inriver commercial harvest of Columbia River salmon.^{a/} (Page 1 of 3)

Columbia River Salmon: (Page 1 of 3)													
	Non-Indian Gillnet ^{b/}						Treaty Indian ^{c/} - All Gears						Col. R. Total By State
	Chinook			Coho	Chum ^{e/}	TOTAL	Chinook			Coho	Chum ^{e/}	TOTAL	
	Spring	Fall					Spring	Fall					
Year or Avg.		Brights ^{d/}	Tules					Brights ^{d/}	Tules				
Oregon													
Average Price Per Landed Pound ^{f/} (dollars)													
1991-1995	6.33	1.90	0.52	1.48	0.62		6.53	1.63	0.36	1.07	-		
1996-2000	4.32	1.54	0.31	1.15	0.37		4.61	1.25	0.22	0.68	-		
2001-2005	4.78	1.52	0.25	0.95	0.47		3.35	1.47	0.35	0.97	-		
2006-2010	7.00	3.17	0.55	1.86	0.74		5.13	2.76	0.47	1.71	-		
2011	6.60	2.96	0.75	2.14	1.00		4.64	3.07	0.92	1.99	-		
2012	7.43	2.82	0.69	2.05	0.63		7.04	3.27	0.94	2.36	-		
2013	8.09	3.15	0.71	2.31	0.63		6.51	2.58	0.80	1.68	-		
2014	6.62	2.25	0.70	1.44	0.62		6.19	2.12	0.70	1.12	-		
2015	7.03	2.95	0.61	1.85	0.37		5.09	3.03	0.56	1.78	-		
2016	8.55	3.87	0.76	2.22	-		7.24	3.50	0.72	1.87	-		
2017	8.87	3.77	0.73	2.40	0.59		8.49	5.80	0.71	2.32	-		
2018	12.05	4.09	0.77	2.28	-		9.19	5.39	0.80	2.43	-		
2019	12.90	3.00	0.60	1.93	-		6.92	4.07	0.57	2.25	-		
2020	8.03	3.21	0.64	1.85	-		7.13	3.81	0.45	1.91	-		
2021	10.03	3.50	0.74	1.99	-		7.41	4.07	0.54	1.80	-		
2022	5.52	3.00	0.69	1.73	-		5.69	3.71	0.47	1.67	-		
Exvessel Value (thousands of dollars)													
1991-1995	372	328	23	822	g/	1,545	1	307	37	9	-	354	1,899
1996-2000	164	116	13	424	g/	716	1	92	13	3	-	108	825
2001-2005	1,024	527	44	910	g/	2,505	63	230	12	7	-	312	2,817
2006-2010	1,195	1,037	88	925	g/	3,245	300	715	50	37	g/	1,101	4,346
2011	1,517	1,881	177	940	g/	4,515	238	777	40	39	-	1,094	5,608
2012	1,348	1,148	140	190	g/	2,826	94	446	6	15	-	561	3,387
2013	1,161	2,662	133	616	g/	4,571	112	1,300	28	8	-	1,448	6,019
2014	773	1,995	174	2,044	g/	4,985	343	1,092	17	42	-	1,495	6,480
2015	1,518	1,767	113	315	g/	3,713	519	1,199	36	3	-	1,757	5,470
2016	1,506	1,596	72	469	-	3,644	170	1,016	2	9	-	1,198	4,842
2017	1,737	654	35	519	g/	2,946	191	1,053	3	18	-	1,265	4,211
2018	1,620	356	26	161	-	2,163	511	1,019	2	23	-	1,555	3,718
2019	517	207	13	229	-	967	179	1,163	1	15	-	1,357	2,324
2020	404	597	47	582	-	1,631	286	1,899	2	78	-	2,265	3,896
2021	742	586	56	1,419	-	2,803	468	1,173	4	122	-	1,767	4,570
2022 ^{h/}	1,126	493	70	949	-	2,637	371	1,209	71	31	-	1,683	4,320
Pounds (thousands)													
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	134	87	34	71	-	326	56	189	3	9	-	257	583
2019	40	69	22	119	-	250	26	286	1	7	-	319	569
2020	50	186	73	315	-	625	40	498	4	41	-	583	1,208
2021	74	167	75	713	-	1,029	63	289	8	67	-	427	1,456
2022 ^{h/}	204	164	102	548	-	1,017	65	326	151	19	-	561	1,578

TABLE IV-9. Landings, exvessel values and average prices (inflation adjusted, 2022 dollars) of inriver commercial harvest of Columbia River salmon.^{a/} (Page 2 of 3)

Year or Avg.	Non-Indian Gillnet ^{b/}						Treaty Indian ^{c/} - All Gears						Col. R. Total By State	
	Chinook			Coho	Chum ^{d/}	TOTAL	Chinook			Coho	Chum ^{d/}	TOTAL		
	Spring	Fall					Spring	Fall						
		Brights ^{d/}	Tules					Brights ^{d/}	Tules					
Washington ^{h/i/}														
Average Price Per Landed Pound ^{f/} (dollars)														
1991-1995	6.18	1.73	-	1.47	0.57		4.27	1.01	-	1.05	-			
1996-2000	7.43	1.52	-	1.11	0.43		6.03	0.78	-	0.77	-			
2001-2005	6.04	1.29	-	0.94	0.47		2.07	0.50	-	0.26	-			
2006-2010	7.45	2.93	-	1.71	1.06		4.90	1.69	-	0.98	1.05			
2011	5.84	2.48	-	1.96	0.75		4.56	2.37	-	1.86	4.07			
2012	8.00	2.60	-	2.08	0.55		5.89	2.21	-	1.61	-			
2013	7.69	2.68	-	2.29	-		5.73	2.37	-	1.47	-			
2014	6.60	1.99	-	1.39	0.57		5.80	1.78	-	1.21	1.33			
2015	6.75	2.45	-	1.99	-		4.86	2.27	-	1.57	-			
2016	8.98	3.50	-	2.26	-		6.49	2.90	-	1.68	-			
2017	11.39	3.49	-	2.44	-		6.36	0.99	-	1.57	0.99			
2018	14.67	3.39	-	2.06	-		7.79	3.46	-	1.99	1.10			
2019	15.87	2.90	-	2.18	-		5.95	2.59	-	1.50	-			
2020	8.51	2.70	-	2.00	-		5.73	1.92	-	1.45	-			
2021	12.83	3.05	-	2.23	-		6.73	2.27	-	1.64	-			
2022	10.45	2.41	-	1.86	-		4.69	1.19	-	1.05	0.50			
Exvessel Value (thousands of dollars)														
1991-1995	250	130	-	358	1	689	-	1	g/	-	11	-	11	701
1996-2000	6	92	-	147	g/	245	-	17	5	-	7	-	29	274
2001-2005	306	357	-	433	g/	1,097	-	285	62	-	10	-	356	1,452
2006-2010	438	600	-	387	1	1,426	-	1,074	362	-	74	-	1,509	2,935
2011	458	970	-	310	1	1,738	-	2,166	1,123	-	303	1	3,592	5,330
2012	421	928	-	79	g/	1,428	-	1,176	2,174	-	46	-	3,396	4,824
2013	244	1,695	-	273	g/	2,212	-	1,097	5,329	-	136	g/	6,561	8,773
2014	304	1,685	-	731	-	2,720	-	2,437	6,310	-	445	2	9,194	11,914
2015	615	1,811	-	97	g/	2,523	-	3,233	7,380	-	33	g/	10,645	13,168
2016	505	2,205	-	132	-	2,842	-	2,276	5,219	-	104	-	7,599	10,441
2017	111	768	-	186	-	1,065	-	1,315	4,702	-	122	12	6,151	7,216
2018	90	303	-	52	-	445	-	426	1,433	-	64	9	1,933	2,377
2019	19	235	-	59	-	313	-	214	1,263	-	51	g/	1,529	1,842
2020	2	854	-	127	-	984	-	316	1,433	-	96	-	1,845	2,828
2021	21	640	-	302	-	964	-	601	1,471	-	124	-	2,196	3,160
2022	27	615	-	67	-	709	-	670	1,687	-	77	-	2,434	3,143
Pounds (thousands)														
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	
2019	1	81	-	27	-	110	36	487	-	34	-	557	667	
2020	g/	316	-	64	-	379	55	748	-	66	-	869	1,248	
2021	2	210	-	135	-	347	89	651	-	75	-	815	1,162	
2022	3	256	-	36	-	294	143	1,419	-	73	g/	1,635	1,929	

TABLE IV-9. Landings, exvessel values and average prices (inflation adjusted, 2022 dollars) of inriver commercial harvest of Columbia River salmon.^{a/} (Page 3 of 3)

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), and Priest Rapids Pool fisheries.

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 ^{a/}		Coho Catch ^{a/}	
	Charter	Private	Charter	Private	Charter	Private
CALIFORNIA						
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	47.7	49.0	59.2	28.1	b/	0.2
2019	45.3	58.4	48.7	39.8	b/	0.7
2020 ^{d/}	26.6	33.3	24.3	15.9	b/	b/
2021	36.1	52.4	31.0	24.5	b/	0.5
2022 ^{c/}	40.1	58.4	47.9	41.1	b/	0.5
OREGON^{e/f/}						
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	5.6	58.2	0.3	4.7	2.0	25.7
2019	7.5	86.8	0.3	6.3	5.6	60.7
2020	2.3	54.7	0.2	7.0	0.7	20.1
2021	7.8	90.8	0.4	7.9	8.4	84.9
2022 ^{c/}	4.8	91.6	0.1	8.3	3.3	75.6

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 ^{a/}		Coho Catch ^{a/}	
	Charter	Private	Charter	Private	Charter	Private
WASHINGTON^{g/h/}						
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	14.5	33.5	3.0	7.0	11.8	22.9
2019	18.1	47.5	1.6	8.0	22.6	41.8
2020 ^{i/}	9.5	24.3	2.2	5.3	7.0	13.2
2021 ^{i/}	16.5	44.4	3.8	12.0	16.4	32.6
2022 ^{c/}	19.2	50.1	4.4	16.9	21.1	39.6

a/ Catch numbers may include some illegal harvest.

b/ Fewer than 50 fish.

c/ Preliminary.

d/ Estimates for California private trips do not include May and June due to restrictions on sampling caused by the COVID-19 pandemic.

e/ 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.

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

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

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

i/ Neah Bay and La Push were closed to public access in 2020 and Neah Bay again in 2021 due to the COVID-19 pandemic. 2020 Values for Washington include catch and effort from 7,016 ocean salmon angler trips (276 charter and 6,740 private) from Sekiu. 2021 Values for Washington include catch and effort from 10,899 ocean salmon angler trips (345 charter and 10,554 private) from Sekiu.

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
CHARTER TRIPS						
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	-	0.6	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	a/	1.0	3.1	42.0	1.6	47.7
2019	a/	1.5	2.6	37.2	3.9	45.3
2020	-	0.6	0.8	24.6	0.6	26.6
2021	a/	0.4	1.9	28.6	5.2	36.1
2022 ^{c/}	0.1	0.6	1.7	34.0	3.7	40.1
PRIVATE TRIPS						
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	1.3	5.0	6.8	23.5	12.3	49.0
2019	0.5	5.7	5.0	20.8	26.4	58.4
2020 ^{b/}	1.2	3.2	4.4	20.8	3.6	33.3
2021	0.7	1.1	6.8	17.1	26.7	52.4
2022 ^{c/}	1.8	2.8	5.1	28.2	20.6	58.4
TOTAL TRIPS						
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	1.3	6.0	9.9	65.4	13.9	96.6
2019	0.5	7.2	7.6	58.1	30.3	103.7
2020 ^{b/}	1.2	3.8	5.2	45.5	4.2	59.8
2021	0.7	1.6	8.7	45.7	31.9	88.6
2022 ^{c/}	1.8	3.5	6.8	62.1	24.3	98.5

a/ Fewer than 50 angler trips.

b/ Estimates for California private trips do not include May and June due to restrictions on sampling caused by the COVID-19 pandemic.

c/ 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
CHARTER TRIPS						
1991-1995 ^{a/}	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	0.5	0.4	4.7	c/	0.1	5.6
2019	0.9	1.1	5.3	-	0.1	7.5
2020	0.1	0.6	1.5	-	0.1	2.3
2021	0.3	0.9	6.4	-	0.2	7.8
2022 ^{b/}	0.3	0.3	4.1	-	0.2	4.8
PRIVATE TRIPS						
1991-1995 ^{a/}	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	7.2	10.8	18.9	14.3	6.9	58.2
2019	13.8	20.0	29.8	19.0	4.3	86.8
2020	3.4	12.6	17.1	15.5	6.2	54.7
2021	12.5	17.8	35.4	19.5	5.6	90.8
2022 ^{b/}	16.6	20.7	28.5	22.7	3.0	91.6
TOTAL TRIPS						
1991-1995 ^{a/}	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	7.7	11.3	23.6	14.3	7.0	63.8
2019	14.7	21.1	35.1	19.0	4.4	94.2
2020	3.5	13.2	18.6	15.5	6.3	57.0
2021	12.9	18.7	41.8	19.5	5.9	98.7
2022 ^{b/}	16.9	21.0	32.6	22.7	3.2	96.4

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 ^{a/}	La Push	Westport	Ilwaco ^{b/}	State Total
CHARTER TRIPS					
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	0.7	0.5	9.2	4.1	14.5
2019	0.8	0.6	10.8	5.9	18.1
2020 ^{c/}	-	-	7.1	2.1	9.5
2021 ^{d/}	-	0.4	10.4	5.3	16.5
2022 ^{e/}	0.2	0.4	10.9	7.7	19.2
PRIVATE TRIPS					
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	8.0	1.4	13.3	10.7	33.5
2019	9.3	1.7	12.6	24.0	47.5
2020 ^{c/}	-	-	11.0	6.5	24.3
2021 ^{d/}	-	1.2	14.5	18.1	44.4
2022 ^{e/}	9.2	2.4	18.2	20.6	50.3
TOTAL TRIPS					
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	8.7	1.9	22.5	14.9	48.0
2019	10.1	2.3	23.4	29.9	65.7
2020 ^{c/}	-	-	18.1	8.7	33.8
2021 ^{d/}	-	1.6	24.9	23.4	60.9
2022 ^{e/}	9.4	2.8	29.1	28.3	69.5

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/ Neah Bay and La Push were closed to public access in 2020 due to the COVID-19 pandemic. State totals include 7,016 ocean salmon angler trips (276 charter and 6,740 private) from Sekiu.

d/ Neah Bay remained closed to public access in 2021 due to the COVID-19 pandemic. 2021 Values for Washington include catch and effort from 10,899 ocean salmon angler trips (345 charter and 10,554 private) from Sekiu.

e/ 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 2)

Year	Columbia River and Buoy 10					Westport			La Push			Neah Bay and Area 4B Add-On		
	Charter	Private	Subtotal	Jetty ^{b/}	Total	Charter	Private	Total	Charter	Private	Total	Charter	Private	Total
SALMON EFFORT														
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	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
2019	6.9	110.7	117.6	4.0	121.6	10.8	12.6	23.4	0.6	1.7	2.3	0.8	9.3	10.1
2020 ^{h/}	2.6	76.2	78.8	5.9	84.7	7.1	11.0	18.1	-	-	-	-	-	-
2021 ^{i/}	5.8	129.4	135.2	11.9	147.2	10.4	14.5	24.9	0.4	1.2	1.6	-	-	-
2022 ^{c/}	8.0	115.1	123.1	10.8	133.9	10.9	17.8	28.7	0.4	2.2	2.5	0.2	9.2	9.4
BOTTOMFISH EFFORT^{d/}														
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 ^{a/f/}	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	9.2	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	8.9	17.1	5.8	22.9	0.7	5.0	5.6	1.3	16.2	17.5
2018	5.2	3.8	9.0	b/	9.0	19.0	5.8	24.8	1.0	6.3	7.3	1.6	18.7	20.3
2019	3.8	3.2	7.0	b/	7.0	17.2	6.1	23.4	1.0	7.5	8.5	1.4	21.2	22.6
2020 ^{h/}	3.7	6.0	9.7	1.8	11.6	11.8	9.2	21.0	a/	a/	a/	a/	a/	a/
2021 ^{i/}	4.5	4.0	8.5	1.7	10.2	17.5	9.2	26.7	0.1	2.6	2.7	a/	a/	a/
2022 ^{c/}	2.8	3.7	6.5	5.3	11.8	13.5	7.4	20.9	0.5	4.8	5.3	0.7	16.5	17.2

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 2)

Year	Columbia River and Buoy 10					Westport			La Push			Neah Bay and Area 4B Add-On		
	Charter	Private	Subtotal	Jetty ^{b/}	Total	Charter	Private	Total	Charter	Private	Total	Charter	Private	Total
STURGEON EFFORT^{g/}														
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	1.0	16.5	17.5	-	17.5	-	-	-	-	-	-	-	-	-
2019	0.7	19.9	20.6	-	20.6	-	-	-	-	-	-	-	-	-
2020	a/	0.8	0.8	-	0.8	-	-	-	-	-	-	-	-	-
2021	1.1	16.5	17.6	-	17.6	-	-	-	-	-	-	-	-	-
2022 ^{c/}	0.6	10.4	11.0	-	11.0	-	-	-	-	-	-	-	-	-

a/ Fewer than 50 angler trips.

b/ Columbia River north jetty was not sampled in 2005, 2007, 2018 and 2019 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.

h/ Neah Bay and La Push were closed to public access in late March for the remainder of 2020 due to the COVID-19 pandemic. An additional 7,016 ocean salmon angler trips (276 charter, 6,740 private) and 9,940 ocean bottomfish angler trips (458 charter, 9,482 private) occurred from the port of Sekiu and are not included in this table.

i/ Neah Bay remained closed to public access in 2021 due to the COVID-19 pandemic. An additional 10,899 ocean salmon angler trips (345 charter and 10,554 private) and 17,367 ocean bottomfish angler trips (1,005 charter, and 16,362 private) occurred from the port of Sekiu and are not included in this table.

TABLE IV-15. Buoy 10 ^{a/b/} 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
OREGON BUOY 10											
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	36	41,898	2,153	1	8,191	66	13	3,927	457	0	0
2019	10	50,492	3,995	-	8,587	49	1	15,367	1,368	0	0
2020	16	40,724	2,194	1	10,046	35	3	3,489	588	0	0
2021	20	75,704	4,024	-	17,731	133	6	26,671	1,470	0	0
2022 ^{c/}	-	57,545	2,496	-	22,632	106	-	6,177	365	0	0
WASHINGTON BUOY 10											
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	615	22,616	-	84	3,278	-	114	2,250	-	0	0
2019	22	22,458	-	-	2,638	-	2	6,037	-	0	0
2020	362	25,555	3,592	41	4,489	21	63	2,738	183	0	0
2021	118	23,106	2,893	-	2,925	-	90	7,790	1,004	0	0
2022 ^{c/}	12	20,338	4,796	5	5,559	53	1	1,834	470	0	0

TABLE IV-15. Buoy 10^{a/b/} 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
TOTAL BUOY 10											
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	651	64,514	2,153	85	11,469	66	127	6,177	457	0	0
2019	32	72,950	3,995	0	11,225	49	3	21,404	1,368	0	0
2020	378	66,279	5,786	42	14,535	56	66	6,227	771	0	0
2021	138	98,810	6,917	0	20,656	133	96	34,461	2,474	0	0
2022 ^{c/}	12	77,883	7,292	5	28,191	159	1	8,011	835	0	0
TOTAL AREA 4B ADD-ON^{d/}											
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 ^{e/}	123	2,528	-	1	23	-	173	3,086	-	28	83
2001-2005	-	-	-	-	-	-	-	-	-	0	0
2006 ^{e/}	-	-	-	-	-	-	-	-	-	0	0
2007	-	-	-	-	-	-	-	-	-	0	0
2008	-	782	-	-	11	-	-	137	-	0	0
2009 ^{f/}	-	-	-	-	-	-	-	-	-	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, 2022) dollars of the troll and recreational ocean salmon fishery for major port areas.^{a/}

Year or Avg.	Crescent City	Eureka	Fort Bragg	San Francisco	Monterey	Coastal Community Total ^{b/}	State-Level Total
OCEAN TROLL^{c/}							
1991-1995	13	194	1,369	15,918	9,068	26,563	32,010
1996-2000	14	231	967	16,673	10,108	27,994	29,618
2001-2005	654	438	8,247	19,882	5,362	34,583	36,423
2006-2010	84	216	1,838	3,694	690	6,520	6,815
2011	43	523	5,032	3,187	776	9,561	11,932
2012	25	805	4,625	14,640	4,424	24,518	29,378
2013	131	2,065	12,069	23,413	2,376	40,053	46,809
2014	126	904	7,716	11,430	672	20,849	24,277
2015	32	428	5,270	5,520	1,017	12,268	14,940
2016	1	68	1,861	5,360	1,125	8,415	9,539
2017 ^{e/}	-	35	432	5,982	1,400	7,848	9,497
2018	307	394	1,103	9,841	1,285	12,931	15,327
2019	192	93	801	20,710	5,080	26,875	32,669
2020 ^{e/}	-	26	1,219	23,744	2,406	27,395	28,739
2021 ^{h/}	110	342	5,088	21,726	3,502	30,767	35,315
2022 ^{f/h/}	13	123	1,663	21,260	3,515	26,574	30,348
RECREATIONAL							
1991-1995	1,131	1,218	1,840	15,618	7,480	27,288	32,039
1996-2000	524	965	1,879	15,658	6,878	25,904	30,137
2001-2005	213	1,026	2,498	11,113	4,475	19,326	20,492
2006-2010	52	524	837	3,148	1,287	5,847	6,453
2011	61	1,291	1,951	6,252	3,377	12,931	15,985
2012	636	2,273	1,964	11,102	5,513	21,488	26,569
2013	562	2,276	2,365	13,359	3,513	22,076	26,832
2014	365	1,650	2,371	10,834	3,275	18,494	22,415
2015	52	877	1,571	9,312	1,715	13,528	15,964
2016	45	848	1,219	8,527	868	11,507	13,516
2017	-	-	561	10,685	1,578	12,825	14,620
2018	112	591	1,343	13,147	1,519	16,712	19,329
2019	42	746	1,060	11,658	3,369	16,875	19,870
2020 ^{e/g/}	94	364	602	8,480	474	10,014	11,528
2021	56	177	1,090	9,072	3,657	14,053	16,588
2022 ^{f/}	149	347	867	11,633	2,769	15,766	18,435

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.

g/ California 2020 recreational estimates do not include private trips during May and June due to restrictions on sampling caused by the COVID-19 pandemic.

h/ Commercial landings in 2021 and 2022 in Crescent City and Eureka port areas are fish caught in the Fort Bragg and San Francisco areas but landed in Crescent City and Eureka ports.

TABLE IV-17. Estimates of Oregon coastal community and state personal income impacts in thousands of real (inflation adjusted, 2022) dollars of the troll and recreational ocean salmon fishery for major port areas.^{a/}

Year or Avg.	Astoria	Tillamook	New port	Coos Bay	Brookings	Coastal Community Total ^{b/}	State-Level Total
OCEAN TROLL^{c/}							
1991-1995	116	907	3,714	1,804	184	6,725	9,068
1996-2000	193	380	3,931	2,270	548	7,322	8,922
2001-2005	1,065	1,178	7,364	6,495	1,233	17,335	20,003
2006-2010	699	388	918	877	366	3,248	3,781
2011	289	69	629	2,804	313	4,104	5,400
2012	833	334	2,301	2,621	425	6,514	9,241
2013	419	587	1,857	7,897	739	11,498	15,501
2014	2,175	1,142	6,502	9,666	1,431	20,916	29,523
2015	1,152	818	3,043	4,198	619	9,830	12,213
2016	307	197	3,421	1,417	154	5,496	7,157
2017	385	179	1,923	397	111	2,995	3,935
2018	62	115	1,428	1,128	502	3,235	4,547
2019	56	162	1,743	636	213	2,810	3,841
2020	30	137	1,578	345	217	2,307	3,088
2021	89	250	2,078	681	229	3,327	4,352
2022 ^{d/}	238	682	2,080	786	185	3,970	5,414
RECREATIONAL							
1991-1995	1,278	1,029	2,330	2,080	1,468	8,185	10,614
1996-2000	495	567	559	617	1,185	3,423	4,512
2001-2005	1,336	1,262	2,406	2,111	928	8,042	9,884
2006-2010	791	859	1,287	820	375	4,132	5,170
2011	732	654	955	652	260	3,253	4,462
2012	561	622	1,107	1,068	785	4,143	5,936
2013	651	724	1,180	1,873	863	5,291	7,410
2014	1,206	1,287	2,866	1,863	725	7,947	11,075
2015	874	788	1,408	915	373	4,358	6,016
2016	363	535	597	688	174	2,356	3,240
2017	705	432	657	790	83	2,668	3,490
2018	619	573	1,633	882	291	3,998	5,543
2019	1,187	1,100	2,271	1,169	184	5,912	8,071
2020	262	679	1,073	955	261	3,229	4,572
2021	983	966	2,709	1,200	255	6,113	8,452
2022 ^{d/}	1,273	1,023	2,027	1,400	141	5,864	7,863

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, 2022) dollars of the troll and recreational ocean salmon fishery for major port areas.^{a/}

Year or Avg.	Neah Bay	La Push	Westport	Ilwaco ^{b/}	Coastal Community Total ^{c/d/}	Puget Sound	State-Level Total
OCEAN TROLL^{e/f/}							
1991-1995 ^{g/}	645	142	917	66	1,772	259	2,609
1996-2000	217	4	262	25	508	134	698
2001-2005	941	249	1,248	156	2,593	19	2,937
2006-2010	370	396	1,689	181	2,636	26	3,074
2011	682	270	1,668	114	2,733	-	3,587
2012	1,007	585	1,669	266	3,527	-	4,836
2013	573	529	3,163	88	4,354	0	5,422
2014	456	526	1,806	1,310	4,097	1	5,067
2015	332	676	3,323	462	4,793	34	6,363
2016	217	216	1,580	250	2,263	50	3,008
2017	601	188	3,508	88	4,385	-	5,903
2018	470	493	2,502	24	3,490	-	4,838
2019	980	442	1,151	51	2,624	-	3,894
2020 ^{h/}	-	147	1,354	107	1,608	530	2,578
2021 ^{i/}	302	90	2,535	65	2,992	157	4,012
2022	213	145	2,147	98	2,603	-	3,480
RECREATIONAL							
1991-1995	729	143	4,057	2,058	6,987	-	9,449
1996-2000	387	105	1,900	929	3,321	-	4,477
2001-2005	1,107	277	6,816	4,190	12,390	-	14,496
2006-2010	622	255	4,591	2,829	8,297	-	10,268
2011	711	348	4,918	2,848	8,826	-	12,824
2012	889	330	5,557	2,689	9,466	-	13,755
2013	1,026	354	5,401	2,813	9,594	-	14,003
2014	1,124	469	7,893	4,422	13,909	-	20,163
2015	1,000	324	6,851	3,563	11,737	-	16,969
2016	-	110	2,606	2,434	5,150	-	8,309
2017	725	172	3,733	2,284	6,913	-	10,100
2018	604	188	3,247	1,816	5,855	-	8,531
2019	701	226	3,593	3,233	7,754	-	11,290
2020 ^{j/}	-	-	2,556	1,007	3,563	826	5,839
2021 ^{j/}	-	148	3,642	2,655	6,446	1,265	10,393
2022	576	219	4,028	3,416	8,239	-	11,959

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 NWFS'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/ 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.

h/ The port of Neah Bay was closed to public access and the port of La Push was restricted to local access only in 2020 due to the COVID-19 pandemic. Vessels were allowed to land in the Puget Sound ports of Sekiu and Port Angeles by emergency rule. Totals include revenue from ocean troll-caught landings (36,000 pounds of Chinook, 800 pounds of coho) in Puget Sound ports authorized by emergency rule.

i/ The port of Neah Bay was partially closed and restricted to limited local access only in 2021 due to the COVID-19 pandemic. Vessels were allowed to land in the Puget Sound ports of Sekiu and Port Angeles by emergency rule. Totals include revenue from ocean troll-caught landings (9,100 pounds of Chinook, 1,300 pounds of coho) in Puget Sound ports authorized by emergency rule.

j/ Neah Bay and La Push were closed to public access in 2020 and Neah Bay again in 2021 due to the COVID-19 pandemic. 2020 Values for Washington include catch and effort from 7,016 ocean salmon angler trips (276 charter and 6,740 private) from Sekiu. 2021 Values for Washington include catch and effort from 10,899 ocean salmon angler trips (345 charter and 10,554 private) from Sekiu.

TABLE IV-19. Local personal income impacts in real (inflation adjusted, 2022) dollars of the inriver commercial salmon fishery on Oregon and Washington Columbia River communities.^{a/} (page 1 of 2)

Communities: (page 1 of 2)	Non-Indian - Gillnet ^{b/}						Treaty Indian - All Gears ^{c/}						Columbia River Total	
	Chinook				Coho	Chum	TOTAL	Chinook			Coho	Chum		TOTAL
	Year or Avg.	Spring	Fall					Spring	Fall					
Brights ^{d/}			Tules	Brights ^{d/}	Tules									
Oregon														
1991-1995	723	636	78	1,630	1	3,069	2	632	155	20	e/	808	3,877	
1996-2000	319	311	87	1,127	2	1,846	2	260	105	8	e/	374	2,220	
2001-2005	1,931	1,334	303	2,662	e/	6,229	137	550	115	15	e/	817	7,046	
2006-2010	1,869	1,868	198	1,630	e/	5,565	461	1,350	123	69	e/	2,003	7,567	
2011	2,005	2,486	233	1,243	e/	5,967	315	1,026	53	52	e/	1,445	7,413	
2012	1,754	1,495	183	247	e/	3,679	123	581	8	19	e/	731	4,409	
2013	1,805	4,140	206	958	e/	7,109	175	2,021	44	12	e/	2,252	9,362	
2014	1,197	3,091	269	3,167	e/	7,724	532	1,693	26	66	e/	2,317	10,041	
2015	1,956	2,277	146	406	e/	4,784	669	1,545	47	3	e/	2,264	7,048	
2016	1,979	2,097	95	617	e/	4,788	224	1,336	3	12	e/	1,575	6,363	
2017	2,708	1,019	55	809	e/	4,592	297	1,642	5	29	e/	1,973	6,565	
2018	2,627	578	42	262	e/	3,509	829	1,652	4	37	e/	2,522	6,031	
2019	839	336	21	372	e/	1,568	291	1,886	1	24	e/	2,202	3,770	
2020	720	1,064	84	1,037	e/	2,905	509	3,383	3	139	e/	4,034	6,940	
2021	1,322	1,043	100	2,528	e/	4,994	833	2,090	7	217	e/	3,147	8,141	
2022 ^{f/}	1,777	778	110	1,498	e/	4,164	586	1,909	113	50	e/	2,657	6,821	
Washington ^{f/g/h/}														
1991-1995	388	260		703	3	1,354	1	901		25	e/	927	2,281	
1996-2000	11	236		405	2	653	36	1,622		23	e/	1,680	2,333	
2001-2005	557	950		1,354	1	2,862	673	2,991		67	e/	3,731	6,593	
2006-2010	724	1,111		693	1	2,530	1,777	3,247		176	e/	5,200	7,730	
2011	674	1,427	-	456	1	2,558	3,188	1,653	e/	445	1	5,286	7,844	
2012	603	1,331	-	113	e/	2,049	1,688	3,120	e/	65	e/	4,873	6,921	
2013	346	2,405	-	387	e/	3,138	1,556	7,560	e/	194	e/	9,310	12,448	
2014	430	2,381	-	1,034	e/	3,845	3,444	8,919	e/	629	4	12,992	16,838	
2015	808	2,381	-	128	e/	3,317	4,249	9,701	e/	43	e/	13,993	17,311	
2016	685	2,993	-	180	e/	3,858	3,090	7,085	e/	141	e/	10,316	14,174	
2017	148	1,021	-	247	e/	1,416	1,748	6,252	e/	162	17	8,162	9,578	
2018	124	419	-	72	e/	616	590	1,985	e/	89	13	2,663	3,279	
2019	26	325	-	82	e/	433	297	1,749	e/	71	e/	2,117	2,550	
2020	4	1,351	-	201	e/	1,556	500	2,267	e/	151	e/	2,918	4,474	
2021	34	1,013	-	477	e/	1,524	950	2,327	e/	197	e/	3,474	4,998	
2022	41	923	-	100	e/	1,064	1,005	2,532	e/	115	e/	3,652	4,716	

TABLE IV-19. Local personal income impacts in thousands of real (inflation adjusted, 2022) dollars of the inriver commercial salmon fishery on Oregon and Washington Columbia River communities.^{a/} (page 2 of 2)

Year or Avg.	Non-Indian - Gillnet ^{b/}						Treaty Indian - All Gears ^{c/}						Columbia River Total
	Chinook					Coho	Chinook						
	Spring	Fall		Tules	Chum		TOTAL	Spring	Fall		Chum	TOTAL	
		Brights ^{d/}							Brights ^{d/}				
Columbia River (Combined)													
1991-1995	1,111	896	78	2,333	4	4,423	3	1,533	155	45	e/	1,735	6,157
1996-2000	330	547	87	1,531	3	2,499	37	1,881	105	30	e/	2,054	4,553
2001-2005	2,487	2,284	303	4,016	1	9,091	809	3,541	115	82	e/	4,548	13,639
2006-2010	2,593	2,979	198	2,324	2	8,094	2,238	4,596	123	245	e/	7,203	15,297
2011	2,679	4,146		1,699	1	8,525	3,503	2,732		497	1	6,732	15,257
2012	2,358	3,009		361	e/	5,728	1,810	3,709		84	e/	5,603	11,331
2013	2,152	6,751		1,345	e/	10,248	1,730	9,626		206	e/	11,562	21,810
2014	1,627	5,741		4,201	e/	11,569	3,976	10,638		695	4	15,309	26,878
2015	2,764	4,804		534	e/	8,101	4,918	11,292		47	e/	16,257	24,358
2016	2,664	5,186		797	e/	8,646	3,314	8,424		153	e/	11,891	20,537
2017	2,856	2,096		1,056	e/	6,008	2,046	7,899		191	17	10,135	16,143
2018	2,752	1,039		334	e/	4,124	1,419	3,641		126	13	5,185	9,310
2019	865	682		455	e/	2,001	587	3,636		95	e/	4,318	6,320
2020	724	2,499		1,239	e/	4,462	1,009	5,654		290	e/	6,952	11,414
2021	1,356	2,157		3,005	e/	6,518	1,783	4,424		413	e/	6,621	13,139
2022 ^{f/}	1,818	1,811		1,599	e/	5,228	1,591	4,553		164	e/	6,309	11,536

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 NWFS'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/ 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, 2022) dollars of the Buoy 10 recreational fishery in Oregon and Washington and the Area 4B add-on fishery in Washington^{a/}.

Year or Avg.	Total Angler Trips (thousands)	Income Impacts (thousands of dollars)		
		Oregon	Washington	Total
BUOY 10 (including bank fishing)				
1991-1995	79	1,978	3,366	5,344
1996-2000	45	1,267	1,734	3,001
2001-2005	85	2,321	1,995	4,316
2006-2010	68	1,561	1,075	2,636
2011	49	2,348	1,362	3,710
2012	65	3,110	1,813	4,923
2013	66	3,202	1,709	4,911
2014	108	5,488	2,484	7,972
2015	108	5,461	2,545	8,007
2016	95	4,711	2,314	7,026
2017	94	4,555	2,420	6,976
2018	67	3,243	1,823	5,066
2019	77	4,004	1,665	5,669
2020	72	3,155	2,244	5,399
2021	106	5,860	1,951	7,811
2022 ^{b/}	85	4,410	1,861	6,271
AREA 4B ADD-ON^{c/d/e/}				
1989-1990	12	-	859	859
1991-1995	6	-	501	501
1996-2000	3	-	180	180
2001-2005	-	-	-	-
2006	-	-	-	-
2007	-	-	-	-
2008	1	-	40	40
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:

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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.

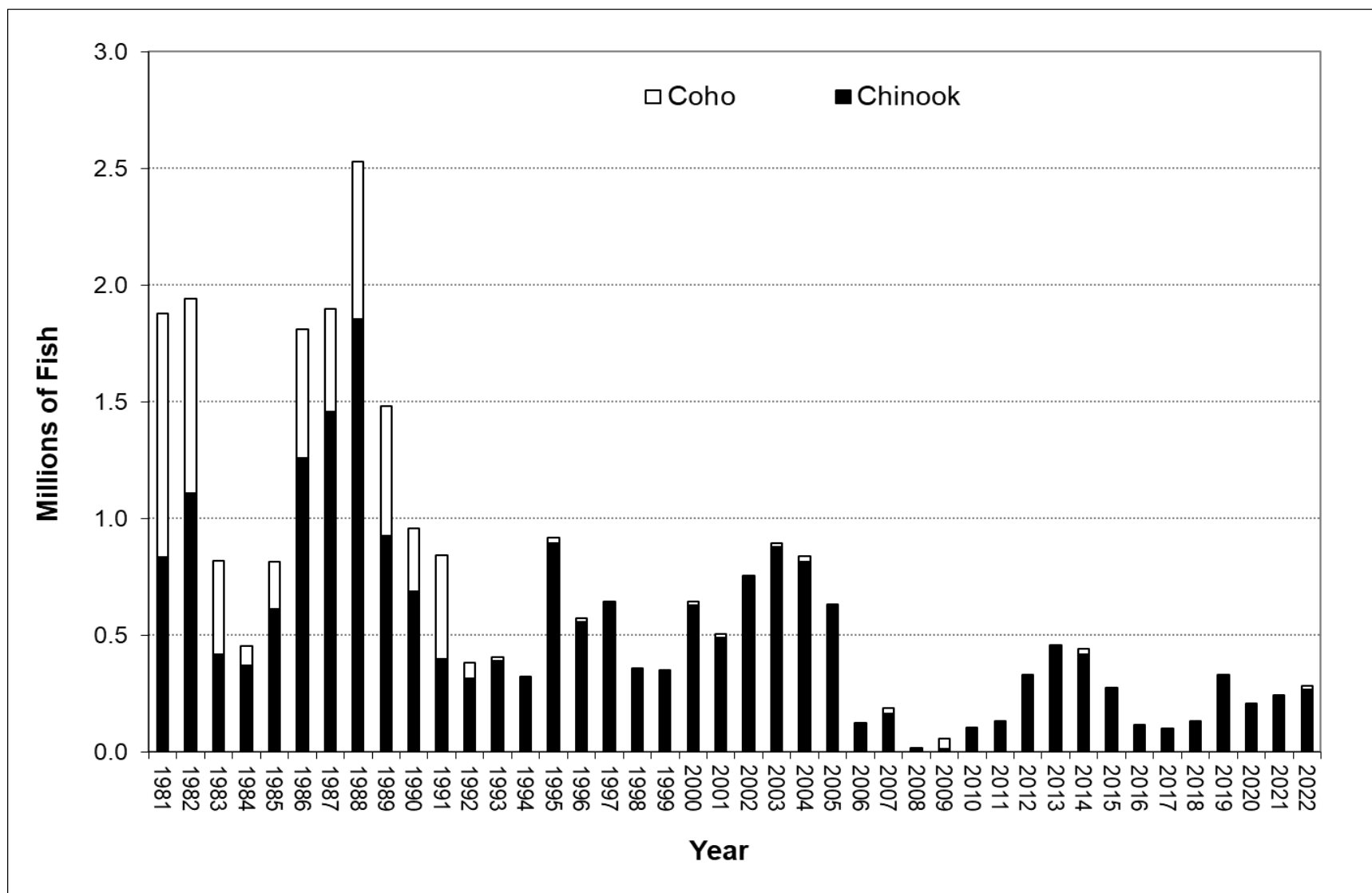


Figure IV-1. West Coast ocean non-Indian commercial Chinook and coho harvest.

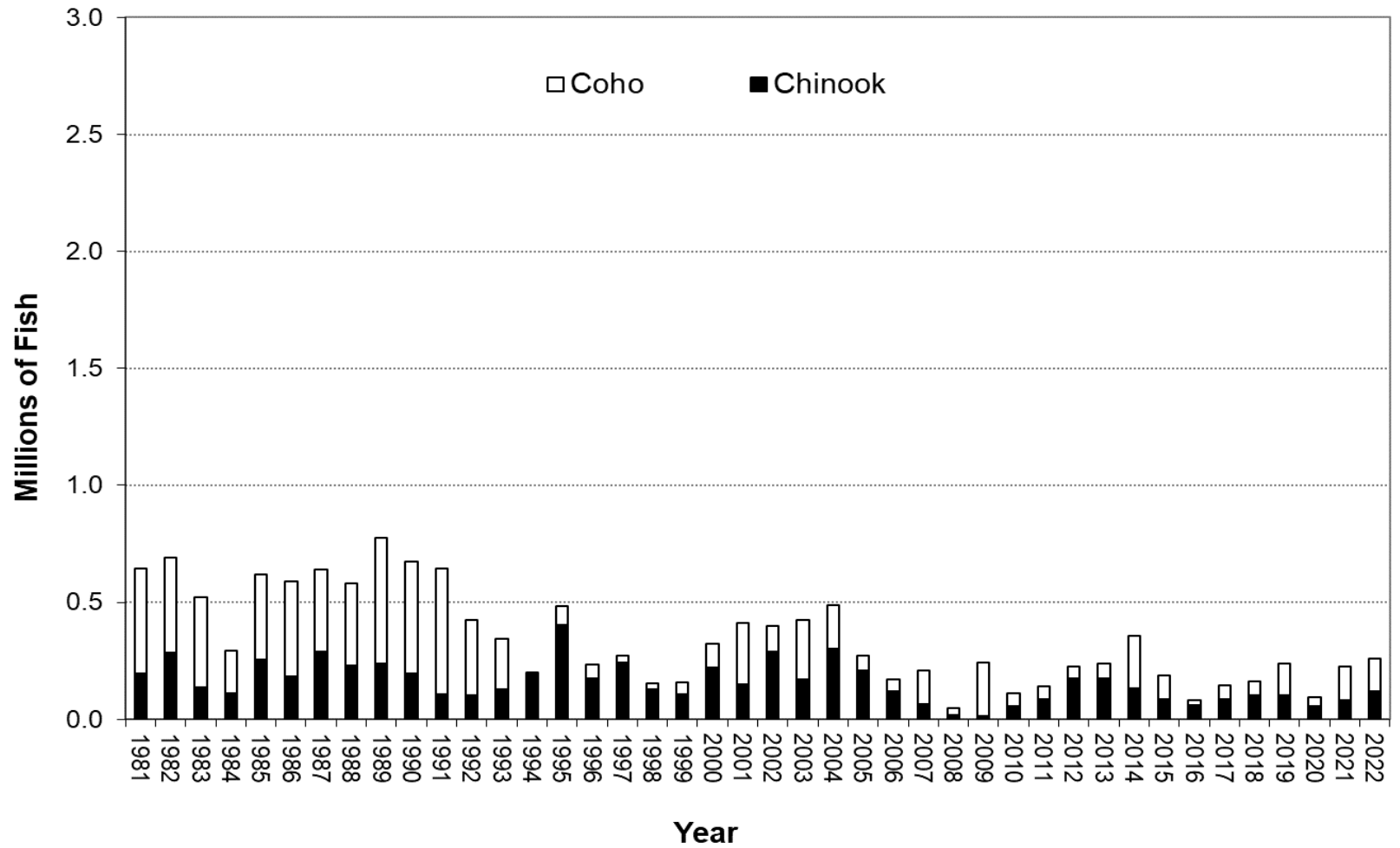


Figure IV-2. West Coast ocean recreational Chinook and coho harvest.

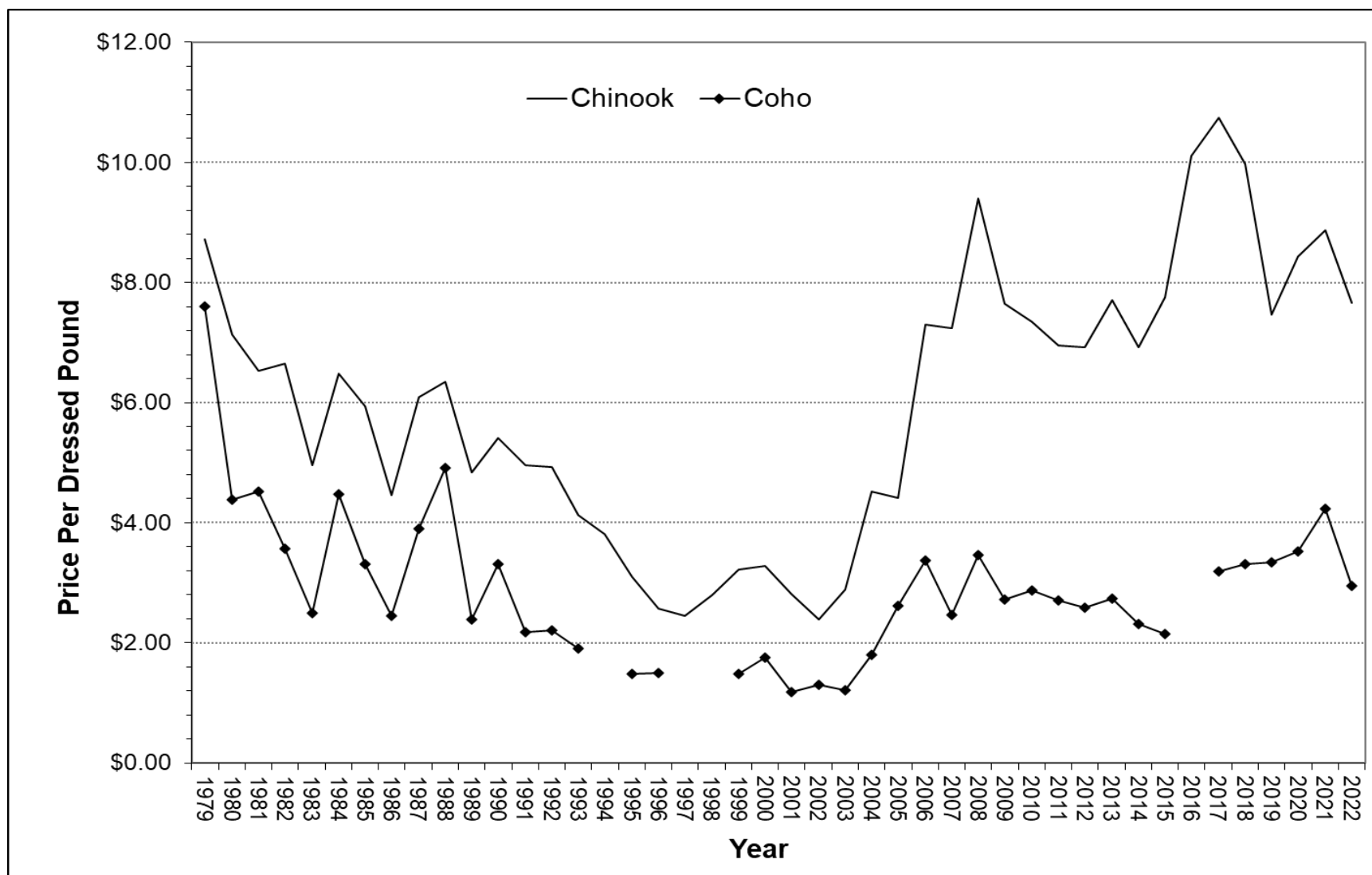


Figure IV-3. West Coast ocean non-Indian commercial salmon average annual exvessel prices (inflation adjusted, 2022 dollars).

