## SALMON FISHERY UPDATE

A summary of the management events for the 2004 salmon season (updated through August 23) is contained in Attachment 1. Through August 23, there have been 11 inseason management conferences to adjust fisheries. Numerous routine calls were made to adjust landing limits and close seasons as quotas were reached in the non-Indian commercial fisheries north of Cape Falcon and in the Oregon Klamath Management Zone. Action was taken to trade 5,000 chinook from the recreational fishery to the commercial fishery in exchange for 20,000 marked coho north of Cape Falcon. Inseason action was also taken to establish non-mark-selective coho fisheries for the Westport subarea recreational fishery and the non-Indian commercial fishery in the Westport and Columbia River subareas. This is the first time since mark-selective fisheries were established in Council waters that non-Indian fisheries have been allowed to retain unmarked coho.

Mr. Dell Simmons, Chair of the Salmon Technical Team (STT), will provide detailed effort and harvest data for salmon fisheries through the end of August in his report to the Council (Agendum D.1.a, Supplemental STT Report).

## **Council Task:**

## Discuss issues relevant to inseason management of salmon fisheries.

## Reference Materials:

- 1. Agendum D.1, Attachment 1: Table D.1-1. Sequence of Events in Ocean Salmon Fishery Management through August 23, 2004.
- 2. Agendum D.1.a, Supplemental STT Report: Status Report of the 2004 Ocean Salmon Fisheries off Washington, Oregon, and California.

## Agenda Order:

a. Salmon Technical Team Report

## **Dell Simmons**

- b. Reports and Comments of Advisory Bodies
- c. Public Comment
- d. Council Discussion

PFMC 08/28/04

#### TABLE D.1-1. Sequence of events in ocean salmon fishery management through August 23, 2004.<sup>a/</sup> (Page 1 of 7)

#### **GENERAL MANAGEMENT ACTIONS AND INSEASON CONFERENCES**

- Mar. 5 National Marine Fisheries Service (NMFS) provides the Council with a letter outlining the 2004 management guidance for stocks listed under the Endangered Species Act (ESA).
- Mar. 12 Council adopts three troll and three recreational ocean salmon fishery management options for public review.
- Mar. 17 North of Cape Falcon Salmon Forum meets in Lynwood, Washington to initiate consideration of recommendations for treaty Indian and non-Indian salmon management options.
- Mar. 29-30 Council holds public hearings on proposed 2004 management options in three locations within the three Pacific Coast states.
- Mar. 30 North of Cape Falcon Salmon Forum meets in Seattle, Washington to further consider recommendations for treaty Indian and non-Indian salmon management options.
- Apr. 8 Council adopts final ocean salmon fishery management recommendations for approval and implementation by the U.S. Secretary of Commerce. The proposed measures comply with the salmon fishery management plan (FMP) and the current biological opinions for listed species. An emergency rule is not required for implementation.
- May 5 Ocean salmon seasons implemented as recommended by the Council and published in the *Federal Register* on May 5 (69 FR 25026).

NMFS inseason conference number one results in closure of the U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon-except-coho fishery effective midnight, May 5, 2004 as the 29,800 chinook quota was approached, and the preseason intent to reserve at least 500 chinook for the June 26-30 opening was in jeopardy.

- May 14 NMFS inseason conference number two results in reopening of the U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon-except-coho fishery effective midnight, May 15, 2004 through May 18, 2004 with a 125 chinook per vessel landing limit for the five-day open period.
- May 21 NMFS inseason conference number three results in reopening of the U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon-except-coho fishery effective midnight, May 24, 2004 through May 26, 2004 with a 70 chinook per vessel landing limit for the three-day open period.
- June 18 NMFS inseason conference number four results in closure of the Humbug Mt., Oregon to Oregon/California border, non-Indian commercial all-salmon-except-coho fishery effective midnight, June 19, 2004 as the 2,600 chinook quota was reached.
- July 2 NMFS inseason conference number five results in changing the landing and possession limit in the U.S./Canada border to Cape Falcon, non-Indian commercial salmon fishery from 125 chinook to 100 chinook for the first two open periods, and changing the second open period from July 15-19 to July 16-19.
- July 14 NMFS inseason conference number six results in changing the landing and possession limit in the U.S./Canada border to Cape Falcon, non-Indian commercial salmon fishery from 100 chinook to 125 chinook for the July 16-19 period.
- July 16 NMFS inseason conference number seven results in changing Queets River to Cape Falcon recreational fishery bag limit to allow retention of two chinook and open seven days per week beginning July 23.
- July 19 NMFS inseason conference number eight results in closure of the Humbug Mt., Oregon to Oregon/California border, non-Indian commercial all-salmon-except-coho fishery effective midnight, July 19, 2004 as the 1,600 chinook quota was reached.