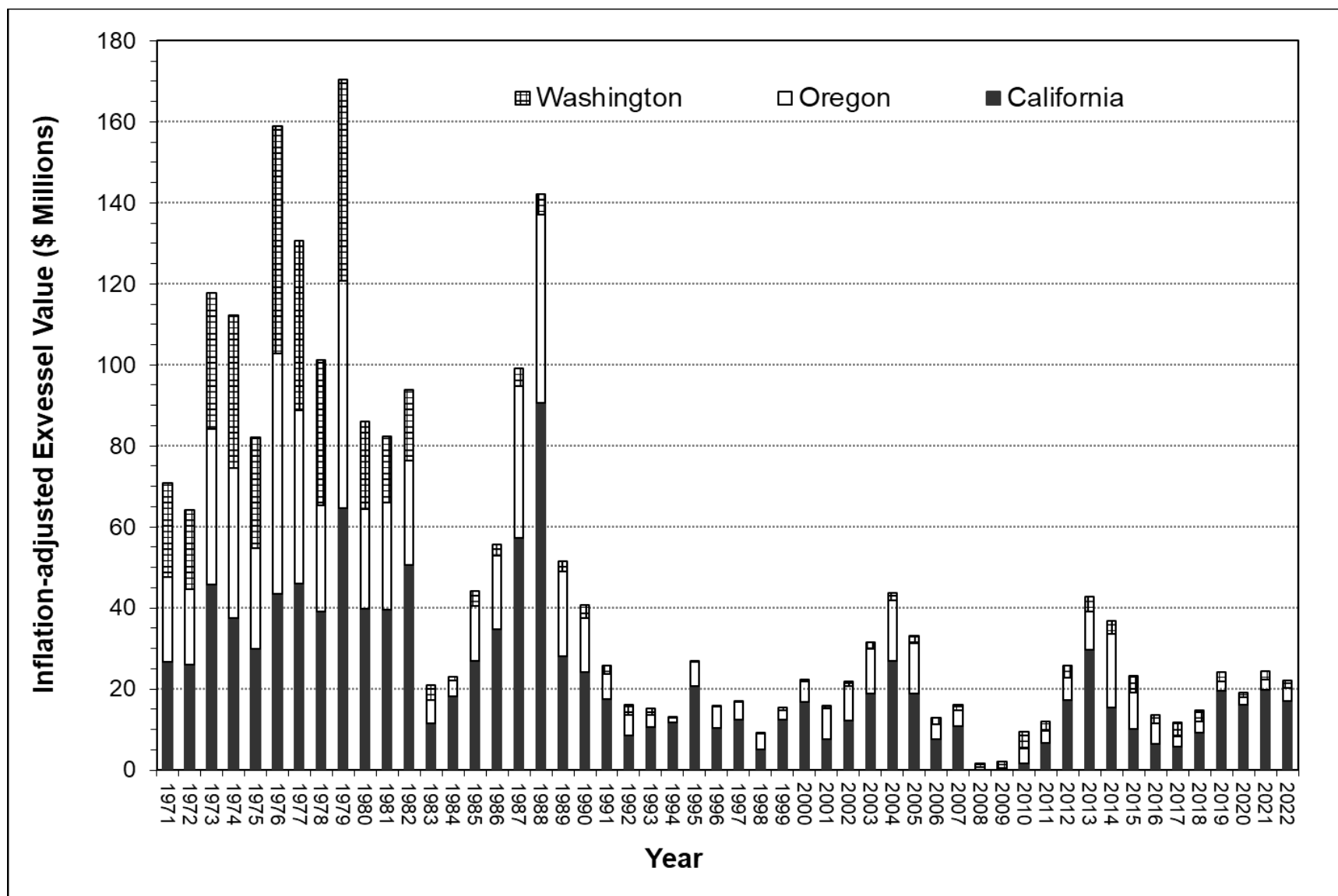


Figure IV-4. Exvessel value of West Coast non-Indian ocean commercial Chinook and coho landings by state of landing (inflation adjusted, 2022 dollars).

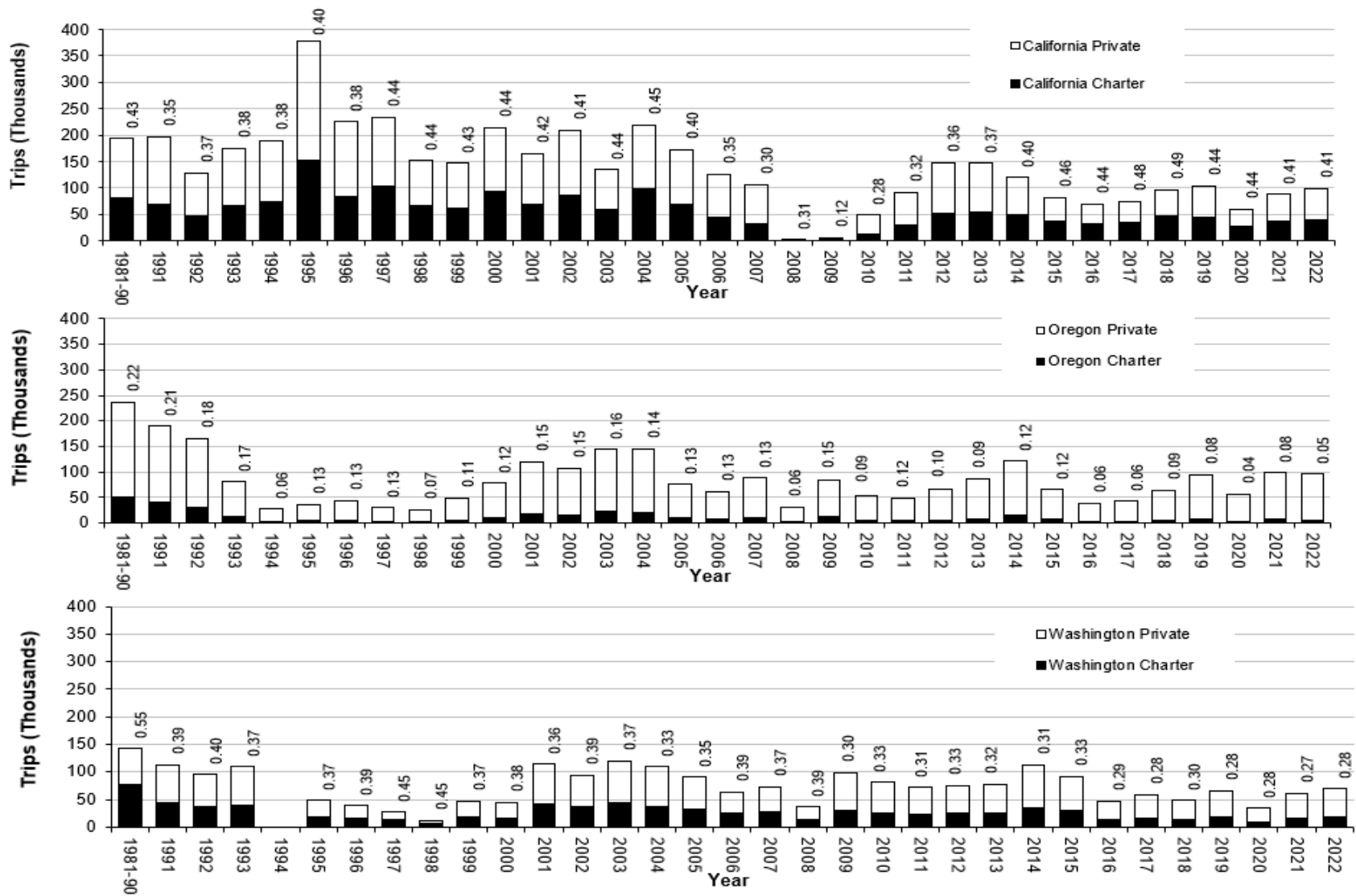


Figure IV-5. Total recreational ocean salmon trips for California, Oregon, and Washington, with proportion of charter trips shown above each bar.

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	Eureka	Fort Bragg	San Francisco	Monterey	Oregon	Season
DAYS FISHED							
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	119	261	3,255	8,878	4,674	87	17,187
2006-2010	87	270	1,107	4,156	1,587	-	6,968
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	238	461	819	4,747	1,312	-	7,577
2019	153	151	1,040	8,236	6,210	-	15,790
2020	-	-	219	9,451	2,616	-	12,286
2021	-	-	1,579	5,080	3,263	-	9,922
2022 ^{a/}	-	-	875	5,252	4,884	-	11,011
CHINOOK LANDINGS							
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
2006-2010	2,367	6,395	13,168	41,349	8,881	-	66,319
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	4,412	4,599	10,551	39,429	19,425	-	78,416
2019	4,235	1,622	9,281	158,392	97,959	-	271,489
2020	-	-	1,849	145,741	30,210	-	177,800
2021	-	-	44,725	104,893	52,837	-	202,455
2022 ^{a/}	-	-	21,661	97,566	91,959	-	211,186
COHO LANDINGS							
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	-	-	-	-	-	-	-
2006-2010	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-
2016	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-
2019	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-

a/ 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^{a/}</u>								
1986-1990	-	9	360	219	253	10	-	545
1991-1995	-	-	-	-	-	-	-	-
1996-2000	-	-	-	-	10	13	-	15
2001-2005 ^{b/}	18	2	3	36	97	61	6	119
2006-2010	-	-	-	-	-	87	-	87
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	-	20	108	42	68	-	-	238
2019	-	-	13	50	90	-	-	153
2020	-	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-	-
2022 ^{c/}	-	-	-	-	-	-	-	-
<u>Eureka</u>								
1986-1990	-	-	882	518	547	467	64	1,629
1991-1995	-	-	-	-	-	500	100	600
1996-2000	-	-	-	-	128	177	-	202
2001-2005	-	-	-	-	94	242	-	261
2006-2010	-	-	-	-	-	270	-	270
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	-	110	116	121	114	-	-	461
2019	-	-	74	19	58	-	-	151
2020	-	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-	-
2022 ^{c/}	-	-	-	-	-	-	-	-
<u>Fort Bragg</u>								
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
2006-2010	106	-	-	616	1,061	238	-	1,107
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	-	-	-	304	453	62	-	819
2019	-	-	306	319	415	-	-	1,040
2020	-	-	-	-	126	93	-	219
2021	-	-	-	-	1,341	238	-	1,579
2022 ^{c/}	-	-	-	379	496	-	-	875

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
San Francisco								
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
2006-2010	-	1,656	-	1,271	1,851	1,378	271	4,156
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	-	-	-	519	2,298	1,489	441	4,747
2019	-	683	2,014	1,801	2,379	1,108	251	8,236
2020	-	1,363	2,515	2,521	1,491	993	568	9,451
2021	-	-	2,109	570	998	1,086	317	5,080
2022 ^{c/}	-	-	-	2,136	1,241	1,494	381	5,252
Monterey								
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
2006-2010	-	1,769	66	204	150	89	-	1,587
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	-	473	839	-	-	-	-	1,312
2019	-	3,189	2,050	971	-	-	-	6,210
2020	-	1,302	844	374	96	-	-	2,616
2021	-	2,527	483	197	56	-	-	3,263
2022 ^{c/}	-	3,047	1,398	337	102	-	-	4,884
Total Statewide^{a/}								
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
2006-2010	106	2,597	66	1,681	2,041	1,883	271	6,968
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	-	603	1,063	986	2,933	1,551	441	7,577
2019	-	3,872	4,457	3,160	2,942	1,108	251	15,790
2020	-	2,665	3,359	2,895	1,713	1,086	568	12,286
2021	-	2,527	2,592	767	2,395	1,324	317	9,922
2022 ^{c/}	-	3,047	1,398	2,852	1,839	1,494	381	11,011

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)

CHINOOK									COHO							
<u>Crescent City^{a/}</u>																
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 ^{b/}	1,186	84	53	5,245	10,184	1,351	293	7,103	-	-	-	-	-	-	-	-
2006-2010	-	-	-	-	-	2,367	-	2,367	-	-	-	-	-	-	-	-
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	-	241	1,497	775	1,899	-	-	4,412	-	-	-	-	-	-	-	-
2019	-	-	114	1,311	2,810	-	-	4,235	-	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>Eureka</u>																
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	-	-	-	-	-	-	-	-
2006-2010	-	-	-	-	-	6,395	-	6,395	-	-	-	-	-	-	-	-
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	-	696	980	1,045	1,878	-	-	4,599	-	-	-	-	-	-	-	-
2019	-	-	623	164	835	-	-	1,622	-	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE A-3. California commercial troll Chinook and coho salmon landings in numbers of fish by catch area and month. (Page 2 of 3)

Year or Avg.	Apr.	May	June	July	Aug.	Sept.	Oct.	Season	Apr.	May	June	July	Aug.	Sept.	Oct.	Season
CHINOOK									COHO							
Fort Bragg																
1986-1990	-	46,868	72,418	91,861	36,174	5,095	-	252,416	-	-	9,106	14,014	3,376	190	-	26,000
1991-1995	-	388	-	-	34,300	8,682	-	17,354	-	-	-	-	4,500	-	-	4,500
1996-2000	-	-	-	-	14,443	9,640	-	12,529	-	-	-	-	-	-	-	-
2001-2005	-	17,715	-	51,702	51,853	27,247	-	96,466	-	-	-	-	-	-	-	-
2006-2010	748	-	-	6,371	10,678	5,515	-	13,168	-	-	-	-	-	-	-	-
2011	-	-	-	21,085	17,766	460	-	39,311	-	-	-	-	-	-	-	-
2012	-	-	-	24,324	12,304	1,654	-	38,282	-	-	-	-	-	-	-	-
2013	-	4,352	23,785	68,781	14,916	4,324	-	116,158	-	-	-	-	-	-	-	-
2014	-	-	23,126	45,563	7,788	454	-	76,931	-	-	-	-	-	-	-	-
2015	-	38,546	11,317	5,333	3,848	1,008	-	60,052	-	-	-	-	-	-	-	-
2016	-	-	9,956	-	4,515	909	-	15,380	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	1,935	-	1,935	-	-	-	-	-	-	-	-
2018	-	-	-	6,081	4,137	333	-	10,551	-	-	-	-	-	-	-	-
2019	-	-	3,581	2,894	2,806	-	-	9,281	-	-	-	-	-	-	-	-
2020	-	-	-	-	1,617	232	-	1,849	-	-	-	-	-	-	-	-
2021	-	-	-	-	42,817	1,908	-	44,725	-	-	-	-	-	-	-	-
2022 ^{c/}	-	-	-	10,501	11,160	-	-	21,661	-	-	-	-	-	-	-	-
San Francisco																
1986-1990	-	131,362	111,938	71,214	26,550	10,050	-	351,115	-	-	5,375	3,280	820	82	-	9,377
1991-1995	-	69,489	43,811	43,504	29,911	13,873	-	200,588	-	-	33,100	19,700	500	-	-	26,900
1996-2000	3,266	49,931	51,659	57,754	20,264	15,401	-	195,662	-	-	-	-	-	-	-	-
2001-2005	-	52,401	74,746	75,262	19,186	12,158	1,905	210,228	-	-	-	-	-	-	-	-
2006-2010	-	25,396	-	19,140	12,888	7,017	712	41,349	-	-	-	-	-	-	-	-
2011	-	7,753	2,830	8,305	1,395	1,312	317	21,912	-	-	-	-	-	-	-	-
2012	-	34,005	10,090	51,592	14,292	5,808	3,313	119,100	-	-	-	-	-	-	-	-
2013	-	56,365	47,837	24,215	7,819	6,477	941	143,654	-	-	-	-	-	-	-	-
2014	-	30,605	14,917	6,994	15,879	11,044	2,985	82,424	-	-	-	-	-	-	-	-
2015	-	7,407	4,762	4,456	7,055	9,399	2,617	35,696	-	-	-	-	-	-	-	-
2016	-	3,147	446	-	13,819	8,362	589	26,363	-	-	-	-	-	-	-	-
2017	-	-	-	-	18,336	8,297	1,279	27,912	-	-	-	-	-	-	-	-
2018	-	-	-	7,015	19,790	10,593	2,031	39,429	-	-	-	-	-	-	-	-
2019	-	16,076	59,859	25,141	50,416	6,099	801	158,392	-	-	-	-	-	-	-	-
2020	-	12,572	41,698	63,138	17,658	8,240	2,435	145,741	-	-	-	-	-	-	-	-
2021	-	-	72,832	10,988	14,384	5,649	1,040	104,893	-	-	-	-	-	-	-	-
2022 ^{c/}	-	-	-	66,884	21,610	7,959	1,113	97,566	-	-	-	-	-	-	-	-

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
CHINOOK									COHO							
<u>Monterey</u>																
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	-	-	-	-	-	-	-	-
2006-2010	-	10,557	274	1,235	427	212	-	8,881	-	-	-	-	-	-	-	-
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	-	4,566	14,859	-	-	-	-	19,425	-	-	-	-	-	-	-	-
2019	-	54,925	33,706	9,328	-	-	-	97,959	-	-	-	-	-	-	-	-
2020	-	19,944	7,559	2,367	340	-	-	30,210	-	-	-	-	-	-	-	-
2021	-	46,881	3,891	1,644	421	-	-	52,837	-	-	-	-	-	-	-	-
2022 ^{c/}	-	52,946	34,217	3,689	1,107	-	-	91,959	-	-	-	-	-	-	-	-
<u>Total Statewide^{a/}</u>																
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	-	-	-	-	-	-	-	-
2006-2010	748	23,255	274	22,499	15,994	17,125	712	66,319	-	-	-	-	-	-	-	-
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	-	5,503	17,336	14,916	27,704	10,926	2,031	78,416	-	-	-	-	-	-	-	-
2019	-	71,001	97,883	38,838	56,867	6,099	801	271,489	-	-	-	-	-	-	-	-
2020	-	32,516	49,257	65,505	19,615	8,472	2,435	177,800	-	-	-	-	-	-	-	-
2021	-	46,881	76,723	12,632	57,622	7,557	1,040	202,455	-	-	-	-	-	-	-	-
2022 ^{c/}	-	52,946	34,217	81,074	33,877	7,959	1,113	211,186	-	-	-	-	-	-	-	-

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>											
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
2006-2010	-	-	-	225	425	462	252	195	-	-	1,218
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	-	-	-	-	359	673	328	3	-	-	1,363
2019	-	-	-	15	137	279	56	24	-	-	511
2020 ^{a/}	-	-	-	-	--	801	386	-	-	-	1,187
2021	-	-	-	-	244	427	4	-	-	-	675
2022 ^{b/}	-	-	-	1,620	-	-	179	9	-	-	1,808
<u>Eureka</u>											
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
2006-2010	-	-	-	2,051	3,611	2,652	3,023	1,900	-	-	10,403
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	-	-	-	-	2,298	2,067	1,593	48	-	-	6,006
2019	-	-	-	349	2,601	2,535	1,617	99	-	-	7,201
2020 ^{a/}	-	-	-	-	--	2,939	847	-	-	-	3,786
2021	-	-	-	-	127	1,406	63	-	-	-	1,596
2022 ^{b/}	-	-	-	2,056	-	-	796	618	-	-	3,470

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>											
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
2006-2010	248	446	920	1,946	4,084	4,462	2,563	336	13	0	11,261
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	-	-	-	-	1,009	5,523	2,897	423	39	-	9,891
2019	-	-	606	166	1,646	3,171	1,735	228	52	-	7,604
2020 ^{a/}	-	-	-	--	--	2,637	2,062	469	0	0	5,168
2021	-	-	-	-	251	4,742	2,272	1,002	445	-	8,712
2022 ^{b/}	-	-	-	1,186	1,795	1,333	1,811	629	-	-	6,754
<u>San Francisco</u>											
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
2006-2010	-	-	3,751	6,670	8,009	13,120	5,398	2,518	1,797	921	41,279
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	-	-	-	-	8,043	28,234	15,575	8,561	5,033	-	65,446
2019	-	-	3,207	1,612	12,056	15,392	17,321	6,697	1,769	-	58,054
2020 ^{a/}	-	-	-	--	--	19,892	14,050	7,132	4,252	147	45,473
2021	-	-	-	-	3,016	19,902	13,620	7,030	2,120	-	45,688
2022 ^{b/}	-	-	3,161	4,533	5,051	26,032	16,297	5,816	1,244	-	62,134

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
Monterey											
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
2006-2010	-	-	12,333	3,782	3,817	2,939	738	198	26	-	23,817
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	-	-	8,140	2,021	3,244	514	-	-	-	-	13,919
2019	-	-	13,537	3,801	4,471	4,360	4,163	-	-	-	30,332
2020 ^{a/}	-	-	-	--	--	3,438	641	138	12	-	4,229
2021	-	-	12,287	8,838	6,785	3,201	442	329	-	-	31,882
2022 ^{b/}	-	-	10,491	5,789	4,876	2,800	291	75	16	-	24,338
Total Statewide											
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
2006-2010	248	446	17,005	14,674	19,947	23,636	8,981	4,384	1,822	921	57,362
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	-	-	8,140	2,021	14,953	37,011	20,393	9,035	5,072	-	96,625
2019	-	-	17,350	5,943	20,911	25,737	24,892	7,048	1,821	-	103,702
2020 ^{a/}	-	-	-	--	--	29,707	17,986	7,739	4,264	147	59,843
2021	-	-	12,287	8,838	10,423	29,678	16,401	8,361	2,565	-	88,553
2022 ^{b/}	-	-	13,652	15,184	11,722	30,165	19,374	7,147	1,260	-	98,504

a/ Recreational estimates are not available for May and June due to restrictions on sampling caused by the COVID-19 pandemic.

b/ Preliminary.

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

TABLE A-3. California ocean recreational salmon landings in numbers of fish by catch area and month: (Page 1 of 9)																							
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>Crescent City</u>																							
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	
2006-2010	-	-	-	94	157	268	21	38	-	-	444	-	-	-	3	9	26	-	4	-	-	26	
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	-	-	-	-	124	128	76	0	-	-	328	-	-	-	-	8	16	-	-	-	-	24	
2019	-	-	-	1	33	10	13	4	-	-	61	-	-	-	-	-	4	4	-	-	-	8	
2020 ^{a/}	-	-	-	-	--	318	65	-	-	-	383	-	-	-	-	-	14	-	-	-	-	14	
2021	-	-	-	-	16	73	0	-	-	-	89	-	-	-	-	-	-	-	-	-	-	0	
2022 ^{b/}	-	-	-	1,154	-	-	29	4	-	-	1,187	-	-	-	-	-	-	-	-	-	-	0	
<u>Eureka</u>																							
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	
2006-2010	-	-	-	1,710	3,540	2,149	2,260	1,485	-	-	8,729	-	-	-	88	63	61	79	43	-	-	155	
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	-	-	-	-	1,590	734	1,059	27	-	-	3,410	-	-	-	-	41	4	33	-	-	-	78	
2019	-	-	-	315	2,273	1,308	941	59	-	-	4,896	-	-	-	-	47	61	39	-	-	-	147	
2020 ^{a/}	-	-	-	-	--	1,244	204	-	-	-	1,448	-	-	-	-	-	4	-	-	-	-	4	
2021	-	-	-	-	12	546	0	-	-	-	558	-	-	-	-	-	9	-	-	-	-	9	
2022 ^{b/}	-	-	-	2,404	-	-	324	439	-	-	3,167	-	-	-	5	-	-	-	-	-	-	-	

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
	CHINOOK											COHO										
Fort Bragg																						
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
2006-2010	34	105	175	1,036	2,177	2,356	1,186	73	0	0	5,357	-	-	-	13	73	68	21	-	-	-	146
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	-	-	-	-	540	3,217	1,846	95	0	-	5,698	-	-	-	-	-	13	4	8	-	-	25
2019	-	-	206	81	947	1,697	825	101	0	-	3,857	-	-	-	-	13	22	5	-	-	-	40
2020 ^{a/}	-	-	-	--	--	1,198	565	114	0	0	1,877	-	-	-	-	-	19	-	4	-	-	23
2021	-	-	-	-	153	1,908	859	170	685	-	3,775	-	-	-	-	12	78	14	-	4	-	108
2022 ^{b/}	-	-	-	662	718	295	739	228	-	-	2,642	-	-	-	-	8	-	46	-	-	-	54
San Francisco																						
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
2006-2010	-	-	1,201	5,704	7,797	9,092	1,314	475	349	196	25,946	-	-	-	47	131	212	9	11	-	-	317
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	-	-	-	-	11,361	38,248	11,717	6,689	4,172	-	72,187	-	-	-	-	5	63	-	-	-	-	68
2019	-	-	2,982	1,645	15,459	16,558	15,861	3,570	468	-	56,543	-	-	-	2	100	4	348	14	5	-	473
2020 ^{a/}	-	-	-	--	--	19,662	9,140	3,945	2,364	29	35,140	-	-	-	-	-	11	-	-	-	-	11
2021	-	-	-	-	3,864	16,429	9,128	3,852	898	-	34,171	-	-	-	-	18	125	4	-	-	-	147
2022 ^{b/}	-	-	3,099	5,845	8,102	32,474	13,747	2,464	374	-	66,105	-	-	-	-	41	251	115	5	-	-	412

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
CHINOOK												COHO										
Monterey																						
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
2006-2010	-	-	4,565	942	1,140	987	167	41	0	-	7,842	-	-	8	24	137	63	-	-	-	-	155
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	-	-	3,935	476	1,157	123	-	-	-	-	5,691	-	-	-	-	-	-	-	-	-	-	-
2019	-	-	13,592	1,437	2,159	2,636	3,279	-	-	-	23,103	-	-	-	-	2	26	-	-	-	-	28
2020 ^{a/}	-	-	-	--	--	1,242	33	18	0	-	1,293	-	-	-	-	-	-	-	-	-	-	-
2021	-	-	7,626	4,184	3,200	1,710	177	57	-	-	16,954	-	-	-	210	54	12	-	-	-	-	276
2022 ^{b/}	-	-	6,724	3,273	3,907	1,840	98	10	8	-	15,860	-	-	-	22	7	3	-	-	-	-	32
Total Statewide																						
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
2006-2010	34	105	5,942	9,486	14,811	14,852	3,711	1,965	349	196	31,897	-	-	8	86	318	308	84	40	-	-	639
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	-	-	3,935	476	14,772	42,450	14,698	6,811	4,172	-	87,314	-	-	-	-	54	96	37	8	-	-	195
2019	-	-	16,780	3,479	20,871	22,209	20,919	3,734	468	-	88,460	-	-	-	2	162	117	396	14	5	-	696
2020 ^{a/}	-	-	-	--	--	23,664	10,007	4,077	2,364	29	40,141	-	-	-	-	-	48	-	4	-	-	52
2021	-	-	7,626	4,184	7,245	20,666	10,164	4,079	1,583	-	55,547	-	-	-	210	84	224	18	-	4	-	540
2022 ^{b/}	-	-	9,823	13,338	12,727	34,609	14,937	3,145	382	-	88,961	-	-	-	27	56	254	161	5	-	-	503

a/ Recreational estimates are not available for May and June due to restrictions on sampling caused by the COVID-19 pandemic.

b/ Preliminary.

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

Year or Ave.	Astoria	Tillamook	New port	Coos Bay	Brookings	Oregon Subtotal	Alaska	Washington	California	Total
DAYS FISHED										
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
2006-2010	628	435	1,283	945	220	3,210	0	0	0	3,210
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	98	179	1,043	778	475	2,573	0	0	-	2,573
2019	187	137	1,596	387	236	2,543	0	0	-	2,543
2020	65	134	1,185	463	123	1,970	0	0	-	1,970
2021	40	224	1,090	430	119	1,903	0	0	-	1,903
2022 ^{b/}	163	506	1,554	260	158	2,641	0	0	-	2,641
CHINOOK LANDINGS										
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
2006-2010	5,840	2,160	11,779	7,121	1,485	23,376	0	0	0	23,376
2011	2,836	1,106	4,980	21,832	1,326	32,080	0	0	-	32,080
2012	8,444	7,397	26,612	25,204	5,444	73,101	0	0	-	73,101
2013	1,945	8,880	15,700	79,410	6,816	112,751	0	0	-	112,751
2014	16,182	7,009	83,141	86,673	16,146	209,151	0	0	-	209,151
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	333	465	14,487	5,277	3,899	24,461	0	0	-	24,461
2019	508	567	22,866	3,171	1,872	28,984	0	0	-	28,984
2020	190	678	8,934	2,185	825	12,812	0	0	-	12,812
2021	178	1,309	12,656	2,960	424	17,527	0	0	-	17,527
2022 ^{b/}	1,999	7,444	20,130	2,106	783	32,462	0	0	-	32,462

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

Year or Ave.	Astoria	Tillamook	New port	Coos Bay	Brookings	Oregon Subtotal	Alaska	Washington	California	Total
COHO LANDINGS										
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
2006-2010	5,425	2,385	3,494	1,538	-	8,392	0	0	-	8,392
2011	464	-	-	-	-	464	0	0	-	464
2012	625	-	-	-	-	625	0	0	-	625
2013	452	-	-	-	-	452	0	0	-	452
2014	7,702	1,104	1,220	971	-	10,997	0	0	-	10,997
2015	2,213	-	-	-	-	2,213	0	0	-	2,213
2016	-	-	-	-	-	-	0	0	-	0
2017	470	-	-	-	-	470	0	0	-	470
2018	92	-	-	-	-	92	0	0	-	92
2019	1,412	-	-	-	-	1,412	0	0	-	1,412
2020	130	-	-	-	-	130	0	0	-	130
2021	141	117	1,945	26	-	2,229	0	0	-	2,229
2022 ^{b/}	1,727	219	1,935	1	-	3,882	0	0	-	3,882

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-waters only terminal area fisheries.

b/ Preliminary.

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

Year or											
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
2006-2010	-	-	201	199	113	109	28	-	-	-	628
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	-	-	16	50	3	29	0	-	-	-	98
2019	-	-	9	17	97	40	24	-	-	-	187
2020	-	-	17	12	20	13	3	-	-	-	65
2021	-	-	1	3	21	9	6	-	-	-	40
2022 ^{b/}	-	-	12	42	83	15	11	-	-	-	163
<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
2006-2010	-	8	157	152	42	53	119	91	31	-	435
2011	-	-	25	96	21	23	42	13	-	-	220
2012	-	52	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	-	-	60	44	5	36	23	11	-	-	179
2019	-	3	45	22	16	12	15	24	-	-	137
2020	-	2	4	48	8	12	35	25	-	-	134
2021	-	53	59	40	27	15	24	6	-	-	224
2022 ^{b/}	20	31	98	289	43	6	15	4	-	-	506

TABLE A-7. Oregon commercial troll salmon fishing effort in days fished by area and month.^{a/} (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
2006-2010	-	81	412	512	285	222	263	140	50	-	1,283
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	-	-	161	119	191	534	36	2	-	-	1,043
2019	-	30	60	235	831	356	75	9	-	-	1,596
2020	-	91	77	276	401	216	111	13	-	-	1,185
2021	32	342	157	57	261	222	15	4	-	-	1,090
2022 ^{b/}	175	267	193	366	308	221	7	17	-	-	1,554
<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
2006-2010	-	253	530	394	168	615	83	115	110	26	945
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	-	-	127	270	91	97	21	89	83	-	778
2019	-	16	29	85	68	21	14	154	-	-	387
2020	-	43	11	43	140	23	29	174	-	-	463
2021	-	-	122	72	25	9	31	171	-	-	430
2022 ^{b/}	-	-	119	12	-	1	16	112	-	-	260

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

Year or Average	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Season
Brookings											
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
2006-2010	-	6	26	138	63	68	33	80	20	-	220
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	-	-	37	127	123	73	-	115	-	-	475
2019	-	2	7	21	71	135	-	-	-	-	236
2020	-	1	3	47	72	-	-	-	-	-	123
2021	1	2	4	55	57	-	-	-	-	-	119
2022 ^{b/}	-	4	-	72	15	67	-	-	-	-	158
South of Cape Falcon											
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
2006-2010	-	348	1,124	972	480	730	340	303	176	26	2,582
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	-	-	385	560	410	740	80	217	83	-	2,475
2019	-	51	141	363	986	524	104	187	-	-	2,356
2020	-	137	95	414	621	251	175	212	-	-	1,905
2021	33	397	342	224	370	246	70	181	-	-	1,863
2022 ^{b/}	195	302	410	739	366	295	38	133	-	-	2,478

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

Year or Average	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Season
Statewide Total											
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
2006-2010	-	348	650	783	379	547	368	303	176	26	3,210
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	-	-	401	610	413	769	80	217	83	-	2,573
2019	-	51	150	380	1,083	564	128	187	-	-	2,543
2020	-	137	112	426	641	264	178	212	-	-	1,970
2021	33	397	343	227	391	255	76	181	-	-	1,903
2022 ^{b/}	195	302	422	781	449	310	49	133	-	-	2,641

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.^{a/} (Page 1 of 4)

Year or Avg.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Season	June	July	Aug.	Sept.	Oct.	Season
CHINOOK												COHO					
<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
2006-2010	-	-	2,252	2,587	521	432	48	-	-	-	5,840	-	2,164	3,086	175	-	5,425
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	-	39	35	551	-	625
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	-	-	16	269	10	38	0	-	-	-	333	-	8	84	-	-	92
2019	-	-	17	36	334	93	28	-	-	-	508	-	1,029	302	81	-	1,412
2020	-	-	84	36	57	13	0	-	-	-	190	-	63	64	3	-	130
2021	-	-	15	8	126	24	5	-	-	-	178	-	75	25	41	-	141
2022 ^{b/}	-	-	377	554	1,038	23	7	-	-	-	1,999	-	1,449	198	80	-	1,727
<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	-	-	-	-	-	-
2006-2010	-	14	1,433	1,514	332	57	162	252	71	-	2,160	-	-	1,195	1,787	#DIV/0!	2,385
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	-	-	180	168	19	58	26	14	-	-	465	-	-	-	-	-	-
2019	-	3	144	68	234	42	33	43	-	-	567	-	-	-	-	-	-
2020	-	15	9	481	38	19	73	43	-	-	678	-	-	-	-	-	-
2021	-	413	355	238	106	146	47	4	-	-	1,309	-	61	56	-	-	117
2022 ^{b/}	128	377	1,225	5,266	356	68	11	13	-	-	7,444	-	217	2	-	-	219

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

Year or Avg.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Season	June	July	Aug.	Sept.	Oct.	Season
CHINOOK												COHO					
<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	-	-	-	-	-	-
2006-2010	-	279	2,752	4,446	2,128	1,223	1,970	791	321	-	11,779	-	-	1,607	2,691	-	3,494
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	36,188	3,658	932	-	-	83,141	-	-	-	1,220	-	1,220
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	-	-	491	709	2,101	11,031	151	4	-	-	14,487	-	-	-	-	-	-
2019	-	68	351	2,602	14,858	4,436	537	14	-	-	22,866	-	-	-	-	-	-
2020	-	532	709	1,786	3,790	1,672	428	17	-	-	8,934	-	-	-	-	-	-
2021	229	1,958	785	266	4,445	4,940	26	7	-	-	12,656	-	856	1,089	-	-	1,945
2022 ^{b/}	1,441	2,406	1,268	3,806	6,152	5,012	9	36	-	-	20,130	-	1,193	742	-	-	1,935
<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	-	-	-	-	-	-
2006-2010	-	1,563	3,990	2,551	1,135	6,640	277	769	550	67	7,121	-	-	2,234	421	-	1,538
2011	-	4,102	5,413	8,309	333	399	223	1,058	1,995	-	21,832	-	-	-	-	-	-
2012	-	2,103	8,633	4,338	609	2,897	3,981	1,942	701	-	25,204	-	-	-	-	-	-
2013	-	3,796	5,309	4,091	3,516	30,097	23,926	7,673	1,002	-	79,410	-	-	-	-	-	-
2014	-	6,403	15,505	17,339	11,453	31,574	2,845	1,085	469	-	86,673	-	-	-	971	-	971
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	-	-	300	2,001	810	1,215	48	472	431	-	5,277	-	-	-	-	-	-
2019	-	79	170	632	1,245	170	62	813	-	-	3,171	-	-	-	-	-	-
2020	-	252	55	147	557	172	59	943	-	-	2,185	-	-	-	-	-	-
2021	-	-	963	338	107	23	297	1,232	-	-	2,960	-	17	9	-	-	26
2022 ^{b/}	-	-	1,144	48	-	1	33	880	-	-	2,106	-	-	1	-	-	1

TABLE A-8. Oregon commercial troll Chinook and coho salmon landings in numbers of fish by catch area and month.^{a/} (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					
Brookings																	
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	-	-	-	-	-	-
2006-2010	-	15	95	727	601	825	206	391	92	-	1,485	-	-	-	-	-	-
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	-	-	272	1,529	1,168	614	-	316	-	-	3,899	-	-	-	-	-	-
2019	-	12	16	62	470	1,312	-	-	-	-	1,872	-	-	-	-	-	-
2020	-	1	5	168	651	-	-	-	-	-	825	-	-	-	-	-	-
2021	2	2	13	275	132	-	-	-	-	-	424	-	-	-	-	-	-
2022 ^{b/}	-	7	0	371	39	366	-	-	-	-	783	-	-	-	-	-	-
South of Cape Falcon																	
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	-	-	-	-	-	-
2006-2010	-	1,871	8,268	7,902	3,617	6,256	1,143	1,496	872	67	17,536	-	-	5,036	4,899	-	7,417
2011	-	4,481	8,501	10,655	726	1,349	337	1,200	1,995	-	29,244	-	-	-	-	-	-
2012	-	3,633	14,904	8,644	3,241	10,099	14,561	8,874	701	-	64,657	-	-	-	-	-	-
2013	-	7,423	9,101	7,425	8,510	40,383	28,387	8,575	1,002	-	110,806	-	-	-	-	-	-
2014	-	15,554	48,819	29,436	18,886	68,411	8,912	2,482	469	-	192,969	-	-	-	3,295	-	3,295
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	-	-	1,243	4,407	4,098	12,918	225	806	431	-	24,128	-	-	-	-	-	-
2019	-	162	681	3,364	16,807	5,960	632	870	-	-	28,476	-	-	-	-	-	-
2020	-	800	778	2,582	5,036	1,863	560	1,003	-	-	12,622	-	-	-	-	-	-
2021	231	2,373	2,116	1,117	4,790	5,109	370	1,243	-	-	17,349	-	934	1,154	-	-	2,088
2022 ^{b/}	1,569	2,790	3,637	9,491	6,547	5,447	53	929	-	-	30,463	-	1,410	745	-	-	2,155

TABLE A-8. Oregon commercial troll Chinook and coho salmon landings in numbers of fish by catch area and month.^{a/} (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					
Statewide Total																	
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
2006-2010	-	1,871	5,559	7,328	2,692	4,185	1,191	1,496	872	67	23,376	-	2,164	4,094	2,134	-	8,392
2011	-	4,481	9,558	12,055	840	1,588	363	1,200	1,995	-	32,080	-	234	147	83	-	464
2012	-	3,633	15,938	14,010	3,451	10,248	16,246	8,874	701	-	73,101	-	39	35	551	-	625
2013	-	7,423	9,533	8,129	8,646	40,662	28,781	8,575	1,002	-	112,751	-	39	295	118	-	452
2014	-	15,554	61,623	30,161	21,168	68,586	9,108	2,482	469	-	209,151	-	2,428	1,570	6,999	-	10,997
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	-	-	1,259	4,676	4,108	12,956	225	806	431	-	24,461	-	8	84	-	-	92
2019	-	162	698	3,400	17,141	6,053	660	870	-	-	28,984	-	1,029	302	81	-	1,412
2020	-	800	862	2,618	5,093	1,876	560	1,003	-	-	12,812	-	63	64	3	-	130
2021	231	2,373	2,131	1,125	4,916	5,133	375	1,243	-	-	17,527	-	1,009	1,179	41	-	2,229
2022 ^{b/}	1,569	2,790	4,014	10,045	7,585	5,470	60	929	-	-	32,462	-	2,859	943	80	-	3,882

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.^{a/} (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
2006-2010	-	-	66	296	2,809	5,759	724	-	-	9,338
2011	-	-	-	459	1,402	4,645	877	-	-	7,383
2012	-	-	-	695	1,790	1,949	413	-	-	4,847
2013	-	-	6	1,577	1,329	2,929	298	-	-	6,139
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	-	-	-	380	1,839	5,332	148	-	-	7,699
2019	-	-	-	1,334	5,066	7,930	365	-	-	14,695
2020	-	-	-	86	3,367	-	-	-	-	3,453
2021	-	-	-	305	4,676	7,873	-	-	-	12,854
2022 ^{b/}	-	-	-	757	4,378	9,428	2,344	-	-	16,907
<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
2006-2010	2	16	448	1,174	4,670	4,274	3,439	2,536	98	16,389
2011	0	50	143	936	3,771	2,968	3,730	1,240	-	12,838
2012	0	38	565	830	2,372	2,941	4,132	1,521	-	12,399
2013	2	78	371	656	3,166	2,620	3,321	3,942	-	14,156
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	0	0	354	332	1,533	4,541	3,670	829	-	11,259
2019	0	0	293	2,061	8,113	6,440	2,725	1,470	-	21,102
2020	8	0	111	234	4,133	3,072	4,243	1,404	-	13,205
2021	0	25	567	973	8,109	4,893	3,945	172	-	18,684
2022 ^{b/}	0	14	394	2,479	5,914	4,921	6,471	774	-	20,967

TABLE A-9. Oregon ocean recreational effort in salmon angler trips by catch area and month.^{a/} (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
2006-2010	8	25	645	2,855	11,579	9,713	3,131	1,596	176	26,512
2011	20	2	103	847	4,550	2,518	3,913	-	-	11,953
2012	23	290	322	665	3,425	4,021	5,967	107	-	14,820
2013	354	441	206	425	5,046	4,126	4,606	188	-	15,392
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	39	0	125	538	5,623	11,666	5,502	70	-	23,563
2019	37	0	65	2,864	16,935	11,609	3,507	96	-	35,113
2020	0	47	93	251	9,735	4,938	3,368	176	-	18,608
2021	23	276	92	2,418	18,515	14,893	5,588	21	-	41,826
2022 ^{b/}	78	273	230	2,852	13,874	8,633	6,637	71	-	32,648
<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
2006-2010	16	33	333	1,565	6,669	4,906	876	45	--	14,079
2011	2	23	187	1,182	2,514	4,687	1,711	-	16	10,322
2012	0	52	732	2,285	4,075	5,560	3,646	77	18	16,445
2013	123	174	340	2,895	3,010	19,281	3,897	84	--	29,804
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	15	19	178	252	2,410	6,012	5,424	0	--	14,310
2019	6	8	52	1,348	7,337	6,775	3,428	15	-	18,969
2020	3	65	88	164	7,339	3,959	3,735	134	-	15,487
2021	0	270	186	1,337	7,539	6,181	3,941	9	-	19,463
2022 ^{b/}	15	56	123	1,752	8,173	4,288	8,288	14	-	22,709

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

Year or Average	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Season
<u>Brookings</u>										
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	-	-	1,663	3,322	2,588	5,226	2,509	2,983	-	18,291
2006-2010	-	-	357	897	1,459	1,704	2,269	2,420	-	7,685
2011	-	-	393	296	189	1,772	1,853	1,757	-	6,260
2012	-	-	484	1,977	4,678	6,809	1,201	3,666	-	18,815
2013	-	-	289	2,259	6,658	7,092	208	3,547	-	20,053
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	-	-	508	1,058	1,398	1,934	-	2,102	-	7,000
2019	-	-	132	769	1,797	1,635	24	-	-	4,357
2020	-	-	-	1,624	4,046	587	-	-	-	6,257
2021	-	-	-	1,965	2,734	1,154	-	-	-	5,853
2022 ^{b/}	-	-	-	1,376	1,215	557	9	-	-	3,157
<u>South of Cape Falcon</u>										
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
2006-2010	30	84	1,330	5,523	19,285	17,105	7,007	4,559	69	54,349
2011	22	75	826	3,261	11,024	11,945	11,207	2,997	16	41,373
2012	23	380	2,103	5,757	14,550	19,331	14,946	5,371	18	62,479
2013	479	693	1,206	6,235	17,880	33,119	12,032	7,761	--	79,405
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	54	19	1,165	2,180	10,964	24,153	14,596	3,001	--	56,132
2019	43	8	542	7,042	34,182	26,459	9,684	1,581	-	79,541
2020	11	112	292	2,273	25,253	12,556	11,346	1,714	-	53,557
2021	23	571	845	6,693	36,897	27,121	13,474	202	-	85,826
2022 ^{b/}	93	343	747	8,459	29,176	18,399	21,405	859	-	79,481

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

Year or Average	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Season
Total All Areas										
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
2006-2010	30	84	1,014	5,700	22,093	22,864	7,586	4,559	69	63,687
2011	22	75	826	3,720	12,426	16,590	12,084	2,997	16	48,756
2012	23	380	2,103	6,452	16,340	21,280	15,359	5,371	18	67,326
2013	479	693	1,212	7,812	19,209	36,048	12,330	7,761	--	85,544
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	54	19	1,165	2,560	12,803	29,485	14,744	3,001	--	63,831
2019	43	8	542	8,376	39,248	34,389	10,049	1,581	-	94,236
2020	11	112	292	2,359	28,620	12,556	11,346	1,714	-	57,010
2021	23	571	845	6,998	41,573	34,994	13,474	202	-	98,680
2022 ^{b/}	93	343	747	9,216	33,554	27,827	23,749	859	-	96,388

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.^{a/} (Page 1 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>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
2006-2010	-	-	17	64	263	599	48	-	-	942	-	84	3,522	6,417	396	-	10,305
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	-	-	-	120	150	417	2	-	-	689	-	36	1,393	5,694	5	-	7,128
2019	-	-	-	104	668	485	38	-	-	1,295	-	1,852	6,548	8,543	281	-	17,224
2020	-	-	-	11	142	-	-	-	-	153	-	0	3,721	-	-	-	3,721
2021	-	-	-	60	350	1,427	-	-	-	1,837	-	109	4,655	9,640	-	-	14,404
2022 ^{b/}	-	-	-	96	700	2,573	-	-	-	3,369	-	1,006	6,375	10,400	2,764	-	20,545
<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
2006-2010	0	0	31	42	112	94	453	593	49	1,300	2	579	3,929	4,676	173	5	8,424
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	0	4	19	28	66	366	160	63	-	706	-	25	274	1,652	858	-	2,809
2019	8	0	37	95	422	212	293	239	-	1,306	-	609	6,201	2,749	1,156	5	10,720
2020	0	0	12	52	231	213	767	184	-	1,459	-	0	1,059	1,020	634	-	2,713
2021	0	0	145	86	216	246	636	9	-	1,338	-	104	7,350	3,590	2,262	4	13,310
2022 ^{b/}	0	0	103	788	268	196	422	56	-	1,833	-	849	6,174	3,821	5,650	5	16,499

TABLE A-10. Oregon ocean recreational salmon landings in numbers of fish by catch area and month.^{a/} (Page 2 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>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
2006-2010	2	1	28	53	124	176	81	40	16	393	-	1,103	5,927	5,758	515	-	13,200
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	0	0	23	59	409	490	217	11	-	1,209	-	2	2,125	6,042	3,095	-	11,264
2019	2	3	66	348	1,405	277	84	17	-	2,202	-	1,931	16,778	7,594	1,934	-	28,237
2020	0	4	19	37	1,460	231	217	24	-	1,992	-	0	4,050	3,302	3,152	-	10,504
2021	12	54	16	369	1,833	557	90	0	-	2,931	-	539	23,359	20,642	6,807	-	51,347
2022 ^{bi}	31	68	74	275	615	259	89	6	-	1,417	-	1,496	14,729	5,000	5,408	-	26,633
<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
2006-2010	1	2	12	119	783	511	249	0	--	1,468	-	558	4,257	1,351	26	-	6,186
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	0	0	6	52	180	311	244	0	--	793	-	4	579	887	2,983	-	4,453
2019	0	0	0	87	603	236	305	-	-	1,231	-	1,265	4,322	2,023	1,980	-	9,590
2020	0	0	7	0	1,151	419	361	11	-	1,949	-	0	2,605	804	453	-	3,862
2021	0	82	13	149	632	263	137	0	-	1,276	-	1,149	7,073	3,554	1,691	-	13,467
2022 ^{bi}	0	27	49	178	585	251	286	0	-	1,376	-	978	6,264	424	6,612	-	14,278

TABLE A-10. Oregon ocean recreational salmon landings in numbers of fish by catch area and month.^{a/} (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
2006-2010	-	-	63	865	73	759	516	431	-	1,975	2	230	523	263	27	4	959
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	-	-	105	149	458	448	4	429	-	1,593	-	3	3	12	-	-	18
2019	-	-	9	117	212	223	11	-	-	572	-	139	343	60	-	-	542
2020	-	-	-	566	956	113	-	-	-	1,635	-	-	-	-	-	-	-
2021	-	-	-	248	469	178	-	-	-	895	-	450	121	195	-	-	766
2022 ^{bi}	-	-	-	164	63	169	-	-	-	396	-	544	401	7	2	-	954
<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
2006-2010	3	2	96	315	1,059	1,053	930	960	33	4,389	2	2,452	14,740	11,109	631	6	28,938
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	0	4	153	288	1,113	1,615	625	503	--	4,301	-	34	2,981	8,593	6,936	-	18,544
2019	10	3	112	647	2,642	948	693	256	-	5,311	-	3,944	27,644	12,426	5,070	5	49,089
2020	0	4	38	655	3,798	976	1,345	219	-	7,035	-	0	7,714	5,126	4,239	-	17,079
2021	12	136	174	852	3,150	1,244	863	9	-	6,440	-	2,242	37,903	27,981	10,760	4	78,890
2022 ^{bi}	31	95	226	1,405	1,531	875	797	62	-	5,022	-	3,867	27,568	9,252	17,672	5	58,364

TABLE A-10. Oregon ocean recreational salmon landings in numbers of fish by catch area and month.^{a/} (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						
Total All Areas																	
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
2006-2010	3	2	76	354	1,322	1,652	968	960	33	5,332	2	2,502	18,262	17,526	948	6	39,243
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	0	4	153	408	1,263	2,032	627	503	--	4,990	-	70	4,374	14,287	6,941	-	25,672
2019	10	3	112	751	3,310	1,433	731	256	--	6,606	-	5,796	34,192	20,969	5,351	5	66,313
2020	0	4	38	666	3,940	976	1,345	219	--	7,188	-	0	11,435	5,126	4,239	-	20,800
2021	12	136	174	912	3,500	2,671	863	9	--	8,277	-	2,351	42,558	37,621	10,760	4	93,294
2022 ^{b/}	31	95	226	1,501	2,231	3,448	797	62	--	8,391	-	4,873	33,943	19,652	20,436	5	78,909

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-waters 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 or Avg ^{a/}	Neah Bay ^{a/}	La Push	Westport	Ilwaco	Washington Subtotal	Oregon	California	Alaska	Total
DAYS FISHED									
1981-1985	3,111	1,553	5,194	1,961	11,819	244	18	25	12,106
1986-1990	928	300	2,619	871	4,718	100	0	3	4,821
1991-1995	1,421	243	2,079	335	3,475	100	0	3	3,578
1996-2000	235	55	128	20	431	30	0	0	460
2001-2005	454	195	593	82	1,324	30	0	0	1,354
2006-2010	209	471	885	108	1,672	30	0	0	1,702
2011	170	669	1,133	92	2,064	-	-	0	2,064
2012	254	1,045	654	107	2,060	-	-	0	2,060
2013	245	435	1,498	130	2,308	-	-	0	2,308
2014	121	716	791	394	2,022	-	-	0	2,022
2015	266	657	1,447	275	2,645	-	-	0	2,645
2016	148	411	881	188	1,628	-	-	0	1,628
2017	367	502	1,411	93	2,373	-	-	0	2,373
2018	541	360	1,194	54	2,149	-	-	0	2,149
2019	942	429	290	77	1,738	-	-	0	1,738
2020	137	336	446	57	976	-	-	0	976
2021	126	301	1,135	38	1,600	-	-	0	1,600
2022 ^{b/}	29	301	849	69	1,248	-	-	0	1,248
CHINOOK LANDINGS									
1981-1985	10,074	7,061	34,995	9,172	61,303	901	184	203	62,591
1986-1990	9,601	4,251	27,281	5,089	46,222	1,431	0	1	47,654
1991-1995	12,082	2,769	13,907	1,386	25,628	1,431	0	1	27,060
1996-2000	7,048	1,503	1,329	184	10,018	812	0	0	10,830
2001-2005	17,310	4,481	17,254	1,293	40,338	812	0	0	41,149
2006-2010	2,119	4,767	11,529	1,003	19,418	-	-	0	19,418
2011	2,934	10,418	12,518	1,032	26,902	-	-	0	26,902
2012	6,102	19,722	8,781	2,250	36,855	-	-	0	36,855
2013	5,971	8,388	25,171	560	40,090	-	-	0	40,090
2014	3,326	13,851	12,550	8,980	38,707	-	-	0	38,707
2015	4,698	13,180	33,410	4,025	55,313	-	-	0	55,313
2016	1,788	4,173	9,724	1,659	17,344	-	-	0	17,344
2017	6,351	4,831	21,177	574	32,933	-	-	0	32,933
2018	7,276	3,208	12,941	131	23,556	-	-	0	23,556
2019	13,823	6,385	2,339	229	22,776	-	-	0	22,776
2020	1,418	4,647	5,867	378	12,310	-	-	0	12,310
2021	940	3,255	14,744	146	19,085	-	-	0	19,085
2022 ^{b/}	370	4,244	18,688	677	23,979	-	-	0	23,979

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 or Avg.	Neah Bay ^{a/}	La Push	Westport	Ilwaco	Washington Subtotal	Oregon	California	Alaska	Total
COHO LANDINGS									
1981-1985	42,272	34,020	63,633	32,087	152,480	8,260	33	876	161,649
1986-1990	19,563	4,139	15,616	23,765	54,379	1,501	0	103	55,983
1991-1995	13,939	2,876	8,689	5,957	27,800	1,501	0	103	29,404
1996-2000	7,478	851	2,387	1,413	8,881	0	-	103	8,984
2001-2005	1,231	1,555	3,240	929	6,397	0	-	103	6,500
2006-2010	213	1,943	2,963	1,084	6,203	-	-	0	6,203
2011	140	1,167	1,708	38	3,053	-	-	0	3,053
2012	204	2,119	856	89	3,268	-	-	0	3,268
2013	309	1,846	3,759	127	6,041	-	-	0	6,041
2014	41	4,602	8,525	2,239	15,407	-	-	0	15,407
2015	34	309	1,839	690	2,872	-	-	0	2,872
2016	-	-	-	-	-	-	-	-	-
2017	311	402	524	131	1,368	-	-	-	1,368
2018	405	488	366	33	1,292	-	-	-	1,292
2019	1,117	1,290	1,331	259	3,997	-	-	-	3,997
2020	45	204	373	15	637	-	-	-	637
2021	67	417	2,763	123	3,370	-	-	-	3,370
2022 ^{b/}	24	2,940	6,321	1,922	11,207	-	-	-	11,207
PINK LANDINGS^{c/}									
1981-1985	107,620	22,914	7,589	1,272	139,394	342	1	263	140,000
1986-1990	18,894	364	412	45	19,714	19	0	0	19,733
1991-1995	23,992	1,773	11	30	25,792	19	0	0	25,811
1996-2000	21	7	2	0	29	19	0	0	48
2001-2005	29	38	18	13	97	19	0	0	116
2006-2010	17	120	5	0	141	-	-	0	141
2011	7	98	110	0	215	-	-	0	215
2012	0	0	0	0	0	-	-	0	0
2013	27	99	15	0	141	-	-	0	141
2014	0	0	0	0	0	-	-	0	0
2015	20	36	12	0	68	-	-	0	68
2016	0	0	0	0	0	-	-	0	0
2017	11	2	0	0	13	-	-	0	13
2018	0	0	0	0	0	-	-	0	0
2019	230	230	23	2	485	-	-	0	485
2020	0	0	0	0	0	-	-	0	0
2021	15	16	2	0	33	-	-	0	33
2022 ^{b/}	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 averages .

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

Year or Avg.	May	June	July	Aug.	Sept. ^{b/}	Oct.	Season
<u>Neah Bay^{c/}</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
2006-2010	87	67	29	17	8	-	209
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	234	121	149	22	15	-	541
2019	138	271	498	25	10	-	942
2020	25	49	47	16	0	-	137
2021	32	38	41	11	4	-	126
2022 ^{d/}	9	5	13	2	0	-	29
<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
2006-2010	71	137	124	109	31	-	471
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	160	14	36	103	47	-	360
2019	52	12	133	152	80	-	429
2020	25	43	147	108	13	-	336
2021	41	43	95	74	48	-	301
2022 ^{d/}	78	56	96	46	25	-	301
<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
2006-2010	248	275	169	148	44	-	885
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	347	539	237	64	7	-	1,194
2019	171	52	30	14	23	-	290
2020	23	44	270	103	6	-	446
2021	177	377	359	155	67	-	1,135
2022 ^{d/}	403	124	158	89	75	-	849

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

Year or Avg.	May	June	July	Aug.	Sept. ^{b/}	Oct.	Season
<u>Ilwaco</u>							
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
2006-2010	31	39	11	20	6	-	108
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	13	17	15	7	2	-	54
2019	42	9	12	14	0	-	77
2020	17	25	0	10	5	-	57
2021	8	15	1	5	9	-	38
2022 ^{d/}	0	21	28	0	20	-	69
<u>Statewide Total</u>							
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
2006-2010	437	518	333	294	89	-	1,672
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	754	691	437	196	71	-	2,149
2019	403	344	673	205	113	-	1,738
2020	90	161	464	237	24	-	976
2021	258	473	496	245	128	-	1,600
2022 ^{d/}	490	206	295	137	120	-	1,248

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.^{a/} (Page 1 of 3)

TABLE 7-15. Washington non-indian commercial fishery for chinook, coho, and pink salmon landings in numbers of fish by catch area and month. (Page 1 of 3)																		
Year or Avg.	May	June	July	Aug.	Sept. ^{b/}	Season	May	June	July	Aug.	Sept. ^{b/}	Season	May	June	July	Aug.	Sept. ^{b/}	Season
CHINOOK						COHO						PINKS						
<u>Neah Bay^{c/}</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
2006-2010	1,041	618	157	207	96	2,119	-	-	136	67	10	213	5	4	8	0	0	17
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	2,797	1,330	2,684	283	182	7,276	-	-	249	50	106	405						
2019	1,430	2,616	9,491	219	67	13,823	-	-	938	59	120	1,117	0	0	230	0	0	230
2020	135	389	692	202	0	1,418	-	-	29	16	0	45						
2021	262	358	212	75	33	940	-	-	7	10	50	67	0	0	1	14	0	15
2022 ^{d/}	82	111	137	40	0	370	-	-	20	4	0	24						
<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
2006-2010	878	1,743	888	979	279	4,767	-	-	735	1,015	192	1,943	0	11	92	17	1	120
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	1,174	94	297	1,119	524	3,208	-	-	41	181	266	488						
2019	529	61	1,838	2,373	1,584	6,385	-	-	313	633	344	1,290	0	0	230	0	0	230
2020	207	535	2,386	1,402	117	4,647	-	-	29	126	49	204						
2021	410	232	978	1,314	321	3,255	-	-	61	235	121	417	0	0	1	15	0	16
2022 ^{d/}	972	1,073	1,583	574	42	4,244	-	-	528	817	1,595	2,940						

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).^{a/} (Page 2 of 3)

Year or Avg.	May	June	July	Aug.	Sept. ^{b/}	Season	May	June	July	Aug.	Sept. ^{b/}	Season	May	June	July	Aug.	Sept. ^{b/}	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
2006-2010	3,210	5,077	1,641	1,472	128	11,529	-	-	800	1,478	685	2,963	0	2	1	2	0	5
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	2,682	7,518	2,457	281	3	12,941	-	-	125	225	16	366						
2019	1,803	341	65	49	81	2,339	-	-	226	368	737	1,331	0	0	23	0	0	23
2020	136	251	4,191	1,257	32	5,867	-	-	164	172	37	373						
2021	1,870	6,612	4,357	1,751	154	14,744	-	-	483	826	1,454	2,763	0	0	2	0	0	2
2022 ^{d/}	12,637	1,393	3,105	1,383	170	18,688	-	-	486	1,486	4,349	6,321						
<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
2006-2010	527	343	48	72	16	1,003	-	-	207	840	37	1,084	0	0	0	0	0	0
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	20	68	20	19	4	131	-	-	32	1	-	33						
2019	139	26	36	28	0	229	-	-	161	98	0	259	0	0	0	2	0	2
2020	147	132	0	88	11	378	-	-	0	0	15	15						
2021	24	77	2	33	10	146	-	-	0	43	80	123	0	0	0	0	0	0
2022 ^{d/}	0	251	399	0	27	677	-	-	440	0	1,482	1,922						

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).^{a/} (Page 3 of 3)

Year or Avg.	May	June	July	Aug.	Sept. ^{b/}	Season	May	June	July	Aug.	Sept. ^{b/}	Season	May	June	July	Aug.	Sept. ^{b/}	Season
	CHINOOK						COHO						PINKS					
Statewide Total																		
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
2006-2010	5,656	7,782	2,734	2,729	517	19,418	-	-	1,879	3,400	924	6,203	5	17	101	19	1	141
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	6,673	9,010	5,458	1,702	713	23,556	-	-	447	457	388	1,292						
2019	3,901	3,044	11,430	2,669	1,732	22,776	-	-	1,638	1,158	1,201	3,997	0	0	483	2	0	485
2020	625	1,307	7,269	2,949	160	12,310	-	-	222	314	101	637						
2021	2,566	7,279	5,549	3,173	518	19,085	-	-	551	1,114	1,705	3,370	0	0	4	29	0	33
2022 ^{d/}	13,691	2,828	5,224	1,997	239	23,979	-	-	1,474	2,307	7,426	11,207						

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	Total									
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
2006-2010	96	44	122	50	55	6	-	58	276	430
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	93	73	114	86	21	22	-	26	316	435
2019	100	49	33	28	5	2	-	13	117	230
2020	68	0	0	10	14	1	-	0	25	93
2021	18	21	80	122	21	4	-	0	248	266
2022 ^{b/}	90	93	46	45	19	6	-	2	209	301
<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
2006-2010	1	27	95	98	106	44	-	0	369	370
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	0	21	133	185	108	80	-	0	527	527
2019	0	11	36	327	255	105	-	0	734	734
2020	0	0	0	13	101	27	-	0	141	141
2021	0	3	14	14	68	63	-	0	162	162
2022 ^{b/}	0	4	20	118	74	45	-	0	261	261
<u>La Push^{b/}</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
2006-2010	0	2	10	7	10	2	3	-	31	34
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	0	0	1	0	0	3	0	-	4	4
2019	0	0	0	0	2	5	0	-	7	7
2020	0	0	0	0	1	0	0	-	1	1
2021	0	0	0	4	9	0	0	-	13	13
2022 ^{b/}	0	2	5	3	3	2	0	-	15	15

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

Year or									Total	
Avg.	Jan.-Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.-Dec.	May-Sept.	Year
<u>Westport</u>										
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
2006-2010	0	3	11	14	21	5	-	-	55	55
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	0	5	7	1	16	5	-	-	34	34
2019	0	5	3	10	14	8	-	-	40	40
2020	0	1	2	6	6	3	-	-	18	18
2021	0	4	4	1	5	10	-	-	24	24
2022 ^{b/}	0	10	6	5	8	7	-	-	36	36
<u>Statewide Total</u>										
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
2006-2010	97	77	238	169	191	57	3	58	732	889
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	93	99	255	272	145	110	0	26	881	1,000
2019	100	65	72	365	276	120	0	13	898	1,011
2020	68	1	2	29	122	31	0	0	185	253
2021	18	28	98	141	103	77	0	0	447	465
2022 ^{b/}	90	109	77	171	104	60	0	2	521	613

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	Total										Total									
Avg.	Jan.-Apr.	May	June	July	Aug.	Sept.	Oct. ^{b/}	Nov.-Dec.	May-Sept.	Year	Jan.-Apr.	May	June	July	Aug.	Sept.	Oct. ^{b/}	Nov.-Dec.	May-Sept.	Year
CHINOOK											COHO									
Area 4B																				
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
2006-2010	1,009	476	2,140	398	504	42	-	488	3,559	5,056	0	0	2	1,020	1,018	27	-	3	2,068	2,071
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	798	727	2,363	511	94	54	-	129	3,749	4,676	0	0	3	192	222	239	-	0	656	656
2019	1,001	503	603	700	8	5	-	70	1,819	2,890	0	0	0	173	59	7	-	0	239	239
2020	661	0	0	93	74	8	-	0	175	836	0	0	0	239	396	12	-	0	647	647
2021	88	182	1,615	3,147	340	8	-	0	5,292	5,380	0	0	0	475	507	436	-	0	1,418	1,418
2022 ^{b/}	1,873	2,751	742	1,769	500	116	-	6	5,878	7,757	0	0	0	63	45	16	-	0	124	124
Neah Bay																				
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
2006-2010	12	820	6,616	3,445	4,610	1,765	-	7	17,256	17,276	4	3	26	10,833	10,955	4,670	-	0	26,487	26,490
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	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
2019	0	186	1,492	11,589	2,709	224	-	0	16,200	16,200	0	0	0	13,981	31,842	5,979	-	0	51,802	51,802
2020	0	0	0	290	1,500	44	-	0	1,834	1,834	0	0	0	348	10,377	2,723	-	0	13,448	13,448
2021	0	29	386	534	1,083	167	-	0	2,199	2,199	0	0	0	517	12,700	8,566	-	0	21,783	21,783
2022 ^{b/}	0	119	1,044	18,529	7,187	575	-	0	27,454	27,454	0	0	0	1,989	9,964	19,374	-	0	31,327	31,327

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. ^{b/}	Nov.-Dec.	May-Sept.	Year	Jan.-Apr.	May	June	July	Aug.	Sept.	Oct. ^{b/}	Nov.-Dec.	May-Sept.	Year
CHINOOK										COHO										
La Push																				
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
2006-2010	0	46	1,008	408	570	103	10	-	2,134	2,145	0	0	0	244	1,191	124	7	-	1,560	1,567
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	0	0	25	0	0	3	0	-	28	28	0	0	0	0	0	17	0	-	17	17
2019	0	0	0	0	14	23	0	-	37	37	0	0	0	0	123	219	0	-	342	342
2020	0	0	0	0	27	0	0	-	27	27	0	0	0	0	5	0	0	-	5	5
2021	0	0	0	81	256	0	0	-	337	337	0	0	0	45	1,578	0	0	-	1,623	1,623
2022 ^{b/}	0	7	215	183	63	10	0	-	478	478	0	0	0	159	1,861	992	0	-	3,012	3,012
Westport																				
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
2006-2010	0	41	198	240	223	147	-	-	849	849	0	0	10	208	999	342	-	-	1,559	1,559
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	0	71	152	23	185	5	-	-	436	436	0	0	0	0	509	296	-	-	805	805
2019	0	120	15	25	58	47	-	-	265	265	0	0	0	260	1,794	1,068	-	-	3,122	3,122
2020	0	8	23	239	117	14	-	-	401	401	0	0	0	0	86	205	-	-	291	291
2021	0	210	128	1	10	58	-	-	407	407	0	0	0	2	210	1,325	-	-	1,537	1,537
2022 ^{b/}	0	406	233	86	100	42	-	-	867	867	0	0	0	46	344	1,299	-	-	1,689	1,689

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)

TABLE A-13. Treaty Indian Ocean trout Chinook and coho salmon landings in numbers of fish by catch area and month. (Page 3 of 3)																				
Year or	Total										Total									
Avg.	Jan.-Apr.	May	June	July	Aug.	Sept.	Oct. ^{b/}	Nov.-Dec.	May-Sept.	Year	Jan.-Apr.	May	June	July	Aug.	Sept.	Oct. ^{b/}	Nov.-Dec.	May-Sept.	Year
CHINOOK											COHO									
Statewide Total																				
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
2006-2010	1,021	1,382	9,962	4,491	5,907	2,056	10	495	23,799	25,325	4	4	39	12,304	14,163	5,163	7	3	31,673	31,687
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	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
2019	1,001	809	2,110	12,314	2,789	299	0	70	18,321	19,392	0	0	0	14,414	33,818	7,273	0	0	55,505	55,505
2020	661	8	23	622	1,718	66	0	0	2,437	3,098	0	0	0	587	10,864	2,940	0	0	14,391	14,391
2021	88	421	2,129	3,763	1,689	233	0	0	8,235	8,323	0	0	0	1,039	14,995	10,327	0	0	26,361	26,361
2022 ^{b/}	1,873	3,283	2,234	20,567	7,850	743	0	6	34,677	36,556	0	0	0	2,257	12,214	21,681	0	0	36,152	36,152

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)

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Year or Avg. ^{a/}	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	0	0	0	1	1	0	-	0	2	2
2019	0	0	0	0	0	0	-	0	0	0
2021	0	0	0	9	10	0	-	0	19	19
<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	0	0	0	60	133	0	-	0	193	193
2019	0	0	0	243	270	0	-	0	513	513
2021	0	0	0	8	31	0	-	0	39	39
<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	0	0	0	0	0	0	0	-	0	0
2019	0	0	0	0	0	0	0	-	0	0
2021	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 Avg. ^{a/}	Jan.-Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.-Dec.	Total	
									May-Sept.	Year
<u>Westport</u>										
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	0	0	0	0	0	0	-	-	0	0
2019	0	0	0	0	0	0	-	-	0	0
2021	0	0	0	0	0	0	-	-	0	0
<u>Total Statewide</u>										
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	0	0	0	61	134	0	0	0	195	195
2019	0	0	0	243	270	0	0	0	513	513
2021	0	0	0	17	41	0	0	0	58	58

a/ Odd year averages only.

TABLE A-17. Washington ocean recreational salmon fishing effort in angler trips by port and statistical month. (Page 1 of 3)

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
1986-1990 ^{a/}	-	431	491	13,953	7,341	2,193	-	23,175
1991-1995 ^{a/}	-	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
2006-2010	-	-	869	5,631	5,132	775	-	12,233
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	-	-	1,169	5,989	1,499	0	-	8,657
2019	-	-	2,527	5,150	1,987	400	-	10,064
2020 ^{d/}	-	-	1,322	4,700	768	-	-	6,790
2021 ^{d/}	-	-	1,939	6,668	1,775	516	-	10,899
2022 ^{b/}	-	-	3,693	2,398	2,255	1,091	-	9,437
<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
2006-2010	-	-	236	971	1,786	600	132	3,679
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	-	-	80	400	1,408	20	-	1,908
2019	-	-	124	530	1,114	294	240	2,301
2020 ^{d/}	-	-	0	17	146	63	-	225
2021 ^{d/}	-	-	0	539	797	265	-	1,601
2022 ^{b/}	-	-	92	967	844	575	285	2,763

TABLE A-17. Washington ocean recreational salmon fishing effort in angler trips by port and statistical month. (Page 2 of 3)

Year or Avg.	Apr.	May	June	July	Aug.	Sept.	Oct.	Season
<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
2006-2010	-	-	3,753	9,769	13,773	3,296	-	29,090
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	-	-	-	8,019	14,110	390	-	22,519
2019	-	-	1,604	9,823	10,178	1,788	-	23,393
2020 ^{d/}	-	-	676	7,937	6,205	3,278	-	18,097
2021 ^{d/}	-	-	1,752	9,577	9,599	3,987	-	24,915
2022 ^{b/}	-	-	-	12,497	11,593	4,980	-	29,071
<u>Ilwaco^{c/}</u>								
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
2006-2010	-	-	509	7,034	17,717	1,946	-	26,612
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	-	-	1,195	5,098	7,979	613	-	14,884
2019	-	-	2,396	10,576	15,602	1,335	-	29,909
2020 ^{d/}	-	-	610	8,163	-	-	-	8,773
2021 ^{d/}	-	-	1,299	9,247	17,910	-	-	28,456
2022 ^{b/}	-	-	573	8,280	11,264	3,650	-	23,768

TABLE A-17. Washington ocean recreational salmon fishing effort in angler trips by port and statistical month. (Page 3 of 3)

Year or Avg.	Apr.	May	June	July	Aug.	Sept.	Oct.	Season
Statewide Total^{c/}								
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
2006-2010	-	-	4,302	23,405	38,408	6,228	132	71,614
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	-	-	2,444	19,506	24,995	1,023	-	47,968
2019	-	-	6,651	26,079	28,881	3,816	240	65,667
2020 ^{d/}	-	-	2,609	20,816	7,119	3,341	-	33,885
2021 ^{d/}	-	-	4,990	26,031	30,080	4,768	-	65,870
2022 ^{b/}	-	-	4,358	24,143	25,957	10,296	285	65,038

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).

d/ The ports of Neah Bay and La Push were closed to public access in 2020 due to the COVID-19 pandemic. In 2021, Neah Bay remained closed to public access and La Push opened to public access July 12. Effort shown in this table includes effort that occurred in the adjacent catch areas and originated from Sekiu during periods Neah Bay and La Push remained closed to public access.

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
CHINOOK									COHO							
<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 ^{a/}	-	114	143	2,587	358	35	-	2,478	-	-	384	15,896	11,629	3,446	-	29,747
1991-1995 ^{b/}	-	148	-	1,443	232	62	-	1,420	-	40	-	15,654	13,052	991	-	25,804
1996-2000 ^{b/}	-	-	-	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
2006-2010	-	-	186	1,145	810	52	-	2,162	-	-	138	3,012	3,013	361	-	6,478
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	-	-	352	2,269	420	-	-	3,041	-	-	548	3,170	1,221	-	-	4,939
2019	-	-	1,474	2,385	-	-	-	3,859	-	-	754	3,344	1,764	318	-	6,179
2020 ^{c/}	-	-	551	1,400	49	-	-	2,000	-	-	50	2,381	624	-	-	3,055
2021 ^{c/}	-	-	633	3,542	215	28	-	4,417	-	-	4	1,144	1,027	442	-	2,618
2022 ^{d/}	-	-	2,773	1,297	733	74	-	4,877	-	-	239	432	1,373	588	-	2,633
<u>La Push</u>																
1981-1985	-	0	7	132	166	8	-	304	-	0	72	861	2,786	251	-	3,791
1986-1990 ^{a/}	-	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
2006-2010	-	-	40	222	529	141	48	972	-	-	100	752	1,642	194	27	2,654
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	-	-	26	102	297	2	-	427	-	-	25	94	814	21	-	954
2019	-	-	10	216	190	33	164	613	-	-	2	336	1,095	318	16	1,767
2020 ^{c/}	-	-	0	13	4	0	-	17	-	-	0	5	166	23	-	194
2021 ^{c/}	-	-	0	225	92	12	-	329	-	-	0	271	867	209	-	1,347
2022 ^{d/}	-	-	21	423	242	83	127	897	-	-	44	701	828	588	2	2,163

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
CHINOOK									COHO							
<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	-	2,313	4,117	9,698	7,559	2,200	-	11,437	-	5	1,074	12,899	14,113	7,057	-	33,518
2006-2010	-	-	2,327	4,255	4,317	576	-	10,544	-	-	205	5,254	12,050	3,727	-	21,155
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	-	-	-	2,537	2,307	32	-	4,877	-	-	-	1,638	13,496	236	-	15,370
2019	-	-	126	1,163	959	121	-	2,368	-	-	341	7,878	10,930	1,077	-	20,227
2020 ^{c/}	-	-	51	2,750	1,538	479	-	4,818	-	-	-	2,484	3,105	2,304	-	7,893
2021 ^{c/}	-	-	920	3,929	1,792	413	-	7,054	-	-	17	2,448	11,412	6,787	-	20,665
2022 ^{d/}	-	-	-	6,491	4,746	21	-	11,257	-	-	-	9,378	14,404	8,734	-	32,516
<u>Ilwaco^{e/}</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
2006-2010	-	-	197	869	2,091	128	-	3,181	-	-	222	9,143	21,337	1,397	-	31,731
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	-	-	455	507	586	21	-	1,569	-	-	258	4,679	8,422	88	-	13,447
2019	-	-	237	1,533	888	84	-	2,743	-	-	3,507	14,386	16,997	1,361	-	36,251
2020 ^{c/}	-	-	208	465	-	-	-	673	-	-	-	9,108	-	-	-	9,108
2021 ^{c/}	-	-	434	1,157	2,586	-	-	4,177	-	-	147	7,451	17,542	-	-	25,140
2022 ^{d/}	-	-	311	1,843	2,259	15	-	4,429	-	-	233	10,731	10,276	2,263	-	23,503

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
CHINOOK									COHO							
Total Statewide ^{e/}																
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 ^{a/}	-	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 ^{b/}	-	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 ^{b/}	-	-	-	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
2006-2010	-	-	2,101	6,443	7,643	879	48	16,694	-	-	495	18,381	38,456	5,444	27	62,703
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	-	-	833	5,414	3,611	56	-	9,913	-	-	832	9,581	23,952	345	-	34,710
2019	-	-	1,847	5,297	2,037	238	164	9,583	-	-	4,603	25,944	30,786	3,075	16	64,425
2020 ^{c/}	-	-	810	4,627	1,592	479	-	7,508	-	-	50	13,978	3,895	2,327	-	20,250
2021 ^{c/}	-	-	1,987	8,853	4,684	453	-	15,976	-	-	168	11,315	30,848	7,439	-	49,769
2022 ^{d/}	-	-	3,105	10,054	7,980	193	127	21,460	-	-	515	21,242	26,882	12,174	2	60,816

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/ The ports of Neah Bay and La Push were closed to public access in 2020 due to the COVID-19 pandemic. In 2021, Neah Bay remained closed to public access and La Push opened to public access July 12. Catch shown in this table includes catch that occurred in the adjacent catch areas and was landed into Sekiu during periods Neah Bay and La Push remained closed to public access.

d/ Preliminary.

e/ 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. ^{a/}	Apr.	May	June	July	Aug.	Sept.	Oct.	Season
<u>Neah Bay</u>								
1977-1985	9	6	83	1,276	5,553	225	17	7,092
1987-1995 ^{b/}	-	0	3	804	1,279	151	-	2,044
1997-2005 ^{b/}	-	-	6	1,369	1,851	67	-	3,274
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
2019	-	-	15	260	593	0	-	869
2021 ^{c/}	-	-	7	671	395	22	-	1,095
<u>La Push</u>								
1977-1985	0	0	14	175	896	2	0	1,084
1987-1995	-	0	0	26	50	8	-	54
1997-2005	-	-	4	174	141	8	0	321
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
2019	-	-	0	41	165	0	0	206
2021 ^{c/}	-	-	0	22	52	4	-	78
<u>Westport</u>								
1977-1985	0	94	470	2,826	944	4	0	4,319
1987-1995	-	0	0	65	42	3	-	109
1997-2005	-	-	6	984	231	14	-	1,229
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
2019	-	-	0	127	565	8	-	700
2021 ^{c/}	-	-	0	29	21	1	-	51

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. ^{a/}	Apr.	May	June	July	Aug.	Sept.	Oct.	Season
Ilwaco^{d/}								
1977-1985	0	10	37	208	219	1	0	472
1987-1995	-	0	0	36	51	0	-	87
1997-2005	-	-	0	2	10	1	-	13
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
2019	-	-	0	0	0	0	-	0
2021 ^{c/}	-	-	0	3	0	-	-	3
Total Statewide^{d/}								
1977-1985	2	27	151	1,121	1,903	58	4	3,242
1987-1995	-	0	1	233	355	40	-	573
1997-2005	-	-	4	632	558	22	0	1,209
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
2019	-	-	15	428	1,324	8	0	1,775
2021 ^{c/}	-	-	7	725	468	27	-	1,228

a/ Odd year averages only, includes five years of data.

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

c/ In 2021, the port of Neah Bay was closed to public access and the port of La Push opened to public access July 12 due to the COVID-19 pandemic. Catch shown in this table includes catch that occurred in the adjacent catch areas and was landed into Sekiu during periods Neah Bay and La Push remained closed to public access.

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-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.^{a/}</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
2006-2010	-	342	1,098	926	439	685	326	239	163	26	2,406
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	-	-	348	433	287	667	80	102	83	-	2,000
2019	-	49	134	342	915	389	104	187	-	-	2,120
2020	-	136	92	367	549	251	175	212	-	-	1,782
2021 ^{b/}	32	395	338	169	313	246	70	181	-	-	1,744
2022 ^{b/}	195	298	410	667	351	228	38	133	-	-	2,320
<u>Humbug Mt. to 40°10' Line (KMZ)^{a/c/}</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
2006-2010	-	6	26	138	63	68	212	80	20	-	310
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	-	-	167	351	286	255	-	115	-	-	1,174
2019	-	2	7	108	140	283	-	-	-	-	540
2020	-	1	3	47	72	-	-	-	-	-	123
2021 ^{b/}	1	2	4	55	57	-	-	-	-	-	119
2022 ^{b/}	-	4	-	72	15	67	-	-	-	-	158

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
40°10' Line to U.S./Mexico Border											
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
2006-2010	-	106	2,597	66	1,681	2,041	1,705	271	-	-	6,849
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	-	-	473	839	823	2,751	1,551	441	-	-	6,878
2019	-	-	3,872	4,370	3,091	2,794	1,108	251	-	-	15,486
2020	-	-	2,665	3,359	2,895	1,713	1,086	568	-	-	12,286
2021 ^{b/}	-	-	2,527	2,592	767	2,395	1,324	317	-	-	9,922
2022 ^{b/}	-	-	3,047	1,398	2,852	1,839	1,494	381	-	-	11,011
Total South of Cape Falcon^{a/}											
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
2006-2010	-	454	2,480	1,016	2,161	2,771	1,093	412	176	26	6,763
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	-	-	988	1,623	1,396	3,673	1,631	658	83	-	10,052
2019	-	51	4,013	4,820	4,146	3,466	1,212	438	-	-	18,146
2020	-	137	2,760	3,773	3,516	1,964	1,261	780	-	-	14,191
2021 ^{b/}	33	397	2,869	2,816	1,137	2,641	1,394	498	-	-	11,785
2022 ^{b/}	195	302	3,457	2,137	3,218	2,134	1,532	514	-	-	13,489

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

b/ Preliminary.

c/ In 2021, the southern boundary of the KMZ was officially moved five nautical miles north from Horse Mountain to latitude 40°10' N.

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
CHINOOK												COHO										
<u>Cape Falcon to Humbug Mt.^{a/}</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	-	-	-	-	-	-	-	-	-	-	-
2006-2010	-	1,856	8,174	7,660	3,217	5,706	1,061	1,184	811	67	16,348	-	-	-	-	-	5,036	4,899	-	-	-	7,417
2011	-	4,481	7,900	10,401	699	1,012	337	1,093	1,995	-	27,918	-	-	-	-	-	-	-	-	-	-	-
2012	-	3,633	14,533	7,357	1,785	8,771	13,677	8,756	701	-	59,213	-	-	-	-	-	-	-	-	-	-	-
2013	-	7,373	9,094	5,975	5,339	38,535	28,252	8,420	1,002	-	103,990	-	-	-	-	-	-	-	-	-	-	-
2014	-	15,501	35,467	28,087	18,394	68,008	8,858	2,039	469	-	176,823	-	-	-	-	-	3,295	-	-	-	-	3,295
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	-	-	971	2,878	2,930	12,304	225	490	431	-	20,229	-	-	-	-	-	-	-	-	-	-	-
2019	-	150	665	3,302	16,337	4,648	632	870	-	-	26,604	-	-	-	-	-	-	-	-	-	-	-
2020	-	799	773	2,414	4,385	1,863	560	1,003	-	-	11,797	-	-	-	-	-	-	-	-	-	-	-
2021 ^{b/}	229	2,371	2,103	842	4,658	5,109	370	1,243	-	-	16,925	-	-	-	-	934	1,154	-	-	-	-	2,088
2022 ^{b/}	1,569	2,783	3,637	9,120	6,508	5,081	53	929	-	-	29,680	-	-	-	-	1,410	745	-	-	-	-	2,155
<u>Humbug Mt. to 40°10' Line (KMZ)^{a/c/}</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	-	-	-	-	-	-	-	-	-	-	-
2001-2005	25	656	446	1,182	3,363	6,874	7,582	661	66	-	17,645	-	-	-	-	-	-	-	-	-	-	-
2006-2010	-	15	95	727	601	825	4,587	391	92	-	3,676	-	-	-	-	-	-	-	-	-	-	-
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	-	-	1,209	4,006	2,988	4,391	-	316	-	-	12,910	-	-	-	-	-	-	-	-	-	-	-
2019	-	12	16	799	1,945	4,957	-	-	-	-	7,729	-	-	-	-	-	-	-	-	-	-	-
2020	-	1	5	168	651	-	-	-	-	-	825	-	-	-	-	-	-	-	-	-	-	-
2021 ^{b/}	2	2	13	275	132	-	-	-	-	-	424	-	-	-	-	-	-	-	-	-	-	-
2022 ^{b/}	-	7	0	371	39	366	-	-	-	-	783	-	-	-	-	-	-	-	-	-	-	-

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
CHINOOK												COHO										
<u>40°10' Line 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	-	-	-	-	-	-	-	-	-	-	-
2006-2010	-	748	23,255	274	22,499	15,994	12,744	712	-	-	63,398	-	-	-	-	-	-	-	-	-	-	-
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	-	-	4,566	14,859	13,096	23,927	10,926	2,031	-	-	69,405	-	-	-	-	-	-	-	-	-	-	-
2019	-	-	71,001	97,146	37,363	53,222	6,099	801	-	-	265,632	-	-	-	-	-	-	-	-	-	-	-
2020	-	-	32,516	49,257	65,505	19,615	8,472	2,435	-	-	177,800	-	-	-	-	-	-	-	-	-	-	-
2021 ^{bl}	-	-	46,881	76,723	12,632	57,622	7,557	1,040	-	-	202,455	-	-	-	-	-	-	-	-	-	-	-
2022 ^{bl}	-	-	52,946	34,217	81,074	33,877	7,959	1,113	-	-	211,186	-	-	-	-	-	-	-	-	-	-	-
<u>Total South of Cape Falcon^{a/}</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	-	-	-	-	-	-	-	-	-	-	-
2006-2010	-	2,619	21,015	8,084	26,116	22,250	7,993	1,781	872	67	57,328	-	-	-	-	5,036	4,899	-	-	-	-	7,417
2011	-	4,481	20,233	14,844	32,395	21,650	2,157	1,517	1,995	-	99,272	-	-	-	-	-	-	-	-	-	-	-
2012	-	3,633	73,761	28,029	96,083	38,365	27,483	12,187	701	-	280,242	-	-	-	-	-	-	-	-	-	-	-
2013	-	7,423	86,617	91,974	106,780	65,640	39,481	9,516	1,002	-	408,433	-	-	-	-	-	-	-	-	-	-	-
2014	-	15,554	83,765	69,017	73,454	92,496	21,030	5,467	469	-	361,252	-	-	-	-	-	3,295	-	-	-	-	3,295
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	-	-	6,746	21,743	19,014	40,622	11,151	2,837	431	-	102,544	-	-	-	-	-	-	-	-	-	-	-
2019	-	162	71,682	101,247	55,645	62,827	6,731	1,671	-	-	299,965	-	-	-	-	-	-	-	-	-	-	-
2020	-	800	33,294	51,839	70,541	21,478	9,032	3,438	-	-	190,422	-	-	-	-	-	-	-	-	-	-	-
2021 ^{bl}	231	2,373	48,997	77,840	17,422	62,731	7,927	2,283	-	-	219,804	-	-	-	-	934	1,154	-	-	-	-	-
2022 ^{bl}	1,569	2,790	56,583	43,708	87,621	39,324	8,012	2,042	-	-	241,649	-	-	-	-	1,410	745	-	-	-	-	-

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

b/ Preliminary.

c/ In 2021, the southern boundary of the KMZ was officially moved five nautical miles north from Horse Mountain to latitude 40°10' N.

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.^{a/}</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
2006-2010	-	30	84	973	4,625	17,825	15,742	5,192	2,623	69	46,664
2011	-	22	75	433	2,965	10,835	10,173	9,354	1,240	16	35,113
2012	-	23	380	1,619	3,780	9,872	12,522	13,745	1,705	18	43,664
2013	-	479	693	917	3,976	11,222	26,027	11,824	4,214	--	59,352
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	-	54	19	657	1,122	9,566	22,219	14,596	899	--	49,132
2019	-	43	8	410	6,273	32,385	24,824	9,660	1,581	-	75,184
2020	-	11	112	292	649	21,207	11,969	11,346	1,714	-	47,300
2021	-	23	571	845	4,728	34,163	25,967	13,474	202	-	79,973
2022 ^{b/}	-	93	343	747	7,083	27,961	17,842	21,396	859	-	76,324
<u>Humbug Mt. to 40°10' Line (KMZ)^{a/c/}</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
2006-2010	-	-	-	2,633	3,319	3,328	4,160	4,363	2,420	-	16,981
2011	-	-	-	2,244	2,974	5,059	6,554	2,621	1,757	-	21,209
2012	-	-	-	3,619	9,509	14,645	15,182	3,576	3,666	-	50,197
2013	-	-	-	3,501	10,773	15,914	15,324	822	3,547	-	49,881
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	-	-	-	508	3,715	4,138	3,855	51	2,102	-	14,369
2019	-	-	-	496	3,507	4,611	3,308	147	-	-	12,069
2020 ^{d/}	-	-	-	-	1,624	7,786	1,820	-	-	-	11,230
2021 ^{b/}	-	-	-	-	2,336	4,567	1,221	-	-	-	8,124
2022 ^{b/}	-	-	-	3,676	1,376	1,215	1,532	636	-	-	8,435

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
40°10' Line to U.S./Mexico Border^{c/}											
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
2006-2010	248	446	17,005	12,398	15,911	20,521	8,700	3,053	1,822	921	60,083
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	-	-	8,140	2,021	12,296	34,271	18,472	8,984	5,072	-	89,256
2019	-	-	17,350	5,579	18,173	22,923	23,219	6,925	1,821	-	95,990
2020 ^{d/}	-	-	-	--	--	25,967	16,753	7,739	4,264	147	54,870
2021 ^{b/}	-	-	12,287	8,838	10,052	27,845	16,334	8,361	2,565	-	86,282
2022 ^{b/}	-	-	13,652	11,508	11,722	30,165	18,399	6,520	1,260	-	93,226
Total South of Cape Falcon^{a/}											
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
2006-2010	248	466	17,061	16,004	17,491	33,466	24,290	10,514	5,287	990	111,711
2011	-	22	15,640	8,620	12,876	36,194	31,114	22,139	6,428	16	133,049
2012	-	23	21,846	23,315	35,263	52,934	42,324	25,235	8,959	587	210,486
2013	-	479	20,295	19,605	33,064	63,296	61,363	18,167	10,006	426	226,701
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	--	104,631
2017	-	17	10,165	5,500	8,490	32,647	28,741	17,839	4,316	--	107,715
2018	-	54	8,159	3,186	17,133	47,975	44,546	23,631	8,073	--	152,757
2019	-	43	17,358	6,485	27,953	59,919	51,351	16,732	3,402	-	183,243
2020 ^{d/}	-	11	112	292	2,273	54,960	30,542	19,085	5,978	147	113,400
2021 ^{b/}	-	23	12,858	9,683	17,116	66,575	43,522	21,835	2,767	-	174,379
2022 ^{b/}	-	93	13,995	15,931	20,181	59,341	37,773	28,552	2,119	-	177,985

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

b/ Preliminary.

c/ In 2021, the southern boundary of the KMZ was officially moved five nautical miles north from Horse Mountain to latitude 40°10' N.

d/ Recreational estimates for California do not include May and June due to restrictions on sampling caused by the COVID-19 pandemic.