#### GENERAL MANAGEMENT ACTIONS AND INSEASON CONFERENCES (continued)

- Aug. 3 NMFS inseason conference number nine results in closure of the Humbug Mt., Oregon to Oregon/California border, non-Indian commercial all-salmon-except-coho fishery effective midnight, August 4, 2004 as the 2,500 chinook quota was reached.
- Aug. 10 NMFS inseason conference number ten results in two actions:
  - Reducing the coho quota in the Queets River to Leadbetter point recreational fishery from 74,900 to 34,900 and increasing the coho quota in the U.S./Canada border to Cape Alava recreational fishery from 21,050 to 27,650 in order to extend the latter fishery into September and maintain impacts on Interior Fraser coho at or below preseason expectations.
  - 2. The Cape Alava to Cape Falcon all-salmon recreational fishery chinook minimum size limit is reduced from 26 inches total length to 24 inches total length, and the bag limit in the Cape Alava to Queets River subarea is modified to allow retention of two chinook.

Aug. 18 NMFS inseason conference number eleven results in four actions:

- Trading 5,000 chinook from the recreational fishery north of Cape Falcon to the non-Indian commercial fishery north of Cape Falcon for 20,000 adipose fin clipped coho from the non-Indian commercial fishery north of Cape Falcon to the Queets River to Leadbetter Point subarea in the recreational fishery north of Cape Falcon. This would allow the commercial fishery to continue through the scheduled closure of September 15.
- 2. Allowing retention of unmarked coho in the Queets River to Cape Falcon non-Indian commercial fishery beginning September 1 with a landing limit of 500 coho per five-day open period, and restricting the fishery to a subarea quota of 10,000 non-mark-selective coho. Unmarked coho must be landed in the area (or in Garibaldi as per the preseason regulations) and may not be possessed in areas north of the Queets River.
- 3. Allowing retention of unmarked coho in the Queets River to Leadbetter Point recreational fishery beginning August 29 under a 10,000 coho subarea quota. Possession and landing of unmarked coho was allowed in the Queets River to Leadbetter Point subarea only.
- 4. The September Humbug, Mt., Oregon to Oregon/California border, non-Indian commercial allsalmon-except-coho fishery was restricted to open dates of September 1-3, 8-10, and 15-30 with a 50 fish per day possession and landing limit.

#### NON-INDIAN COMMERCIAL TROLL SEASONS

Mar. 15 Cape Falcon to Florence south jetty, non-Indian commercial all-salmon-except-coho fishery opens through June 30. The fishery reopens July 7 through 12; July 19 through 27; August 1 through 14; August 19 through 24; and September 1 through October 31.

Florence south jetty to Humbug Mt., non-Indian commercial all-salmon-except-coho fishery opens through July 6. The fishery reopens July 13 through 18; July 26 through 29; August 1 through 8; August 15 through 22; August 26 through 29; and September 1 through October 31.

Humbug Mt. to Oregon/California border, non-Indian commercial all-salmon-except-coho fishery opens through May 31. The fishery is scheduled to reopen June 1 through the earlier of June 30 or a 2,600 chinook quota; July 1 through the earlier of July 31 or a 1,600 chinook quota; August 1 through the earlier of August 29 or a 2,500 chinook quota; and September 1 through the earlier of September 30 or a 3,000 chinook quota.

May 1 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon-except-coho fishery opens through the earlier of June 30 or a 29,800 chinook quota.