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.^{a/}</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
2006-2010	-	3	2	72	204	996	643	651	609	33	3,161	-	-	-	2	2,240	14,112	10,849	606	5	-	27,810
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	-	0	4	48	139	655	1,167	621	74	--	2,708	-	-	-	-	31	2,978	8,581	6,936	-	-	18,526
2019	-	10	3	103	530	2,430	725	682	256	-	4,739	-	-	-	-	3,805	27,301	12,366	5,070	5	-	48,547
2020	-	0	4	38	89	2,842	863	1,345	219	-	5,400	-	-	-	-	0	7,714	5,126	4,239	-	-	17,079
2021	-	12	136	174	604	2,681	1,066	863	9	-	5,545	-	-	-	-	1,792	37,782	27,786	10,760	4	-	78,124
2022 ^{b/}	-	31	95	226	1,241	1,468	706	797	62	-	4,626	-	-	-	-	3,323	27,167	9,245	17,670	5	-	57,410
<u>Humbug Mt. to 40°10' Line (KMZ)^{a/c/}</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
2006-2010	-	-	-	1,828	3,883	1,891	2,963	1,873	438	-	8,566	-	-	-	93	301	662	365	66	4	-	1,268
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	-	-	-	105	1,863	1,320	1,583	31	429	-	5,331	-	-	-	-	52	23	45	-	-	-	120
2019	-	-	-	325	2,423	1,530	1,177	74	-	-	5,529	-	-	-	-	186	408	103	-	-	-	697
2020 ^{c/}	-	-	-	-	566	2,518	382	-	-	-	3,466	-	-	-	-	-	18	-	-	-	-	18
2021 ^{b/}	-	-	-	-	276	1,088	178	-	-	-	1,542	-	-	-	-	450	130	195	-	-	-	775
2022 ^{b/}	-	-	-	3,558	164	63	522	443	-	-	4,750	-	-	-	5	544	401	7	2	-	-	959

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)

TABLE 7.20. Cape Falcon to U.S./Mexico Border South of California Current Exchange 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
CHINOOK												COHO										
40°10' Line to U.S./Mexico Border ^{c/}																						
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
2006-2010	34	105	5,942	7,682	11,114	12,435	2,667	589	349	196	30,698	-	-	8	56	271	251	31	11	-	-	618
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	-	-	3,935	476	13,058	41,588	13,563	6,784	4,172	-	83,576	-	-	-	-	5	76	4	8	-	-	93
2019	-	-	16,780	3,163	18,565	20,891	19,965	3,671	468	-	83,503	-	-	-	2	115	52	353	14	5	-	541
2020 ^{c/}	-	-	-	--	--	22,102	9,738	4,077	2,364	29	38,310	-	-	-	-	-	30	-	4	-	-	34
2021 ^{b/}	-	-	7,626	4,184	7,213	20,047	10,164	4,079	1,583	-	54,900	-	-	-	210	84	215	18	-	4	-	531
2022 ^{b/}	-	-	9,823	4,184	7,213	34,609	14,584	2,702	382	-	84,607	-	-	-	22	56	254	161	5	-	-	498
Total South of Cape Falcon ^{a/}																						
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
2006-2010	34	107	5,943	9,582	9,202	9,970	4,021	2,502	1,099	229	36,286	-	-	8	88	2,643	14,925	11,160	663	6	-	29,449
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	-	0	3,939	629	15,060	43,563	16,313	7,436	4,675	0	91,615	-	-	-	-	88	3,077	8,630	6,944	-	-	18,739
2019	-	10	16,783	3,591	21,518	24,851	21,867	4,427	724	-	93,771	-	-	-	2	4,106	27,761	12,822	5,084	10	-	49,785
2020 ^{c/}	-	0	4	38	655	27,462	10,983	5,422	2,583	29	47,176	-	-	-	-	0	7,762	5,126	4,243	-	-	17,131
2021 ^{b/}	-	12	7,762	4,358	8,093	23,816	11,408	4,942	1,592	-	61,987	-	-	-	210	2,326	38,127	27,999	10,760	8	-	79,430
2022 ^{b/}	-	31	9,918	7,968	8,618	36,140	15,812	3,942	444	-	93,983	-	-	-	27	3,923	27,822	9,413	17,677	5	-	58,867

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

b/ Preliminary.

c/ In 2021, the southern boundary of the KMZ was officially moved five nautical miles north from Horse Mountain to latitude 40°10' N.

d/ Recreational estimates for California do not include May and June due to restrictions on sampling caused by the COVID-19 pandemic.

TABLE A-24. U.S./Canada border to Cape Falcon commercial troll salmon fishing effort in days fished by area and month.^{a/}
(Page 1 of 3)

Year or Avg.	May	June	July	Aug.	Sept.	Oct.	Season
<u>U.S./Canada Border to Leadbetter Pt. - Non-Indian</u>							
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
2006-2010	406	479	322	274	83	-	1,564
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	741	674	422	189	69	-	2,095
2019	361	335	661	191	113	-	1,661
2020	73	136	464	227	19	-	919
2021	250	458	495	240	119	-	1,562
2022 ^{b/}	490	185	267	137	100	-	1,179
<u>U.S./Canada Border to Leadbetter Pt. - Treaty Indian^{c/}</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
2006-2010	77	238	169	191	57	3	732
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	99	255	272	145	110	0	881
2019	65	72	365	276	120	0	898
2020	1	2	29	122	31	0	185
2021	28	98	141	103	77	0	447
2022 ^{b/}	109	77	171	104	60	0	521
<u>U.S./Canada Border to Leadbetter Pt. - Total^{c/}</u>							
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
2006-2010	483	717	491	466	140	3	2,296
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	840	929	694	334	179	0	2,976
2019	426	407	1,026	467	233	0	2,559
2020	74	138	493	349	50	0	1,104
2021	278	556	636	343	196	0	2,009
2022 ^{b/}	599	262	438	241	160	0	1,700

TABLE A-24. U.S./Canada border to Cape Falcon commercial troll salmon fishing effort in days fished by area and month.^{a/}
(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
2006-2010	232	239	102	129	34	-	736
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	29	67	18	36	2	-	152
2019	51	26	109	54	24	-	264
2020	34	37	20	23	8	-	122
2021	9	18	22	14	15	-	78
2022 ^{b/}	12	63	111	15	31	-	232
<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
2006-2010	638	718	424	403	118	-	2,301
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	770	741	440	225	71	-	2,247
2019	412	361	770	245	137	-	1,925
2020	107	173	484	250	27	-	1,041
2021	259	476	517	254	134	-	1,640
2022 ^{b/}	502	248	378	152	131	-	1,411
<u>U.S./Canada Border to Cape Falcon - Treaty Indian Total^{c/}</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
2006-2010	77	238	169	191	57	3	732
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	99	255	272	145	110	0	881
2019	65	72	365	276	120	0	898
2020	1	2	29	122	31	0	185
2021	28	98	141	103	77	0	447
2022 ^{b/}	109	77	171	104	60	0	521

TABLE A-24. U.S./Canada border to Cape Falcon commercial troll salmon fishing effort in days fished by area and month.^{a/}
(Page 3 of 3)

Year or Avg.	May	June	July	Aug.	Sept.	Oct.	Season
U.S./Canada Border to Cape Falcon - Total Treaty Indian and Non-Indian^{c/}							
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
2006-2010	715	955	593	595	174	3	3,032
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	869	996	712	370	181	0	3,128
2019	477	433	1,135	521	257	0	2,823
2020	108	175	513	372	58	0	1,226
2021	287	574	658	357	211	0	2,087
2022 ^{b/}	611	325	549	256	191	0	1,932

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.^{a/} (Page 1 of 4)

Year or Avg.	May	June	July	Aug.	Sept.	Oct.	Season	May	June	July	Aug.	Sept.	Oct.	Season
CHINOOK								COHO						
U.S./Canada Border to Leadbetter Pt. - Non-Indian														
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
2006-2010	5,129	7,439	2,687	2,657	504	-	18,415	-	-	1,672	2,560	887	-	5,119
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	6,653	8,942	5,438	1,683	709	-	23,425	-	-	415	456	388	-	1,259
2019	3,762	3,018	11,394	2,641	1,732	-	22,547	-	-	1,477	1,060	1,201	-	3,738
2020	478	1,175	7,269	2,861	149	-	11,932	-	-	222	314	86	-	622
2021	2,542	7,202	5,547	3,140	508	-	18,939	-	-	551	1,071	1,625	-	3,247
2022 ^{b/}	13,691	2,577	4,825	1,997	212	-	23,302	-	-	1,034	2,307	5,944	-	9,285
U.S./Canada Border to Leadbetter Pt. - Treaty Indian ^{c/}														
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
2006-2010	1,382	9,962	4,491	5,907	2,056	10	23,799	4	39	12,304	14,163	5,163	7	31,673
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	1,319	11,756	8,486	1,883	459	0	23,903	0	15	1,751	5,512	4,524	0	11,802
2019	809	2,110	12,314	2,789	299	0	18,321	0	0	14,414	33,818	7,273	0	55,505
2020	8	23	622	1,718	66	0	2,437	0	0	587	10,864	2,940	0	14,391
2021	421	2,129	3,763	1,689	233	0	8,235	0	0	1,039	14,995	10,327	0	26,361
2022 ^{b/}	3,283	2,234	20,567	7,850	743	0	34,677	0	0	2,257	12,214	21,681	0	36,152

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.^{a/} (Page 2 of 4)

Year or Avg.	May	June	July	Aug.	Sept.	Oct.	Season	May	June	July	Aug.	Sept.	Oct.	Season
CHINOOK								COHO						
U.S./Canada Border to Leadbetter Pt. - Total^{c/}														
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
2006-2010	6,511	17,401	7,178	8,564	2,560	10	42,214	4	39	13,976	16,724	6,050	7	36,792
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	7,972	20,698	13,924	3,566	1,168	0	47,328	0	15	2,166	5,968	4,912	0	13,061
2019	4,571	5,128	23,708	5,430	2,031	0	40,868	0	0	15,891	34,878	8,474	0	59,243
2020	486	1,198	7,891	4,579	215	0	14,369	0	0	809	11,178	3,026	0	15,013
2021	2,963	9,331	9,310	4,829	741	0	27,174	0	0	1,590	16,066	11,952	0	29,608
2022 ^{b/}	16,974	4,811	25,392	9,847	955	0	57,979	0	0	3,291	14,521	27,625	0	45,437
Leadbetter Pt. to Cape Falcon - Non-Indian														
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
2006-2010	2,779	2,930	569	503	61	-	6,842	-	-	2,371	3,926	212	-	6,509
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	-	-	62	37	615	-	714
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	36	337	30	57	4	-	464	-	-	40	85	-	-	125
2019	156	62	370	121	28	-	737	-	-	1,190	400	81	-	1,671
2020	231	168	57	101	11	-	568	-	-	63	64	18	-	145
2021	39	85	128	57	15	-	324	-	-	75	68	121	-	264
2022 ^{b/}	377	805	1,437	23	34	0	2,676	-	-	1,889	198	1,562	-	3,649

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.^{a/} (Page 3 of 4)

Year or Avg.	May	June	July	Aug.	Sept.	Oct.	Season	May	June	July	Aug.	Sept.	Oct.	Season
CHINOOK								COHO						
U.S./Canada Border to Cape Falcon - Non-Indian														
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
2006-2010	7,908	10,369	3,255	3,161	565	-	25,257	-	-	4,043	6,487	1,099	-	11,628
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	-	-	808	1,153	1,932	-	3,893
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	6,689	9,279	5,468	1,740	713	-	23,889	-	-	455	541	388	-	1,384
2019	3,918	3,080	11,764	2,762	1,760	-	23,284	-	-	2,667	1,460	1,282	-	5,409
2020	709	1,343	7,326	2,962	160	-	12,500	-	-	285	378	104	-	767
2021	2,581	7,287	5,675	3,197	523	-	19,263	-	-	626	1,139	1,746	-	3,511
2022 ^{b/}	14,068	3,382	6,262	2,020	246	0	25,978	-	-	2,923	2,505	7,506	-	12,934
U.S./Canada Border to Cape Falcon - Treaty Indian ^{c/}														
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
2006-2010	1,382	9,962	4,491	5,907	2,056	10	23,799	4	39	12,304	14,163	5,163	7	31,673
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	1,319	11,756	8,486	1,883	459	0	23,903	0	15	1,751	5,512	4,524	0	11,802
2019	809	2,110	12,314	2,789	299	0	18,321	0	0	14,414	33,818	7,273	0	55,505
2020	8	23	622	1,718	66	0	2,437	0	0	587	10,864	2,940	0	14,391
2021	421	2,129	3,763	1,689	233	0	8,235	0	0	1,039	14,995	10,327	0	26,361
2022 ^{b/}	3,283	2,234	20,567	7,850	743	0	34,677	0	0	2,257	12,214	21,681	0	36,152

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.^{a/} (Page 4 of 4)

Year or Avg.	May	June	July	Aug.	Sept.	Oct.	Season	May	June	July	Aug.	Sept.	Oct.	Season
CHINOOK								COHO						
U.S./Canada Border to Cape Falcon - Total Treaty Indian and Non-Indian ^{c/}														
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
2006-2010	9,290	20,331	7,747	9,068	2,621	10	49,057	4	39	16,347	20,650	6,262	7	43,301
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	3,577	19,943	17,801	0	41,423
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	8,008	21,035	13,954	3,623	1,172	0	47,792	0	15	2,206	6,053	4,912	0	13,186
2019	4,727	5,190	24,078	5,551	2,059	0	41,605	0	0	17,081	35,278	8,555	0	60,914
2020	717	1,366	7,948	4,680	226	0	14,937	0	0	872	11,242	3,044	0	15,158
2021	3,002	9,416	9,438	4,886	756	0	27,498	0	0	1,665	16,134	12,073	0	29,872
2022 ^{b/}	17,351	5,616	26,829	9,870	989	0	60,655	0	0	5,180	14,719	29,187	0	49,086

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).^{a/} (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
1996-2000	1	2	31	21	0	-	29
2001-2005	2	3	55	22	5	-	84
2006-2010	5	17	101	19	1	-	141
2011	0	0	3	118	93	1	215
2013	0	2	0	101	37	1	141
2015	0	1	20	47	0	0	68
2017	0	0	10	3	0	0	13
2019	0	0	483	0	0	0	483
2021	0	0	4	29	0	0	33
<u>U.S./Canada Border to Leadbetter Pt - Treaty Indian^{b/}</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
1996-2000	0	0	0	1,573	81	-	1,653
2001-2005	4	0	351	592	78	0	1,025
2006-2010	0	4	379	310	0	0	692
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
2019	0	0	243	270	0	0	513
2021	0	0	17	41	0	0	58
<u>U.S./Canada Border to Leadbetter Pt - Total^{b/}</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
1996-2000	1	2	16	1,583	81	-	1,682
2001-2005	5	3	406	614	81	0	1,109
2006-2010	5	20	479	329	1	0	833
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	71	137	0	0	208
2019	0	0	726	270	0	0	996
2021 ^{c/}	0	0	21	70	0	0	91
<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
1996-2000	0	0	0	0	0	-	0
2001-2005	65	17	31	23	0	-	137
2006-2010	33	0	3	10	4	-	49
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
2019	0	0	0	2	0	-	2
2021	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).^{a/} (Page 2 of 2)

Year or Avg.	May	June	July	Aug.	Sept.	Oct.	Season
<u>U.S./Canada Border to Cape Falcon - Non-Indian</u>							
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
1996-2000	1	2	16	11	0	-	29
2001-2005	67	20	86	44	4	-	221
2006-2010	37	17	104	29	5	-	190
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	10	3	0	13	0
2019	0	0	483	2	0	0	485
2021	0	0	0	0	0	0	0
<u>U.S./Canada Border to Cape Falcon - Treaty Indian^{b/}</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
1996-2000	0	0	0	1,573	81	-	1,653
2001-2005	6	0	434	789	115	0	1,344
2006-2010	0	2	314	273	1	0	590
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
2019	0	0	243	270	0	0	513
2021	0	0	17	41	0	0	58
<u>U.S./Canada Border to Cape Falcon - Total^{b/}</u>							
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
1996-2000	1	2	16	1,583	81	-	1,682
2001-2005	70	20	437	636	81	0	1,246
2006-2010	37	20	482	339	5	0	882
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	71	137	0	13	195
2019	0	0	726	272	0	0	998
2021	0	0	17	41	0	0	58

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.^{a/}

Year or Avg.	Apr.	May	June	July	Aug.	Sept.	Oct.	Season ^{b/}
<u>U.S./Canada Border to Leadbetter Pt.^{c/}</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
2006-2010	-	-	3,920	16,371	20,691	4,671	132	45,002
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	-	-	1,249	14,408	17,017	410	-	33,084
2019	-	-	4,254	15,503	13,279	2,482	240	35,758
2020	-	-	1,999	12,654	7,119	3,341	-	25,112
2021	-	-	3,692	16,784	12,171	4,768	-	37,414
2022 ^{d/}	-	-	3,785	15,863	14,692	6,646	285	41,271
<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
2006-2010	-	66	805	9,842	23,475	2,670	-	35,950
2011	-	-	1,133	6,760	19,772	4,463	-	32,127
2012	-	-	2,659	7,417	12,103	5,637	-	27,817
2013	-	6	4,420	6,162	16,310	3,736	-	30,635
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	-	-	1,575	6,937	13,311	761	-	22,583
2019	-	-	3,730	15,642	23,532	1,700	-	44,604
2021	-	-	696	11,530	-	-	-	12,226
2022 ^{d/}	-	-	1,330	12,658	20,692	5,994	-	40,675
<u>U.S./Canada Border to Cape Falcon^{c/}</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	-	-	-	13,543	27,273	7,498	-	45,605
1996-2000	-	-	-	18,152	24,315	5,064	-	43,901
2001-2005	-	2,866	6,440	47,285	57,436	16,642	133	127,222
2006-2010	-	66	4,524	26,213	44,166	6,807	132	80,952
2011	-	-	6,670	24,094	40,950	9,249	16	80,979
2012	-	-	12,286	24,830	31,271	13,765	353	82,506
2013	-	957	13,393	22,173	40,257	9,136	237	86,153
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	-	-	2,824	21,345	30,327	1,171	-	55,667
2019	-	-	7,985	31,145	36,811	4,181	240	80,362
2020	-	-	2,695	24,183	7,119	3,341	-	37,338
2021	-	-	5,295	30,707	37,953	4,768	-	78,724
2022 ^{d/}	-	-	5,115	28,521	35,385	12,640	285	81,945

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.^{a/} (Page 1 of 2)

Year or Avg.	April	May	June	July	Aug.	Sept.	Oct.	Season ^{b/}	April	May	June	July	Aug.	Sept.	Oct.	Season
CHINOOK									COHO							
<u>U.S./Canada Border to Leadbetter Pt.^{c/}</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
2006-2010	-	-	1,954	5,574	5,552	777	48	13,513	-	-	329	9,237	17,119	4,326	27	30,972
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	-	-	378	4,908	3,025	34	-	8,344	-	-	574	4,902	15,530	257	-	21,262
2019	-	-	1,610	3,764	1,148	154	164	6,841	-	-	1,097	11,558	13,789	1,714	16	28,174
2020	-	-	602	4,163	1,592	479	-	6,835	-	-	50	4,870	3,895	2,327	-	11,142
2021	-	-	1,552	7,696	2,098	453	-	11,799	-	-	21	3,864	13,306	7,439	-	24,630
2022 ^{d/}	-	-	2,794	8,211	5,721	178	127	17,031	-	-	282	10,511	16,606	9,911	2	37,312
<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
2006-2010	-	17	261	1,132	2,691	176	-	4,123	-	-	306	12,665	27,754	1,793	-	42,037
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	-	-	575	657	1,003	23	-	2,258	-	-	294	6,072	14,116	93	-	20,575
2019	-	-	341	2,201	1,373	122	-	4,038	-	-	5,359	20,934	25,540	1,642	-	53,475
2020	-	-	219	607	-	-	-	826	-	-	0	12,829	-	-	-	12,829
2021	-	-	494	1,507	4,013	-	-	6,014	-	-	256	12,106	27,182	-	-	39,544
2022 ^{d/}	-	-	407	2,543	4,832	15	-	7,798	-	-	1,239	17,106	20,676	5,027	-	44,048

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.^{a/} (Page 2 of 2)

Year or Avg.	April	May	June	July	Aug.	Sept.	Oct.	Season ^{b/}	April	May	June	July	Aug.	Sept.	Oct.	Season
CHINOOK									COHO							
<u>U.S./Canada Border to Cape Falcon^{c/}</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
2006-2010	-	17	2,149	6,706	8,243	917	48	17,637	-	-	558	21,902	44,873	5,760	27	73,008
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	-	-	953	5,564	4,028	58	-	10,602	-	-	868	10,974	29,646	350	-	41,838
2019	-	-	1,951	5,965	2,522	276	164	10,878	-	-	6,455	32,492	39,329	3,356	16	81,649
2020	-	-	821	4,769	1,592	479	-	7,661	-	-	50	17,699	3,895	2,327	-	23,971
2021	-	-	2,047	9,203	6,111	453	-	17,813	-	-	277	15,970	40,488	7,439	-	64,173
2022 ^{d/}	-	-	3,201	10,754	10,553	193	127	24,829	-	-	1,521	27,617	37,282	14,938	2	81,361

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.^{a/b/}

Year or Average	Upper Sacramento		Lower Sacramento Natural Areas ^{c/}						Natural Area		Sacramento Hatcheries								Hatchery Totals		Sacramento Totals	
	Natural Areas ^{c/d/e/}		Feather River		Yuba River		American River ^{f/}		Totals ^{c/}		Coleman		Feather River		Nimbus		Adults ^{g/}	Jacks	Adults	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 ^{h/}	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		
2001-2005	197,215 ^{i/}	7,600	88,250	7,064	18,461	2,861	107,941	14,198	411,867	31,723	72,122	6,018	18,300	2,507	12,221	4,799	102,643	13,324	514,510	45,047		
2006-2010	40,050	2,884	29,544	1,451	5,913	512	10,483	1,035	85,990	5,883	18,528	2,193	9,411	1,522	5,454	648	33,393	4,363	119,383	10,245		
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	80,407	7,193	55,480	5,241	9,885	1,819	22,895	3,580	168,667	17,833	17,937	903	18,824	4,596	7,048	1,295	43,809	6,794	212,476	24,627		
2015	40,696	3,342	18,069	2,497	3,844	2,789	11,895	3,844	74,504	12,472	13,861	1,863	17,700	3,116	7,403	2,419	38,964	7,398	113,468	19,870		
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	1,207	441	6,998	2,665	17,851	9,535	1,316	5,080	16,598	8,448	8,564 ^{j/}	2,015 ^{j/}	26,478	15,543	44,329	25,078		
2018	18,317	11,998	39,210	6,616	2,140	933	12,022	9,070	71,689	28,617	8,207	5,991	21,084	7,272	4,486	1,726	33,777	14,989	105,466	43,606		
2019	53,706	5,203	43,352	8,611	2,677	671	21,894	5,136	121,629	19,621	13,065	1,204	19,731	7,372	9,342	1,954	42,138	10,530	163,767	30,151		
2020	36,447	3,747	40,499	2,470	3,801	393	19,422	3,034	100,169	9,644	12,478	1,259	20,340	1,853	5,104	1,160	37,922	4,272	138,091	13,916		
2021	51,822	5,484	9,203	485	3,957	712	7,787	3,445	72,769	10,126	14,556	1,882	10,927	1,458	7,332	3,745	32,815	7,085	105,584	17,211		
2022 ^{k/}	8,993	659	6,164	413	2,924	246	14,631	1,752	32,712	3,070	8,918	346	11,909	2,368	8,311	1,212	29,138	3,926	61,850	6,996		
GOALS	-	-	-	-	-	-	-	-	-	-	12,000 ^{l/}	-	6,000 ^{l/}	-	4,000 ^{l/}	-	22,000 ^{l/}	-	122,000 ^{m/}	-		

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.

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 2002 estimation methodology due to extremely high Battle Creek escapement.

j/ 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.

k/ Preliminary.

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.^{a/}

Year or Average	San Joaquin Natural Areas ^{b/}										San Joaquin Hatcheries						San Joaquin Totals	
	Mokelumne River		Stanislaus River		Tuolumne River		Merced River		Other Tributaries ^{c/d/}		Totals		Mokelumne River		Merced River		Totals	
	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	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
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
1991-1995	865	281	472	123	264	139	1,026	360	0	0	2,626	904	1,077	554	239	233	1,316	788
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
2001-2005	3,264	572	4,905	822	3,668	658	4,674	828	148	26	16,659	2,905	5,177	2,392	716	387	5,894	2,780
2006-2010	812	183	937	181	293	86	583	101	285	3	2,910	554	1,639	811	93	47	1,731	858
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
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
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
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
2015	3,075	1,506	4,050	2,086	42	71	860	387	180	0	8,207	4,050	5,170	3,128	556	642	5,726	3,770
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
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
2018	6,456	3,599	2,018	359	734	343	349	529	630	158	10,187	4,988	4,937	2,483	264	639	5,201	3,122
2019	3,325	1,042	1,221	283	828	103	1,952	259	435	0	7,761	1,687	5,806	2,697	628	339	6,434	3,036
2020	179	422	461	80	240	31	394	32	0	0	1,274	565	2,141	1,302	141	44	2,282	1,346
2021	258	568	1,946	2,368	138	50	287	183	833	0	3,462	3,169	2,116	2,101	57	210	2,173	2,311
2022 ^{e/}	918	987	3,185	455	375	91	60	15	0	0	4,538	1,548	3,549	1,481	33	34	3,582	1,515
GOALS ^{f/}	-	-	-	-	-	-	-	-	-	-	-	-	3,000 ^{g/}	-	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 with a jack length cut-off.

c/ Other San Joaquin tributary escapement includes Cosumnes and Calaveras Rivers when surveys were conducted. In some years no survey was conducted due to logistical or environmental limitations.

d/ Calculating jack proportions was 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 was 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 Average	Upper Sacramento River										
	Late-Fall ^{a/b/c/}		Winter ^{c/d/}				Spring				
	Adults	Jacks	RBDD ^{a/}		Carcass Survey		Tributary ^{e/} Adults and Jacks ^{h/}	Sacramento River ^a		Feather River	
			Adults	Jacks	Adults	Jacks		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 ^{i/}	383 ^{i/}	586	78	--	--	2,813	410	165	3,441	465
1996-2000	16,061 ^{i/}	2,478 ^{i/}	940	1,032	--	--	7,768	242	160	4,393	503
2001-2005	19,012	1,258	4,318	3,070	8,527	996	19,499 ^{j/}	439	78 ^{h/}	4,370 ^{k/}	255 ^{k/}
2006-2010	11,004	581	3,100	2,631	5,595	164	7,606 ^{j/}	75	7	1,660 ^{k/}	30 ^{k/}
2011	7,129	1,161	l/	l/	637	187	5,547 ^{j/}	l/	l/	1,831 ^{k/}	138 ^{k/}
2012	5,153	909	m/	m/	2,527	144	18,694 ^{j/}	m/	m/	3,510 ^{k/}	228 ^{k/}
2013	8,365	644	m/	m/	5,622 ^{n/}	462	18,507 ^{j/}	m/	m/	4,247 ^{k/}	44 ^{k/}
2014	11,792	1,453	m/	m/	2,688	327	7,127 ^{j/}	m/	m/	2,599 ^{k/}	177 ^{k/}
2015	9,306	134	m/	m/	3,382	57	1,039 ^{j/}	m/	m/	3,333 ^{k/}	53 ^{k/}
2016	4,708	949	m/	m/	924	622	6,458 ^{j/}	m/	m/	1,595 ^{k/}	55 ^{k/}
2017	4,466	389	m/	m/	490	485	1,055 ^{j/}	m/	m/	266 ^{k/}	314 ^{k/}
2018	2,023	3,189	m/	m/	1,884	754	2,806 ^{j/}	m/	m/	1,870 ^{k/}	240 ^{k/}
2019	9,965	1,550	m/	m/	7,570	559	16,145 ^{j/}	m/	m/	3,554 ^{k/}	313 ^{k/}
2020	5,109	113	m/	m/	6,743	686	1,675 ^{j/}	m/	m/	1,444 ^{k/}	110 ^{k/}
2021	3,626	267	m/	m/	10,239	277	5,210 ^{j/}	m/	m/	2,596 ^{k/}	47 ^{k/}
2022 ^{o/}	7,035	228	m/	m/	5,561	477	4,473 ^{j/}	m/	m/	1,761 ^{k/}	11 ^{k/}

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 include Chinook trapped at Keswick Dam for use as broodstock at Coleman or Livingston Stone National Fish hatcheries. Beginning in 2019, winter run estimates also include Chinook that returned to Battle Creek as part of the Coleman National Fish Hatchery captive broodstock "jumpstart" reintroduction effort.

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 in 2001.

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

o/ Preliminary.

TABLE B-4. Summary of Klamath River fall Chinook salmon estimates in numbers of adults and jacks.

Year or Average	Category	Inriver					Spawning Escapement								
		Total Inriver Run	Inriver Harvest			Nonlanded Fishery Mortality	Klamath River			Trinity River			Total		
			Indian	Sport	Total		Hatchery	Natural	Total	Hatchery	Natural	Total	Hatchery	Natural	Total
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	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 ^{a/}	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
2006-2010	Adults	91,113	23,678	3,396	27,074	2,218	12,043	19,498	31,541	9,115	21,166	30,281	21,158	40,663	61,821
	Jacks	16,484	337	2,850	3,186	87	1,399	3,986	5,385	1,297	6,528	7,825	2,696	10,514	13,210
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 ^{b/}	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 ^{b/}	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 ^{b/}	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	Adults	91,060	14,769	4,110	18,879	1,262	11,425	37,505	48,930	7,142	14,847	21,989	18,567	52,352	70,919
	Jacks	10,872	308	2,237	2,545	58	435	3,491	3,926	171	4,172	4,343	606	7,663	8,269
2019 ^{b/}	Adults	37,084	5,989	5,376	11,365	511	3,797	13,528	17,325	1,381	6,494	7,875	5,178	20,022	25,200
	Jacks	9,951	592	2,785	3,377	73	249	2,314	2,563	205	3,732	3,937	454	6,046	6,500
2020	Adults	45,409	5,212	5,123	10,335	558	4,042	11,818	15,860	4,289	14,367	18,656	8,331	26,185	34,516
	Jacks	9,077	328	533	861	40	413	929	1,342	2,815	4,019	6,834	3,228	4,948	8,176
2021 ^{b/}	Adults	53,954	8,066	2,265	10,331	717	7,012	16,690	23,702	5,838	13,252	19,090	12,850	29,942	42,792
	Jacks	10,334	612	2,397	3,009	75	494	3,283	3,777	129	3,339	3,468	623	6,622	7,245
2022 ^{c/}	Adults	46,690	8,035	2,461	10,496	744	9,269	14,769	24,038	3,966	7,281	11,247	13,235	22,050	35,285
	Jacks	7,581	334	1,870	2,204	48	206	989	1,195	973	3,162	4,135	1,179	4,151	5,330
GOAL	Adults														≥40,700 ^{d/e/}

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; 2019 - 9 fish; 2021 - 113 adults and 6 jacks; 2022 - 159 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 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 SACL 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 ^{a/}	Spring Run			Fall Run		
		Jack	Adult	Total	Jack	Adult	Total
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	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
2019	Commercial:Estuary	0	0	0	23	1,878	1,901
	Middle Klamath	0	0	0	1	9	10
	Subsistence:Estuary	1	36	37	17	1,438	1,455
	Middle Klamath ^{b/}	10	96	106	14	166	180
	Upper Klamath ^{b/}	6	52	58	39	441	480
	Trinity River	316	838	1,154	499	2,065	2,564
	Total	333	1,022	1,355	593	5,997	6,590
2020 ^{d/}	Commercial:Estuary	0	0	0	0	0	0
	Middle Klamath	0	0	0	0	0	0
	Subsistence:Estuary	5	142	147	85	1,730	1,815
	Middle Klamath	2	35	37	45	727	772
	Upper Klamath	3	78	81	111	1,776	1,887
	Trinity River	5	147	152	87	979	1,066
	Total	15	402	417	328	5,212	5,540
2021	Commercial:Estuary	0	0	0	0	0	0
	Middle Klamath	0	0	0	0	0	0
	Subsistence:Estuary	6	895	901	17	2,598	2,615
	Middle Klamath	3	50	53	37	706	743
	Upper Klamath	8	146	154	111	2,132	2,243
	Trinity River	135	982	1,117	451	2,626	3,077
	Total	152	2,073	2,225	616	8,062	8,678
2022 ^{d/}	Commercial:Estuary	0	0	0	0	0	0
	Middle Klamath	0	0	0	0	0	0
	Subsistence:Estuary	0	549	549	0	4,557	4,557
	Middle Klamath	4	159	163	12	520	532
	Upper Klamath	8	345	353	29	1,344	1,373
	Trinity River	32	1,538	1,570	293	1,778	2,071
	Total	44	2,591	2,635	334	8,199	8,533

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 by the Yurok Tribe to test for the presence of the parasite *Ichthyophthirius multifiliis*

c/ Harvest includes 20 fall run collected from the Trinity River by the Hoopa Valley Tribe to test for the presence of the

d/ Preliminary.

TABLE B-6. Shasta, Scott, and Salmon rivers fall Chinook salmon spawning escapement estimates in numbers of fish.^{a/}

Year	Shasta River		Scott River		Salmon River	
	Adults	Jacks	Adults	Jacks	Adults	Jacks
1931-1940 ^{b/}	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 ^{c/}	6,506	3,194	2,950	1,527	1,467	583
1981-1985 ^{d/}	4,560	1,942	3,373	1,929	1,287	389
1986-1990 ^{e/}	2,403	318	4,010	1,512	3,361	537
1991-1995	3,751	539	4,497	1,032	2,510	552
1996-2000	3,572	726	6,409	355	2,905	189
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	18,675	2,017	1,208	71	1,228	285
2019	5,926	78	1,681	409	957	686
2020	3,775	393	812	43	972	122
2021	5,972	927	1,307	655	1,890	263
2022 ^{f/}	4,403	106	927	67	1,274	291

a/ Estimates are made from a combination of weir counts, carcass surveys, and redd counts. The methodology can change annually based on environmental conditions, logistical constraints, and/or the expert opinion of regional biologists.

b/ Commercial fishing in lower Klamath River closed by the state after the 1933 season.

c/ Gillnetting resumed in lower 20 miles of Klamath River by Hoopa Valley Indian Reservation fishers in 1976.

d/ Shasta adults include 276 females taken to Iron Gate Hatchery in 1981.

e/ Low water conditions appeared to hinder entry into the Shasta River in 1988.

f/ Preliminary.

TABLE B-7. Summary of California North Coast salmon spawning stock surveys in numbers of fish (adults and jacks combined) or redd counts. (Page 1 of 2)

Redwood Creek (Page 1 of 2)						
CHINOOK	Redwood Creek ^{a/}	Mad River ^{a/b/}	Eel River (Mainstem) ^{a/b/}	South Fork Eel River ^{a/b/}	Mattole River ^{c/} (Redds)	Russian River ^{d/}
Run Year or Ave.						
2000-2005	-	-	-	-	-	3,839
2005-2006	-	-	-	-	-	2,607
2006-2007	-	-	-	-	-	3,407
2007-2008	-	-	-	-	-	2,021
2008-2009	-	-	-	-	-	1,129
2009-2010	2,438	-	-	-	-	1,800
2010-2011	e/	-	-	-	-	2,502
2011-2012	1,455	-	-	-	-	3,173
2012-2013	3,401	-	-	-	418	6,730
2013-2014	3,487	2,169 ^{f/}	-	-	988	3,152
2014-2015	e/	7,489	-	-	535	1,420 ^{g/}
2015-2016	1,839 ^{h/}	5,786	-	-	331	3,020 ^{g/}
2016-2017	e/	7,186	-	-	929	1,062 ^{i/}
2017-2018	4,541	12,667	-	-	2,202	2,093
2018-2019	2,820	3,825	3,844	3,738	633	1,219
2019-2020	290	k/	4,231	135	k/	922
2020-2021	e/	k/	4,632	k/	k/	625
2021-2022	e/	k/	4,710	155	k/	e/
2022-2023 ^{j/}	e/	k/	k/	k/	k/	1,180

COHO	Redwood Creek ^{c/} (Redds)	Humboldt Bay ^{c/l/} (Redds)	Freshwater Creek ^{m/}	South Fork Eel River ^{b/c/} (Redds)	Ten Mile River ^{n/}	Pudding Creek ^{m/}	Noyo River ^{n/}	Big River ^{n/}	Little River ^{n/}	Lagunitas Watershed ^{o/} (Redds)
1995-2000	-	-	-	-	-	-	-	-	-	196
2000-2005	-	-	1,171	-	-	816	-	-	79	305
2005-2006	-	-	789	-	-	709	1,394	-	14	190
2006-2007	-	-	396	-	-	401	330	-	14	338
2007-2008	-	-	262	-	-	228	259	-	5	148
2008-2009	-	-	399	-	-	50	294	80	4	26
2009-2010	246	194	89	-	190	9	286	134	2	51
2010-2011	574	1,099	455	1,284	395	199	411	160	8	80
2011-2012	540	1,738	624	1,873	1,127	415	228	269	2	130
2012-2013	405	763	318	1,340	440	283	784	519	2	217
2013-2014	705	630	155	939	3	0	723	155	3	188
2014-2015	297	1,632	718	2,069	1,654	539	3,468	1,344	65	140
2015-2016	206	617	449	416	241	135	5,112	744	15	226
2016-2017	e/	522	466	465	336	573	2,196	250	34	158
2017-2018	523	443	535	1,633	1,011	497	2,043	963	30	103
2018-2019	554	922	560	990	1,045	755	1,015	e/	13	306
2019-2020	153	448	298	138	303	551	358	1,198	5	61
2020-2021	e/	1,132	335	617p/	2,479	399	1,541	866	e/	161
2021-2022	e/	e/	872	941	663	256	1,332	513	20	273
2022-2023 ^{j/}	e/	e/	k/	k/	k/	k/	k/	k/	k/	82

TABLE B-7. Summary of California North Coast salmon spawning stock surveys in numbers of fish (adults and jacks combined) or redd counts.
(Page 2 of 2)

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- a/ Escapement estimates from expanded sonar fish counts.
 - b/ Previous versions of this table reported Chinook and coho counts for Cañon, Tomki (Chinook only), and Sprowl creeks, tributaries to the Mad, mainstem Eel, and South Fork Eel rivers, respectively. See the *Review of 2018 Ocean Salmon Fisheries* for these estimates.
 - c/ Expanded redd counts from design-based sample of reaches.
 - d/ Video counts of combined adults and jacks made at Mirabel Dam. These are minimum counts and are not comparable between years. Accuracy of counts may be affected by environmental conditions.
 - e/ No data available.
 - f/ Minimum count; sonar installed mid-season.
 - g/ Mirabel Dam video counts were unavailable due to construction of a new counting facility. The number recorded is the sum of minimum counts made at two facilities upstream of Mirabel Dam.
 - h/ Minimum abundance due to unexpanded, missing data.
 - i/ Monitoring at Mirabel Dam was complicated by operational challenges associated with the implementation of a new counting facility.
 - j/ Available estimates are incomplete and preliminary; surveys are still in progress at time of publication.
 - k/ Estimates not yet available; data analysis in progress.
 - l/ Redd surveys conducted in the four largest tributaries to Humboldt Bay: Jacoby Creek, Freshwater Creek, Elk River, and Salmon Creek.
 - m/ Escapement estimates from mark-recapture experiments.
 - n/ Escapement estimates derived by multiplying expanded redd counts from design-based sample of reaches by annual fish/redd ratios.
 - o/ Olema Creek is excluded.

TABLE B-8. Peak spawning counts in index areas for selected south/local migrating Oregon coastal fall Chinook stocks.

Year or Avg.	Deep Creek (Pistol River) (0.4 mile)		Big Emily Creek (Chetco River) (1.0 mile)		Bear Creek (Winchuck River) (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 ^{a/}	2	58	12	10	2	35	7
1991-1995	12	9	74	10	16	2	46	10
1996-2000	51	6	51	4	18	2	54	6
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	4	3	16	10	11	7	14	9
2019	7	3	15	2	1	0	10	2
2020	28	8	20	11	1	5	22	11
2021	18	2	20	5	6	1	20	4
2022 ^{b/}	24	16	65	7	5	1	19	5

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 ^{a/}				Winchester Dam, Umpqua River ^{a/}			
	Natural ^{b/}	Hatchery	Total	Jacks ^{c/}	Natural	Hatchery	Total	Jacks ^{c/}
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
1996-2000	6.6	22.5	29.1	2.8	3.6	4.3	7.8	5.2
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	10.4	NA	NA	NA	3.3	2.0	5.3	2.7
2019	5.4	NA	NA	NA	3.7	2.2	5.8	1.9
2020	3.6	NA	NA	NA	6.2	3.7	9.9	1.9
2021	4.6	NA	NA	NA	2.3	2.0	4.3	1.1
2022 ^{d/}	8.7	NA	NA	NA	2.6	2.0	4.6	1.4

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 ^{a/}			Huntley Park Passage		
	Adults	Jacks	Total	Adults	Jacks	Total
1977-1980	5,256	1,004	6,259	99,881	30,425	130,307
1981-1985	3,906	1,009	4,915	55,907	25,683	81,590
1986-1990	16,797	1,527	18,324	84,435	29,553	113,988
1990-1995	4,387	316	4,703	45,489	15,499	60,988
1996-2000	2,710	122	2,833	51,229	14,389	65,618
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 ^{b/}	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	-	-	-	39,507	23,927	63,434
2019	-	-	-	18,436	15,622	34,058
2020	-	-	-	29,387	16,020	45,407
2021	-	-	-	48,979	13,679	62,658
2022 ^{c/}	-	-	-	17,615	13,791	31,406

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 Average	River Tributaries																			
	Humbug (Nehalem) (1.0 mile)		Tillamook (1.8 mile)		Niagara (Nestucca) (0.4 mile)		Sunshine (Siletz) (1.2 mile)		Grant (Yaquina) (1.7 mile)		Buck (Alsea) (1.0 mile)		Siuslaw (Lake) (0.8 mile)		W.F. Millicoma (Coos) (0.5 mile)		Salmon (Coquille) (0.8 mile)		Index Fish Per Mile	
	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks
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
1996-2000						1	73	1	a/	62	56	3	360	14	31	3	110	6	112	4
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	107	6	a/	a/	11	0	86	2	220	11	31	3	94	5	57	5	a/	a/	92	5
2019	201	2	a/	a/	8	0	48	0	79	2	27	0	46	2	19	1	a/	a/	65	1
2020	348	4	a/	a/	17	0	115	1	233	5	71	3	74	1	47	3	a/	a/	137	3
2021	120	2	a/	a/	20	0	74	1	133	9	a/	a/	124	1	5	2	a/	a/	85	3
2022 ^{b/}	72	0	a/	a/	21	0	57	1	124	5	a/	a/	265	4	47	5	a/	a/	64	2

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 Average	Minimum Columbia R. Return ^{b/}	Lower River Catch ^{a/}		Tributary Runs								Hatchery Escapement ^{d/}
				Willamette			Sandy	Cow litz ^{c/}	Lew is ^{c/}	Kalama		
		Non-Indian Commercial	Sport	Run Size	L. Willamette Sport Catch	Will. Falls Escapement ^{b/}						
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	
2006-2010	80,247	1,720	2,880	53,795	8,940	32,982	4,654	5,769	4,190	3,298	29,986	
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	62,743	500	1,621	37,441	6,200	24,543	4,838	4,076	3,454	2,371	18,540	
2019	37,007	300	239	27,292	4,700	18,882	3,424	1,563	1,047	997	11,271	
2020	61,716	312	220	45,965	6,078	33,888	7,782	908	1,900	1,158	21,207	
2021	62,228	262	1,411	41,308	6,473	28,646	5,676	3,700	2,938	1,857	19,974	
2022 ^{e/}	101,745	849	2,151	55,391	9,028	37,057	10,289	7,146	6,875	1,883	34,058	

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 Cow litz 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^{a/} (Includes Snake River summer Chinook.)

Year or Avg.	Minimum Columbia R. Return ^{b/}	<u>Lower River Catch^{c/}</u>		<u>Catch Above Bonneville Dam</u>				<u>Snake River Escapement^{h/}</u>		<u>Rock Island Dam Count</u>	
		Non-Indian Commercial	Sport	Bonneville Dam Count ^{d/}	Sport ^{e/}	Treaty Indian ^{f/}	Non-Treaty Tribal ^{g/}	Hatchery	Wild	Hatchery	Wild
1981-1985	70,440	1,706	393	68,342	0	3,569	0	7,508	10,791	7,473	4,798
1986-1990	108,167	2,378	1,356	104,433	0	6,957	0	19,701	10,192	9,669	4,891
1991-1995	63,404	511	710	62,183	0	3,745	0	7,260	6,880	7,005	1,702
1996-2000	90,792	81	36	90,675	0	5,359	0	16,816	5,390	5,284	510
2001-2005	269,274	4,941	14,594	249,740	2,331	26,037	30	69,242	27,861	18,319	2,369
2006-2010	176,420	4,769	13,301	156,752	2,615	18,295	3	49,749	15,143	12,893	1,113
2011	221,158	3,930	9,506	205,431	4,516	15,533	0	72,531	24,526	11,084	2,005
2012	203,090	4,821	10,422	186,448	3,597	17,701	1	55,117	25,634	15,289	3,838
2013	123,136	1,853	5,343	112,934	1,413	9,282	8	29,835	14,576	11,524	1,821
2014	242,635	4,098	13,572	224,946	5,627	24,703	37	62,759	32,065	20,203	3,044
2015	288,994	6,818	15,689	265,558	3,101	31,181	58	98,819	22,577	27,830	3,918
2016	187,816	3,508	10,167	172,614	2,480	17,066	35	58,620	16,161	15,929	2,717
2017	115,821	1,083	7,198	107,524	84	8,109	35	32,229	4,425	6,785	1,295
2018	115,081	692	5,868	108,045	1,345	10,892	0	32,338	6,632	6,731	1,163
2019	73,104	304	1,478	71,235	613	4,702	11	19,476	4,140	8,084	704
2020	81,300	86	1,381	79,714	878	4,307	8	21,564	8,565	6,473	1,122
2021	91,756	382	4,088	87,233	1,251	4,446	11	28,906	6,408	10,074	2,255
2022 ^{i/}	185,209	992	10,371	173,737	2,695	15,377	9	61,181	17,074	18,489	3,998

a/ Chinook formerly managed separately as Snake River summer Chinook are now grouped with all upriver spring Chinook because of overlap in run timing.

b/ Includes adult upriver spring chinook and Snake River summer Chinook.

c/ 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 is from estimated miscellaneous fishery-related impacts from commercial shad and test fisheries, Select Area fisheries beginning in 1979, and catch and release mortalities from selective fisheries beginning in 2001. Sport catch, including any release mortalities, is from mainstem and Select Area fisheries downstream of Bonneville Dam.

d/ Spring counting period is January 1-June 15.

e/ Includes mainstem Columbia R. fisheries in Zone 6 (BON-MCN), McNary to Hwy I-395, Ringold sport (2001-2011), plus the Washington lower Snake River sport fishery.

f/ Includes ticketed commercial, over-the-bank sales, and ceremonial and subsistence catch. Spring season commercial fishery closed in 1975, 1976, and from 1978 to 2000. Spring Chinook landed during those years were from the winter season fishery and limited spring Ceremonial & Subsistence harvest. Includes below Bonneville Dam C&S starting in 2008 along with fish taken for tribal use from lower river test fishing.

g/ Mainstem catch. Wanapum tribal fishery.

h/ Escapement estimated at Lower Granite Dam.

i/ Preliminary.

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^{a/} (Excludes Snake River summer Chinook.)

Year or Avg.	Minimum	<u>Lower River Catch</u>		Bonneville Dam Count ^{d/}	<u>Catch above Bonneville Dam</u>			<u>Escapement</u>
	Columbia R. Return	Non-Indian Commercial ^{b/}	Sport ^{c/}		Sport ^{e/}	Treaty Indian ^{f/}	Non-Treaty Tribal ^{g/}	Rock Island Dam Count ^{h/}
1981-1985	16,709	55	0	16,654	-	973	0	10,010
1986-1990	21,036	71	8	20,957	-	902	0	14,563
1991-1995	12,984	30	15	12,939	-	227	0	10,748
1996-2000	17,957	5	29	17,924	-	317	96	13,902
2001-2005	70,287	611	1,264	68,412	265	4,624	2,202	66,711
2006-2010	59,227	2,933	2,872	53,423	518	11,634	1,983	43,946
2011	80,574	5,004	5,576	69,994	389	20,645	1,263	44,432
2012	58,300	1,715	3,281	53,304	296	7,824	3,423	52,184
2013	67,603	1,987	2,058	63,508	324	13,397	3,692	68,380
2014	78,254	2,788	2,385	72,871	453	19,389	3,724	77,982
2015	126,882	4,043	6,152	116,657	786	37,763	10,694	88,691
2016	91,048	3,050	3,706	84,192	565	20,515	4,199	79,253
2017	68,204	47	3,853	64,144	262	16,328	1,736	56,265
2018	42,120	24	1,140	40,906	134	9,498	1,336	38,816
2019	34,556	23	74	34,472	6	5,637	1,431	41,090
2020	65,466	13	1,389	64,064	172	8,410	1,764	70,654
2021	56,800	7	2,284	54,489	102	11,225	1,645	52,076
2022 ^{i/}	78,444	65	3,549	74,810	302	14,711	1,221	64,497
GOAL	29,000 ^{j/}							12,143 ^{k/}

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/ Mainstem and Select Area Fisheries. 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/ Includes estimated catch and release mortalities from mainstem and Select Area recreational fisheries.

d/ Counting period June 16-July 31.

e/ Mainstem catch from Bonneville Dam upstream to Priest Rapids Dam.

f/ Mainstem catch. Includes ticketed commercial, over-the-bank sales, and ceremonial and subsistence catch. No directed commercial summer Chinook fishery from 1965 to 2003. Landings during those years are bycatch from commercial sockeye fishery. Includes commercial and C&S catch. Includes catch downstream of Bonneville since 2010.

g/ Mainstem catch. Wanapum and Colville tribal fisheries.

h/ Summer counting period June 18 to August 17.

i/ Preliminary.

j/ Comanager goal established in 2004 associated with regrouping Snake River summer Chinook with Snake River spring Chinook.

k/ 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 lower river hatchery (LRH) stock fall Chinook.^{a/}

Year or Ave.	Minimum Columbia R. Return	Catch			Escapement	
		Non-Indian Commercial ^{b/}	Sport ^{c/}	Treaty Indian ^{d/}	Natural ^{e/}	Hatchery ^{f/}
1981-1985	107,163	25,604	4,486	851	37,755	36,846
1986-1990	199,938	93,794	17,420	655	38,774	48,821
1991-1995	55,519	2,871	4,998	238	19,915	27,419
1996-2000	49,017	2,041	5,239	72	17,310	24,319
2001-2005	118,621	9,183	11,804	188	60,838	36,549
2006-2010	66,452	7,634	9,291	148	23,215	26,134
2011	108,961	15,417	17,248	223	28,334	47,735
2012	84,978	16,340	16,362	457	21,556	30,259
2013	104,777	10,578	19,420	574	40,411	33,662
2014	101,906	12,810	16,347	135	33,264	39,333
2015	128,705	15,146	15,142	42	34,588	63,784
2016	81,860	11,050	11,418	78	21,974	37,340
2017	64,627	7,917	8,831	198	19,737	27,929
2018	52,963	5,348	7,417	68	19,093	21,037
2019	48,913	3,046	6,400	0	16,795	22,536
2020	77,863	6,057	8,968	196	25,058	37,336
2021	74,671	5,334	12,175	117	24,495	32,533
2022 ^{g/}	73,000	NA	NA	NA	NA	NA
GOAL						Hatchery Production

a/ Based on Columbia River fall Chinook database (Preliminary Big Sheets), WDFW, unpublished. Adult Aged fish.

b/ Includes Select Area fisheries.

c/ Includes tributary catches.

d/ Commercial, ceremonial, and subsistence.

e/ Includes Cow litz, Kalama, Toutle, Lewis, and Washougal rivers.

f/ Does not include strays to hatcheries above Bonneville Dam or fish trapped at Bonneville Dam.

g/ Preliminary estimates based on preseason expectations.

TABLE B-16. Estimates of inriver run size, catch, and escapement in numbers of Columbia River adult lower river wild (LRW) stock fall Chinook.^{a/}

Year or Ave.	Minimum Columbia R. Return	Catch			Escapement	
		Non-Indian Commercial ^{b/}	Sport ^{c/}	Treaty Indian ^{d/}		
					Natural ^{e/}	Hatchery
1981-1985	16,287	1,940	1,320	0	12,480	480
1986-1990	32,600	10,689	3,251	60	18,383	181
1991-1995	14,761	2,159	2,433	0	10,101	68
1996-2000	9,545	189	397	0	8,865	94
2001-2005	21,201	2,231	3,041	32	15,801	44
2006-2010	9,586	619	892	0	8,070	5
2011	15,180	674	3,636	0	10,601	269
2012	12,112	1,880	766	0	9,407	59
2013	25,841	2,095	5,071	0	18,675	0
2014	25,774	767	2,107	0	22,900	0
2015	32,403	3,126	2,106	0	27,169	2
2016	13,034	906	2,713	0	9,414	1
2017	7,838	0	1,255	0	6,583	0
2018	8,270	0	1,052	0	7,218	0
2019	16,661	0	1,081	0	15,580	0
2020	35,375	1,221	5,925	0	28,226	3
2021	17,013	0	2,860	0	14,153	0
2022 ^{f/}	10,800	NA	NA	NA	NA	NA
GOAL					5,700 ^{g/}	

a/ Based on Columbia River fall Chinook database (Preliminary Big Sheets), WDFW, unpublished. Adult Aged fish.

b/ Includes Mainstem Select Area fisheries.

c/ Includes tributary catches.

d/ Includes mainstem commercial, ceremonial and subsistence.

e/ Natural escapement includes Sandy and Lew is rivers.

f/ Preliminary estimates based on preseason expectations.

g/ Escapement objective is for North Lew is River, but escapement numbers include other fish. The escapement objective for the North Lew is River was met for all years except 1998, 1999, 2007, 2008, and 2009.

TABLE B-17. Estimates of inriver run size, catch, and escapement in numbers of Columbia River adult Spring Creek Hatchery (SCH) stock fall Chinook.^{a/}

Year or Ave.	<u>Lower River Catch</u>			Bonneville Dam Count ^{d/}	<u>Catch Above Bonneville Dam</u>		<u>Escapement</u>	
	Minimum Columbia R.	Non-Indian Commercial ^{b/}	Sport ^{c/}		Sport ^{e/}	Treaty Indian ^{f/}	Natural ^{g/}	Hatchery ^{h/}
1981-1985	63,342	9,747	580	49,780	c/	24,637	2,711	15,955
1986-1990	16,673	2,920	769	10,200	133	6,080	1,500	4,600
1991-1995	30,192	2,067	1,133	25,564	126	11,360	1,460	9,700
1996-2000	30,278	659	1,682	27,180	306	14,824	3,213	8,071
2001-2005	148,523	6,540	4,626	137,108	629	51,618	11,955	52,389
2006-2010	63,213	5,169	1,454	54,307	408	28,563	3,302	21,694
2011	70,096	12,196	802	53,655	440	28,801	10,283	17,092
2012	56,947	7,983	3,067	44,076	319	14,223	5,063	26,255
2013	86,707	15,823	3,087	62,525	113	29,746	10,074	16,307
2014	127,000	22,813	4,753	81,030	783	54,740	16,655	24,112
2015	166,370	22,767	8,309	111,900	360	67,922	22,319	43,246
2016	44,554	8,745	1,834	31,663	543	19,256	5,064	9,037
2017	48,227	4,949	5,266	38,012	707	21,332	1,547	12,443
2018	28,861	2,786	2,603	23,472	33	10,581	336	12,512
2019	28,953	1,537	1,888	25,424	624	10,790	1,606	11,763
2020	52,688	8,033	1,624	42,959	101	18,389	1,018	15,429
2021	73,674	11,461	6,634	42,960	357	21,859	1,458	27,441
2022 ^{i/}	91,200	NA	NA	NA	NA	NA	NA	NA
GOAL								7,000 ^{j/}

a/ Based on Columbia River fall Chinook database (Preliminary Big Sheets), WDFW, unpublished. Adult Aged fish. This stock may also be referred to as Bonneville Pool Hatchery (BPH).

b/ Includes Select Area fisheries.

c/ Includes Bouy 10, Mainstem, and tributary catch downstream of Bonneville Dam. Includes estimates for release mortalities. 1970-1988 catch includes upriver catch.

d/ Fall counting period begins August 1.

e/ Includes mainstem and Zone 6 tributary catch. 1970-1988 catch included in lower river sport fisheries.

f/ Includes mainstem commercial, ands ceremonial and subsistence catch.

g/ Includes White Salmon, Klickitat, and Little White Salmon rivers.

h/ Does not include strays to hatcheries below Bonneville Dam. Includes fall Chinook tules trapped at Bonneville Dam, 1986-1994 and 1998.

i/ Preliminary estimates based on in-season run updates.

j/ Escapement goal was changed from 8,200 fish to 7,000 fish, or 4,000 females, in 1994.

TABLE B-18. 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^{a/}

Year or Ave.	Minimum	Lower River Catch			Above Bonneville Catch			Escapement
	Columbia R. Return	Non-Indian Commercial ^{b/}	Sport ^{c/}	Bonneville Dam Count	Sport ^{d/}	Treaty Indian ^{e/}	Natural ^{f/}	Hatchery ^{g/}
1982-1985	10,275	1,675	100	4,925	c/	1,875	0	3,450
1986-1990	60,894	26,547	2,041	24,780	581	16,288	4,253	9,194
1991-1995	32,352	4,151	958	19,360	664	6,014	7,327	10,631
1996-2000	48,787	2,994	3,110	34,120	1,897	9,475	14,052	11,059
2001-2005	111,515	10,532	8,612	68,642	2,791	23,112	24,372	23,405
2006-2010	71,266	6,764	2,641	39,363	2,386	20,511	8,419	21,920
2011	87,262	7,596	7,232	58,775	963	27,569	12,399	24,923
2012	63,363	5,841	3,850	44,306	7,490	14,804	12,860	17,052
2013	243,508	16,947	10,875	187,748	16,508	52,261	65,999	58,045
2014	203,734	20,902	9,527	154,971	16,874	74,477	34,996	34,075
2015	170,620	14,536	11,910	123,722	14,037	56,405	31,305	30,744
2016	88,299	9,460	4,526	59,300	9,476	28,184	19,290	15,806
2017	47,367	1,087	5,914	33,820	5,347	18,598	6,261	7,750
2018	36,009	440	951	27,972	7,623	14,858	5,646	6,354
2019	58,140	1,457	2,275	54,380	5,109	14,978	15,924	16,636
2020	101,928	7,026	7,184	85,101	8,325	31,937	12,357	17,216
2021	66,077	3,694	3,832	85,102	8,140	21,019	11,999	12,645
2022 ^{h/}	70,200	NA	NA	NA	NA	NA	NA	NA

a/ Based on Columbia River fall Chinook database (Preliminary Big Sheets), WDFW, unpublished. Adult Aged fish. The MCB stock includes Bonneville upriver brights (BUBs) and Pool upriver brights (PUBs). A portion of the BUB stock includes low er river brights (LRBs) that spawn naturally downstream of Bonneville Dam. In 2013, hatchery production of BUBs was discontinued and production shifted to PUB. Since 2018, the MCB stock has consisted of PUB stock and the minor LCB component.

b/ Mainstem and Select Areas downstream of Bonneville Dam.

c/ Mainstem and tributary downstream of Bonneville Dam. 1982-88 includes catch from upriver sport.

d/ Mainstem and tributary between Bonneville and McNary dam (Zone 6). 1982-88 catch from upriver sport included in low e river sport catch.

e/ Mainstem and tributary between Bonneville and McNary dam (Zone 6). Includes commercial, ceremonial, and subsistence catch.

f/ Includes Little White Salmon, Klickitat, and Umatilla rivers.

g/ Includes Little White Salmon, Bonneville, Umatilla, and Klickitat hatcheries.

h/ Preliminary estimates based on in-season run updates.

TABLE B-19. 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.^{a/}

							Escapement					
	Minimum	Lower River Catch		Above Bonneville Catch			Deschutes River				Total L.	SRW
Year or	Columbia	Non-Indian		Bonneville		Treaty	above/below	McNary Dam	Upper	Granite Dam	L. Granite	
Ave.	R. Return	Commercial ^{b/}	Sport ^{c/}	Dam Count	Sport ^{d/}	Indian ^{e/}	Sheares Falls ^{f/}	Count ^{g/}	Columbia ^{h/}	Count	Dam Count ^{i/}	Dam Count ^{i/}
1981-1985	111,873	13,880	3,020	94,120	c/	26,700	5,551	51,042	NA	585	450	
1986-1990	291,407	61,499	11,169	222,337	5,454	100,379	7,081	107,252	NA	690	289	
1991-1995	105,302	5,000	1,151	99,028	3,945	20,813	7,342	61,362	NA	903	473	
1996-2000	153,790	2,720	6,052	145,362	4,803	36,318	11,745	69,929	58,513	2,349	759	
2001-2005	305,482	11,837	11,611	282,285	10,484	46,846	13,274	146,873	108,019	11,830	4,008	
2006-2010	215,741	8,860	8,322	182,503	8,005	44,232	7,985	99,937	65,037	18,371	5,063	
2011	322,233	22,215	19,641	280,377	14,531	80,288	17,117	161,191	93,510	25,248	8,778	
2012	294,947	16,895	23,033	255,420	16,778	61,422	17,624	173,472	94,925	34,688	12,797	
2013	784,116	47,636	34,181	702,503	33,224	162,964	18,068	454,991	305,445	56,565	21,124	
2014	684,228	53,296	30,262	599,580	32,504	153,685	17,933	410,786	233,934	60,687	14,172	
2015	795,915	38,375	48,015	706,440	40,516	159,717	17,074	396,580	323,276	59,300	16,212	
2016	406,572	32,608	24,904	348,990	21,812	89,840	11,628	239,791	151,373	34,714	9,772	
2017	297,123	12,671	32,654	266,283	14,770	77,280	4,943	156,927	96,096	26,430	6,966	
2018	149,044	3,344	10,515	134,076	9,207	30,491	4,553	100,801	58,540	16,904	6,133	
2019	212,238	3,824	9,760	198,636	14,544	40,795	20,815	128,862	77,880	15,777	6,558	
2020	299,336	11,506	14,834	272,996	16,185	57,591	8,792	186,097	98,401	24,558	8,069	
2021	239,855	7,412	15,383	217,060	14,276	27,121	7,471	172,259	86,644	31,358	7,162	
2022 ^{j/}	230,400	NA	NA	NA	NA	NA	NA	156,134	82,295	46,173	13,302	
GOAL								60,000 ^{k/}	39,625 ^{l/}			

a/ Based on Columbia River fall Chinook database (Preliminary Big Sheets), WDFW, unpublished. Does not include hatchery URB Chinook reared and released below McNary Dam. Adult Aged fish except for McNary, Ice Harbor and Total Lower Granite Dam Counts which are based on adult-sized passage.

b/ Includes, Mainstem, Select Areas, and test fishing.

c/ Includes Bouy 10, Mainstem, and Select Areas. 1971-1988 includes above Bonneville sport catch.

d/ Includes tributary and mainstem catch between Bonneville and Priest Rapids dams and Hanford Reach. Does not include Snake Basin sport harvest. 1971-1988 above Bonneville sport catch included in Lower River sport catch.

e/ Includes Mainstem Commercial and C&S, plus Deschutes Subsistence.

f/ 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).

g/ Conting period August 9-December 31. Data from Fish Passage Center. Does not separate out any MCB fish that stray above McNary.

h/ Upper Columbia escapement only: Yakima River, Hanford Reach, and Priest Rapids Dam count.

i/ Snake River wild; adjusted for stray hatchery fish. Includes wild fish hauled to Lyons Ferry Hatchery.

j/ Preliminary estimates based on in-season run update.

k/ 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.

l/ MSY spawning escapement objective adopted in FMP Amendment 16 in 2011.

TABLE B-20. Estimates of minimum inriver run size and catch in numbers of adult spring, summer, and fall Chinook from the Columbia River^{a/}. (Page 1 of 3)

Year or Ave.	Low er River Catch				Above Bonneville Catch			Minimum escapement (natural and hatchery)
	Minimum Columbia R. Return	Non-Indian Commercial	Sport	Bonneville Dam Count	Sport	Treaty Indian	Non-Treaty Tribal	
Spring Chinook ^{b/}								
1981-1985	163,660	8,386	2,233	68,342	-	3,569	-	59,410
1986-1990	232,001	14,358	5,685	104,433	-	6,957	-	76,913
1991-1995	149,241	4,191	3,010	62,183	-	3,745	-	46,547
1996-2000	145,344	490	96	90,675	-	5,359	-	49,380
2001-2005	406,690	10,021	20,634	249,740	2,331	26,037	30	166,658
2006-2010	256,667	6,489	16,181	156,752	2,615	18,295	3	108,884
2011	319,763	6,230	12,006	205,431	4,516	15,533	0	141,176
2012	295,232	7,121	14,122	186,448	3,597	17,701	1	131,984
2013	189,865	3,653	7,141	112,934	1,413	9,282	8	84,648
2014	311,641	5,398	16,272	224,946	5,627	24,703	37	145,854
2015	420,388	9,467	19,955	265,558	3,101	31,181	58	205,381
2016	275,792	4,708	12,767	172,614	2,480	17,066	35	124,730
2017	211,881	2,383	8,998	107,524	84	8,109	35	70,179
2018	177,824	1,192	7,489	108,045	1,345	10,892	0	65,404
2019	110,111	604	1,717	71,235	613	4,702	11	43,675
2020	143,016	398	1,601	79,714	878	4,307	8	58,931
2021	153,984	644	5,499	87,233	1,251	4,446	11	67,617
2022 ^{b/}	286,954	1,841	12,522	173,737	2,695	15,377	9	134,800
Summer Chinook ^{c/}								
1981-1985	16,709	55	0	16,654	-	973	-	10,010
1986-1990	21,036	71	8	20,957	-	902	-	14,563
1991-1995	12,984	30	15	12,939	-	227	-	10,748
1996-2000	17,957	5	29	17,924	-	317	96	13,902
2001-2005	70,287	611	1,264	68,412	265	4,624	2,202	66,711
2006-2010	59,227	2,933	2,872	53,423	518	11,634	1,983	43,946
2011	80,574	5,004	5,576	69,994	389	20,645	1,263	44,432
2012	58,300	1,715	3,281	53,304	296	7,824	3,423	52,184
2013	67,603	1,987	2,058	63,508	324	13,397	3,692	68,380
2014	78,254	2,788	2,385	72,871	453	19,389	3,724	77,982
2015	126,882	4,043	6,152	116,657	786	37,763	10,694	88,691
2016	91,048	3,050	3,706	84,192	565	20,515	4,199	79,253
2017	68,204	47	3,853	64,144	262	16,328	1,736	56,265
2018	42,120	24	1,140	40,906	134	9,498	1,336	38,816
2019	34,556	23	74	34,472	6	5,637	1,431	41,090
2020	65,466	13	1,389	64,064	172	8,410	1,764	70,654
2021	56,800	7	2,284	54,489	102	11,225	1,645	52,076
2022 ^{b/}	78,444	65	3,549	74,810	302	14,711	1,221	64,497

TABLE B-20. Estimates of minimum inriver run size and catch in numbers of adult spring, summer, and fall Chinook from the Columbia River^{a/}. (Page 2 of 3)

Year or Ave.	Minimum	Low er River Catch		Bonneville Dam Count	Sport	Above Bonneville Catch		Minimum
	Columbia R.	Non-Indian	Treaty			Non-Treaty	escapement	
	Return	Commercial						Sport
Fall Chinook ^{d/}								
1981-1985	306,886	52,511	9,486	147,840	NA	53,688	NA	115,123
1986-1990	601,513	195,448	34,650	257,317	2,467	123,462	NA	133,477
1991-1995	238,127	15,421	10,673	143,952	4,735	38,424	NA	94,866
1996-2000	291,417	8,604	16,480	206,662	7,006	60,689	NA	112,780
2001-2005	705,342	40,323	39,694	488,034	13,904	121,796	NA	358,476
2006-2010	426,258	29,046	22,599	276,173	10,799	93,454	NA	204,154
2011	603,732	58,098	48,559	392,807	15,934	136,882	NA	287,511
2012	512,347	48,939	47,078	343,802	24,587	90,907	NA	269,748
2013	1,244,949	93,079	72,635	952,776	49,845	245,544	NA	623,251
2014	1,142,641	110,588	62,997	835,581	50,161	283,037	NA	517,889
2015	1,294,013	93,950	85,482	942,062	54,913	284,087	NA	652,807
2016	634,319	62,769	45,395	439,953	31,831	137,358	NA	315,641
2017	465,182	26,624	53,920	338,115	20,824	117,408	NA	209,719
2018	275,147	11,918	22,538	185,520	16,863	55,998	NA	152,193
2019	364,905	9,864	21,404	278,440	20,277	66,563	NA	215,312
2020	567,190	33,843	38,535	401,056	24,611	108,113	NA	268,394
2021	471,290	27,901	40,884	345,122	22,773	70,116	NA	250,197
2022 ^{e/}	475,600	NA	NA	NA	NA	NA	NA	NA
Total Chinook								
1981-1985	487,255	60,952	11,719	232,836	NA	58,231	NA	184,543
1986-1990	854,550	209,878	40,343	382,707	2,467	131,321	NA	224,953
1991-1995	400,352	19,641	13,698	219,074	4,735	42,396	NA	152,161
1996-2000	454,718	9,099	16,604	315,261	7,006	66,365	96	176,062
2001-2005	1,182,320	50,955	61,593	806,186	16,499	152,456	2,232	591,844
2006-2010	742,152	38,468	41,653	486,347	13,932	123,383	1,986	356,984
2011	1,004,069	69,332	66,141	668,232	20,839	173,060	1,263	473,119
2012	865,879	57,775	64,480	583,554	28,480	116,432	3,424	453,916
2013	1,502,417	98,719	81,833	1,129,218	51,582	268,223	3,700	776,279
2014	1,532,537	118,774	81,654	1,133,398	56,241	327,129	3,761	741,725
2015	1,841,283	107,460	111,589	1,324,277	58,800	353,031	10,752	946,879
2016	1,001,159	70,527	61,867	696,759	34,877	174,939	4,234	519,624
2017	745,267	29,054	66,771	509,783	21,170	141,845	1,771	336,163
2018	495,091	13,134	31,167	334,471	18,342	76,388	1,336	256,413
2019	509,572	10,491	23,195	384,147	20,896	76,902	1,442	300,077
2020	775,672	34,254	41,525	544,834	25,661	120,830	1,772	397,979
2021	682,074	28,552	48,667	486,844	24,126	85,787	1,656	369,890
2022 ^{e/}	840,998	NA	NA	NA	NA	NA	NA	NA

TABLE B-20. Estimates of minimum inriver run size and catch in numbers of adult spring, summer, and fall Chinook from the Columbia River^{a/}. (Page 3 of 3)

a/ As reported in Appendix B tables. Spring Chinook data in tables B-12 and B-13, Summer Chinook data in B-14, Fall Chinook data in Tables B-15-19.

b/ Includes lower river, Willamette, and upriver spring Chinook, which also includes Snake River summer Chinook. Excludes Select Area spring Chinook.

c/ Upper Columbia Summer Chinook destined for areas upstream of the Snake River.

d/ Includes LRH,LRW,SCH,MCB and URB stocks. Excludes Select Area Brights (SAB).

e/ Preliminary.

TABLE B-21. Estimates of minimum inriver run size, catch, and escapement in thousands of adult coho entering the Columbia River.^{a/}

Year or Average	Minimum Inriver Run Size	Below Bonneville Dam					Above Bonneville Dam		
		Lower River Catch			Lower River Escapement		Mainstem		
		Commercial	Recreational		Hatchery ^{c/}	Tributary Dam Counts ^{d/}	Bonneville Dam Counts ^{e/}	Commercial Treaty Catch	Zone 6 Escapement ^{f/}
			Buoy 10	Mainstem ^{b/}					
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
2006-2010	501.2	72.9	15.4	29.7	208.5	16.1	135.5	10.7	124.8
2011	378.0	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	252.7	48.4	7.6	10.7	81.9	21.6	59.6	8.8	50.8
2014	1,019.4	237.3	57.7	52.2	292.2	32.2	279.7	39.2	240.5
2015	169.5	31.1	36.9	7.9	43.4	4.6	37.4	2.3	35.1
2016	203.6	31.4	9.2	10.8	84.3	4.7	42.0	5.3	36.7
2017	235.9	37.8	18.8	11.1	60.0	12.3	75.9	7.0	68.9
2018	137.2	11.4	6.8	3.9	43.9	6.0	40.9	3.6	37.3
2019	212.4	21.3	22.8	7.3	50.9	12.3	74.0	3.9	70.0
2020	338.6	45.1	7.1	13.9	86.5	23.7	121.5	11.9	109.6
2021	665.6	112.1	37.0	26.0	160.8	35.0	243.6	23.2	220.4
2022 ^{g/}	524.5	83.9	8.8	13.0	185.4	30.0	168.1	9.5	158.6
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.^{a/}

Year	Angler Trips	Catch ^{b/}		Catch Per Trip
		Chinook	Coho	
1982-1985	30,996	4,040	30,547	0.97
1986-1990 ^{c/d/}	130,633	22,107	82,910	0.78
1991-1995 ^{e/}	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
2006-2010	46,864	5,316	15,345	0.40
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	67,318	11,620	6,761	0.27
2019	76,977	11,274	22,775	0.44
2020	72,443	14,633	7,064	0.30
2021	105,865	20,789	37,031	0.55
2022 ^{f/}	85,187	28,355	8,847	0.44

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 ^{d/}
	Gillnet Catch ^{a/}	Gillnet	Sport ^{b/d}	Natural ^{c/}	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
2006-2010 ^{e/}	81	6,996	3,810	2,807	18,779	32,392
2011 ^{e/}	778	18,129	8,348	3,811	21,838	52,126
2012 ^{e/}	932	8,762	5,933	2,677	14,134	31,506
2013 ^{e/}	1,080	12,886	5,815	1,904	14,483	35,088
2014 ^e	1,178	12,838	7,368	2,075	18,367	40,648
2015 ^{e/}	1,159	3,681	12,146	2,824	26,584	45,235
2016 ^{e/}	713	2,429	7,869	1,888	12,897	25,083
2017 ^{e/}	405	2,537	6,949	3,147	19,937	32,570
2018 ^{e/}	347	1,187	4,649	2,847	18,265	26,948
2019 ^{e/}	247	1,299	3,885	2,894	13,349	21,428
2020 ^{e/}	100	647	3,807	3,585	29,798	37,836
2021 ^{e/f/}	506	3,552	5,831	2,966	24,411	36,760
2022 ^{e/f/}	287	2,118	NA	NA	NA	NA
GOAL				3,393 ^{g/}	9,800 ^{h/}	

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. Since 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		Spaw ning Escapement		Terminal Run Size ^{d/}
	Gillnet	Sport ^{a/}	Natural ^{b/}	Hatchery ^{c/}	
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	21,167	22,531	59,519
2001-2005	44,656	4,695	51,114	49,171	149,635
2005-2010	29,765	2,901	37,277	16,952	86,896
2011	47,985	5,717	31,737	22,022	107,461
2012	25,783	5,052	20,412	14,609	65,856
2013	11,560	4,225	26,303	13,490	55,578
2014	77,475	21,221	59,569	83,059	241,324
2015	1,926	11,106	17,086	21,296	51,414
2016	19,324	5,239	30,667	21,866	77,096
2017	4,615	3,200	11,379	6,743	25,937
2018	7,253	2,182	17,228	13,971	40,634
2019	8,200	4,014	15,115	23,992	51,321
2020	15,260	3,693	16,476	38,587	74,016
2021 ^{e/}	24,386	4,003	31,369	49,163	108,921
2022 ^{e/}	47,232	NA	NA	NA	NA
GOAL			17,200 ^{f/}	6,100 ^{f/}	

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 until 2009.

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	Early Non- local Catch	Terminal Catch				Spaw ning Escapement		Terminal Run Size ^{d/}
		Non-Indian	Treaty Indian	Chehalis Tribal	Sport ^{a/}	Natural ^{b/}	Hatchery ^{c/}	
		Gillnet	Gillnet	Gillnet				
SPRING Chinook								
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	-	3,447
2001-2005	-	-	46	249	132	2,905	-	3,332
2006-2010	-	-	6	91	36	1,751	-	1,884
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 ^{g/}	-	-	1	6	0	1,384	-	1,391
2018 ^{g/}	-	-	0	26	7	493	-	526
2019 ^{g/}	-	-	0	1	0	983	-	984
2020 ^{g/}	-	-	0	1	0	2,828	-	2,829
2021 ^{g/}	-	-	0	1	0	2,573	-	2,574
2022 ^{g/}	-	-	0	0	0	NA	-	NA
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				Spaw ning Escapement		Terminal Run Size ^{d/}
		Non-Indian	Treaty Indian	Chehalis Tribal	Sport ^{a/}	Natural ^{b/}	Hatchery ^{c/}	
		Gillnet ^{f/}	Gillnet	Gillnet		Natural ^{b/}	Hatchery ^{c/}	
FALL Chinook								
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 ^{h/}
1991-1995	206	5,000	7,750	901	3,794	14,276	3,006	34,728 ^{h/}
1996-2000	170	1,048	4,010	74	2,977	14,134	2,184	24,426 ^{h/}
2001-2005	8	684	2,291	10	2,687	18,534	761	24,968
2006-2010	0	887	2,795	4	1,238	14,677	868	20,469
2011	0	2,298	6,402	0	3,086	22,870	1,363	36,019
2012	0	1,731	3,988	3	4,490	14,032	862	25,106
2013	0	103	2,875	0	3,618	12,503	701	19,800
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 ^{g/}	0	107	3,578	0	2,781	17,145	2,404	26,015
2018 ^{g/}	0	78	2,608	0	3,685	20,741	1,225	28,337
2019 ^{g/}	0	98	2,374	0	1,734	14,880	1,295	20,381
2020 ^{g/}	0	58	3,688	0	1,454	20,879	1,049	27,128
2021 ^{g/}	0	104	2,408	0	1,557	13,207	1,792	19,068
2022 ^{g/}	0	53	1,448	0	NA	NA	776	NA
GOAL						13,326 ^{i/}		

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

j/ Includes non-harvest mortalities.

TABLE B-26. Grays Harbor coho terminal catch, spawning escapement, and run size estimates in numbers of fish.

Year or Average	Terminal Catch				Spawning Escapement ^{b/}		Terminal Run Size ^{c/}		
	Non-Indian	Treaty	Chehalis	Sport ^{a/}	Natural	Hatchery	Natural	Hatchery	Total ^{d/}
	Gillnet	Indian Gillnet	Tribal Gillnet						
1981-1985	5,299	15,614	2,865	5,012	36,847	17,253	49,162	32,882	82,044
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
2006-2010	2,952	16,298	1,233	7,722	49,680	36,486	56,882	58,202	115,083
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	1,170	10,554	955	10,721	26,907	22,617	36,260	36,646	72,906
2018	802	8,950	177	4,087	49,622	16,199	57,980	22,043	80,023
2019	2,000	8,207	0	13,666	30,468	14,089	36,012	17,479	53,491
2020 ^{e/}	1,014	6,541	0	6,538	23,814	14,392	30,099	21,923	52,022
2021 ^{e/}	1,504	13,861	0	5,805	62,762	31,475	72,082	43,352	115,434
2022 ^{e/}	3,518	22,100	0	NA	NA	NA	NA	NA	NA
GOAL	35,400 ^{f/}								

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/ The Pacific Fisheries Management Council adopted a new SMSY of 24,426 under FMP Amendment 16 as a biological reference point used to develop status determination criteria consistent with the Magnuson-Stevens Act. Previously, the conservation objective of 35,400 listed in the Pacific Coast Salmon FMP was used to assess overfished status. The natural spawning escapement goal 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 ^{a/}	Fall Chinook ^{a/}	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
2006-2010	19	4,566	1,280	661
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	1	4,420	3,852	3
2019	0	5,232	1,677	0
2020	0	10,778	778	1
2021	5	6,818	2,928	1,374
2022 ^{b/}	23	6,620	6,968	24,139

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 Average	Terminal Catch ^{a/}			Escapement		Terminal Run Size		
	Ceremonial		River Sport ^{b/}	Natural	Hatchery	Natural	Hatchery	Total
	Gillnet	& Subsistence						
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
2006-2010	28,624	1,039	1,043	12,723	13,223	23,776	32,166	55,942
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	33,842	1,333	1,544	29,566	18,252	46,430	37,555	83,985
2018	12,084	508	549	17,276	8,151	24,132	14,113	38,245
2019	4,348	259	355	13,969	6,919	16,662	9,022	25,684
2020	17,567	736	971	12,037	8,944	26,265	22,431	48,696
2021 ^{c/}	14,619	1,010	1,281	22,022	32,556	28,039	43,185	71,224
2022 ^{c/}	23,546	NA	NA	NA	NA	NA	NA	NA
GOAL	Hatchery Production							

a/ Includes dip-in fish destined for other river systems.

b/ Includes Treaty and Non-treaty regulated fisheries.

c/ Preliminary.

TABLE B-29. Estimated inriver run size, catch, and escapement of Queets River spring/summer Chinook in numbers of fish.

Year or Average	Terminal Catch			Escapement		Terminal Run Size		
	Gillnet	Ceremonial & Subsistence	River Sport ^{a/}	Natural ^{b/}	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
2006-2010	-	3	-	348	-	352	-	352
2011	-	0	-	373	-	378	-	378
2012	-	0	-	760	-	769	-	769
2013	-	<10	-	520	-	526	-	526
2014 ^{c/}	20	<10	-	377	-	402	-	402
2015 ^{c/}	23	<10	-	532	-	561	-	561
2016 ^{c/}	21	<10	-	704	-	733	-	733
2017 ^{c/}	25	<10	-	825	-	860	-	860
2018	3	<10	-	484	-	497	-	497
2019	1	<5	-	322	-	328	-	328
2020	24	<5	-	342	-	371	-	371
2021	-	<5	-	280	-	285	-	285
2022 ^{e/}	-	<5	-	NA	-	NA	-	NA
GOAL				700 ^{d/}				

a/ River catch of adults.

b/ Natural escapement includes hatchery strays.

c/ A fishery targeting early fall coho at the tail end of August in weeks 33 and 34 caught a number of early Chinook.

d/ Minimum. Terminal run managed at 30 percent exploitation rate of inriver run size.

e/ Preliminary.

TABLE B-30. Estimated inriver run size, catch, and escapement of Queets River fall Chinook in numbers of fish.

Average	Terminal Catch			Escapement	Terminal Run Size		
	Gillnet	Ceremonial & Subsistence	River Sport ^{a/}		Natural ^{b/}	Natural ^{c/}	Indicator ^{d/}
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
2006-2010	1,195	59	103	3,037	3,489	911	4,400
2011	2,327	85	417	3,857	4,724	1,782	6,506
2012	2,722	84	302	3,706	5,551	927	6,478
2013	1,943	60	369	2,582	3,790	899	4,689
2014	1,142	70	117	3,806	3,023	2,097	5,120
2015	1,335	102	583	5,483	5,089	2,395	7,483
2016	859	55	9	3,035	3,166	778	3,944
2017	1,551	58	20	2,822	3,522	897	4,419
2018	860	42	10	2,207	2,391	724	3,115
2019	1,387	56	218	2,663	3,709	611	4,320
2020	2,784	226	497	3,622	6,377	744	7,121
2021 ^{e/}	1,540	50	133	3,364	4,567	513	5,080
2022 ^{e/}	3,242	NA	NA	NA	NA	NA	NA
GOAL				2,500 ^{f/}			

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 fish of natural origin and hatchery origin (indicator stock) on the spawning grounds. 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 Average	Terminal Catch ^{a/}			Escapement ^{c/}			Terminal Run Size ^{c/}			
	Gillnet	Ceremonial & Subsistence	River Sport ^{b/}	Natural	Supplemental	Hatchery	Natural	Supplemental	Hatchery	Total ^{d/}
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 ^{e/}	4,420	211	273	4,945	1,025	3,455	5,981	1,169	6,928	13,843
1996-2000 ^{e/}	7,114	509	173	5,502	1,275	3,643	6,243	1,813	8,496	16,189
2001-2005 ^{f/}	15,903	1,044	942	12,345	977	5,512	15,723	1,368	17,995	35,086
2006-2010 ^{f/}	11,875	790	517	7,061	-	6,568	10,679	-	13,623	24,303
2011	16,641	1,229	1,491	8,588	-	12,887	13,477	-	20,190	33,668
2012	6,118	370	527	4,285	-	1,090	7,712	-	3,289	11,001
2013	4,519	522	1,285	5,684	-	9,680	8,019	-	11,801	19,820
2014	15,481	1,148	1,625	7,558	-	12,271	10,501	-	23,210	33,711
2015	2,268	215	300	2,028	-	3,315	2,201	-	5,296	7,496
2016	6,822	564	440	5,156	-	6,985	5,653	-	12,956	18,608
2017	7,583	669	111	5,232	-	9,947	6,469	-	15,381	21,851
2018	3,308	241	184	2,631	-	2,261	2,968	-	3,504	6,472
2019	2,567	365	639	1,700	-	8,597	3,083	-	10,438	13,521
2020	9,171	797	1,140	4,181	-	8,841	4,618	-	17,480	22,098
2021 ^{g/}	5,467	446	849	5,752	-	8,064	5,972	-	12,604	18,576
2022 ^{g/}	10,766	NA	NA	NA	-	NA	NA	-	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 Average	Terminal Catch ^{a/}											
	Gillnet			Ceremonial & Subsistence				Escapement		Terminal Run Size		
	Natural	Hatchery	Total	Natural	Hatchery	Total	River Sport ^{b/}	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	NA	NA	285	--	--	33	192	1,181	23	1,631	96	1,727
2001-2005	NA	NA	348	--	--	30	159	1,566	0	1,976	115	2,091
2006-2010	25	139	366	4	14	32	54	819	0	910	330	1,240
2011	51	25	76	7	3	10	22	827	0	885	50	935
2012	135	263	398	9	11	20	36	915	1	1,059	311	1,370
2013	117	415	532	6	17	23	65	750	0	873	497	1,370
2014	67	264	331	8	20	28	0	744	0	819	284	1,103
2015	17	55	72	9	5	14	0	1,070	0	1,096	60	1,156
2016	4	2	6	10	16	26	0	1,144	0	1,158	18	1,176
2017	7	39	46	8	12	20	0	1,364	0	1,379	51	1,430
2018	15	43	58	--	--	34	18	793	0	808	61	869
2019	9	12	21	2	0	2	0	766	0	777	12	789
2020	0	0	0	0	4	4	0	1,248	0	1,248	4	1,252
2021	64	88	152	6	5	11	13	817	0	900	93	993
2022 ^{c/}	4	6	10	7	14	21	NA	NA	0	NA	NA	NA
GOAL	900 ^{d/}											

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. Sport fishery closed to retention of wild adult spring/summer Chinook through August 31 in 2001, 2002, and every year since 2008.

c/ Preliminary.

d/ Minimum. Terminal run managed at 31 percent harvest rate of inriver run size.

TABLE B-33. Estimated inriver run size, catch, and escapement for Hoh River fall Chinook in numbers of fish.

Year or Average	Terminal Catch			Escapement		Terminal Run Size		
	Gillnet	Ceremonial & Subsistence	River Sport ^{a/}	Natural ^{b/}	Hatchery	Natural ^{b/}	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	942	30	316	3,217	31	4,350	155	4,505
2006-2010	560	12	221	2,154	0	2,925	22	2,947
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	493	11	198	1,795	0	2,439	58	2,497
2016	137	3	47	2,831	0	3,012	6	3,018
2017	518	20	223	1,808	0	2,547	22	2,569
2018	139	0	94	2,478	0	2,708	3	2,711
2019	768	0	297	1,552	0	2,586	31	2,617
2020	1,128	0	325	2,273	0	3,704	22	3,726
2021	1,167	0	211	2,622	0	3,952	48	4,000
2022 ^{c/}	440	0	NA	NA	0	NA	NA	NA
GOAL				1,200 ^{d/}				

a/ Recreational catch of age-3 and older fish.

b/ Includes fish taken for hatchery brood stock.

c/ Preliminary.

d/ 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 Average	Terminal Catch ^{a/}			Escapement		Terminal Run Size		
	Gillnet	Ceremonial & Subsistence	River Sport ^{b/}	Natural ^{c/}	Hatchery	Natural ^{c/}	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 ^{d/}	1,069	28	171	4,406	0	5,518	159	5,678
2001-2005 ^{e/}	2,796	28	451	7,094	831	8,931	1,437	10,368
2006-2010	2,358	15	327	4,328	13	6,650	379	7,028
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	297	2	40	5,009	0	5,324	24	5,348
2017 ^{f/}	1,766	20	885	4,478	0	6,981	168	7,149
2018 ^{f/}	560	0	408	2,463	0	3,395	36	3,431
2019 ^{f/}	1,485	1	1,403	2,445	0	5,164	170	5,334
2020 ^{f/}	2,324	0	863	2,840	0	5,924	103	6,027
2021 ^{f/}	1,595	0	53	6,396	0	7,959	85	8,044
2022 ^{f/}	2,431	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 inseason 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 Average	Terminal Catch			Escapement		Terminal Run Size		
	Gillnet	Ceremonial & Subsistence ^{a/}	River Sport ^{b/}	Natural ^{c/}	Hatchery ^{d/}	Natural ^{c/}	Hatchery ^{d/}	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
2006-2010	706	14	229	693	887	793	1,737	2,530
2011	599	41	659	587	696	823	1,759	2,582
2012	880	20	640	785	437	881	1,881	2,762
2013	1,204	0	803	968	528	1,123	2,380	3,503
2014	714	0	481	625	342	832	1,330	2,162
2015	1,075	0	556	783	505	995	1,924	2,919
2016	1,374	15	480	871	745	1,142	2,343	3,485
2017	1,239	60	929	1,097	521	1,362	2,484	3,846
2018	1,426	10	820	990	602	1,203	2,645	3,848
2019	1,671	35	405	1,442	823	1,590	2,786	4,376
2020	801	0	491	942	742	1,082	1,894	2,976
2021	695	10	586	1,056	813	1,130	2,030	3,160
2022 ^{e/}	1,350	10	490	1,441	844	1,600	2,535	4,135
GOAL				1,200 ^{f/}				

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 Average	Terminal Catch			Escapement		Terminal Run Size		
	Gillnet	Ceremonial & Subsistence ^{a/}	River Sport ^{b/}	Natural ^{c/}	Hatchery ^{d/}	Natural ^{c/}	Hatchery ^{d/}	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
2006-2010	1,710	0	265	4,017	0	5,980	16	5,996
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	2,042	8	735	3,937	0	6,707	15	6,722
2019 ^{e/}	1,532	0	859	7,765	0	10,151	5	10,156
2020 ^{e/}	1,627	0	757	8,672	0	11,054	2	11,056
2021 ^{e/}	719	2	611	5,568	0	6,897	3	6,900
2022 ^{e/}	1,361	0	264	6,761	0	8,378	8	8,386
GOAL				3,000 ^{f/}				

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 Average	Terminal Catch ^{a/}			Escapement		Terminal Run Size		
	Gillnet	Ceremonial & Subsistence ^{b/}	River Sport ^{c/}	Natural ^{d/}	Hatchery ^{e/}	Natural ^{d/}	Hatchery ^{e/}	Total
SUMMER COHO								
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
2006-2010	1,644	0	166	748	4,552	1,265	5,846	7,111
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
2014	4,299	0	934	688	5,085	2,320	8,686	11,006
2015	444	0	274	668	4,570	876	5,080	5,956
2016	2,462	0	144	772	2,116	1,669	3,825	5,494
2017	4,443	0	845	688	7,245	1,640	11,581	13,221
2018	1,711	0	669	233	624	1,060	2,177	3,237
2019	619	18	87	499	815	855	1,183	2,038
2020	610	0	507	932	3,719	1,025	4,743	5,768
2021	51	0	14	380	3,728	385	3,778	4,173
2022 ^{g/}	861	0	405	432	4,786	978	5,701	6,679
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 Average	Terminal Catch ^{a/}			Escapement		Terminal Run Size		
	Gillnet	Ceremonial & Subsistence ^{b/}	River Sport ^{c/}	Natural ^{d/}	Hatchery ^{e/}	Natural ^{d/}	Hatchery ^{e/}	Total
FALL COHO								
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 ^{f/}	8,407	100	1,336	11,009	11,515	14,596	17,783	32,379
2001-2005	21,801	50	38 ^{f/}	4,623	2,645	5,021	2,791	7,812
2006-2010	19,978	4	1,957	7,222	13,734	16,948	25,947	42,895
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	2,599	7,474	18,299	13,034	30,967	44,001
2018	3,840	7	1,129	6,091	9,762	8,202	12,627	20,829
2019	3,151	0	2,444	6,852	4,712	9,713	7,446	17,159
2020	1,815	0	1,343	7,695	12,832	8,777	14,908	23,685
2021	1,624	7	1,846	9,938	9,856	11,005	12,266	23,271
2022 ^{g/}	3,565	10	2,147	13,000	14,462	15,642	17,542	33,184
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 Average	Terminal Catch			Escapement		Terminal Run Size		
	Gillnet	Ceremonial & Subsistence	River Sport ^{a/}	Natural ^{b/}	Supplemental	Natural ^{b/}	Supplemental	Total
1991-1995	-	-	5	362	432	362	432	795
1996-2000	-	-	6	507	753	507	753	1,260
2001-2005	-	-	-	286	533	286	533	819
2006-2010	-	-	-	178	447	178	447	625
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	-	-	-	1,500	1,377	1,500	1,377	2,877
2016	-	-	-	651	673	651	673	1,324
2017	-	-	-	913	275	913	275	1,188
2018	-	-	-	1,943	236	1,943	236	2,179
2019	-	-	-	1,551	264	1,551	264	1,815
2020 ^{c/}	-	-	-	1,078	269	1,078	269	1,347
2021 ^{c/}	-	-	-	1,881	375	1,881	375	2,256
2022	-	-	-	NA	NA	NA	NA	NA
GOAL				850 ^{d/}	200 ^{e/}			

a/ River recreational catch of age-3 and older fish.

b/ Includes both natural-origin and hatchery-origin chinook that spawned in the gravel when they returned to the Hoko.

c/ Preliminary.

d/ Goal in terms of naturally spawning fish and includes supplementation production.

e/ Comanagers goal. Not an FMP goal.

TABLE B-39. Puget Sound commercial net and troll fishery salmon catches in numbers of fish.^{a/} (Page 1 of 2)

Year or Average	Fishery	Chinook	Coho	Pink ^{b/}	Chum	Sockeye
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
2006-2010 ^{c/}	Non-Indian	7,373	13,607	598,177	543,723	199,553
	Treaty Indian	100,537	221,880	450,665	610,022	365,078
	Total	107,910	235,487	1,048,842	1,153,746	564,632
2011 ^{c/}	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 ^{c/}	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 ^{c/}	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 ^{c/}	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

TABLE B-39. Puget Sound commercial net and troll fishery salmon catches in numbers of fish.^{a/} (Page 2 of 2)

Year or	Fishery	Chinook	Coho	Pink ^{b/}	Chum	Sockeye
2015 ^{c/}	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 ^{c/}	Non-Indian	6,604	14,328	-	444,586	-
	Treaty Indian	73,152	259,957	88	552,012	21,224
	Total	79,756	274,285	88	996,598	21,224
2017 ^{c/}	Non-Indian	12,065	11,763	17,852	713,535	-
	Treaty Indian	136,424	191,249	124,347	702,227	18,957
	Total	148,489	203,012	142,199	1,415,762	18,957
2018 ^{c/}	Non-Indian	13,700	9,645	3	388,943	397,671
	Treaty Indian	105,929	241,830	108	463,317	618,943
	Total	119,629	251,475	111	852,260	1,016,614
2019 ^{c/}	Non-Indian	9,509	2,980	92,790	135,230	-
	Treaty Indian	106,327	90,187	240,628	149,185	9,468
	Total	115,836	93,167	333,418	284,415	9,468
2020 ^{c/}	Non-Indian	9,286	6,652	-	103,069	-
	Treaty Indian	45,939	196,900	5	172,249	3,392
	Total	55,225	203,552	5	275,318	3,392
2021 ^{c/}	Non-Indian	7,316	11,964	155,754	85,089	-
	Treaty Indian	79,529	304,269	274,904	248,098	5,371
	Total	86,845	316,233	430,658	333,187	5,371
2022 ^{c/}	Non-Indian	17,757	17,189	0	476,609	75,537
	Treaty Indian	89,341	230,308	695	583,297	295,440
	Total	107,098	247,497	695	1,059,906	370,977

a/ Data do not reflect treaty Indian allocations. Includes U.S. and Canadian-origin salmon and fish caught in test fisheries. Includes tribal commercial, ceremonial, subsistence and taken home catch.