Pt. Arena to U.S./Mexico border, non-Indian commercial all-salmon-except-coho fishery opens through August 29. The fishery reopens September 1 through September 30.

- May 5 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon-except-coho fishery closes to ensure the 29,800 chinook quota was not exceeded and at least 500 chinook remain on the quota for the June 26-30 opener.
- May 15-18 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon-except-coho fishery reopens with a 125 chinook per vessel landing limit for the five-day open period.

#### TABLE D.1-1. Sequence of events in ocean salmon fishery management through August 23, 2004.<sup>a/</sup> (Page 3 of 7)

#### NON-INDIAN COMMERCIAL TROLL SEASONS (continued)

- May 24-26 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon-except-coho fishery reopens with a 70 chinook per vessel landing limit for the three-day open period.
- May 31 Humbug Mt. to Oregon/California border, non-Indian commercial all-salmon-except-coho fishery closes.
- June 1 Humbug Mt. to Oregon/California border, non-Indian commercial all-salmon-except-coho fishery opens through the earlier of June 30 or a 2,600 chinook quota. The fishery reopens July 1 through the earlier of July 31 or a 1,600 chinook quota; August 1 through the earlier of August 29 or a 2,500 chinook quota; and September 1 through the earlier of September 30 or a 3,000 chinook quota.
- June 19 Humbug Mt. to Oregon/California border, non-Indian commercial all-salmon-except-coho fishery closes as the 2,600 chinook quota is reached.
- June 26 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon-except-coho fishery reopens through June 30 with a 50 chinook per vessel landing limit for the five-day open period.
- June 30 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon-except-coho fishery closes as scheduled.

Cape Falcon to Florence south jetty, non-Indian commercial all-salmon-except-coho fishery closes.

- July 1 Humbug Mt. to Oregon/California border, non-Indian commercial all-salmon-except-coho fishery reopens through the earlier of July 31 or a 1,600 chinook quota. The fishery reopens August 1 through the earlier of August 29 or a 2,500 chinook quota; and September 1 through the earlier of September 30 or a 3,000 chinook quota.
- July 6 Florence south jetty to Humbug Mt., non-Indian commercial all-salmon-except-coho fishery closes.
- July 7-12 Cape Falcon to Florence south jetty, non-Indian commercial all-salmon-except-coho fishery reopens.
- July 8-12 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery opens with a 100 chinook per vessel landing limit for the five-day open period. The fishery is scheduled to run through earlier of September 15 or 17,631 chinook quota (14,700 preseason plus 2,931 rollover from the May/June season) or a 67,500 mark-selective coho quota. The 67,500 coho quota includes a subarea quota of 8,000 marked coho for the area between the U.S./Canada border and the Queets River.
- July 10 Horse Mt. to Pt. Arena, non-Indian commercial all-salmon-except-coho fishery opens through August 29. The fishery reopens September 1-30.
- July 13-18 Florence south jetty to Humbug Mt., non-Indian commercial all-salmon-except-coho fishery reopens.
- July 16-19 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery opens with a 125 chinook per vessel landing limit for the 4-day open period.
- July 19 Humbug Mt. to Oregon/California border, non-Indian commercial all-salmon-except-coho fishery closes as the 1,600 chinook quota is reached.
- July 19-27 Cape Falcon to Florence south jetty, non-Indian commercial all-salmon-except-coho fishery reopens.
- July 22-26 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery opens with a 125 chinook per vessel landing limit for the five-day open period.
- July 26-29 Florence south jetty to Humbug Mt., non-Indian commercial all-salmon-except-coho fishery reopens.
- July 29-Aug. 2 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery opens with a 125 chinook per vessel landing limit for the five-day open period.

#### TABLE D.1-1. Sequence of events in ocean salmon fishery management through August 23, 2004.<sup>a/</sup> (Page 4 of 7)

#### NON-INDIAN COMMERCIAL TROLL SEASONS (continued)

- Aug. 1 Humbug Mt. to Oregon/California border, non-Indian commercial all-salmon-except-coho fishery reopens through the earlier of August 29 or a 2,500 chinook quota. The fishery reopens September 1 through the earlier of September 30 or a 3,000 chinook quota.
- Aug. 1-8 Florence south jetty to Humbug Mt., non-Indian commercial all-salmon-except-coho fishery reopens.
- Aug. 1-14 Cape Falcon to Florence south jetty, non-Indian commercial all-salmon-except-coho fishery reopens.
- Aug. 4 Humbug Mt. to Oregon/California border, non-Indian commercial all-salmon-except-coho fishery closes as the 2,500 chinook quota is reached.
- Aug. 5-9 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery opens with a 125 chinook per vessel landing limit for the five-day open period.
- Aug. 11-15 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery opens with a 125 chinook per vessel landing limit for the five-day open period.
- Aug. 15-22 Florence south jetty to Humbug Mt., non-Indian commercial all-salmon-except-coho fishery reopens.
- Aug. 18-22 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery opens with a 125 chinook per vessel landing limit for the five-day open period.
- Aug. 19-24 Cape Falcon to Florence south jetty, non-Indian commercial all-salmon-except-coho fishery reopens.
- Aug. 25-29 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery opens with a 125 chinook per vessel landing limit for the five-day open period.
- Aug. 26-29 Florence south jetty to Humbug Mt., non-Indian commercial all-salmon-except-coho fishery reopens.
- Aug. 29 Horse Mt. to Pt. Arena, non-Indian commercial all-salmon-except-coho fishery closes.

Pt. Arena to U.S./Mexico border, non-Indian commercial all-salmon-except-coho fishery closes.

Sept. 1 Cape Falcon to Florence south jetty, non-Indian commercial all-salmon-except-coho fishery reopens through October 31.

Florence south jetty to Humbug Mt., non-Indian commercial all-salmon-except-coho fishery reopens through October 31.

Humbug Mt. to Oregon/California border, non-Indian commercial all-salmon-except-coho fishery reopens through the earlier of September 30 or a 3,000 chinook quota.

Oregon/California border to Humboldt south jetty, non-Indian commercial all-salmon-except-coho fishery opens through the earlier of September 30 or a quota of 6,000 chinook.

Horse Mt. to Pt. Arena, non-Indian commercial all-salmon-except-coho fishery reopens through September 30.

Pt. Arena to U.S./Mexico border, non-Indian commercial all-salmon-except-coho fishery reopens through September 30.

- Sept. 1-5 Scheduled opening of the U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery opens with a 125 chinook per vessel landing limit for the five-day open period. The quotas for the fishery were modified to 22,631 chinook (14,700 preseason plus 2,931 form the May/June fishery plus 5,000 from a trade with the recreational fishery); coho quotas of 10,000 non-mark-selective coho for the subarea between the Queets River and Cape Falcon, and 8,000 mark-selective coho for the subarea between the U.S./Canada border and the Queets River.
- Sept. 8-12 Scheduled opening of the U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery opens with a 125 chinook per vessel landing limit for the five-day open period.

#### TABLE D.1-1. Sequence of events in ocean salmon fishery management through August 23, 2004.<sup>a/</sup> (Page 5 of 7)

#### NON-INDIAN COMMERCIAL TROLL SEASONS (continued)

- Sept. 15 Scheduled opening of the U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery. The fishery is open for the last day with a 125 chinook per vessel landing limit for the final one-day open period.
- Sept. 30 Scheduled closure of the Oregon/California border to Humboldt south jetty, non-Indian commercial all-salmon-except-coho fishery.

Horse Mt. to Pt. Arena, non-Indian commercial all-salmon-except-coho fishery closes.

- Pt. Arena to U.S./Mexico border, non-Indian commercial all-salmon-except-coho fishery closes.
- Oct. 1 Pt. Reyes to Pt. San Pedro, non-Indian commercial all-salmon-except-coho fishery opens Monday to Friday through October 15.
- Oct. 15 Pt. Reyes to Pt. San Pedro, non-Indian commercial all-salmon-except-coho fishery closes.
- Oct. 31 Cape Falcon to Florence south jetty non-Indian commercial all-salmon-except-coho fishery closes.