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.^{a/}

Year or Average	Chinook	Coho	Pink ^{b/}
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
1996-2000	42,205	81,844	11,849
2001-2005	31,024	98,832	65,866
2006-2010	33,868	41,881	50,040
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	44,040	36,240	11,555
2018	51,518	73,069	14
2019 ^{c/}	38,854	62,450	53,338
2020 ^{c/}	19,543	97,412	25
2021 ^{c/}	54,758	103,169	89,480
2022	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.^{a/} (Page 1 of 4)

Year or Average	Commercial Net Catches			Spawning Escapement			Puget Sound Run Size ^{c/}		
	Hatchery	Natural ^{b/}	Total	Hatchery	Natural ^{b/}	Total	Hatchery	Natural ^{b/}	Total
Strait of Juan de Fuca									
1981-1985	58	129	187	811	1,450	2,261	869	1,579	2,448
1986-1990	258	323	581	2,463	3,308	5,772	2,721	3,632	6,353
1991-1995	97	72	169	1,542	1,168	2,710	1,639	1,240	2,879
1996-2000	13	12	24	1,982	1,491	3,473	1,995	1,503	3,497
2001-2005	8	9	17	2,004	2,131	4,135	2,012	2,140	4,152
2006-2010	12	10	22	1,679	1,442	3,121	1,690	1,452	3,143
2011	12	10	22	2,264	1,837	4,101	2,277	1,847	4,123
2012	10	13	23	1,854	2,377	4,231	1,864	2,390	4,254
2013	12	12	24	3,104	3,266	6,370	3,116	3,278	6,394
2014	35	40	75	3,207	3,649	6,856	3,242	3,689	6,931
2015	38	41	79	3,364	3,893	7,257	3,402	3,934	7,336
2016	1	3	5	1,768	2,697	4,465	1,770	2,700	4,470
2017	2	2	4	2,179	2,798	4,976	2,180	2,800	4,980
2018	24	38	61	3,932	6,279	10,211	3,955	6,317	10,272
2019	6	11	17	2,996	7,385	10,382	3,002	7,396	10,398
2020	0	0	0	1,786	3,640	5,426	1,786	3,640	5,426
2021 ^{f/}	2	5	7	1,530	4,008	5,538	1,532	4,013	5,545
2022	NA	NA	NA	NA	NA	NA	NA	NA	NA
GOAL						5,300			
Nooksack-Samish									
1981-1985	54,087	33,729	87,816	16,083	6,575	22,658	70,170	40,304	110,474
1986-1990	38,071	26,271	64,342	10,729	4,113	14,841	48,800	30,383	79,183
1991-1995	17,788	2,738	20,526	8,646	1,041	9,686	26,434	3,779	30,213
1996-2000	19,692	5,275	24,967	8,263	2,957	11,219	27,955	8,232	36,186
2001-2005	10,197	15,798	25,995	3,909	7,429	11,338	14,106	23,227	37,333
2006-2010	10,997	7,544	18,541	6,793	3,628	10,421	17,790	11,172	28,962
2011	20,458	3,915	24,373	8,495	669	9,164	28,953	4,583	33,536
2012	20,306	5,845	26,151	6,635	941	7,576	26,941	6,786	33,727
2013	19,170	4,391	23,561	8,720	621	9,341	27,890	5,012	32,902
2014	10,906	1,547	12,453	12,437	773	13,210	23,343	2,320	25,663
2015	8,332	3,694	12,026	6,162	592	6,754	14,494	4,286	18,781
2016	8,378	2,516	10,894	4,666	336	5,002	13,044	2,852	15,896
2017	10,183	2,779	12,961	5,389	520	5,909	15,572	3,299	18,870
2018	6,652	1,500	8,151	8,306	713	9,019	14,958	2,213	17,170
2019	4,713	1,674	6,387	7,470	293	7,763	12,183	1,967	14,150
2020	5,146	1,881	7,026	6,111	1,560	7,671	11,257	3,441	14,697
2021 ^{f/}	6,542	2,067	8,608	18,531	765	19,296	25,073	2,832	27,904
2022	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.^{a/}
(Page 2 of 4)

Year or Average	Commercial Net Catches			Spawning Escapement			Puget Sound Run Size ^{c/}		
	Hatchery	Natural ^{b/}	Total	Hatchery	Natural ^{b/}	Total	Hatchery	Natural ^{b/}	Total
Skagit									
1981-1985	599	9,200	9,798	787	11,109	11,896	1,385	20,309	21,694
1986-1990	251	4,044	4,295	815	12,398	13,213	1,067	16,442	17,508
1991-1995	464	1,587	2,051	2,402	6,280	8,682	2,866	7,867	10,733
1996-2000	10	462	472	316	10,390	10,705	326	10,852	11,178
2001-2005	12	806	818	221	17,503	17,725	233	18,309	18,542
2006-2010	40	2,697	2,737	210	11,742	11,952	250	14,438	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	14	1,579	1,593	94	10,457	10,551	108	12,036	12,144
2015	10	1,435	1,445	91	13,314	13,405	101	14,749	14,850
2016	8	1,802	1,810	81	19,290	19,371	89	21,092	21,181
2017	10	1,395	1,405	91	12,579	12,670	101	13,974	14,075
2018	11	1,381	1,392	86	10,903	10,989	97	12,284	12,381
2019	10	1,278	1,287	90	11,810	11,900	100	13,088	13,187
2020	16	2,341	2,356	73	10,944	11,017	89	13,285	13,373
2021 ^{f/}	20	1,219	1,239	118	7,307	7,425	138	8,526	8,664
2022	NA	NA	NA	NA	NA	NA	NA	NA	NA
GOAL					14,900				
Hood Canal^{d/}									
1981-1985	7,870	731	8,601	4,786	1,037	5,823	12,656	1,769	14,424
1986-1990	14,701	686	15,387	7,699	390	8,089	22,400	1,076	23,476
1991-1995	2,667	140	2,807	4,915	440	5,355	7,582	579	8,162
1996-2000	3,688	19	3,707	11,915	649	12,564	15,604	667	16,271
2001-2005	17,908	106	18,014	16,678	976	17,653	34,586	1,082	35,668
2006-2010	19,639	99	19,738	16,231	347	16,578	35,870	446	36,316
2011	36,021	41	36,062	26,510	366	26,876	62,530	407	62,938
2012	55,217	132	55,349	29,652	609	30,261	84,869	741	85,610
2013	45,318	115	45,433	25,421	931	26,352	70,739	1,046	71,785
2014	15,975	69	16,044	14,414	304	14,718	30,390	373	30,762
2015	23,769	101	23,871	13,164	405	13,569	36,933	506	37,440
2016	38,925	96	39,022	30,130	547	30,677	69,055	643	69,699
2017	57,605	430	58,035	51,632	1,347	52,979	109,237	1,778	111,014
2018	44,128	55	44,183	30,978	213	31,191	75,106	268	75,374
2019	47,882	213	48,095	17,725	347	18,072	65,607	560	66,167
2020	26,023	52	26,075	6,686	72	6,758	32,709	124	32,833
2021 ^{f/}	34,448	386	34,834	24,456	621	25,077	58,904	1,007	59,911
2022	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.^{a/}
(Page 3 of 4)

Year or Average	Commercial Net Catches			Spawning Escapement			Puget Sound Run Size ^{c/}		
	Hatchery	Natural ^{b/}	Total	Hatchery	Natural ^{b/}	Total	Hatchery	Natural ^{b/}	Total
Stillaguamish-Snohomish^{e/}									
1981-1985	3,289	7,476	10,765	1,990	4,830	6,821	5,279	12,307	17,585
1986-1990	3,817	3,733	7,549	1,187	5,469	6,656	5,004	9,202	14,205
1991-1995	4,313	1,331	5,644	2,581	4,375	6,957	6,894	5,707	12,601
1996-2000	6,062	4,142	10,203	8,246	4,585	12,831	14,308	8,727	23,035
2001-2005	2,998	3,923	6,921	4,756	7,981	12,737	7,754	11,904	19,658
2006-2010	3,804	181	3,985	6,432	4,945	11,377	10,235	5,126	15,362
2011	4,222	91	4,313	5,256	1,862	7,118	9,478	1,953	11,431
2012	420	29	448	9,201	4,382	13,583	9,620	4,411	14,031
2013	1,771	95	1,867	6,280	3,607	9,887	8,051	3,703	11,754
2014	1,788	53	1,842	6,539	2,639	9,178	8,327	2,693	11,020
2015	861	1,515	2,375	4,977	2,822	7,799	5,838	4,337	10,174
2016	2,248	4,093	6,341	10,166	4,154	14,320	12,414	8,247	20,661
2017	11,636	207	11,843	9,347	4,823	14,170	20,983	5,030	26,013
2018	9,742	211	9,953	6,486	3,325	9,811	16,228	3,536	19,764
2019	9,147	75	9,222	6,703	1,236	7,939	15,850	1,311	17,161
2020	3,515	64	3,578	6,163	3,387	9,550	9,678	3,451	13,128
2021 ^{f/}	1,560	36	1,596	7,040	2,511	9,551	8,600	2,547	11,147
2022	NA	NA	NA	NA	NA	NA	NA	NA	NA
GOAL					7,300				
South Puget Sound^{g/}									
1981-1985	22,448	9,251	31,699	22,693	5,596	28,289	45,141	14,846	59,987
1986-1990	29,277	21,234	50,511	37,152	18,298	55,450	66,429	39,532	105,961
1991-1995	22,147	11,804	33,951	31,383	13,797	45,180	53,530	25,600	79,131
1996-2000	15,934	9,488	25,422	37,008	24,827	61,835	52,942	34,314	87,256
2001-2005	25,887	11,212	37,099	50,473	21,070	71,543	76,360	32,281	108,642
2006-2010	45,936	7,642	53,578	60,552	9,795	70,347	106,488	17,437	123,925
2011	26,858	4,374	31,232	47,096	7,249	54,345	73,954	11,623	85,577
2012	24,116	3,212	27,328	44,598	12,133	56,731	68,714	15,345	84,059
2013	22,128	9,897	32,025	52,083	6,838	58,921	74,211	16,735	90,946
2014	10,264	3,200	13,464	27,382	4,207	31,589	37,646	7,407	45,053
2015	9,801	4,338	14,139	34,554	7,051	41,606	44,355	11,389	55,744
2016	10,412	5,823	16,235	66,510	9,724	76,234	76,922	15,546	92,468
2017	38,651	7,193	45,844	95,559	13,220	108,779	134,210	20,413	154,623
2018	34,506	9,767	44,272	63,428	10,426	73,854	97,934	20,193	118,126
2019	27,983	12,489	40,472	51,736	7,147	58,883	79,719	19,636	99,355
2020	15,492	6,792	22,283	37,321	6,383	43,704	52,813	13,175	65,987
2021 ^{f/}	21,479	10,376	31,855	55,870	7,908	63,778	77,349	18,284	95,633
2022	NA	NA	NA	NA	NA	NA	NA	NA	NA
GOAL						0			

TABLE B-41. Puget Sound commercial net fishery catches and spawning escapements in numbers of fish for hatchery and natural Puget Sound Chinook stocks.^{a/}
(Page 4 of 4)

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 Tulalip hatchery returns, which are not added into escapement since no broodstock is taken at the hatchery.

f/ Preliminary.

g/ Includes the following stock groups: miscellaneous Area 10 - Seattle, Lake Washington, Green-Duwamish, miscellaneous Area 10E - Port Orchard, Puyallup, miscellaneous Area 13 - south Puget Sound, Chambers Creek, Nisqually, miscellaneous Area 13A - Minter Creek, Deschutes, miscellaneous Area 13B streams.

TABLE B-42. Puget Sound commercial net fishery catches and spawning escapements in numbers of fish for hatchery and natural Puget Sound coho stocks.^{a/} (Page 1 of 4)

Year or Average	Commercial Net Catches ^{c/}			Spawning Escapement			Terminal Run Size ^{c/}		
	Hatchery ^{b/}	Natural	Total	Hatchery ^{b/}	Natural	Total	Hatchery ^{b/}	Natural	Total
Strait of Juan de Fuca									
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	5,281	3	5,284	7,945	11,020	18,965	14,119	11,023	25,142
2013	2,057	42	2,099	6,765	8,458	15,223	10,260	8,500	18,760
2014	3,195	28	3,223	3,686	11,488	15,174	7,345	11,516	18,861
2015	298	34	332	1,018	3,859	4,877	1,619	3,893	5,512
2016	3,931	16	3,947	4,103	8,435	12,538	8,672	8,451	17,123
2017	4,842	9	4,851	5,763	5,530	11,293	11,635	5,539	17,174
2018 ^{d/}	3,313	1	3,314	2,042	5,470	7,512	5,567	5,471	11,038
2019 ^{d/}	1,200	11	1,211	1,666	4,625	6,291	3,505	4,636	8,141
2020 ^{d/}	3,473	3	3,476	8,704	8,548	17,252	12,466	8,551	21,017
2021 ^{d/}	572	109	681	12,676	20,837	33,513	15,211	21,035	36,246
2022	NA	NA	NA	NA	NA	NA	NA	NA	NA
GOAL	7,000-11,000								
Nooksack-Samish									
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	32,842	26,291	59,133	16,370	9,600	25,970	51,699	36,095	87,794
2013	38,628	51,180	89,808	18,209	20,494	38,703	58,726	72,968	131,694
2014	20,038	8,616	28,654	16,117	5,455	21,572	37,189	14,118	51,307
2015	9,129	5,914	15,043	23,891	1,359	25,250	35,833	7,507	43,340
2016	37,734	5,301	43,035	11,818	7,212	19,030	50,295	12,513	62,808
2017	25,772	1,814	27,586	13,309	3,257	16,566	39,894	5,071	44,965
2018 ^{d/}	35,030	19,267	54,297	11,826	7,622	19,448	50,809	27,880	78,689
2019 ^{d/}	17,417	10,174	27,591	16,570	16,162	32,732	35,475	27,453	62,928
2020 ^{d/}	22,982	12,153	35,135	7,064	6,490	13,554	31,028	19,114	50,142
2021 ^{d/}	40,958	11,689	52,647	12,527	11,672	24,199	54,708	23,853	78,561
2022	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.^{a/} (Page 2 of 4)

Year or Average	Commercial Net Catches ^{c/}			Spawning Escapement			Terminal Run Size ^{c/}		
	Hatchery ^{b/}	Natural	Total	Hatchery ^{b/}	Natural	Total	Hatchery ^{b/}	Natural	Total
Skagit									
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	2,056	17,524	19,580	10,833	92,687	103,520	13,650	117,699	131,349
2013	4,721	21,812	26,533	14,996	85,751	100,747	22,194	121,659	143,853
2014	2,657	11,563	14,220	8,242	24,820	33,062	11,996	42,140	54,136
2015	808	2,188	2,996	2,108	5,794	7,902	4,232	12,939	17,171
2016	908	4,660	5,568	11,394	35,822	47,216	13,134	43,097	56,231
2017	263	780	1,043	6,831	20,184	27,015	7,094	20,964	28,058
2018 ^{d/}	3,002	10,258	13,260	9,960	19,047	29,007	14,489	32,866	47,355
2019 ^{d/}	1,898	2,646	4,544	10,228	14,246	24,474	15,862	22,103	37,965
2020 ^{d/}	3,048	11,417	14,465	24,135	23,808	47,943	31,912	39,890	71,802
2021 ^{d/}	6,597	18,577	25,174	27,095	75,532	102,627	36,902	103,056	139,958
2022	NA	NA	NA	NA	NA	NA	NA	NA	NA
GOAL	14,875-25,000								
Hood Canal									
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	63,078	28,341	91,419	16,900	45,921	62,821	87,946	77,378	165,324
2013	35,929	6,886	42,815	18,255	16,064	34,319	59,942	24,277	84,219
2014	8,020	16,181	24,201	7,066	26,787	33,853	16,865	44,694	61,559
2015 ^{e/}	4,755	3,303	8,058	9,593	26,926	36,519	16,498	31,213	47,711
2016	45,692	6,079	51,771	17,301	24,313	41,614	68,537	31,729	100,266
2017	35,070	5,276	40,346	15,396	23,871	39,267	54,251	30,280	84,531
2018 ^{d/}	30,208	4,428	34,636	8,596	7,512	16,108	41,851	12,086	53,937
2019 ^{d/}	6,029	2,100	8,129	12,939	7,884	20,823	21,387	10,428	31,815
2020 ^{d/}	23,022	4,388	27,410	20,008	17,312	37,320	43,202	21,638	64,840
2021 ^{d/}	24,745	6,103	30,848	33,734	35,178	68,912	58,477	41,282	99,759
2022	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.^{a/} (Page 3 of 4)

Year or Average	Commercial Net Catches ^{c/}			Spawning Escapement			Terminal Run Size ^{c/}		
	Hatchery ^{b/}	Natural	Total	Hatchery ^{b/}	Natural	Total	Hatchery ^{b/}	Natural	Total
Stillaguamish									
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	78	6,843	6,921	101	45,156	45,257	249	56,091	56,340
2013	73	5,057	5,130	0	60,387	60,387	133	70,597	70,730
2014	30	5,620	5,650	180	35,829	36,009	233	44,182	44,415
2015	0	447	447	0	2,914	2,914	0	4,773	4,773
2016	0	2,152	2,152	0	13,048	13,048	0	15,206	15,206
2017	1	795	796	11	6,099	6,110	12	6,894	6,906
2018 ^{d/}	0	2,906	2,906	0	23,937	23,937	0	28,970	28,970
2019 ^{d/}	0	514	514	0	12,887	12,887	0	14,333	14,333
2020 ^{d/}	0	1,204	1,204	0	21,555	21,555	0	23,232	23,232
2021 ^{d/}	0	2,651	2,651	0	38,176	38,176	0	40,855	40,855
2022	NA	NA	NA	NA	NA	NA	NA	NA	NA
GOAL	6,100-10,000								
Snohomish									
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	34,605	15,020	49,625	13,354	130,637	143,991	48,572	160,553	209,125
2013	37,929	10,176	48,105	10,277	125,870	136,147	49,591	156,856	206,447
2014	34,103	6,932	41,035	13,641	46,244	59,885	50,809	58,740	109,549
2015	5,462	2,207	7,669	3,945	12,804	16,749	10,026	23,571	33,597
2016	66,452	7,478	73,930	9,201	44,141	53,342	75,658	52,834	128,492
2017	42,154	2,597	44,751	6,371	18,195	24,566	49,163	22,922	72,085
2018 ^{d/}	16,225	6,859	23,084	5,528	58,135	63,663	23,388	71,121	94,509
2019 ^{d/}	3,452	1,252	4,704	5,524	40,314	45,838	9,558	43,036	52,594
2020 ^{d/}	14,060	1,946	16,006	9,929	42,675	52,604	24,461	44,621	69,082
2021 ^{d/}	75,039	6,325	81,364	10,691	97,523	108,214	91,685	103,848	195,533
2022	NA	NA	NA	NA	NA	NA	NA	NA	NA
GOAL	31,000-50,000 ^{f/}								

TABLE B-42. Puget Sound commercial net fishery catches and spawning escapements in numbers of fish for hatchery and natural Puget Sound coho stocks.^{a/} (Page 4 of 4)

Year or Average	Commercial Net Catches ^{c/}			Spawning Escapement			Terminal Run Size ^{c/}		
	Hatchery ^{b/}	Natural	Total	Hatchery ^{b/}	Natural	Total	Hatchery ^{b/}	Natural	Total
South Puget Sound									
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	57,799	19,690	77,489	94,259	37,387	131,646	154,355	57,838	212,193
2017	52,466	21,477	73,943	48,710	26,555	75,265	124,170	53,280	177,450
2018 ^{d/}	78,228	30,628	108,856	72,264	21,421	93,685	165,081	62,689	227,770
2019 ^{d/}	31,714	11,088	42,802	66,484	23,064	89,548	111,900	45,127	157,027
2020 ^{d/}	73,573	24,770	98,343	67,685	18,215	85,900	152,380	53,225	205,605
2021 ^{d/}	80,331	27,161	107,492	77,720	32,070	109,790	186,762	70,000	256,762
2022	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.^{a/} (Page 1 of 4)

Year or	Commercial Net Catches			Spawning Escapement			Puget Sound Run Size ^{c/}		
Average	Hatchery ^{b/}	Natural	Total	Hatchery ^{b/}	Natural	Total	Hatchery ^{b/}	Natural	Total
(odd year)									
Strait of Juan de Fuca									
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
2019	1	939	940	59	48,341	48,400	60	49,280	49,340
2021 ^{g/}	0	1,940	1,940	0	158,127	158,127	0	160,067	160,067
GOAL ^{d/}	Not Agreed Upon								
Nooksack-Samish									
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
2019	0	17,722	17,722	0	50,024	50,024	0	67,746	67,746
2021 ^{g/}	0	25,514	25,514	0	218,805	218,805	0	244,319	244,319
GOAL ^{d/}	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.^{a/} (Page 2 of 4)

Year or Average (odd-year)	Commercial Net Catches			Spawning Escapement			Puget Sound Run Size ^{c/}		
	Hatchery ^{b/}	Natural	Total	Hatchery ^{b/}	Natural	Total	Hatchery ^{b/}	Natural	Total
Skagit									
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
2019	0	9,172	9,172	0	300,000	300,000	0	309,172	309,172
2021 ^{g/}	0	159,352	159,352	0	460,000	460,000	0	619,352	619,352
GOAL ^{d/}					330,000				
Hood Canal									
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
2019	3,162	2,727	5,889	9,608	59,249	68,857	12,770	61,976	74,746
2021 ^{g/}	647	12,790	13,437	6,672	475,286	481,958	7,319	488,076	495,395
GOAL ^{d/}					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.^{a/} (Page 3 of 4)

Year or Average (odd-year)	Commercial Net Catches			Spawning Escapement			Puget Sound Run Size ^{c/}		
	Hatchery ^{b/}	Natural	Total	Hatchery ^{b/}	Natural	Total	Hatchery ^{b/}	Natural	Total
Stillaguamish-Snohomish									
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
2019	3	34,320	34,324	92	651,275	651,367	95	685,595	685,691
2021 ^{g/}	0	111,155	111,155	0	987,941	987,941	0	1,099,096	1,099,096
GOAL ^{d/} - Stillaguamish					155,000				
GOAL ^{d/} - Snohomish					120,000				
South Puget Sound									
1981-1989	651	17,149	17,800	282	32,803	33,085	933	49,952	50,885
1991-1999 ^e	88	3,847	3,935	90	10,483	10,573	178	14,330	14,508
2001 ^{e/f/}	0	3,128	3,128	0	26,692	26,692	0	29,820	29,820
2003 ^{e/f/}	0	30,795	30,795	0	391,702	391,702	0	422,497	422,497
2005 ^{e/f/}	0	55,263	55,263	0	1,087,906	1,087,906	0	1,143,169	1,143,169
2007 ^{e/f/}	0	84,180	84,180	0	1,218,896	1,218,896	0	1,303,076	1,303,076
2009 ^{e/f/}	0	695,324	695,324	0	4,091,283	4,091,283	0	4,786,607	4,786,607
2011 ^{f/}	0	500,308	500,308	0	2,422,575	2,422,575	0	2,922,883	2,922,883
2013 ^{f/}	40	546,139	546,179	6	2,172,795	2,172,801	46	2,718,934	2,718,980
2015 ^{f/}	66	285,504	285,570	115	941,673	941,788	181	1,227,177	1,227,358
2017 ^{f/}	0	31,293	31,293	2	175,952	175,954	2	207,245	207,247
2019	0	109,833	109,833	18	1,643,786	1,643,804	18	1,753,619	1,753,637
2021 ^{g/}	49	142,633	142,681	0	1,010,121	1,010,122	49	1,152,754	1,152,803
GOAL ^{d/}					25,000				

TABLE B-43. Puget Sound commercial net fishery catches and spawning escapements in numbers of fish for hatchery and natural Puget Sound pink stocks.^{a/} (Page 4 of 4)

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.

g/ Preliminary.

TABLE B-44. Puget Sound spring Chinook spawning escapement estimates in numbers of adult fish.

Year or Average	Stock							
	Skagit		NF Nooksack		SF Nooksack ^{a/}		White River	Quilcene
	Hatchery ^{b/}	Natural	Hatchery ^{b/}	Natural ^{c/d/}	Hatchery	Natural ^{c/d/}	Hatchery ^{e/}	Hatchery ^{f/}
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		2,008	7
2001-2005	2,028	1,317	4,226	2,510	403		2,763	0
2006-2010	1,430	1,264	936	1,568	456		3,971	0
2011	1,301	825	1,404	865	470		3,151	0
2012	1,579	2,774	1,215	758	508		3,819	0
2013	1,256	2,010	2,297	1,346	243		6,541	0
2014	1,109	1,608	1,998	1,398	208		2,131	0
2015	1,836	1,409	2,994	1,717	135		2,893	0
2016	2,441	2,445	1,806	1,141	654		6,585	0
2017	3,325	2,850	2,301	2,016	981		9,986	0
2018	2,333	2,376	2,171	1,791	1,341		6,530	0
2019 ^{g/}	1,825	1,131	1,516	880	1,504	579	5,108	0
2020 ^{g/}	1,888	1,449	1,577	349	3,026	1,479	4,974	0
2021 ^{g/}	3,201	1,602	5,085	NA	NA	NA	6,931	0
2022 ^{g/}	3,886	3,487	4,140	NA	NA	NA	5,807	0
GOAL		2,000						

a/ Beginning in 2019, data were available to independently account for hatchery and natural spawning escapement. Prior to 2019, natural and hatchery spawning escapement are combined.

b/ Hatchery escapement estimates include all rack returns (retained and released).

c/ 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.

d/ Nooksack basin co-managers updated spawning ground escapements to report "Total Basin Escapement" for each Spring Chinook stock starting with Run Year 2016.

e/ 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.

f/ Program discontinued.

g/ Preliminary.

APPENDIX C: HISTORICAL RECORD OF OCEAN SALMON FISHERY REGULATIONS AND CHRONOLOGY OF 2022 EVENTS

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TABLE C-1. Summary of actual California commercial salmon seasons in state and federal (EEZ) waters.^{a/} (Page 1 of 3)

Year	Area	Seasons		Number of Days	Minimum Size Limit (in.)		Other Restrictions
		All-Salmon-Except-Coho	All Salmon		Chinook	Coho	
2017	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	-	
2018	OR/CA Border to Humboldt South Jetty	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.
		June 1-July 31	-	45	26	-	
		Aug. 3-31	-	21	26	-	
	Horse Mt. to Pt. Arena	July 26-31	-	6	26	-	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. 3-29	-	27	26	-	
		Sept. 1-30	-	30	26	-	
	Pt. Arena to Pigeon Pt.	July 26-31	-	6	26	-	All fish caught in the area must be landed south of Pt. Arena during Sept. When the KMZ fishery is open, all fish must be landed south of Horse Mt.
		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	-	When the KMZ fishery is open, all fish must be landed south of Horse Mt.
		June 19-30	-	12	26	-	

TABLE C-1. Summary of actual California commercial salmon seasons in state and Federal (EEZ) waters. (Page 2 of 3)

Year	Area	Seasons		Number of Days	Minimum Size Limit (in.)		Other Restrictions
		All-Salmon-Except-Coho	All Salmon		Chinook	Coho	
2019	OR/CA Border to Humboldt South Jetty	June 1-30	-	22	27	-	Open 5 days per week (Fri.-Tue.). Chinook quotas: 2,500 in June, 3,997 in July, and 4,293 in Aug. Chinook landing and possession limits per vessel per day: 20 through July 16, 50 July 19-Aug. 5, and 15 Aug. 12-31.
		July 1-30	-	22	27	-	
		Aug. 2-5, 12-31	-	18	27	-	
	Horse Mt. to Pt. Arena	June 4-30	-	27	27	-	When the KMZ fishery is open, all fish must be landed south of Horse Mt.
		July 11-31	-	21	27	-	
		Aug. 1-28	-	28	27	-	
	Pt. Arena to Pigeon Pt.	May 16-31	-	16	27	-	When the KMZ fishery is open, all fish must be landed south of Horse Mt.
		June 4-30	-	27	27	-	
		July 11-31	-	21	27	-	
		Aug. 1-28	-	28	27	-	
	Pt. Reyes to Pt. San Pedro	Sept. 1-30	-	30	27	-	Open 5 days per week (Mon.-Fri.). All salmon caught in this area must be landed between Point Arena and Pigeon Point.
		Oct. 1-4, 7-11, 14-15	-	11	27	-	
	Pigeon Pt. to U.S./Mexico Border	May 1-31,	-	31	27	-	When the KMZ fishery is open, all fish must be landed south of Horse Mt.
		June 4-30,	-	27	27	-	
		July 11-31	-	21	27	-	
2020	OR/CA Border to Humboldt South Jetty	Closed	-	-	-	-	
	Horse Mt. to Pt. Arena	Aug. 1-10	-	10	27	-	All salmon must be landed in CA and north of Point Arena.
		Sept. 1-30	-	30	27	-	
	Pt. Arena to Pigeon Pt.	May 6-12, 18-31	-	21	27	-	During September, all salmon must be landed south of Point Arena.
		June 1-6, 14-30	-	23	27	-	
		July 13-31	-	19	27	-	
		Aug. 1-28	-	28	27	-	
		Sept. 1-30	-	30	26	-	
	Pt. Reyes to Pt. San Pedro	Oct. 1-2, 5-9, 12-15	-	11	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 1-12, 18-31	-	26	27	-	
		June 1-6, 14-30	-	23	27	-	
		July 13-31	-	19	27	-	
		Aug. 1-28	-	28	27	-	

TABLE C-1. Summary of actual California commercial salmon seasons in state and Federal (EEZ) waters. (Page 3 of 3)

Year	Area	Seasons		Number of Days	Minimum Size Limit (in.)		Other Restrictions
		All-Salmon-Except-Coho	All Salmon		Chinook	Coho	
2021^{a/b/}	OR/CA Border to Humboldt South Jetty	Closed	-	-	-	-	
	40°10' line to Pt. Arena	Aug. 1-17 Sept. 1-30	- -	17 30	27 27	- -	All salmon must be landed in CA and north of Point Arena.
	Pt. Arena to Pigeon Pt.	June 16-30 July 17-22 Aug. 1-17 Sept. 1-30	- - - -	15 6 17 30	27 27 27 26	- - - -	During September, all salmon must be landed south of Point Arena.
	Pt. Reyes to Pt. San Pedro	Oct. 1, 4-8, 11-15	-	11	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 1-12, 20-27 June 16-30 July 17-22 Aug. 1-17	- - - -	20 15 6 17	27 27 27 27	- - - -	
2022^{a/}	OR/CA Border to Humboldt South Jetty	Closed	-	-	-	-	
	40°10' line to Pt. Arena	July 8-12, 21-25 Aug 3-12	- -	10 10	27 27	- -	All salmon must be landed in CA and north of Point Arena.
	Pt. Arena to Pigeon Pt.	July 8-12, 21-25 Aug 3-12 Sept. 1-30	- - -	10 10 30	27 27 26	- - -	All salmon must be landed in CA, and during September, all salmon must be landed south of Point Arena.
	Pt. Reyes to Pt. San Pedro	Oct. 3-7, 10-14	-	10	26	-	All salmon caught in this area must be landed between Point Arena and Pigeon Point.
	Pigeon Pt. to U.S./Mexico Border	May 1-5, 10-15, 20-24 June 1-12 July 8-12, 21-25 Aug 3-12	- - - -	15 12 10 10	27 27 27 27	- - - -	All salmon must be landed in CA. During May all salmon must be landed within 24 hours of any closure of the fishery.

a/ For recent year detailed regulations and inseason adjustments, see Tables I-1 and C-9.

b/ In 2021, the southern boundary of the KMZ was officially moved five nautical miles north from Horse Mountain to latitude 40°10' N.

TABLE C-2. Summary of actual California recreational ocean salmon regulations ^{a/} (Page 1 of 2)

Year	Area	Season	Days	Bag Limit	Chinook	Coho	Other Restrictions
2012	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	-	
2013	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.
2014	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	-	
2015	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	-	
	Pigeon Pt. to Pt. Sur	Apr. 4-May 31	58	2	24	-	
		June 1-Sept. 7	99	2	20	-	
	Pt. Sur to U.S./Mexico Border	Apr. 4-May 31	58	2	24	-	
		June 1-July 19	49	2	20	-	
2016	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	-	

TABLE C-2. Summary of actual California recreational ocean salmon regulations.^{a/} (Page 2 of 2)

Year	Area	Season	Days	Bag Limit	Minimum Size Limit (in.)		Other Restrictions
					Chinook	Coho	
2017	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	-	
2018	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	-	
2019	OR/CA Border to Horse Mt.	May 25-Sept. 2	101	2	20	-	
	Horse Mt. to Pt. Arena	Apr. 13-30, May 18-Oct. 31	185	2	20	-	
	Pt. Arena to Pigeon Pt.	Apr. 13-30	18	2	24	-	
		May 18-Oct. 31	167	2	20	-	
	Pigeon Pt. to U.S./Mexico Border	Apr. 6-Aug. 28	145	2	24	-	
2020	OR/CA Border to Horse Mt.	June 6-Aug. 9	65	2	20	-	
	Horse Mt. to Pt. Arena	May 1-Nov. 8	192	2	20	-	
	Pt. Arena to Pigeon Pt.	May 1-Nov. 8	192	2	20	-	
	Pigeon Pt. to U.S./Mexico Border	May 1-Oct. 4	157	2	24	-	
2021^{a/b/}	OR/CA Border to 40°10' line	June 29-Aug. 1	34	2	20	-	
	40°10' line to Pt. Arena	June 29-Oct. 31	125	2	20	-	
	Pt. Arena to Pigeon Pt.	June 26-Oct. 31	128	2	20	-	
	Pigeon Pt. to U.S./Mexico Border	Apr. 3-May 15	43	2	24	-	
		May 16-Sept. 30	138	2	20	-	
2022^{a/}	OR/CA Border to 40°10' line	May 1-31, Aug. 1-Sept. 5	67	2	20	-	
	40°10' line to Pt. Arena	May 1-July 4, July 22- Sept. 5	111	2	20	-	
	Pt. Arena to Pigeon Pt.	Apr. 2-May 31	60	2	24	-	
		June 23-Oct. 31	131	2	20	-	
	Pigeon Pt. to U.S./Mexico Border	Apr. 2-May 15	44	2	24	-	
		May 16-Oct. 2	140	2	20	-	

a/ For detailed regulations and inseason adjustments, see Tables I-3 and C-9.

b/ In 2021, the southern boundary of the KMZ was officially moved five nautical miles north from Horse Mountain to latitude 40°10' N.

TABLE C-3. Summary of actual Oregon commercial salmon seasons in state and federal (EEZ) waters.^{a/} (Page 1 of 5)

Year	Area	Seasons		Number of Days	Minimum Size Limit (in.)		Other Restrictions
		All-Salmon-Except-Coho	All Salmon		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	
		-	July 7-18, July 21-Sept. 19	71	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.
	Cape Falcon to Florence South Jetty	Apr. 15-May 31	-	47	28	-	
		June 7-12, 15-30	-	22	28	-	
		July 8-31	-	24	28	-	
		Sept. 1-Oct. 31	-	61	28	-	45 Chinook per vessel per landing week (Thurs.-Wed.) and only open shoreward of the 40 fathom regulatory line.
	Florence South Jetty to Humbug Mt.	Closed	-	-	-	-	
	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 (Oregon KMZ)	Closed	-	-	-	-	
	Tw in Rocks to OR/CA Border Inside 3 nm (Chetco River Area)	Oct. 9-13, 16-17, 26-27	-	9	28	-	300 Chinook quota; 5 Chinook per day per vessel landing limit; landings restricted to Brookings.
2018	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.

TABLE C-3. Summary of actual Oregon commercial salmon seasons in state and Federal (EEZ) waters. (Page 2 of 6)

Year	Area	Seasons		Number of Days	Minimum Size Limit (in.)		Other Restrictions
		All-Salmon- Except-Coho	All Salmon		Chinook	Coho	
2018 cont.	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	-	
	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 Management Zone, OR KMZ)	May 4-14, 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, 16-31	-	24	28	-	
		Aug. 3-7, 13-17, 25-29	-	15	28	-	
		Sept. 1-Oct. 31	-	61	28	-	
	Tw in Rocks to OR/CA Border Inside 3 nm (Chetco River Area)	Oct. 8-12, 15-23	-	14	28	-	5 Chinook per day per vessel landing limit; landings restricted to Brookings.
2019	WA/OR Border to Cape Falcon	May 6-June 28	-	54	28	-	Quota: 13,200 Chinook (capped at 1,800 south of Leadbetter Point). Landing and possession limit: 100 Chinook per vessel May 6-15; 50 Chinook per vessel per landing week (Thurs.-Weds.) thereafter.
		-	July 1-Sept. 30	92	28	16	Quota: 19,257 Chinook and 30,400 marked coho. Landing and possession limits per vessel per landing week (Thurs.-Wed.): 150 marked coho through July 18, 125 Chinook and 150 marked coho July 19-Aug. 15, 160 Chinook and 150 marked coho thereafter.

TABLE C-3. Summary of actual Oregon commercial salmon seasons in state and Federal (EEZ) waters. (Page 3 of 6)

Year	Area	Seasons		Number of Days	Minimum Size Limit (in.)		Other Restrictions
		All-Salmon- Except-Coho	All Salmon		Chinook	Coho	
2019 cont.	Cape Falcon to Humbug Mt.	Apr. 20-30	-	11	28	-	Beginning September 1 no more than 75 Chinook allowed per vessel per landing week (Thurs.-Wed.).
		May 6-30,	-	24	28	-	
		June 1-Aug. 29	-	90	28	-	
		Sept. 1-Oct. 31	-	61	28	-	
2020	Humbug Mt. to OR/CA Border (Oregon Klamath Mangement Zone, OR KMZ)	Apr. 20-30	-	10	28	-	Chinook Quotas: 3,200 in June, 4,495 in July, and 4,330 in August. Landing and possession limit per vessel per week (Thurs.-Wed.): 50 Chinook June 1- July 3, and 125 Chinook thereafter.
		May 6-30	-	26	28	-	
		June 1-July 31	-	61	28	-	
		Aug. 1-29	-	29	28	-	
	WA/OR Border to Cape Falcon	May 6-June 28	-	54	28	-	Quota: 13,820 Chinook (capped at 3,770 south of Leadbetter Point). Landing and possession limit: 75 Chinook per vessel per landing week (Thurs.-Weds.).
		-	July 1-Sept. 30	92	28	16	
	Cape Falcon to Humbug Mt.	Apr. 20-30	-	11	28	-	Quota: 13,820 Chinook (increased to 25,499 after remaining spring quota rolled forward) and 2,000 marked coho. Landing and possession limit: 10 coho per vessel per landing week (Thurs.-Weds.).
		May 1-5, 26-31	-	11	28	-	
		June 4-Aug. 25	-	83	28	-	
		Sept. 1-Oct. 31	-	61	28	-	
	Humbug Mt. to OR/CA Border (Oregon Klamath Mangement Zone, OR KMZ)	Apr. 20-30	-	11	28	-	Beginning September 1 no more than 75 Chinook allowed per vessel per landing week (Thurs.-Wed.).
		May 1-5, 26-31	-	11	28	-	
		June 4-July 31	-	58	28	-	

TABLE C-3. Summary of actual Oregon commercial salmon seasons in state and Federal (EEZ) waters. (Page 4 of 6)

Year	Area	Seasons		Number of Days	Minimum Size Limit (in.)		Other Restrictions
		All-Salmon-Except-Coho	All Salmon		Chinook	Coho	
2021 ^{a/}	WA/OR Border to Cape Falcon	May 1-June 29	-	60	27	-	Quota: 15,375 Chinook (capped at 4,195 south of Leadbetter Point). Landing and possession limit: 75 Chinook per vessel per landing week (Thurs.-Weds.) through June 2, 100 Chinook thereafter.
		-	July 1-Sept. 30	92	27	16	Quota: 16,931 Chinook (includes 5,557 transfer from spring) and 5,000 marked coho. Landing and possession limits per vessel per landing week (Thurs.-Wed.): 20 marked coho through Sept. 2 and increased to 50 thereafter.
	Cape Falcon to Heceta Bank line	Mar. 20-Apr. 30	-	42	28	-	
	Cape Falcon to Humbug Mt.	May 1-5, 10-21, 26-31	-	23	28	-	Beginning September 1 no more than 75 Chinook allowed per vessel per landing week (Thurs.-Wed.).
		June 5-7, 12-14, 19-21, 26-28	-	12	28	-	
		Sept. 1-Oct. 31	-	61	28	-	
	Cape Falcon to Humbug Mt.	-	July 5-7, 12-14, 19-21, 26-28;	12	28	16	Quota: 10,000 marked coho. Landing and possession limit of 20 coho per vessel per week (Thurs.-Wed). Coho retained must not exceed a 1:1 ratio with retained Chinook and must be landed at the same time.
		-	Aug. 1-4, 8-10, 15-17	10	28	16	
	Humbug Mt. to OR/CA Border (Oregon Klamath Management Zone, OR KMZ)	Mar. 20-Apr. 30	-	42	28	-	Chinook Quotas: 300 in June and 216 in July (includes 16 Chinook transferred from June quota to July). Landing and possession limit per vessel per week (Thurs.-Wed.): 20 Chinook during June and July 22-31, and 10 Chinook during July 1-21. All vessels fishing in this area during June and July, must land and deliver all salmon within this area or into Port Orford within 24 hours of any closure of this fishery and prior to fishing outside of this area. Prior to June 1, all salmon caught in this area must be landed and delivered in the State of Oregon.
		May 1-5, 10-21, 26-31	-	23	28	-	
		June 1-16	-	16	28	-	
		July 1-31	-	31	28	-	

TABLE C-3. Summary of actual Oregon commercial salmon seasons in state and Federal (EEZ) waters. (Page 5 of 6)

Year	Area	Seasons		Number of Days	Minimum Size Limit (in.)		Other Restrictions
		All-Salmon-Except-Coho	All Salmon		Chinook	Coho	
2022 ^W	WA/OR Border to Cape Falcon	May 1-June 15, June 23-29	-	53	27	-	Quota: 18,000 Chinook (capped at 4,840 south of Leadbetter Point). Landing and possession limit per vessel per landing week (Thurs.-Weds.): 80 Chinook through May 25, 40 Chinook May 26- June Landing and possession limit per vessel per landing week (Thurs.-Weds.): 80 Chinook through May 25, 40 Chinook May 26-June 8, 25 Chinook June 9-15, 13 Chinook June 23-29
		-	July 1-Sept. 30	92	27	16	Quota: 9,000 Chinook and 32,000 marked coho which was adjusted inseason (Aug. 26) to a non-mark selective quota of 9,700 coho. Landing and possession limits per vessel per landing week (Thurs.-Wed.): 50 Chinook and 150 marked coho July 1-6, 40 Chinook and 150 marked coho July 7-20, 30 Chinook and 150 marked coho July 21-Aug 4, 40 Chinook and 150 marked coho Aug 4-10, 30 Chinook and 150 marked coho Aug 11-17, 10 Chinook and 150 marked coho Aug 18-25, 10 Chinook and 150 coho Aug 26-Sept.14, 15 Chinook and 225 coho Sept. 15-30
	Cape Falcon to Heceta Bank line	Mar. 15-May 15, May 21-31	-	68	28	-	For the entire season, vessels fishing in the area must land their salmon in the State of Oregon.
		June 1-12,18-30,	-				
		-	July 5-9,17-21, 25-31, Aug. 4-11	25	28	16	Mark-selective coho fishery open (Cape Falcon to Humbug Mt. quota of 10,000 marked coho). Salmon trollers may take and retain or possess on board a fishing vessel no more than 30 coho per vessel per open period. All coho retained, possessed on a vessel, and landed must not exceed a 1:1 ratio with Chinook salmon that are retained and landed at the same time.
	Heceta Bank line to Humbug Mt.	Sept. 1-4, 11-14, Oct. 1-31	-	8	28	-	Beginning September 1, no more than 100 Chinook allowed per vessel per landing week (Thurs.-Wed.).
			-	31	28	-	
		May 1-15, 21-31	-	26	28	-	For the entire season, vessels fishing in the area must land their salmon in the State of Oregon.
		-	Aug. 4-11	8	28	16	Mark-selective coho fishery open (Cape Falcon to Humbug Mt. quota of 10,000 marked coho). Salmon trollers may take and retain or possess on board a fishing vessel no more than 30 coho per vessel per open period. All coho retained, possessed on a vessel, and landed must not exceed a 1:1 ratio with Chinook salmon that are retained and landed at the same time.
		Sept. 1-4, 11-14, Oct. 1-31	-	8	28	-	Beginning September 1, no more than 100 Chinook allowed per vessel per landing week (Thurs.-Wed.).
			-	31	28	-	

TABLE C-3. Summary of actual Oregon commercial salmon seasons in state and Federal (EEZ) waters. (Page 6 of 6)

Year	Area	Seasons		Number of Days	Minimum Size Limit (in.)		Other Restrictions
		All-Salmon- Except-Coho	All Salmon		Chinook	Coho	
2022^{a/}	Humboldt Mt. to OR/CA Border	Mar. 15-Apr. 30	-	47	28	-	All salmon must be landed and delivered in OR.
cont.	(Oregon Klamath Management Zone, OR KMZ)	June 1-30	-	30	28	-	Chinook quota: June = 800, July = 687, Aug. = 658.
		July 1-31	-	31	28	-	Landing and possession limit of 50 Chinook per vessel per week. All vessels must land and deliver all salmon within this area or into Port Orford within 24 hours of any closure of this fishery and prior to fishing outside of this area. Oregon state regulations require fishers to notify ODFW within one hour of landing and prior to transport away from the port of landing with vessel name and number, number of salmon by species, location of delivery, and estimated time of delivery.
		Aug. 1-28	-	28	28	-	

a/ For detailed regulations and inseason adjustments, see Tables I-1 and C-9.