Florence south jetty to Humbug Mt., non-Indian commercial all-salmon-except-coho fishery closes.

#### TREATY INDIAN COMMERCIAL TROLL SEASONS

- May 1 All-salmon-except-coho fisheries open through the earlier of June 30 or a 22,500 chinook quota for the May through June season (any remainder of the quota is not transferable to the July 1 through September 15 season, but overages to be deducted from the July 1 through September 30 quota).
- June 19 All-salmon-except-coho fisheries close as the 22,500 quota was reached.
- July 1 All-salmon fisheries open through the earlier of September 15, a 22,223 chinook quota (26,500 preseason minus 4,277 overage from the May/June fishery), or a 75,000 non-mark-selective coho quota.
- Sept. 15 Scheduled closure of the all-salmon commercial fisheries.

#### **RECREATIONAL SEASONS**

- Feb. 14 Horse Mt. to Pt. Arena, all-salmon-except-coho fishery opens through November 14.
- Mar. 15 Cape Falcon to Humbug Mt., all-salmon-except-coho fishery opens through October 31. The fishery (along with the area between Humbug Mt. and the Oregon/California border) allows mark-selective coho retention beginning June 19 through the earlier of August 31 or a 75,000 coho quota, then reverts back to all-salmon-except-coho for the remainder of the season.
- Apr. 3 Pigeon Pt. to the U.S./Mexico border, all-salmon-except-coho fishery opens through October 3.
- Apr. 17 Pt. Arena to Pigeon Pt., all-salmon-except-coho fishery opens through November 14.
- May 15 Humbug Mt. to Horse Mt., all-salmon-except-coho fishery opens through September 12. The fishery in the area north of the Oregon/California border (including the area between Humbug Mt. and Cape Falcon) allows retention of adipose fin clipped coho beginning June 19 through the earlier of August 31 or a 75,000 coho quota, then reverts back to all-salmon-except-coho for the remainder of the season.
- June 19 Cape Falcon to Oregon/California border, all-salmon mark-selective coho fishery opens through the earlier of August 31 or a quota of 75,000 coho; all coho must have a healed adipose fin clip. The fishery reopens for all-salmon-except-coho the earlier of September 1 or the attainment of the coho quota, and continues through October 31 for the area north of Humbug Mt., and through September 12 for the areas south of Humbug Mt.

#### TABLE D.1-1. Sequence of events in ocean salmon fishery management through August 23, 2004.<sup>a/</sup> (Page 6 of 7)

#### **RECREATIONAL SEASONS**, (continued)

June 27 U.S./Canada border to Cape Alava, all-salmon mark-selective coho fishery opens seven days per week through the earlier of September 19 or a 21,050 coho quota, with a 3,700 chinook guideline. Daily-bag-limit is two fish, only one of which can be a chinook; all coho must have a healed adipose fin clip. Cape Alava to Queets River, all-salmon mark-selective coho fishery opens seven days per week though the earlier of September 19 or, or a 5,200 coho quota, with a 1,900 chinook guideline. Dailybag-limit is two fish, only one of which can be a chinook; all coho must have a healed adipose fin clip. Queets River to Leadbetter Pt., all-salmon mark-selective coho fishery opens though the earlier of September 19 or a 74,900 coho quota, with a 30,800 chinook guideline. Fishery runs Sunday to Thursday through July 23, then seven days per week thereafter. Daily-bag-limit is two fish, only one of which can be a chinook; all coho must have a healed adipose fin clip. Leadbetter Pt. to Cape Falcon, all-salmon mark-selective coho fishery opens though the earlier of September 30 or a 101,250 coho quota, with a 8,000 chinook guideline. Fishery runs Sunday to Thursday through July 23, then seven days per week thereafter. Daily-bag-limit is two fish, only one of which can be a chinook; all coho must have a healed adipose fin clip. Closed between Tillamook Head and Cape Falcon beginning August 1. July 23 Queets River to Cape Falcon, all-salmon recreational fishery is opened seven days per week and the bag limit is modified to allow retention of two chinook. Aug. 13 Cape Alava to Cape Falcon all-salmon recreational fishery chinook minimum size limit is reduced from 26 inches total length to 24 inches total length, and the bag limit in the Cape Alava to Queets River is modified to allow retention of two chinook. Queets River to Leadbetter Pt. all-salmon recreational fishery mark-selective coho quota is reduced from 74,900 to 34,900 to allow the U.S./Canada border to Cape Alava coho quota to be increased by 6,600 to 27,650, and remain impact neutral with respect to Interior Fraser (Thompson River, British Columbia) coho. Queets River to Leadbetter Pt. all-salmon recreational fishery coho regulations were modified to allow Aug. 29 non-mark-selective retention of all legal sized coho, and the fishery scheduled to run through the earlier of September 19 or a non-mark-selective coho quota of 10,000, with a chinook guideline of 25,800 (30,800 preseason minus 5,000 for the trade to the commercial fishery). Aug. 31 Cape Falcon to Oregon/California border, all-salmon mark-selective coho fishery closes as scheduled. Sept. 1 Cape Falcon to Oregon/California border, all-salmon-except-coho fishery reopens through October 31. Sept. 12 Humbug Mt. to Horse Mt., all-salmon-except-coho fishery closes. Sept. 19 Scheduled closure of the U.S./Canada border to Cape Alava, all-salmon mark-selective coho fishery. Scheduled closure of the Cape Alava to Queets River, all-salmon mark-selective coho fishery. Scheduled closure of the Queets River to Leadbetter Point, all-salmon non-mark-selective fishery. La Push area ( 47°58'00" to 47°50'00" inside 3 nm), all-salmon mark-selective coho fishery reopens Sept. 25 through the earlier of October 10, a 100 chinook quota, or a 100 coho quota. Sept. 30 Scheduled closure of the Leadbetter Pt. to Cape Falcon, all-salmon mark-selective coho fishery. Oct. 3 Pigeon Pt. to U.S./Mexico border, all-salmon-except-coho fishery closes. Oct. 10 Scheduled closure of the La Push area, all-salmon mark-selective coho fishery.

## TABLE D.1-1. Sequence of events in ocean salmon fishery management through August 23, 2004.<sup>a/</sup> (Page 7 of 7)

#### RECREATIONAL SEASONS, (continued)

Oct. 31 Cape Falcon to Humbug Mt., all-salmon-except-coho fishery closes.

Nov. 14 Horse Mt. to Pt. Arena, all-salmon-except-coho fishery closes.

Pt. Arena to Pigeon Pt., all-salmon-except-coho fishery closes.

a/ Unless stated otherwise, season openings or modifications of restrictions are effective at 0001 hours of the listed date. Closures are effective at midnight.

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- Mar. 29-30 Council holds public hearings on proposed 2004 management options in three locations within the three Pacific Coast states.
- Mar. 30 North of Cape Falcon Salmon Forum meets in Seattle, Washington to further consider recommendations for treaty Indian and non-Indian salmon management options.
- Apr. 8 Council adopts final ocean salmon fishery management recommendations for approval and implementation by the U.S. Secretary of Commerce. The proposed measures comply with the salmon fishery management plan (FMP) and the current biological opinions for listed species. An emergency rule is not required for implementation.
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NMFS inseason conference number one results in closure of the U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon-except-coho fishery effective midnight, May 5, 2004 as the 29,800 chinook quota was approached, and the preseason intent to reserve at least 500 chinook for the June 26-30 opening was in jeopardy.

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- May 21 NMFS inseason conference number three results in reopening of the U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon-except-coho fishery effective midnight, May 24, 2004 through May 26, 2004 with a 70 chinook per vessel landing limit for the three-day open period.
- June 18 NMFS inseason conference number four results in closure of the Humbug Mt., Oregon to Oregon/California border, non-Indian commercial all-salmon-except-coho fishery effective midnight, June 19, 2004 as the 2,600 chinook quota was reached.
- July 2 NMFS inseason conference number five results in changing the landing and possession limit in the U.S./Canada border to Cape Falcon, non-Indian commercial salmon fishery from 125 chinook to 100 chinook for the first two open periods, and changing the second open period from July 15-19 to July 16-19.
- July 14 NMFS inseason conference number six results in changing the landing and possession limit in the U.S./Canada border to Cape Falcon, non-Indian commercial salmon fishery from 100 chinook to 125 chinook for the July 16-19 period.
- July 16 NMFS inseason conference number seven results in changing Queets River to Cape Falcon recreational fishery bag limit to allow retention of two chinook and open seven days per week beginning July 23.
- July 19 NMFS inseason conference number eight results in closure of the Humbug Mt., Oregon to Oregon/California border, non-Indian commercial all-salmon-except-coho fishery effective midnight, July 19, 2004 as the 1,600 chinook quota was reached.