TABLE C-4. Summary of actual Oregon recreational ocean salmon regulations.^{a/} (Page 1 of 5)

Year	Area ^{a/}	Season	Days	Bag Limit	Minimum Size Limit (in.)		Other Restrictions ^{c/}
					Chinook	Coho ^{b/}	
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.: (Elk R. Area see footnote a/)	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 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. (Page 2 of 5)

Year	Area ^{a/}	Season	Days	Bag Limit	Minimum Size Limit (in.)		Other Restrictions ^{c/}
					Chinook	Coho ^{b/}	
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.: (Elk R. Area see footnote a/)	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.
	Twin Rocks to OR/CA Border 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. 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. (Page 3 of 5)

Year	Area ^{a/}	Season	Days	Bag Limit	Minimum Size Limit (in.)		Other Restrictions ^{c/}
					Chinook	Coho ^{b/}	
2017 (cont.)	Cape Blanco to Humbug Mt.: (Elk R. Area, see footnote a/)	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	Closed	-	-	-	-	
	Twin Rocks to OR/CA Border Inside 3 nm (Chetco River Area)	Oct. 7-8, 14-15	4	1	28	-	One Chinook daily.
2018	WA/OR Border to Cape Falcon	June 23-Aug. 12, Sept. 2-3	53	2	24	16	8,000 Chinook guideline and 21,000 marked coho quota. Two salmon daily, no more than one Chinook through Aug. 12, then any two salmon daily thereafter.
	Cape Falcon to Humbug Mt.	Mar. 15-June 29, Sept. 4-6, 9-13, 16-20, Sept. 22-Oct. 31, June 30-Sept. 3, Sept. 7-8, 14-15, 21	160 66 5	2 2 2	24 24 24	- 16 16	In Oct., only open shoreward of the 40 fathom line. 35,000 marked coho quota. 7,600 non-mark-selective coho quota.
	Cape Blanco to Humbug Mt.: (Elk R. Area, see footnote a/)	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 (Oregon KMZ)	May 19-Aug. 26	100	2	24	-	
	Chetco River Terminal Area: Twin Rocks to OR/CA Border Inside 3 nm	Oct. 6-7, 13-14	4	1	28	-	One Chinook daily.

TABLE C-4. Summary of actual Oregon recreational ocean salmon regulations. (Page 4 of 5)

Year	Area ^{a/}	Season	Days	Bag Limit	Minimum Size Limit (in.)		Other Restrictions ^{c/}
					Chinook	Coho ^{b/}	
2019	WA/OR Border to Cape Falcon	June 22-Sept. 30	101	2	24	16	Subarea guideline of 7,150 Chinook and 79,800 marked coho quota. Daily limit includes only one Chinook.
	Cape Falcon to Humbug Mt.	Mar. 15-June 21, Aug. 26-30, Sept. 2-5, 9-12, Sept. 30-Oct. 31	148	2	24	-	
	Cape Falcon to OR/CA Border	June 22-Aug. 25	65	2	24	16	90,000 marked coho quota.
	Cape Falcon to Humbug Mt.	Aug. 31-Sept. 1, Sept. 6-8, 13-15, 20-29	18	2	24	16	15,640 non-mark-selective coho quota. (increased from 9,000 after remaining marked coho quota rolled forward on impact neutral basis).
	Humbug Mt. to OR/CA Border (Oregon KMZ)	May 25-June 21, Aug. 26-Sept. 2	36	2	24	-	
2020	WA/OR Border to Cape Falcon	June 20-28	9	1	22	-	Subarea guideline of 7,000 Chinook and 13,250 marked coho quota. Daily limit beginning June 29 includes two salmon per day and only one Chinook.
		June 29-July 26	28	2	22	16	
	Cape Falcon to Humbug Mt.	Mar. 15-June 26, Aug. 17-31, Sept. 1-3, 6-30	119	2	24	-	
		Oct. 1-31	28	2	24	-	
			31	2	24	-	
	Cape Falcon to Humbug Mt.	June 27-Aug. 16	51	2	24	16	22,000 marked coho quota.
	Cape Falcon to Humbug Mt.	Sept. 4-5	2	2	24	16	4,650 non-mark-selective coho quota.
	Humbug Mt. to OR/CA Border (Oregon KMZ)	June 20-Aug. 7	49	2	24	-	

TABLE C-4. Summary of actual Oregon recreational ocean salmon regulations. (Page 5 of 5)

Year	Area ^{a/}	Season	Days	Bag Limit	Minimum Size Limit (in.)		Other Restrictions ^{c/}
					Chinook	Coho ^{b/}	
2021^{d/}	WA/OR Border to Cape Falcon	June 19-Aug. 29	72	2	22	16	7,200 Chinook guideline, 42,400 coho quota. Daily limit through June 26 includes only one salmon and no coho. Daily limit beginning June 27 includes two salmon per day and only one Chinook.
	Cape Falcon to Humbug Mt.	Mar. 15-June 11, Aug. 29-31,	92	2	24	-	
		Sept. 1-9, 13-16	13	2	24	-	
		Oct. 1-31	31	2	24	-	
	Cape Falcon to Humbug Mt.	June 12-Aug. 28	78	2	24	16	120,000 marked coho quota shared with the Humbug Mt to OR/CA border fishery.
	Cape Falcon to Humbug Mt.	Sept.10-12, 17-30	17	2	24	16	20,230 non-mark-selective coho quota.
	Humbug Mt. to OR/CA Border (Oregon KMZ)	June 12-18	7	2	-	16	120,000 marked coho quota shared with the Humbug Mt to OR/CA border fishery.
		June 19- Aug. 15	58	2	24	16	
		Aug. 16-28	13	2	-	16	
2022^{d/}	WA/OR Border to Cape Falcon	June 25-Sept. 30	98	2	22	16	8,090 Chinook guideline (adjusted inseason from 7,700), 84,000 coho quota. Daily limit includes two salmon; only one Chinook. No Chinook retention beginning Aug. 23. The subarea North of 46° 15' N and East of 124° 08' 40" W, which is north of the Columbia River mouth and falls within the Columbia River Ocean Salmon Management Area (Leadbetter Point, Washington to Cape Falcon, Oregon)closed beginning July 16. Chinook transferred from the Neah Bay area guideline to add 390 Chinook to the Columbia River area guideline on Sept. 12.
	Cape Falcon to Humbug Mt.	Mar. 15-June 17	95	2	24	-	
		Aug. 22-Sept. 2	12	2	24	-	
		Oct. 1-31	31	2	24	-	
	Cape Falcon to Humbug Mt.	June 18-Aug. 21	65	2	24	16	100,000 marked coho quota shared with the Humbug Mt to OR/CA border fishery
	Cape Falcon to Humbug Mt.	Sept. 3-30	28	2	24	16	26,800 non-mark-selective coho quota. Quota was adjusted inseason (Aug. 30) from 17,000 based on an impact neutral rollover of coho remaining on the marked coho fishery.
	Humbug Mt. to OR/CA Border (Oregon KMZ)	June 18-24	7	2	-	16	100,000 marked coho quota shared with the Cape Falcon to Humbug Mt. fishery.
		June 25- Aug. 21	58	2	24	-	

a/ Elk River area is 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.

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 I-3 and C-9.

TABLE C-5. Summary of actual Washington commercial salmon seasons in state and federal (EEZ) waters.^{a/} (Page 1 of 5)

Year	Area	Seasons		Number of Days	Minimum Size Limit (in.)		Other Restrictions
		All-Salmon- Except-Coho	All Salmon		Chinook	Coho	
2015	U.S./Canada Border to WA/OR Border	Area 1					
		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.
		Area 2					
		May 1-June 25	-	56	28	-	Seven days per week, no landing limits.
		Area 3					
		May 1-June 30					
		May 1-16	-	16	28	-	Seven days per week, no landing limits.
		Area 4					
		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.
		Areas 1 & 2					
		-	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.
		Areas 3 & 4					
		-	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. (Page 2 of 5)

Year	Area	Seasons		Number of Days	Minimum Size Limit (in.)		Other Restrictions
		All-Salmon- Except-Coho	All Salmon		Chinook	Coho	
2016	U.S./Canada Border to WA/OR Border	Areas 1 & 2					
		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.
		Area 3					
		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.
		Area 4					
		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. (Page 3 of 5)

Year	Area	Seasons		Number of Days	Minimum Size Limit (in.)		Other Restrictions
		All-Salmon- Except-Coho	All Salmon		Chinook	Coho	
2017	U.S./Canada Border to WA/OR Border	Areas 1 & 2					
		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.
		Areas 3 & 4					
		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 marked 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	U.S./Canada Border to WA/OR Border	Area 1					
		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.
		Area 2					
		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.
		Areas 3 & 4					
		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.

TABLE C-5. Summary of actual Washington commercial salmon seasons in state and federal (EEZ) waters. (Page 4 of 5)

TABLE 0-0: Summary of actual Washington commercial salmon seasons in state and federal (ELL) waters. (Page 4 of 6)								
Year	Area	Seasons		Number of Days	Minimum Size Limit (in.)		Other Restrictions	
		All-Salmon-Except-Coho	All Salmon		Chinook	Coho		
2019	U.S./Canada Border to WA/OR Border.	Area 1 (Col. R. subarea) May 6-June 28	-	54	28	-	Landing and possession limit: 100 Chinook per vessel May 6-15, 50 Chinook per vessel per landing week (Thurs.-Weds.) thereafter.	
	AREA QUOTAS: Spring (May-June) Chinook quota:13,200, capped at 1,800 in Area 1 (Col.R.) and 5,000 in Areas 3 & 4 (La Push and Neah Bay). Summer (July-Sept.) Quota: 19,527 Chinook and 30,400 marked coho.	-	July 1-Sept. 30	92	28	16	Landing and possession limits per vessel per landing week (Thurs.-Wed.): 150 marked coho through July 18, 125 Chinook and 150 marked coho July 19-Aug. 15, 160 Chinook and 150 marked coho thereafter.	
	Area 2 (Wesport subarea) May 6-June 28	-	54	28	-			
	-	-	July 1- Sept. 30	92	28	16	Landing and possession limits per vessel per landing week (Thurs.-Wed.): 150 marked coho through July 18, 125 Chinook and 150 marked coho July 19-Aug. 15, 160 Chinook and 150 marked coho thereafter.	
	Area 3 (La Push) & Area 4 (Neah Bay) May 6-15, May 16-June 19, June 24-28	- - -	10 35 5	28 28 28	- - -	100 Chinook per vessel for the open period. 50 Chinook per vessel per landing week (Thurs.-Weds.). 20 Chinook per vessel for the open period.		
			July 1-Sept. 30	92	28	16	Landing and possession limits per vessel per landing week (Thurs.-Wed.): 150 marked coho through July 18, 125 Chinook and 150 marked coho July 19-Aug. 15, 160 Chinook and 150 marked coho thereafter.	
	2020	U.S./Canada Border to WA/OR Border.	Area 1 (Col. R. subarea) May 6-June 28	-	54	28	-	Landing and possession limit per vessel per landing week (Thurs.-Weds.): 75 Chinook.
		<div>AREA QUOTAS: <u>Spring</u> (May-June) Chinook quota:13,820, capped at 3,770 in Area 1 and 5,100 in Areas 3 & 4 <u>Summer</u> (July-Sept.) Quota: 25,499 Chinook and 2,000 marked coho.</div>	-	July 1-Sept. 30	92	28	16	Landing and possession limits per vessel per landing week (Thurs.-Wed.): 10 marked coho.
			Area 2 (Wesport subarea) May 6-June 28	-	54	28	-	
			-	-	July 1- Sept. 30	92	28	16
Area 3 (La Push) & Area 4 (Neah Bay) May 6-June 28			-	54	28	-	Landing and possession limit per vessel per landing week (Thurs.-Weds.): 75 Chinook.	
				July 1-Sept. 30	92	28	16	Landing and possession limits per vessel per landing week (Thurs.-Wed.): 10 marked coho.

AREA QUOTAS:
Spring (May-June)
Chinook quota:13,820,
capped at 3,770 in Area
1 and 5,100 in Areas 3 &
4
Summer (July-Sept.)
Quota: 25,499 Chinook
and 2,000 marked coho.

TABLE C-5. Summary of actual Washington commercial salmon seasons in state and federal (EEZ) waters. (Page 5 of 5)

TABLE 3-3. Summary of actual Washington commercial salmon seasons in state and federal (ELL) waters. (Page 3 of 5)							
Year	Area	Seasons		Number of Days	Minimum Size Limit (in.)		Other Restrictions
		All-Salmon-Except-Coho	All Salmon		Chinook	Coho	
2021 ^{a/}	U.S./Canada Border to WA/OR Border.	Area 1 (Col. R. subarea) May 1-June 29	-	60	27	-	Landing and possession limit per vessel per landing week (Thurs.-Weds.): 75 Chinook through June 2, 100 Chinook thereafter.
	<div>AREA QUOTAS: <u>Spring</u> (May-June) Chinook quota:15,375, capped at 4,195 in Area 1 and 5,680 in Areas 3 & 4 <u>Summer</u> (July-Sept.) Quota: 16,931 Chinook (includes 5,557 transfer from spring) and 5,000 marked coho.</div>	-	July 1-Sept. 30	92	27	16	Landing and possession limits per vessel per landing week (Thurs.-Wed.): 20 marked coho through Sept. 2 and increased to 50 thereafter.
		Area 2 (Wesport subarea) May 1-June 29	-	60	27	-	
		-	July 1- Sept. 30	92	27	16	Landing and possession limits per vessel per landing week (Thurs.-Wed.): 20 marked coho through Sept. 2 and increased to 50 thereafter.
		Area 3 (La Push) & Area 4 (Neah Bay) May 1-June 29	-	60	27	-	Landing and possession limit per vessel per landing week (Thurs.-Weds.): 75 Chinook through June 2, 100 Chinook thereafter.
			July 1-Sept. 30	92	27	16	Landing and possession limits per vessel per landing week (Thurs.-Wed.): 20 marked coho through Sept. 2 and increased to 50 thereafter.
2022 ^{a/}	U.S./Canada Border to WA/OR Border.	Area 1 (Col. R. subarea) May 1-June 15, June 23-29	-	53	27	-	Landing and possession limit per vessel per landing week (Thurs.-Weds.): 80 Chinook through May 25, 40 Chinook May 26- June 8, 25 Chinook June 9-15, 13 Chinook June 23-29.
	<div>2022 AREA QUOTAS: <u>Spring</u> (May-June) Chinook quota:18,000 capped at 4,840 in Area 1 and 6,040 in Areas 3 & 4 <u>Summer</u> (July-Sept.) Quota: 9,000 Chinook and 32,000 marked coho which was adjusted inseason (Aug. 26) to a non-mark selective quota of 9,700 coho.</div>	-	July 1-Sept. 30	92	27	16	Landing and possession limits per vessel per landing week (Thurs.-Wed.): 50 Chinook and 150 marked coho July 1-6, 40 Chinook and 150 marked coho July 7-20, 30 Chinook and 150 marked coho July 21-Aug. 4, 40 Chinook and 150 marked coho Aug. 4-10, 30 Chinook and 150 marked coho Aug. 11-17, 10 Chinook and 150 marked coho Aug. 18-25, 10 Chinook and 150 coho Aug. 26-Sept.14, 15 Chinook and 225 coho Sept. 15-30.
		Area 2 (Wesport subarea) May 1-June 15, June 23-29	-	53	27	-	Landing and possession limit per vessel per landing week (Thurs.-Weds.): 150 Chinook May 19-25, 40 Chinook May 26- June 8, 25 Chinook June 9-15, 13 Chinook June 23-29.
		-	July 1- Sept. 30	92	27	16	Landing and possession limits per vessel per landing week (Thurs.-Wed.): Same for all areas; see Area 1 (Col. R. subarea) for description.
		Area 3 (La Push) & Area 4 (Neah Bay) May 1-June 15, June 23-29	-	53	27	-	Landing and possession limits per vessel per landing week (Thurs.-Wed.): Same as Area 1 (Col. R. subarea).
			July 1-Sept. 30	92	27	16	Landing and possession limits per vessel per landing week (Thurs.-Wed.): Same for all areas; see Area 1 (Col. R. subarea) for description.

a/ For detailed regulations and inseason adjustments, see Tables I-1 and C-9.

TABLE C-6. Summary of actual Washington recreational ocean salmon regulations.^{a/} (Page 1 of 4)

Year	Area	Season	Days	Bag Limit	Minimum Size Limit (in.)		Other Restrictions
					Chinook	Coho ^{a/}	
2015	U.S./Canada Border to Queets R. WA (Neah Bay and La Push subareas)	May 15-16, 22-23, 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. (Page 2 of 4)

Year	Area	Season	Days	Bag Limit	Minimum Size Limit (in.)		Other Restrictions
					Chinook	Coho ^{a/}	
2016	U.S./Canada Border to Cape Alava (Neah Bay subarea)	July 1- Aug. 21	52	2	24	-	All salmon except coho. Chinook guideline: 6,200
	Cape Alava to Queets R. (La Push subarea)	July 1- Aug. 21	52	2	24	-	All salmon except coho. Chinook guideline: 2,000
	Queets R. to Leadbetter Pt. WA (Westport subarea)	July 1-22	22	1	24	-	All salmon except coho. Chinook guideline: 16,600
		July 23-Aug. 21	30	2	24	-	
	Leadbetter Pt. WA to Cape Falcon OR (Columbia River subarea)	July 1- Aug. 27	58	2	24	16	All salmon. 10,200 Chinook guideline, 18,900 coho quota. Daily bag limit allow s only 1 Chinook through Aug 15.
2017	U.S./Canada Border to Cape Alava (Neah Bay subarea)	June 24-Sept. 4	73	2	24	16	All salmon. 7,900 Chinook guideline, 3,970 coho quota. Tw o fish daily.
	Cape Alava to Queets R. (La Push subarea)	June 24-Sept. 4	73	2	24	16	All salmon. 2,500 Chinook guideline, 1,490 coho quota. Tw o fish daily.
	Queets R. to Leadbetter Pt. WA (Westport subarea)	July 1-Aug.22	53	2	24	16	All salmon. 21,400 Chinook guideline, 17,113 coho quota. 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 OR (Columbia River subarea)	June 24-Aug.22	60	2	24	16	All salmon. 13,200 Chinook guideline, 22,527 coho quota. Tw o salmon daily, no more than one Chinook.
2018^{cf}	U.S./Canada Border to Cape Alava (Neah Bay subarea)	June 23-Aug 12	51	2	24	16	3,024 Chinook guideline, 5,370 coho quota. Daily limit includes only one Chinook through July 13.
	Cape Alava to Queets R. (La Push subarea)	June 23-Sept. 3	73	2	24	16	1,500 Chinook guideline, 1,090 coho quota.
	Queets R. to Leadbetter Pt. WA (Westport subarea)	July 1-Sept. 3	51	2	24	16	13,100 Chinook guideline, 15,540 coho quota. 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 OR (Columbia River subarea)	June 23-Aug.12, Sept. 2-3	53	2	24	16	8,000 Chinook guideline, 21,000 coho quota. Daily limit includes only one Chinook through Aug. 12.

TABLE C-6. Summary of actual Washington recreational ocean salmon regulations. (Page 3 of 4)

Year	Area	Season	Days	Bag Limit	Minimum Size Limit (in.)		Other Restrictions
					Chinook	Coho ^{a/}	
2019	U.S./Canada Border to Cape Alava WA (Neah Bay subarea)	June 22-Sept. 30	101	2	24	16	5,200 Chinook guideline, 16,600 coho quota. Daily limit includes only one Chinook July 8-13. No Chinook retention allowed thereafter.
	Cape Alava to Queets R. (La Push subarea)	June 22-Sept. 30	101	2	24	16	1,100 Chinook guideline, 4,050 coho quota. Daily limit includes only one Chinook beginning July 15.
	48°00' N. Lat. to 47°50' N. Lat.	Oct. 1-13	13	2	24	16	100 Chinook guideline, 100 coho quota.
	Queets R. to Leadbetter Pt. WA (Westport subarea)	June 22-Sept. 30	101	2	24	16	12,700 Chinook guideline, 59,050 coho quota. Daily limit includes only one Chinook through Aug. 9.
	Leadbetter Pt. WA to Cape Falcon OR (Columbia River subarea)	June 22-Sept. 30	101	2	24	16	7,150 Chinook guideline, 79,800 coho quota. Daily limit includes only one Chinook.
2020	U.S./Canada Border to Cape Alava WA (Neah Bay subarea)	June 20-Aug. 7	49	2	24	16	5,600 Chinook guideline, 2,988 coho quota. Daily limit through June 28 includes only one salmon and no coho.
	Cape Alava to Queets R. (La Push subarea)	June 20-Sept. 30	103	2	24	16	1,300 Chinook guideline, 462 coho quota. Daily limit through June 28 includes only one salmon and no coho.
	Queets R. to Leadbetter Pt. WA (Westport subarea)	June 20-Sept. 30	103	2	22	16	12,460 Chinook guideline, 9,800 coho quota. Daily limit through June 28 includes only one salmon and no coho. Daily limit beginning June 29 includes two salmon; only one Chinook through Sept. 3. Closed Fridays and Saturdays through Sept. 3.
	Leadbetter Pt. WA to Cape Falcon OR (Columbia River subarea)	June 20-July 26	37	2	22	16	7,000 Chinook guideline, 13,250 coho quota. Daily limit through June 28 includes only one salmon and no coho. Daily limit beginning June 29 includes two salmon and only one Chinook.
2021^{b/}	U.S./Canada Border to Cape Alava WA (Neah Bay subarea)	June 19-Sept. 15	89	2	24	16	5,825 Chinook guideline, 5,730 coho quota. Daily limit through July 3 includes only one salmon and no coho. Daily limit beginning July 24 includes two salmon and only one Chinook.
	Cape Alava to Queets R. (La Push subarea)	June 19-Sept. 3	77	2	24	16	1,300 Chinook guideline, 1,430 coho quota. Daily limit through July 3 includes two salmon and no coho.
	Queets R. to Leadbetter Pt. WA (Westport subarea)	June 19-Sept. 7	71	2	22	16	12,925 Chinook guideline, 20,440 coho quota. Daily limit through June 26 includes only one salmon and no coho. Daily limit beginning June 27 includes two salmon; only one Chinook through Aug. 20. Closed Fridays and Saturdays through Aug. 5
	Leadbetter Pt. WA to Cape Falcon OR (Columbia River subarea)	June 19-Aug. 29	72	2	22	16	7,200 Chinook guideline, 42,400 coho quota. Daily limit through June 26 includes only one salmon and no coho. Daily limit beginning June 27 includes two salmon and only one Chinook.

TABLE C-6. Summary of actual Washington recreational ocean salmon regulations. (Page 4 of 4)

Year	Area	Season	Days	Bag Limit	Minimum Size Limit (in.)		Other Restrictions
					Chinook	Coho ^{a/}	
2022 ^{b/}	U.S./Canada Border to Cape Alava WA (Neah Bay subarea)	June 18-July 5, July 25-Sept. 30	86	2	24	16	5,510 Chinook guideline, 17,470 coho quota. Chinook guideline adjusted inseason (Sept. 14) Daily limit includes two salmon; only one Chinook beginning June 24. Area east of Bonilla-Tatoosh line closed beginning July 2. Entire area closed July 5-24. Area west of Bonilla-Tatoosh line opened beginning July 25. Area east of Bonilla-Tatoosh line opened beginning Aug. 1. Balance of Chinook guideline (600 Chinook) transferred to the Columbia River area guideline on an impact neutral basis on Sept. 14.
	Cape Alava to Queets R. (La Push subarea)	June 18-Sept. 30	105	2	24	16	995 Chinook guideline, 4,370 coho quota. Daily limit includes two salmon; only one Chinook July 4-15 and July 25-Sept. 30. No Chinook retention allowed July 16-24.
	48°00' N. Lat. to 47°50' N. Lat.	Oct. 5-8	4	2	24	-	125 Chinook quota. Chinook only.
	Queets R. to Leadbetter Pt. WA (Westport subarea)	July 2-Sept. 30	91	2	22	16	12,070 Chinook guideline, 62,160 coho quota. Coho quota adjusted inseason (Aug. 27) to 14,000 non-mark selective coho. Daily limit includes two salmon; only one Chinook <u>except</u> no Chinook retention on Fridays and Saturdays July 22- August 22. No Chinook retention beginning Aug. 23. Non-marked coho retention allowed beginning Aug. 27.
	Leadbetter Pt. WA to Cape Falcon OR (Columbia River subarea)	June 25-Sept. 30	98	2	22	16	8,090 Chinook guideline (adjusted inseason from 7,700), 84,000 coho quota. Daily limit includes two salmon; only one Chinook. No Chinook retention beginning Aug. 23. The subarea North of 46° 15' N and East of 124° 08' 40" W within the Columbia River area closed beginning July 16. Chinook transferred from the Neah Bay area guideline to add 390 Chinook to the Columbia River area guideline on Sept. 14.

a/ Mark-selective coho fishery unless otherwise noted; all retained coho must be marked with a healed adipose fin clip.

b/ For detailed regulations and inseason adjustments, see Tables I-1 and C-9.

TABLE C-7. Summary of actual Washington treaty Indian ocean and Area 4B troll salmon seasons. ^{a/} (Page 1 of 6)

Year	Tribe/Area	Seasons		Number of Days	Minimum Size Limit (in.)		Other Restrictions
		All-Salmon-Except-Coho	All Salmon		Chinook	Coho	
2017	Quinault, Quileute, and Hoh						
	Cape Alava to Point Chehalis	May 1-June 30	-	61	24	-	
		-	July 1-Sept. 15	77	24	16	
	Makah						
	North of 48°02'15" N. Lat.	May 1-June 30	-	61	24	-	
	(Norwegian Memorial) and east of	-	July 1- Aug. 14	45	24	16	
	125°44'00" W. Long.	-	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)	-	Jan. 1-Apr. 15	105	22	16	
	(Tootosh line east to Sieku R.)	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	
	S'Kallam/Area 4B	-	Jan. 1-Apr. 15	105	22	16	
	(Tootosh line east to Sieku R.)	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. (Page 2 of 6)

TABLE 3.1. Summary of actual Washington treaty Indian coho and Area 4B for salmon seasons. (Page 2 of 3)							
Year	Tribe/Area	Seasons		Number of Days	Minimum Size Limit (in.)		Other Restrictions
		All-Salmon-Except-Coho	All Salmon		Chinook	Coho	
2018	Quinault, Quileute, and Hoh						
	Cape Alava to Point Chehalis	May 1-June 30	-	61	24	-	
		-	July 1-Sept. 15	77	24	16	
	Makah						
	North of 48°02'15" N. Lat.	May 1-June 30	-	61	24	-	
	(Norwegian Memorial) and east of	-	July 1- Aug. 14	45	24	16	
	125°44'00" W. Long.	-	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
	Area 4B (inside waters)	-	Jan. 1-Apr. 15	105	22	16	
	(Tootosh line east to Sieku R.)	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
	S'Klallam/Area 4B	-	Jan. 1-Apr. 15	105	22	16	
	(Tootosh line east to Sieku R.)	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. (Page 3 of 6)

Year	Tribe/Area	Seasons		Number of Days	Minimum Size Limit (in.)		Other Restrictions
		All-Salmon-Except-Coho	All Salmon		Chinook	Coho	
2019	Quinault, Quileute, and Hoh						
	Cape Alava to Point Chehalis	May 1-June 30	-	61	24	-	
		-	July 1-Aug. 28	59	24	16	
			Aug 31-Sept 13	14	24	16	
	Makah						
	North of 48°02'15" N. Lat.	May 1-June 30	-	61	24	-	
	(Norwegian Memorial) and east of	-	July 1- Aug. 27	58	24	16	
	125°44'00" W. Long.	-	Aug. 31 - Sept. 6	7	24	16	125 coho per vessel per week
		-	Sept. 7-11	5	24	16	140 coho per vessel per week
		-	Sept. 12-13	2	24	16	50 coho per vessel per week
	Area 4B (inside waters)	-	Jan. 1-Apr. 15	105	22	16	
	(Tootosh line east to Sieku R.)	May 1-June 30	-	61	24	-	
		-	July 1- Aug. 27	58	24	16	
		-	Aug. 31 - Sept. 6	7	24	16	125 coho per vessel per week
		-	Sept. 7-11	5	24	16	140 coho per vessel per week
		-	Sept. 12-13	2	24	16	50 coho per vessel per week
	S'Kallam/Area 4B	-	Jan. 1-Apr. 15	105	22	16	
	(Tootosh line east to Sieku R.)	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. (Page 4 of 6)

Year	Tribe/Area	Seasons		Number of Days	Minimum Size Limit (in.)		Other Restrictions
		All-Salmon-Except-Coho	All Salmon		Chinook	Coho	
2020	Quinault, Quileute, and Hoh						
	Cape Alava to Point Chehalis	May 1-June 30	-	61	24	-	
		-	July 1 - Sept. 15	77	24	16	
	Makah						
	North of 48°02'15" N. Lat.	May 1-June 30	-	61	24	-	Fishery closed due to Makah's COVID-19 safety regulations
	(Norwegian Memorial) and east of	-	July 1- July 23	23	24	16	Fishery closed due to Makah's COVID-19 safety regulations
	125°44'00" W. Long.	-	July 24 - 28	5	24	16	Fishery opened on July 24; no landing limits
		-	July 29 - Aug. 4	7	24	16	150 coho per vessel per week
		-	Aug. 6 - 12	7	24	16	150 coho per vessel per week
			Aug. 14 - 19	6	24	16	200 coho per vessel per week
			Aug. 20 -25	6	24	16	200 coho per vessel per week
			Aug. 26 - Sept. 1	7	24	16	250 coho per vessel per week
			Sept. 3 - 15	13	24	16	125 coho per vessel per week
	Area 4B (inside waters)	-	Jan. 1-Apr. 15	105	22	16	
	(Tootosh line east to Sieku R.)	May 1-June 30	-	61	24	-	Fishery closed due to Makah's COVID-19 safety regulations
		-	July 1- July 23	23	24	16	Fishery closed due to Makah's COVID-19 safety regulations
		-	July 24 - 28	5	24	16	Fishery opened on July 24; no landing limits
		-	July 29 - Aug 4	7	24	16	150 coho per vessel per week
		-	Aug 6 - 12	7	24	16	150 coho per vessel per week
		-	Aug 14 - 19	6	24	16	200 coho per vessel per week
		-	Aug 20 -25	6	24	16	200 coho per vessel per week
		-	Aug 26 - Sept 1	7	24	16	250 coho per vessel per week
		-	Sept 3 - 15	13	24	16	125 coho per vessel per week
	S'Klallam/Area 4B						
	(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	

TABLE C-7. Summary of actual Washington treaty Indian ocean and Area 4B troll salmon seasons. (Page 5 of 6)

TABLE 6-7: Summary of actual Washington treaty Indian Ocean and Area 4B troll salmon seasons. (Page 3 of 6)							
Year	Tribe/Area	Seasons		Number of Days	Minimum Size Limit (in.)		Other Restrictions
		All-Salmon-Except-Coho	All Salmon		Chinook	Coho	
2021 ^{a/}	Quinault, Quileute, and Hoh	-	Nov. 1-Dec. 31	61	22	16	
	Cape Alava to Point Chehalis	May 1-June 30	-	61	24	-	
		-	July 1 - Sept. 15	77	24	16	Quinault closed their treaty troll fishery on September 13
	Makah						
	North of 48°02'15" N. Lat.	May 1-June 30	-	61	24	-	
	(Norwegian Memorial) and east of	-	July 1- August 13	44	24	16	
	125°44'00" W. Long.	-	August 16 - 19	4	24	16	250 coho per vessel per open period
		-	August 21 - 26	6	24	16	300 coho per vessel per open period
		-	August 28 - Sept 3	6	24	16	350 coho per vessel per open period
			September 4 - 9	6	24	16	50 coho per vessel per open period
			September 11 - 15	5	24	16	30 coho per vessel per open period
	Area 4B (inside waters)	-	Jan. 1-Apr. 15	105	22	16	
	(Tootosh line east to Sieku R.)	May 1-June 30	-	61	24	-	
		-	July 1- August 13	44	24	16	
		-	August 16 - 19	4	24	16	250 coho per vessel per open period
		-	August 21 - 26	6	24	16	300 coho per vessel per open period
		-	August 28 - Sept 3	6	24	16	350 coho per vessel per open period
		-	September 4 - 9	6	24	16	50 coho per vessel per open period
		-	September 11 - 15	5	24	16	30 coho per vessel per open period
	S'Klallam/Area 4B	-	Jan. 1-Apr. 15	105	22	16	
	(Tootosh line east to Sieku R.)	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. (Page 6 of 6)

Year	Tribe/Area	Seasons		Number of Days	Minimum Size Limit (in.)		Other Restrictions
		All-Salmon-Except-Coho	All Salmon		Chinook	Coho	
2022	Quinault, Quileute, and Hoh						
	Cape Alava to Point Chehalis	May 1-June 30	-	61	24	-	
		-	July 1 - Sept. 15	77	24	16	
	Makah						
	North of 48°02'15" N. Lat.	May 1-June 30	-	61	24	-	
	(Norwegian Memorial) and east of	-	July 1- July 24	24	24	16	
	125°44'00" W. Long.	-	July 25 - July 26	2	24	16	Emergency Closure
		-	July 27 - Aug 26	31	24	16	300 chinook per vessel per week
		-	Aug 27 - Sep 15	20	24	16	Removed landing limit
	Area 4B (inside waters)	-	Jan. 1-Apr. 15	105	22	16	
	(Tootosh line east to Sieku R.)	May 1-June 30	-	61	24	-	
		-	July 1- July 24	24	24	16	
		-	July 25 - July 26	2	24	16	Emergency Closure
		-	July 27 - Aug 26	31	24	16	300 chinook per vessel per week
		-	Aug 27 - Sep 15	20	24	16	Removed landing limit
	S'Klallam/Area 4B	-	Jan. 1-Apr. 15	105	22	16	
	(Tootosh line east to Sieku R.)	May 1-June 30	-	61	24	-	
		-	July 1-Sept. 15	77	24	16	
		-	Nov. 1-Dec. 31	61	22	16	

a/ 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)

Chinook					Coho				
Year	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 ^{a/}	-	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 ^{b/}	-	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 ^{c/}	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 ^{d/}	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 ^{e/}	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 ^{f/}	
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 ^{g/}	

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 Low er River Wild (Lew is River)	25.5	12.5	12.5	Queets, Skagit, Stillaguamish, Snohomish, Strait of Juan de Fuca, and OCN	20.0	25.0 ^{g/}	75.0 ^{g/}
2001	Columbia River Low er River natural tules	37.0	30.0	30.0	Oregon Coast Natural	90.0	75.0 ^{g/}	225.0 ^{g/}
2002	Columbia River Low er River natural tules	60.0	82.5	67.5	Oregon Coast Natural	60.0	5.0 ^{g/i/}	115.0 ^{g/i/}
2003	Columbia River Low er River natural tules and Snake River Fall	60.0	64.4	59.6	Oregon Coast Natural	90.0	75.0 ^{g/}	225.0 ^{g/}
2004	Columbia River Low er 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 ^{g/}	202.5 ^{g/}
2005	Snake River Fall	48.0	43.3	43.3	Interior Fraser (B.C.) and Skagit River	50.0	23.2 ^{g/}	121.8 ^{g/}
2006	Columbia River Low er River natural tules ^{h/}	42.2	34.0	31.0	Low er Columbia River natural and Interior Fraser (B.C.)	37.5	6.8 ^{g/}	73.2 ^{g/}
2007	Columbia River Low er River natural tules ^{h/}	35.0	16.3	16.3	Low er Columbia River natural and Interior Fraser (B.C.)	38.0	22.4 ^{g/}	117.6 ^{g/}
2008	Low er River wild (Lew is River) ^{h/} and Columbia River natural tules	37.5	20.0	20.0	Low er Columbia River natural and Hood Canal Natural	20.0	4.0 ^{g/}	20.35 ^{g/}
2009	Columbia River Low er River natural tules	39.0	20.5	20.5	Low er Columbia River, Skagit, Stillaguamish, and Interior Fraser Natural	60.0	33.6 ^{g/}	176.4 ^{g/}
2010	Columbia River Low er River natural tules	55.0	56.0	61.0 ^{i/}	Low er Columbia River, Strait of Juan de Fuca, and Interior Fraser Natural	41.5	12.8 ^{g/}	67.2 ^{g/}
2011	Columbia River Low er River natural tules	41.0	30.9	33.7 ^{i/}	Low er Columbia River and Interior Fraser Natural	42.0	12.8 ^{g/}	67.2 ^{g/}
2012	Columbia River Low er River natural tules	55.0	47.4	51.5 ^{i/}	Low er Columbia River and Interior Fraser Natural	47.5	11.8 ^{g/}	71.2 ^{g/}
2013	Columbia River Low er River natural tules	52.5	44.0	48.0 ^{i/}	Low er Columbia River and Interior Fraser Natural	47.5	14.2 ^{g/}	74.8 ^{g/}
2014	Columbia River natural tules and Puget Sound	62.5	56.9	59.1 ^{i/}	Low er Columbia River and Interior Fraser Natural	57.5	35.2 ^{g/}	184.8 ^{g/}

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)

Chinook					Coho			
Year	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 ^{j/}	Low er Columbia River, Queets River and Interior Fraser Natural coho.	42.5	19.2 ^{g/}	150.8 ^{g/}
2016	Columbia River natural tules and Puget Sound	40.0	35.0	35.0	Low er Columbia River, Queets River and Interior Fraser Natural coho.	0.0	0.0	18.9 ^{g/}
2017	Columbia River natural tules and Puget Sound	40.0	45.0	45.0	Low er Columbia River, Queets River and Interior Fraser Natural coho.	12.5	5.6 ^{g/}	42.0 ^{g/}
2018	Columbia River natural tules and Puget Sound	40.0	27.5	27.5	Low er Columbia River, Grays Harbor, Queets River and Interior Fraser Natural coho.	12.5	5.6 ^{g/}	42.0 ^{g/}
2019	Columbia River natural tules and Puget Sound	35.0	26.3	26.3	Low er Columbia River, Grays Harbor, Queets River and Interior Fraser Natural coho.	55.0	30.4 ^{g/}	159.6 ^{g/}
2020	Columbia River natural tules and Puget Sound	35.0	27.6	26.4	Low er Columbia River, Grays Harbor, Queets River and Interior Fraser Natural coho.	16.5	2.0 ^{g/}	26.5 ^{g/}
2021	Columbia River natural tules and Puget Sound	40.0	30.8	27.3	Low er Columbia River, Grays Harbor, Queets River and Interior Fraser Natural coho.	26.5	5.0 ^{g/}	70.0 ^{g/}
2022	Columbia River natural tules and Puget Sound	40.0	27.0	27.0	Low er Columbia River, Grays Harbor, Queets River and Interior Fraser Natural coho.	26.5	32.0 ^{g/}	168.0 ^{g/}

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. 2022 sequence of events in ocean salmon fishery management.^{a/} (Page 1 of 6)

GENERAL MANAGEMENT AND INSEASON ACTIONS FOR TRIBAL COMMERCIAL FISHERIES

- January 1: The all-salmon treaty troll fisheries open in Area 4B for the Makah and S'Klallam Tribes through April 15.
- May 1: The all-salmon-except-coho treaty troll fisheries open through the earlier of June 30 or attainment of the seasonal sub-quota of 20,000 Chinook. Tribal fisheries for the Quinault, Quileute, Hoh, Makah, and S'Klallam Tribes operate within their respective usual and accustomed areas within Marine Areas 2, 3, 4 and 4B.
- July 1: The all-salmon treaty troll fisheries open through the earlier of September 15 or attainment of the 26,500 coho quota or the seasonal sub-quota of 52,000 Chinook. Tribal fisheries for the Quinault, Quileute, Makah, Hoh, and S'Klallam Tribes operate within their respective usual and accustomed areas within Marine Areas 2, 3, 4 and 4B.
- July 24: Inseason action. The Makah tribe's fishery in Norwegian Memorial and Areas 4, 4A, and 4B was closed until further notice.
- July 26: Inseason action. Effective July 26 – Saturday, July 30, and every calendar week thereafter until the end of the management period (September 15, 2022), the Makah tribe's fishery in Norwegian Memorial and Areas 4, 4A, and 4B was reopened with a modified landing limit. Landing limits were not to exceed 300 Chinook salmon per vessel per calendar week (12:01 a.m. Sunday –11:59 p.m. Saturday).
- July 26: Inseason action. Adjusted the July - September subquota for the treaty Indian salmon fishery north of Cape Falcon, that was set preseason at 20,000 Chinook salmon, to 34,525 Chinook salmon through an impact-neutral rollover of unused May-June subquota.
- September 15: Quileute, Quinault, Hoh, Makah, and S'Klallam treaty troll salmon fisheries close as scheduled.
- November 1: The all-salmon treaty troll fisheries open in Area 4B for the S'Klallam Tribes through December 31.
- November 2: The Chinook winter troll fisheries open in Area 4B, 5, and 6 for the Makah Tribe through April 15.

GENERAL MANAGEMENT ACTIONS FOR NON-TRIBAL FISHERIES

- March 8-14: Pacific Fishery Management Council meeting, hybrid meeting in San Jose, CA and via webinar.
- March 8: National Marine Fisheries Service (NMFS) provides the Council with a [letter](#) outlining the 2022 management guidance for stocks listed under the Endangered Species Act (ESA) and stocks of concern. Supplemental guidance was also provided to the Council. Revised guidance for California Coastal Chinook was provided to the Council on March 14 as a supplemental report under agenda item D.7.a
- March 16: North of Cape Falcon Salmon Forum meets online to initiate consideration of recommendations for treaty Indian and non-Indian salmon management alternatives.
- March 22-23: Council holds public hearings on proposed management alternatives. All hearings were held online; one for each of the three coastal states (WA, OR, and CA).
- March 31: North of Cape Falcon (NOF) Salmon, Puget Sound Forum meets online to further consider recommendations for treaty Indian and non-Indian salmon management alternatives.
- April 1: North of Cape Falcon (NOF) Salmon, Columbia River Forum meets online to further consider recommendations for treaty Indian and non-Indian salmon management alternatives.
- April 8-13: Pacific Fishery Management Council meeting, Hybrid meeting in Seattle, WA and via webinar.
- May 16: Final Rule for the 2022 annual salmon management measure is published on the Federal Register ([87 FR 29690](#))

ACTUAL NON-TRIBAL COMMERCIAL SEASONS

- March 11: Effective: March 15. Inseason action #1. The commercial salmon fishery from the Heceta Bank Line, OR, to Humbug Mountain, OR, previously scheduled to open March 15 is closed through April 30.
- March 15: The commercial ocean salmon fishery from **Cape Falcon, OR to the Heceta Bank Line** opened. Scheduled for intermittent openings through September and all of October.

TABLE C-9. 2022 sequence of events in ocean salmon fishery management.^{a/} (Page 2 of 6)

March 15:	The <u>commercial</u> salmon fishery in the Oregon Klamath Management Zone, (OR KMZ) (Humbug Mt., OR, to the OR/CA border) opened. Scheduled for March 15-April 30, then open all of June and July and most of August with Chinook quotas in place.
April 11:	<p>The <u>commercial</u> salmon fisheries south of Cape Falcon, OR previously scheduled to open during March 15 through May 15 were modified or cancelled. The fisheries affected were:</p> <ul style="list-style-type: none"> • Effective April 11. Inseason action #13. Modifies the <u>commercial</u> salmon fishery from Cape Falcon, OR, to the Heceta Bank Line, OR (latitude 43°58'00" N). This fishery, which did not have a closing date in the 2021 management measures, will close May 15. • Effective April 15. Inseason action #4 modifies the <u>commercial</u> salmon fishery in the area from the Heceta Bank Line, OR, to Humbug Mountain, OR. This action supersedes inseason action #1. Under inseason action #4, this fishery, which opened May 1, closes May 15. • Effective: April 11. Inseason action #5 modifies the <u>commercial</u> salmon fishery in the OR KMZ (Humbug Mountain, OR to the Oregon/California border). This fishery, which did not have a closing date in the 2021 management measures, closes at 11:59 pm on April 30, 2022. • Effective: April 11. Inseason action #6 modified the <u>commercial</u> salmon fishery from the California Klamath Management Zone, CA KMZ (Oregon/California border to Humboldt South Jetty). This fishery, which was previously scheduled to open May 1, is closed. • Effective: April 11. Inseason action #7 modifies the <u>commercial</u> salmon fishery in the Fort Bragg management area (Latitude 40°10' N to Point Arena, CA). This fishery, which was previously scheduled to open April 16, is closed. • Effective: April 11. Inseason action #8 modifies the <u>commercial</u> salmon fishery in the San Francisco management area (Point Arena, CA, to Pigeon Point, CA). This fishery, which was previously scheduled to open May 1, is closed. • Effective: April 11. Inseason action #9 modifies the <u>commercial</u> salmon fishery in the Monterey management area (Pigeon Point, CA, to the U.S./Mexico Border), which was previously scheduled to open May 1, with no closing date. This fishery is now scheduled to open May 1–5, and May 10–15.
April 22:	<p>The commercial salmon fishery in the North of Falcon (NOF) management area (U.S./Canada border to Cape Falcon, OR) were modified as follows:</p> <ul style="list-style-type: none"> • Effective: April 22. Inseason action #10 modifies the quota and subarea catch limits in the NOF management area. Salmon caught during May 1-15 will count against the overall 2022 May-June NOF and subarea quotas. The May-June NOF commercial salmon fishery quota is increased from 15,375 Chinook set in 2021, to 18,000 Chinook in 2022, no more than 6,040 of which may be caught in the area between the U.S/Canada border and the Queets River, WA, and no more than 4,840 of which may be caught in the area between Leadbetter Point, WA and Cape Falcon, OR. • Effective: April 22. Inseason action #11 modifies the Chinook landing and possession limit for the <u>commercial</u> salmon fishery that opens May 1 from the U.S/Canada border to the Queets River and from Leadbetter Point, WA to Cape Falcon, OR from 75 Chinook per vessel per landing week (Thursday - Wednesday) to 80 Chinook per vessel per landing week.
May 1:	The <u>commercial</u> salmon fishery from the Heceta Bank Line, OR to Humbug Mountain, OR opened intermittently through September and all of October. See inseason actions #1 and #4.
May 1:	The <u>commercial</u> salmon fisheries in the NOF management area (U.S./Canada border to Cape Falcon, OR) opened for the spring season; scheduled through June 29.
May 1:	The <u>commercial</u> salmon fishery in the Monterey management area (Pigeon Point, CA to U.S./Mexico border) opened. Scheduled intermittently in May, June 1-12, July 8-12, July 21-25, and August 3-12.
May 16:	Effective May 19. Inseason action #12 modified the Chinook landing and possession limit for the <u>commercial</u> salmon fishery in the area between Leadbetter Point, WA and the Queets River, WA (Westport subarea) to 150 Chinook per vessel per landing week (Thursday-Wednesday).

TABLE C-9. 2022 sequence of events in ocean salmon fishery management.^{a/} (Page 3 of 6)

ACTUAL NON-TRIBAL COMMERCIAL SEASONS *(continued)*

May 25:	Effective: May 26. Inseason action #13 modified the Chinook landing and possession limit for the <u>commercial</u> salmon fishery in the NOF management area (U.S./Canada border to Cape Falcon, OR) to 40 Chinook per vessel per landing week (Thursday-Wednesday) through June 8 and 20 Chinook per vessel per landing week June 9-29.
June 9:	Effective June 10. Inseason action #14 modified the Chinook landing and possession limit for the <u>commercial</u> salmon fishery in the NOF management area (U.S./Canada border to Cape Falcon, OR) to 25 Chinook per vessel per landing week (Thursday-Wednesday).
June 9:	Effective June 16. Inseason action #15: The <u>commercial</u> salmon fishery NOF management area (U.S./Canada border to Cape Falcon, OR) is closed.
June 22	Effective June 23. Inseason action #17. The <u>commercial</u> salmon fishery in the NOF management area (U.S./Canada border to Cape Falcon, OR) re-opened June 23-29 with a landing and possession limit of 13 Chinook per vessel per landing week (Thursday-Wednesday).
June 28:	Effective July 1. Inseason action #18. Retention of halibut caught incidental to the <u>commercial</u> salmon fishery (U.S./Canada border to U.S./Mexico border) is extended past June 30 with the same landing and possession limits set preseason (no more than 1 Pacific halibut per each 2 Chinook, except one Pacific halibut may be landed without meeting the ratio requirement, and no more than 35 halibut may be landed per trip) on dates that the commercial salmon fishery is open.
June 28	Effective July 1. Inseason action #19 modified the Chinook landing and possession limit for the <u>commercial</u> salmon fishery in the NOF management area (U.S./Canada border to Cape Falcon, OR). The Chinook landing and possession limits per vessel per landing week (Thursday - Wednesday) are 50 Chinook during July 1-6 and 40 Chinook starting July 7.
July 1:	The <u>commercial</u> salmon fishery in the NOF management area (U.S./Canada border to Cape Falcon, OR) opened for the summer season; scheduled through September 30.
July 5:	The <u>commercial</u> salmon fishery from Cape Falcon, OR to the Heceta Bank Line : The "Mark-selective coho fishery" opened July 5-9, 17-21, 25-31, and August 4-11, with a Cape Falcon to Humbug Mt. quota of 10,000 marked coho.
July 8:	The <u>commercial</u> salmon fishery in the Fort Bragg management area (Latitude 40°10' N to Point Arena, CA) opened. Scheduled for July 8-12, July 21-25, and August 3-12.
July 8	The <u>commercial</u> salmon fishery in the San Francisco management area (Point Arena, CA, to Pigeon Point, CA) opened. Scheduled for July 8-12, July 21-25, August 3-12, and September 1-30.
July 8:	Effective July 8. Inseason action #23 modified the July Chinook quota for the <u>commercial</u> salmon fishery in the OR KMZ Subarea (Humbug Mt., OR to the OR/CA border) from 400 Chinook to 687 Chinook through an impact-neutral rollover of unused quota from the June commercial salmon fishery in the same area.
July 19:	Effective July 21. Inseason action #29 modified the Chinook landing and possession limit for the <u>commercial</u> salmon fishery in the NOF management area (U.S./Canada border to Cape Falcon, OR) to 30 Chinook per vessel per landing week (Thursday - Wednesday).
August 4:	The <u>commercial</u> salmon fishery from the Heceta Bank Line, OR to Humbug Mountain, OR : The "Mark-selective coho fishery" opened August 4-11 with a Cape Falcon to Humbug Mt. quota of 10,000 marked coho.
August 4:	Effective August 4. Inseason action #34. Modified the August Chinook quota in the <u>commercial</u> salmon fishery in the OR KMZ (Humbug Mountain, OR, to the Oregon/California border) from 250 Chinook to 658 Chinook through an impact-neutral rollover of unused quota from the July commercial salmon fishery in the same area.
August 4:	Effective August 5. Inseason action #35 modified the Chinook landing and possession limit for the <u>commercial</u> salmon fishery in the NOF management area (U.S./Canada border to Cape Falcon, OR) to 40 Chinook per vessel per landing week (Thursday - Wednesday).

TABLE C-9. 2022 sequence of events in ocean salmon fishery management.^{a/} (Page 4 of 6)

ACTUAL NON-TRIBAL COMMERCIAL SEASONS *(continued)*

- August 10: Effective August 11. Inseason action #36 modified the Chinook landing and possession limit for the commercial salmon fishery in the **NOF management area** (U.S./Canada border to Cape Falcon, OR) to 30 Chinook per vessel per landing week (Thursday - Wednesday).
- August 17: Effective August 18. Inseason action #37 modified the Chinook landing and possession limit for the commercial salmon fishery in the **NOF management area** (U.S./Canada border to Cape Falcon, OR) to 10 Chinook per vessel per landing week (Thursday - Wednesday).
- August 25: Effective August 26. Inseason action #41. For the commercial salmon fishery in the **NOF management area** (U.S./Canada border to Cape Falcon, OR), the remaining coho quota is adjusted on an impact-neutral basis, from mark-selective to non-mark-selective. The adjusted non-mark-selective coho quota is 9,700.
- August 25: Effective August 26. Inseason action #42. For the commercial salmon fishery in the **NOF management area** (U.S./Canada border to Cape Falcon, OR), the landing and possession limit for coho is modified to 150 non-mark-selective coho per vessel per landing week (Thursday - Wednesday).
- September 13: Effective September 15. Inseason action #47. For the commercial salmon fishery in the **NOF management area** (U.S./Canada border to Cape Falcon, OR), the landing and possession limits are modified to 15 Chinook and 225 coho per vessel per landing week (Thursday - Wednesday).
- October 3: The commercial salmon fishery in the **Fall Area Target Zone** (Point Reyes, CA to Point San Pedro, CA) opened. Scheduled for October 3-7 and October 10-14.

ACTUAL RECREATIONAL SEASONS

- March 14: Effective: March 14. Inseason action #2 modifies the recreational salmon fishery in the **Fort Bragg management area** (latitude 40°10' N to Point Arena, CA), previously scheduled to open on April 2. This fishery is closed through April 30 and is now scheduled to re-open on May 1.
- March 15: The recreational salmon fishery from **Cape Falcon, OR to Humbug Mt., OR** opened. Scheduled March 15-October 31.
- April 2: The recreational salmon fishery in the **San Francisco management area** (Pt. Arena, CA to Pigeon Point, CA) opened. Scheduled April 2-May 21 and June 23-October 31.
- April 2: The recreational salmon fishery in the **Monterey management area** (Pigeon Point, CA to U.S./Mexico border) opened. Scheduled to remain open through October 2.
- May 1: The recreational salmon fishery in the **CA KMZ management area** (OR/CA border to latitude 40°10' N) opened. Scheduled May 1-31 and August 1- September 5.
- May 1: The recreational salmon fishery in the **Fort Bragg management area** (latitude 40°10' N to Point Arena, CA) opened. Scheduled May 1-July 4 and July 22- September 5.
- June 18: The recreational salmon fishery in the **Neah Bay subarea** (U.S./Canada Border to Cape Alava, WA) opened. Scheduled June 18-September 30. Various restrictions apply.
- June 18: The recreational salmon fishery in the **La Push subarea** (Cape Alava, WA, to the Queets River) opened. Scheduled June 18-September 30. Various restrictions apply.
- June 18: The recreational fishery from **Cape Falcon, OR to Humbug Mt., OR** opened for retention of marked coho in the daily bag limit. Scheduled through August 21 or attainment of 100,000 marked coho quota. The marked coho quota also applies to the concurrent openings in the OR KMZ (Humbug Mt., OR to the OR/CA border).
- June 18: The recreational fishery in the **OR KMZ** (Humbug Mt., OR to the OR/CA border) opened through August 21 for the "all salmon mark-selective coho fishery", except no Chinook allowed through June 18-24. The 100,000 marked coho quota also applies to the concurrent openings in the recreational fishery from Cape Falcon, OR to Humbug Mt., OR.

TABLE C-9. 2022 sequence of events in ocean salmon fishery management.^{a/} (Page 5 of 6)

ACTUAL RECREATIONAL SEASONS *(continued)*

June 22:	Effective June 24. Inseason action #16 modified the <u>recreational</u> salmon fishery bag limit in the Neah Bay subarea (U.S./Canada Border to Cape Alava, WA), from two salmon per day to two salmon per day, only one of which may be a Chinook.
June 25:	The <u>recreational</u> salmon fishery in the Columbia River subarea (Leadbetter Point, WA to Cape Falcon, OR) opened. Scheduled June 25-September 30. Various restrictions apply.
June 30:	Effective July 4. Inseason action #20 modified the <u>recreational</u> salmon fishery bag limit in the La Push subarea (Cape Alava, WA, to the Queets River, WA), from two salmon per day to two salmon per day, only one of which may be a Chinook.
June 30	Effective July 2. Inseason action #21. The <u>recreational</u> salmon fishery in the Neah Bay subarea (U.S./Canada border to Cape Alava, WA), east of the Bonilla-Tatoosh line is closed.
June 30	Effective July 5. Inseason action #22. the <u>recreational</u> salmon fishery in the Neah Bay subarea (U.S./Canada border to Cape Alava, WA) is closed.
July 2:	The <u>recreational</u> salmon fishery in the Westport subarea (the Queets River, WA to Leadbetter Point, WA) opened. Scheduled July 2-September 30. Various restrictions apply.
July 8:	Effective July 25. Inseason action #24 re-opened the <u>recreational</u> salmon fishery in the Neah Bay subarea (U.S./Canada border to Cape Alava, WA) west of the Bonilla-Tatoosh line; through September 30 with a bag limit of 2 salmon, no more than 1 of which may be a Chinook.
July 8:	Effective August 1. Inseason action #25 re-opened the <u>recreational</u> salmon fishery in the Neah Bay subarea (U.S./Canada border to Cape Alava, WA) east of the Bonilla-Tatoosh line; through September 30 with a bag limit of 2 salmon, Chinook retention prohibited.
July 13:	Effective: July 16. Inseason action #26 modified the <u>recreational</u> salmon fishery bag limit in the La Push subarea (Cape Alava, WA to the Queets River, WA), to 2 salmon, Chinook salmon retention prohibited.
July 13:	Effective: July 25. Inseason action #27 modified the <u>recreational</u> salmon fishery bag limit in the La Push subarea (Cape Alava, WA to the Queets River, WA) to 2 salmon, only 1 of which may be a Chinook.
July 13:	Effective July 16. Inseason action #28. For the <u>recreational</u> salmon fishery in the Columbia River subarea (Leadbetter Point, WA to Cape Falcon, OR), a portion of the area (North of 46° 15' N and East of 124° 08' 40" W) is closed.
July 19:	Effective July 22. Inseason action #30 modified the <u>recreational</u> salmon fishery bag limit in the Westport subarea (the Queets River, WA to Leadbetter Point, WA), to 2 salmon per day, where on Fridays and Saturdays Chinook retention is prohibited. Sunday through Thursday, the daily bag limit allows 1 of the 2 salmon to be a Chinook.
August 17:	Effective August 18. Inseason action #38. For the <u>recreational</u> salmon fishery in the Westport subarea (the Queets River, WA to Leadbetter Point, WA) possession of Chinook is illegal on days when retention of Chinook is prohibited in the Westport subarea .
August 17:	Effective August 23. Inseason action #39. For the <u>recreational</u> salmon fishery in the Westport subarea (the Queets River, WA to Leadbetter Point, WA) Chinook retention is prohibited.
August 22:	Effective August 23. Inseason action #40. For the <u>recreational</u> salmon fishery in the Columbia River subarea (Leadbetter Point, WA. to Cape Falcon, OR) Chinook retention is prohibited, and the portion of the subarea North of 46° 15' N and East of 124° 08' 40" W is re-opened to fishing for salmon.
August 25:	Effective August 27. Inseason action #43. For the <u>recreational</u> salmon fishery in the Westport subarea (the Queets River, WA to Leadbetter Point, WA.) the remaining coho quota is adjusted on an impact-neutral basis, from mark-selective to non-mark-selective. The adjusted non-mark-selective coho quota is 14,000.
August 26:	Effective August 27. Inseason action #44. Modified the <u>recreational</u> salmon fishery bag limit in the Westport subarea (the Queets River, WA to Leadbetter Point, WA.) to 2 salmon per day, Chinook retention is prohibited.

TABLE C-9. 2022 sequence of events in ocean salmon fishery management.^{a/} (Page 6 of 6)

ACTUAL RECREATIONAL SEASONS *(continued)*

August 30: Effective September 3. Inseason action #45 modifies the recreational fishery from **Cape Falcon, OR to Humbug Mt., OR**. The non-mark selective coho quota for September 3-30 is increased from 17,000 to 26,800 through an impact-neutral rollover of unused quota from the June - August mark-selective coho recreational fishery in the area from Cape Falcon, Oregon to the Oregon/California border.

September 3: The recreational fishery from **Cape Falcon, OR to Humbug Mt., OR** allows retention of non-marked coho in the daily bag limit; through September 30 or attainment of the adjusted 26,800 non-marked coho quota.

September 13: Effective September 14. Inseason action #46. For the recreational salmon fishery in the **NOF management area**, 600 Chinook from the **Neah Bay subarea** (U.S./Canada border to Cape Alava, WA) guideline are transferred to the **Columbia River subarea** (Leadbetter Point, WA to Cape Falcon, OR) on an impact neutral basis, which added 390 Chinook to the Columbia River subarea guideline. The adjusted Chinook subarea guidelines are 5,510 for the Neah Bay subarea, and 8,090 for Columbia River subarea. The adjusted NOF recreational fishery Chinook quota is 26,790.

^{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 ^{a/}	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	-	-	-	-	-	-
2006-2010	-	-	-	-	-	13.7	-	13.7	-	-	-	-	-	-
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	-	8.6	9.7	9.5	9.8	-	-	9.6	-	-	-	-	-	-
2019	-	-	8.3	9.1	9.2	-	-	9.2	-	-	-	-	-	-
2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<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	-	-	-	-	-	-
2006-2010	-	-	-	-	-	12.3	-	12.3	-	-	-	-	-	-
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	-	7.1	8.3	10.6	10.1	-	-	9.4	-	-	-	-	-	-
2019	-	-	7.9	9.2	8.9	-	-	8.5	-	-	-	-	-	-
2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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 ^{a/}	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	-	-	-	-	-	-
2006-2010	12.5	-	-	15.8	15.2	14.4	-	15.6	-	-	-	-	-	-
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	-	-	-	12.6	10.3	10.0	-	11.6	-	-	-	-	-	-
2019	-	-	8.2	8.7	10.7	-	-	9.1	-	-	-	-	-	-
2020	-	-	-	-	13.6	10.3	-	13.2	-	-	-	-	-	-
2021	-	-	-	-	11.4	10.7	-	11.4	-	-	-	-	-	-
2022 ^{b/}	-	-	-	10.4	11.1	-	-	10.7	-	-	-	-	-	-
<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	-	-	-	-	-	-
2006-2010	-	11.4	-	14.4	14.3	17.2	18.5	14.3	-	-	-	-	-	-
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	-	-	-	12.4	12.0	12.1	12.1	12.1	-	-	-	-	-	-
2019	-	8.4	8.7	10.3	10.5	12.5	12.8	9.7	-	-	-	-	-	-
2020	-	10.5	10.3	10.0	11.9	11.3	13.4	10.5	-	-	-	-	-	-
2021	-	-	11.1	11.2	12.8	13.3	14.5	11.5	-	-	-	-	-	-
2022 ^{b/}	-	-	-	10.5	11.6	13.8	14.2	11.1	-	-	-	-	-	-

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 ^{a/}	May	June	July	Aug.	Sept.	Season
	CHINOOK								COHO					
Monterey														
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	-	-	-	-	-	-
2006-2010	-	13.2	12.9	14.7	13.7	16.7	-	13.6	-	-	-	-	-	-
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	-	11.1	13.2	-	-	-	-	12.7	-	-	-	-	-	-
2019	-	9.1	9.9	10.9	-	-	-	9.6	-	-	-	-	-	-
2020	-	12.2	12.3	13.3	12.6	-	-	12.3	-	-	-	-	-	-
2021	-	10.8	13.3	14.6	13.4	-	-	11.1	-	-	-	-	-	-
2022 ^{b/}	-	10.3	10.7	12.5	12.9	-	-	10.6	-	-	-	-	-	-
Total Statewide^{a/}														
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	-	-	-	-	-	-
2006-2010	12.5	12.3	12.9	14.6	14.7	15.0	18.5	14.5	-	-	-	-	-	-
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	-	10.5	12.6	12.2	11.4	12.0	12.1	11.9	-	-	-	-	-	-
2019	-	9.0	9.1	10.3	10.4	12.5	12.8	9.6	-	-	-	-	-	-
2020	-	11.6	10.6	10.1	12.1	11.2	13.4	10.8	-	-	-	-	-	-
2021	-	10.8	11.2	11.7	11.8	12.7	14.5	11.4	-	-	-	-	-	-
2022 ^{b/}	-	10.3	10.7	10.6	11.5	13.8	14.2	10.8	-	-	-	-	-	-

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
2006-2010	-	13.4	11.9	12.7	13.2	13.1	13.6	16.9	14.9	14.0	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	-	-	11.0	11.6	12.3	11.6	11.6	13.1	12.3	-	11.8
2019	-	9.7	10.1	11.0	10.8	10.6	11.0	11.3	-	-	10.8
2020	-	13.0	13.3	13.4	14.8	15.1	14.3	12.6	-	-	14.1
2021	11.8	11.7	11.4	11.8	11.9	12.0	12.5	11.6	-	-	11.8
2022 ^{a/}	11.4	11.2	10.1	9.9	11.2	12.0	12.4	12.6	-	-	10.9
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
2006-2010	-	-	-	-	5.6	7.4	8.9	-	-	-	7.2
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	-	-	-	-	5.7	6.8	6.9	-	-	-	6.6
2019	-	-	-	-	4.6	5.1	5.1	-	-	-	4.7
2020	-	-	-	-	4.9	6.4	7.3	-	-	-	5.8
2021	-	-	-	-	5.6	5.9	5.7	-	-	-	5.8
2022 ^{a/}	-	-	-	-	4.4	5.7	5.5	-	-	-	4.8

a/ Preliminary.

TABLE D-3. Washington monthly troll Chinook and coho salmon average dressed weights (pounds).^{a/}

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 ^{b/}	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 ^{c/}	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
2006-2010	8.0	11.3	8.1	12.0	9.8	14.4	10.4	14.6	7.4	13.3	-	-	8.7	12.4
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
2019	7.3	10.7	11.2	12.1	9.4	13.8	10.8	14.5	10.3	14.4	-	-	9.7	13.2
2020	10.8	10.4	10.4	11.8	13.2	13.5	13.1	14.2	10.0	13.4	-	-	11.5	13.3
2021	7.9	9.5	6.6	11.5	7.3	12.7	10.2	13.8	8.7	12.3	-	-	8.1	12.0
2022	5.8	8.4	9.0	10.0	7.6	10.4	8.3	12.1	7.0	10.6	-	-	7.6	9.4
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
2006-2010	5.5	-	4.0	-	5.6	5.8	6.6	7.3	7.5	8.6	-	-	6.6	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
2019	-	-	-	-	5.0	5.0	4.9	5.6	5.8	6.2	-	-	5.1	5.6
2020	-	-	-	-	5.8	5.2	5.9	6.5	6.8	9.0	-	-	6.2	6.5
2021	-	-	-	-	4.4	5.3	5.2	6.1	5.7	6.6	-	-	5.1	6.2
2022	-	-	-	-	4.2	4.0	4.6	5.1	5.3	6.6	-	-	5.9	5.9

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

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.^{a/}

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 (2022 dollars)
1960	6,221	3,339	1,365	-	2,446	18,770
1961-1965	8,463	4,536	1,713	-	2,652	19,629
1966-1970	7,316	4,350	2,101	-	2,084	13,483
1971-1975	7,977	6,713	2,759	-	2,409	12,032
1976-1980	7,052	13,318	4,315	-	3,102	10,980
1981-1985	4,799	11,499	3,243	4,658	3,542	8,921
1986-1990	8,360	21,641	2,449	3,523	8,735	18,932
1991-1995	3,523	7,478	1,244	2,754	6,149	11,307
1996-2000	4,037	6,813	783	1,940	8,820	14,833
2001	2,409	4,773	689	1,650	6,927	11,078
2002	5,008	7,776	708	1,586	10,982	17,293
2003	6,392	12,181	584	1,521	20,858	32,208
2004	6,230	17,895	741	1,511	24,150	36,317
2005	4,347	12,913	680	1,477	18,990	27,689
2006	1,043	5,350	477	1,408	11,216	15,864
2007	1,525	7,902	601	1,390	13,149	18,109
2008	-	-	-	1,306	-	-
2009	-	-	-	1,281	-	-
2010	228	1,246	215	1,239	5,794	7,687
2011	992	5,133	464	1,188	11,062	14,378
2012	2,530	13,521	616	1,172	21,950	28,006
2013	3,793	23,632	671	1,163	35,219	44,162
2014	2,253	12,521	653	1,135	19,175	23,603
2015	1,188	8,347	587	1,131	14,219	17,329
2016	615	5,312	438	1,105	12,129	14,635
2017	497	4,925	400	1,083	12,312	14,580
2018	930	7,932	456	1,072	17,396	20,115
2019	2,604	17,209	571	1,053	30,138	34,235
2020	1,928	14,408	473	1,032	30,461	34,156
2021	2,294	18,486	486	1,026	38,038	40,845
2022 ^{b/}	2,283	17,131	464	1,006	36,921	36,921

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.^{a/}

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 (2022 dollars)
1974	-	7,937	2,253	-	3,523	16,464
1975	-	5,808	2,304	-	2,521	10,782
1976-1980 ^{b/}	6,679	8,185	3,875	4,314	2,112	6,379
1981-1985 ^{c/d/}	2,969	5,774	2,050	2,993	2,817	6,589
1986-1990	5,688	6,641	1,557	2,528	4,265	8,552
1991-1995 ^{e/}	1,265	3,294	476	1,465	6,920	12,293
1996-2000	1,428	3,063	399	1,062	7,677	12,553
2001 ^{f/}	2,949	4,721	449	1,175	10,515	16,815
2002 ^{f/}	3,498	5,391	468	1,175	11,519	18,139
2003 ^{f/}	3,681	7,222	494	1,178	14,620	22,576
2004 ^{f/}	2,920	9,919	595	1,181	16,670	25,069
2005 ^{f/}	2,691	8,503	565	1,168	15,050	21,944
2006 ^{f/}	499	2,701	357	1,127	7,565	10,700
2007	565	2,822	436	1,009	6,473	8,915
2008	70	494	138	1,092	3,579	4,836
2009	146	345	225	1,062	1,531	2,056
2010	513	2,791	370	1,021	7,543	10,007
2011	404	2,401	304	1,003	7,899	10,267
2012	745	4,271	369	990	11,576	14,769
2013	1,293	7,611	399	977	19,075	23,919
2014	2,639	14,760	493	977	29,938	36,851
2015	1,200	7,334	488	980	15,028	18,315
2016	518	4,261	313	972	13,613	16,426
2017	267	2,129	176	956	12,099	14,327
2018	289	2,442	230	945	10,618	12,278
2019	320	2,103	218	925	9,645	10,957
2020	183	1,524	174	907	8,756	9,818
2021	232	2,249	187	883	12,026	12,914
2022 ^{g/}	375	3,201	180	853	17,784	17,784

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

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

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.^{a/}

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 (2022 dollars)
1978	4,746	10,025	3,041	3,291	3,297	11,756
1979	5,262	15,091	2,778	3,068	5,432	17,888
1980	3,398	7,114	2,626	2,797	2,709	8,182
1981-1985 ^{b/c/}	1,433	3,225	1,675	2,233	1,696	4,365
1986-1990	752	1,670	913	1,349	1,997	4,295
1991-1995 ^{d/e/f/g/}	345	834	397	586	1,607	3,008
1996-2000 ^{h/i/j/}	126	197	54	270	4,188	7,025
2001	290	383	57	169	6,718	10,743
2002	679	758	75	165	10,102	15,907
2003	875	991	82	163	12,087	18,664
2004	594	1,185	86	160	13,779	20,720
2005	481	1,290	91	158	14,170	20,662
2006	231	1,045	84	158	12,440	17,596
2007	217	953	79	158	12,062	16,612
2008	114	709	86	158	8,244	11,140
2009	291	1,169	97	158	12,051	16,181
2010	537	3,115	116	158	26,856	35,631
2011	339	1,687	112	158	15,066	19,582
2012	452	2,358	105	158	22,457	28,652
2013	481	2,838	108	157	26,275	32,946
2014	551	2,709	116	156	23,351	28,743
2015	640	3,448	122	153	28,266	34,449
2016	201	1,606	107	151	15,009	18,110
2017	343	2,919	108	155	27,031	32,008
2018	263	2,350	108	155	21,759	25,161
2019	322	1,925	88	155	21,878	24,852
2020	168	1,173	60	153	19,555	22,213
2021	233	2,043	76	153	26,882	28,866
2022	291	1,849	79	152	23,402	23,402

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

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.^{a/} (Page 1 of 5)

Year	Vessels			Catch ^{c/}		
	Length Category (feet)	Number ^{b/}	Percent of Total	Average Pounds Per Vessel	Total (pounds)	Percent of Total
2022 ^{d/}	<20	28	6%	1,148	32,153	1%
	21-25	106	23%	1,810	191,865	8%
	26-30	78	17%	2,391	186,465	8%
	31-35	79	17%	5,017	396,371	17%
	36-40	65	14%	7,436	483,344	21%
	41-45	63	14%	8,036	506,243	22%
	46-50	29	6%	12,041	349,177	15%
	51-55	8	2%	10,123	80,980	4%
	>56	8	2%	7,502	60,017	3%
	TOTAL	464		4,928	2,286,615	
2021	<20	27	6%	862	23,280	1%
	21-25	98	20%	1,355	132,811	6%
	26-30	81	17%	2,062	166,983	7%
	31-35	93	19%	4,447	413,583	18%
	36-40	69	14%	6,123	422,475	18%
	41-45	67	14%	9,088	608,896	26%
	46-50	34	7%	11,064	376,163	16%
	51-55	11	2%	9,190	101,085	4%
	>56	6	1%	10,053	60,316	3%
	TOTAL	486		4,744	2,305,592	
2020	<20	28	6%	806	22,576	1%
	21-25	101	21%	1,400	141,397	7%
	26-30	78	16%	2,084	162,544	8%
	31-35	92	19%	3,934	361,968	19%
	36-40	72	15%	5,288	380,705	20%
	41-45	60	13%	8,586	515,168	27%
	46-50	26	5%	8,877	230,810	12%
	51-55	10	2%	8,270	82,697	4%
	>56	6	1%	4,943	29,658	2%
	TOTAL	473		4,075	1,927,523	
2019	<20	33	6%	1,328	43,810	2%
	21-25	117	20%	2,335	273,231	10%
	26-30	90	16%	2,388	214,925	8%
	31-35	108	19%	5,125	553,545	21%
	36-40	91	16%	5,996	545,629	21%
	41-45	77	13%	7,606	585,693	22%
	46-50	38	7%	7,319	278,136	11%
	51-55	10	2%	7,425	74,247	3%
	>56	7	1%	5,015	35,102	1%
	TOTAL	571		4,561	2,604,318	
2018	<20	25	5%	543	13,572	1%
	21-25	100	22%	913	91,294	10%
	26-30	74	16%	1,538	113,826	12%
	31-35	99	22%	1,804	178,642	19%
	36-40	70	15%	3,210	224,704	24%
	41-45	56	12%	4,464	249,986	27%
	46-50	24	5%	1,817	43,610	5%
	51-55	8	2%	1,832	14,652	2%
	>56	e/	e/	e/	e/	e/
	TOTAL	456		2,040	930,286	

TABLE D-7. California salmon troll boat-size catch statistics in pounds of dressed salmon.^{a/} (Page 2 of 5)

Year	Vessels			Catch ^{c/}		
	Length	Number ^{b/}	Percent of	Average	Total	Percent of
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	
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	

TABLE D-7. California salmon troll boat-size catch statistics in pounds of dressed salmon.^{a/} (Page 3 of 5)

Year	Vessels			Catch ^{c/}		
	Length Category (feet)	Number ^{b/}	Percent of Total	Average Pounds Per Vessel	Total (pounds)	Percent of Total
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	-	-	-	-	-
2008	<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.^{a/} (Page 4 of 5)

Year	Vessels			Catch ^{c/}		
	Length Category (feet)	Number ^{b/}	Percent of Total	Average Pounds Per Vessel	Total (pounds)	Percent of 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	
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	

TABLE D-7. California salmon troll boat-size catch statistics in pounds of dressed salmon.^{a/} (Page 5 of 5)

Year	Vessels			Catch ^{c/}		
	Length Category (feet)	Number ^{b/}	Percent of Total	Average Pounds Per Vessel	Total (pounds)	Percent of Total
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	

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 ^{a/}	Percent of Total	Average Per Boat (pounds)	Total (pounds)	Percent of Total
2022 ^{b/}	<20	-	-	-	-	-
	20-29	50	28%	910	45,496	12%
	30-39	47	26%	2,316	108,845	29%
	40-49	65	36%	2,774	180,297	48%
	>50	18	10%	2,242	40,356	11%
	TOTAL	180		2,083	374,994	
2021	<20	-	-	-	-	-
	20-29	56	30%	653	36,545	16%
	30-39	49	26%	1,501	73,537	32%
	40-49	67	36%	1,478	99,020	43%
	>50	14	8%	1,516	21,229	9%
	TOTAL	186		1,238	230,331	
2020	<20	-	-	-	-	-
	20-29	45	26%	683	30,718	17%
	30-39	52	30%	1,148	59,690	33%
	40-49	61	35%	1,321	80,607	44%
	>50	16	9%	679	10,856	6%
	TOTAL	174		1,045	181,871	
2019	<20	4	2%	399	1,595	0%
	20-29	50	23%	744	37,223	12%
	30-39	62	28%	1,753	108,706	34%
	40-49	82	38%	1,803	147,805	46%
	>50	20	9%	1,229	24,575	8%
	TOTAL	218		1,467	319,904	
2018	<20	6	3%	-	1,559	1%
	20-29	54	24%	488	26,370	9%
	30-39	71	31%	1,521	108,017	37%
	40-49	81	35%	1,637	134,258	47%
	>50	17	7%	1,059	17,999	6%
	TOTAL	229		1,259	288,203	
2017	<20	-	-	-	-	-
	20-29	40	23%	615	24,605	9%
	30-39	55	31%	1,736	95,463	36%
	40-49	69	39%	1,997	137,825	52%
	>50	12	7%	748	8,981	3%
	TOTAL	176		1,516	266,874	

TABLE D-8. Oregon salmon troll boat-size catch statistics in pounds of dressed salmon. (Page 2 of 5)

Year	Length	Vessels		Catch		
		Number ^{a/}	Percent of	Average Per	Total	Percent of
2016	<20	-	-	-	-	-
	20-29	75	24%	670	50,243	10%
	30-39	93	30%	1,603	149,106	29%
	40-49	120	38%	2,348	281,718	54%
	>50	25	8%	1,471	36,768	7%
	TOTAL	313		1,654	517,835	
2015	<20	4	1%	1,066	4,265	3%
	20-29	103	21%	1,076	110,839	9%
	30-39	153	31%	2,148	328,697	27%
	40-49	181	37%	3,348	606,043	50%
	>50	51	10%	2,955	150,723	13%
	TOTAL	492		2,440	1,200,567	
2014	<20	3	1%	1,201	3,603	1%
	20-29	115	23%	2,486	285,928	11%
	30-39	153	31%	5,228	799,826	30%
	40-49	177	36%	7,225	1,278,861	48%
	>50	46	9%	5,858	269,446	10%
	TOTAL	494		5,339	2,637,664	
2013	<20	4	1%	1,215	4,858	0%
	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	
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	1%
	20-29	80	26%	602	48,146	12%
	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	

TABLE D-8. Oregon salmon troll boat-size catch statistics in pounds of dressed salmon. (Page 3 of 5)

Year	Vessels			Catch		
	Length	Number ^{a/}	Percent of	Average Per	Total	Percent of
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	
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	

TABLE D-8. Oregon salmon troll boat-size catch statistics in pounds of dressed salmon. (Page 4 of 5)

Year	Vessels			Catch		
	Length	Number ^{a/}	Percent of	Average Per	Total	Percent of
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	
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	

TABLE D-8. Oregon salmon troll boat-size catch statistics in pounds of dressed salmon. (Page 5 of 5)

Year	Vessels			Catch		
	Length	Number ^{a/}	Percent of	Average Per	Total	Percent of
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	
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	

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.^{a/b/} (Page 1 of 3)

Year	Vessels			Catch		
	Length Category (feet)	Number ^{c/}	Percent of Total	Average Pounds Per	Total (pounds)	Percent of Total
2022	<25	e/	e/	e/	e/	e/
	25-36	21	27%	2,668	56,029	19%
	>36	58	73%	4,049	234,835	81%
	Unknown	e/	e/	e/	e/	e/
	TOTAL	79		3,682	290,864	
2021	<25	3	4%	52	155	0%
	25-36	19	25%	2,807	53,340	21%
	>36	54	71%	3,634	196,253	79%
	Unknown	0	0%	0	0	0%
	TOTAL	76		3,286	249,748	
2020	<25	e/	e/	e/	e/	e/
	25-36	15	25%	1,954	29,311	17%
	>36	42	70%	3,274	137,525	82%
	Unknown	3	5%	485	1,454	1%
	TOTAL	60		2,805	168,290	
2019	<25	4	5%	253	1,012	0%
	25-36	22	25%	2,906	63,935	20%
	>36	62	70%	4,165	258,243	80%
	Unknown	0	0%	-	-	0%
	TOTAL	88		3,673	323,190	
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%	3,315	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%	5,273	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	

TABLE D-9. Washington non-Indian salmon troll boat-size catch statistics in pounds of dressed salmon.^{a/b/} (Page 2 of 3)

Year	Vessels			Catch		
	Length Category (feet)	Number ^{c/}	Percent of Total	Average Pounds Per Vessel	Total (pounds)	Percent of Total
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	
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	

TABLE D-9. Washington non-Indian salmon troll boat-size catch statistics in pounds of dressed salmon.^{a/b/} (Page 3 of 3)

Year	Vessels			Catch		
	Length Category (feet)	Number ^{c/}	Percent of Total	Average Pounds Per Vessel	Total (pounds)	Percent of Total
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	
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	

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

b/ Includes 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 2022 California salmon landings (in pounds of dressed salmon) and exvessel values by vessel size categories and port from Crescent City to Morro Bay south.

Port	Length Category (feet)	Number of Deliveries	Total Dressed Pounds Landed	Total Exvessel Value (dollars)	Percent Exvessel Value Landed in Port
Crescent City	<26	-	-	-	-
	26-36	-	-	-	-
	>36	9	1,919	15,834	100%
	TOTAL	9	1,919	15,834	
Eureka	<26	-	-	-	-
	26-36	3	2,366	13,305	12%
	>36	13	13,041	93,368	88%
	TOTAL	16	15,407	106,673	
Shelter Cove	<26	17	1,395	13,006	76%
	26-36	2	209	1491	9%
	>36	1	372	2,604	15%
	TOTAL	20	1,976	17,101	
Fort Bragg ^{a/}	<26	19	3,011	24,663	2%
	26-36	64	35,219	260,371	19%
	>36	113	175,230	1,084,861	79%
	TOTAL	196	213,460	1,369,895	
Bodega Bay	<26	206	61,820	434,903	10%
	26-36	338	199,176	1,318,988	30%
	>36	368	414,109	2,715,625	61%
	TOTAL	912	675,105	4,469,516	
San Francisco	<26	148	17,397	161,982	5%
	26-36	233	96,840	761,621	25%
	>36	298	284,856	2,112,788	70%
	TOTAL	679	399,093	3,036,391	
Half Moon Bay	<26	3	551	3,785	0%
	26-36	176	84,490	728,207	20%
	>36	395	363,723	2,923,425	80%
	TOTAL	574	448,764	3,655,417	
Santa Cruz	<26	362	47,747	412,813	17%
	26-36	250	80,308	703,397	29%
	>36	177	158,164	1,331,255	54%
	TOTAL	789	286,219	2,447,465	
Moss Landing	<26	423	49,568	415,399	36%
	26-36	325	44,602	358,263	31%
	>36	131	45,885	366,349	32%
	TOTAL	879	140,055	1,140,011	
Monterey	<26	309	38,876	326,726	46%
	26-36	137	29,147	246,140	35%
	>36	54	14,533	131,557	19%
	TOTAL	500	82,556	704,423	
Morro Bay south	<26	33	3,653	37,328	22%
	26-36	53	10,480	96,834	57%
	>36	16	3,909	34,509	20%
	TOTAL	102	18,042	168,671	

a/ Fort Bragg includes minor landings made in Mendocino County areas.

TABLE D-11. Preliminary 2022 Washington non-Indian troll salmon landings (in pounds of dressed salmon) and exvessel value by vessel size category and port area.^{a/b/}

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 ^{d/}	<25	c/	c/	c/	c/	c/
	25-36	3	10	1,895	7,892	4%
	>36	16	192	34,019	205,493	96%
	Unknown	-	-	-	-	-
	TOTAL	19	202	35,914	213,385	
La Push ^{d/}	<25	-	-	-	-	-
	25-36	c/	c/	c/	c/	c/
	>36	6	127	29,750	140,032	100%
	Unknown	-	-	-	-	-
	TOTAL	6	127	29,750	140,032	
Westport	<25	c/	c/	c/	c/	c/
	25-36	17	254	48,059	309,946	22%
	>36	39	521	146,596	995,936	69%
	Unknown	3	83	17,530	128,316	9%
	TOTAL	59	858	212,185	1,434,198	
Ilwaco	<25	-	-	-	-	-
	25-36	c/	c/	c/	c/	c/
	>36	12	61	13,015	60,782	100%
	Unknown	-	-	-	-	-
	TOTAL	12	61	13,015	60,782	
Puget Sound	<25	-	-	-	-	-
	25-36	-	-	-	-	-
	>36	-	-	-	-	-
	Unknown	-	-	-	-	-
	TOTAL	0	0	0	0	-

a/ Includes pink salmon landings.

b/ Total pounds and exvessel values reported in this table may be less than are reported in other tables of the Review.

c/ Fewer than three vessels. Values combined with next category to preserve confidentiality.

TABLE D-12. California number of vessels landing 50 percent and 90 percent of total pounds of salmon troll catch by year.

Year or Ave.	50 Percent of Pounds Landed			90 Percent of Pounds Landed	
	Total Vessels	Number of Vessels	Percent of Fleet	Number of Vessels	Percent of Fleet
1978-1980	4,750	449	9.4%	1,799	37.9%
1981-1985	3,243	328	10.1%	1,257	38.8%
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	456	56	12.3%	219	48.0%
2019	571	89	15.6%	286	50.1%
2020	473	65	13.7%	212	44.8%
2021	486	62	12.8%	218	44.9%
2022 ^{a/}	464	67	14.4%	224	48.3%

a/ Preliminary.

TABLE D-13. Oregon number of vessels landing 50 percent and 90 percent of total pounds of salmon troll catch by year.^{a/}

Year or Ave.	50% of Pounds Landed			90% of Pounds Landed	
	Total Vessels	Number of Vessels	Percent of Fleet	Number of Vessels	Percent of Fleet
1974-1975	1,947	328	16.8%	1,043	53.6%
1976-1980	3,211	434	13.5%	1,493	46.5%
1981-1985	2,493	252	10.1%	902	36.2%
1986	2,252	239	10.6%	851	37.8%
1987	2,079	288	13.9%	916	44.1%
1988	2,033	331	16.3%	1,052	51.7%
1989	1,903	293	15.4%	946	49.7%
1990	1,519	211	13.9%	689	45.4%
1991	1,200	201	16.8%	641	53.4%
1992	650	87	13.4%	288	44.3%
1993	612	67	10.9%	236	38.6%
1994	371	43	11.6%	152	41.0%
1995	475	52	10.9%	184	38.7%
1996	457	62	13.6%	202	44.2%
1997	434	60	13.8%	185	42.6%
1998	374	52	13.9%	165	44.1%
1999	329	47	14.3%	152	46.2%
2000	400	68	17.0%	197	49.3%
2001	450	69	15.3%	222	49.3%
2002	468	76	16.2%	231	49.4%
2003	495	83	16.8%	254	51.3%
2004	595	110	18.5%	319	53.6%
2005	566	103	18.2%	311	54.9%
2006	358	67	18.7%	201	56.1%
2007	438	69	15.8%	233	53.2%
2008	141	25	17.7%	75	53.2%
2009	225	27	12.0%	105	46.7%
2010	370	54	14.6%	175	47.3%
2011	304	39	12.8%	136	44.7%
2012	369	54	14.6%	183	49.6%
2013	399	67	16.8%	205	51.4%
2014	494	88	17.8%	267	54.0%
2015	487	75	15.4%	250	51.3%
2016	312	36	11.5%	134	42.9%
2017	176	22	12.5%	81	46.0%
2018	230	27	11.7%	104	45.2%
2019	218	31	14.2%	105	48.2%
2020	174	20	11.5%	72	41.4%
2021	187	18	9.6%	71	38.0%
2022 ^{b/}	180	26	14.4%	80	44.4%

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,

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.^{a/}

Year or Ave.	50% of Fish Landed			90% of Fish Landed	
	Total Vessels	Number of Vessels	Percent of Fleet	Number of Vessels	Percent of Fleet
1978-1980	2,815	227	8.1%	956	34.0%
1981-1985	1,676	126	7.5%	509	30.4%
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 ^{b/}	<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%
2019	88	16	18.2%	47	53.4%
2020	60	11	18.3%	32	53.3%
2021	76	16	21.1%	46	60.5%
2022	79	17	21.5%	49	62.0%

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 2022 California, Oregon, and Washington troll fleet by home state and salmon landings and exvessel value.^{a/}

Home State	Number of Vessels	Percent	Landings (Pounds)	Percent	Total Value (Dollars)	Percent
CALIFORNIA						
California	442	95%	2,123,166	93%	15,931,341	93%
Oregon	10	2%	86,067	4%	644,106	4%
Washington	5	1%	45,971	2%	351,876	2%
Unknown/Other	7	2%	31,411	1%	237,657	1%
TOTAL	464		2,286,615		17,164,980	
OREGON						
Oregon	150	83%	301,305	80%	2,611,542	82%
California	6	3%	17,705	5%	134,562	4%
Washington	20	11%	48,935	13%	387,825	12%
Unknown/Other	4	2%	7,049	2%	67,313	2%
TOTAL	180		374,994		3,201,242	
WASHINGTON						
Washington	65	82%	234,661	81%	1,483,705	80%
Oregon	9	11%	43,618	15%	284,717	15%
California	4	5%	12,397	4%	79,599	4%
Unknown/Other	1	1%	188	0%	376	0%
TOTAL	79		290,864		1,848,397	

a/ Pink salmon included in Oregon and Washington.

TABLE D-16. Vessels landing salmon in California by vessel length and skipper's state of residence.

Year or Ave.	Home State ^{a/}															Grand Total ^{c/}
	California (length)				Oregon (length)				Washington (length)				Total (length) ^{b/}			
	<26	26-36	>36	Subtotal	<26	26-36	>36	Subtotal	<26	26-36	>36	Subtotal	<26	26-36	>36	
81-85 ^{d/}	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	124	164	145	433	0	5	5	10	0	1	8	9	125	173	158	456
2019	147	188	199	534	1	5	12	18	0	3	9	12	150	198	223	571
2020	127	163	160	450	1	1	6	8	0	3	6	9	129	170	174	473
2021	124	166	168	459	1	1	8	10	0	4	7	11	125	174	186	486
2022 ^{e/}	132	149	161	442	1	2	7	10	0	3	2	5	134	157	173	464

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 ≥36.

e/ Preliminary.

TABLE D-17. Percentages of vessels landing troll salmon in Oregon by license holder's state of residence.

Year or Ave.	Oregon	California	Washington	Other/Unknown
1977-1980	82.6%	7.0%	9.7%	0.8%
1981-1985	84.1%	4.9%	9.8%	1.2%
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	74.4%	8.0%	12.5%	5.1%
2018	77.4%	9.1%	10.0%	3.5%
2019	77.7%	8.2%	10.0%	4.1%
2020	82.3%	4.6%	11.4%	1.7%
2021	84.4%	4.3%	9.7%	1.6%
2022 ^{a/}	83.5%	3.3%	11.0%	2.2%

a/ Preliminary.

TABLE D-18. Percentages of vessels landing non-Indian troll salmon in Washington by license holder's state of residence.^{a/}

Year or Ave.	Washington	Oregon	California	Alaska	Other/Unknown
1978-1980	91.8%	4.0%	0.3%	0.3%	3.6%
1981-1985	93.1%	3.0%	0.3%	0.1%	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 ^{b/}	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%
2019	85.2%	11.4%	1.1%	0.0%	2.3%
2020	83.3%	10.0%	0.0%	0.0%	6.7%
2021	82.9%	10.5%	5.3%	0.0%	1.3%
2022	82.3%	11.4%	5.1%	0.0%	1.3%

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 ^{a/}	Port Area					Total
		Monterey	San Francisco	Fort Bragg	Eureka	Crescent City	
2022 ^{b/}	Active	5	51	2	4	0	62
	Casual	16	31	6	9	2	64
	TOTAL	21	82	8	13	2	126
2021	Active	9	39	5	2	0	55
	Casual	12	36	3	9	2	62
	TOTAL	21	75	8	11	2	117
2020	Active	1	36	1	2	0	40
	Casual	9	40	7	10	1	67
	TOTAL	10	76	8	12	1	107
2019	Active	8	39	6	6	0	59
	Casual	7	35	4	8	2	56
	TOTAL	15	74	10	14	2	115
2018	Active	0	53	8	4	0	65
	Casual	11	34	5	10	2	62
	TOTAL	11	87	13	14	2	127
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

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 ^{a/}	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 ^{b/}	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	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
2019	71	42	9	20
2020	NA	NA	NA	NA
2021	NA	NA	NA	NA
2022	NA	NA	NA	NA

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 reinstituted 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.

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
1975-1980 ^{a/}	494	427	52	16
1981-1985	378	353	25	17
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	142	139	3	0
2019	142	139	3	0
2020	142	139	3	0
2021	142	139	3	0
2022 ^{b/}	142	139	3	0

a/ 1977 - First year moratorium in effect.

b/ Preliminary.

TABLE D-22. Price index.^{a/}

Year	Price Index
1981	36.2
1982	38.5
1983	40.0
1984	41.4
1985	42.7
1986	43.6
1987	44.7
1988	46.3
1989	48.1
1990	49.9
1991	51.6
1992	52.7
1993	54.0
1994	55.1
1995	56.3
1996	57.3
1997	58.3
1998	59.0
1999	59.8
2000	61.2
2001	62.5
2002	63.5
2003	64.8
2004	66.5
2005	68.6
2006	70.7
2007	72.6
2008	74.0
2009	74.5
2010	75.4
2011	76.9
2012	78.4
2013	79.8
2014	81.2
2015	82.1
2016	82.9
2017	84.5
2018	86.5
2019	88.0
2020	89.2
2021	93.1
2022	100.0

a/ Based on gross domestic product implicit price deflator calculated from NIPA Tables 1.1.5 and 1.1.6.
<https://apps.bea.gov/iTable/iTable.cfm>.