#### GENERAL MANAGEMENT ACTIONS AND INSEASON CONFERENCES (continued)

- Aug. 3 NMFS inseason conference number nine results in closure of the Humbug Mt., Oregon to Oregon/California border, non-Indian commercial all-salmon-except-coho fishery effective midnight, August 4, 2004 as the 2,500 chinook quota was reached.
- Aug. 10 NMFS inseason conference number ten results in two actions:
  - Reducing the coho quota in the Queets River to Leadbetter point recreational fishery from 74,900 to 34,900 and increasing the coho quota in the U.S./Canada border to Cape Alava recreational fishery from 21,050 to 27,650 in order to extend the latter fishery into September and maintain impacts on Interior Fraser coho at or below preseason expectations.
  - 2. The Cape Alava to Cape Falcon all-salmon recreational fishery chinook minimum size limit is reduced from 26 inches total length to 24 inches total length, and the bag limit in the Cape Alava to Queets River subarea is modified to allow retention of two chinook.

Aug. 18 NMFS inseason conference number eleven results in four actions:

- Trading 5,000 chinook from the recreational fishery north of Cape Falcon to the non-Indian commercial fishery north of Cape Falcon for 20,000 adipose fin clipped coho from the non-Indian commercial fishery north of Cape Falcon to the Queets River to Leadbetter Point subarea in the recreational fishery north of Cape Falcon. This would allow the commercial fishery to continue through the scheduled closure of September 15.
- 2. Allowing retention of unmarked coho in the Queets River to Cape Falcon non-Indian commercial fishery beginning September 1 with a landing limit of 500 coho per five-day open period, and restricting the fishery to a subarea quota of 10,000 non-mark-selective coho. Unmarked coho must be landed in the area (or in Garibaldi as per the preseason regulations) and may not be possessed in areas north of the Queets River.
- 3. Allowing retention of unmarked coho in the Queets River to Leadbetter Point recreational fishery beginning August 29 under a 10,000 coho subarea quota. Possession and landing of unmarked coho was allowed in the Queets River to Leadbetter Point subarea only.
- 4. The September Humbug, Mt., Oregon to Oregon/California border, non-Indian commercial allsalmon-except-coho fishery was restricted to open dates of September 1-3, 8-10, and 15-30 with a 50 fish per day possession and landing limit.

#### NON-INDIAN COMMERCIAL TROLL SEASONS

Mar. 15 Cape Falcon to Florence south jetty, non-Indian commercial all-salmon-except-coho fishery opens through June 30. The fishery reopens July 7 through 12; July 19 through 27; August 1 through 14; August 19 through 24; and September 1 through October 31.

Florence south jetty to Humbug Mt., non-Indian commercial all-salmon-except-coho fishery opens through July 6. The fishery reopens July 13 through 18; July 26 through 29; August 1 through 8; August 15 through 22; August 26 through 29; and September 1 through October 31.

Humbug Mt. to Oregon/California border, non-Indian commercial all-salmon-except-coho fishery opens through May 31. The fishery is scheduled to reopen June 1 through the earlier of June 30 or a 2,600 chinook quota; July 1 through the earlier of July 31 or a 1,600 chinook quota; August 1 through the earlier of August 29 or a 2,500 chinook quota; and September 1 through the earlier of September 30 or a 3,000 chinook quota.

May 1 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon-except-coho fishery opens through the earlier of June 30 or a 29,800 chinook quota.

Pt. Arena to U.S./Mexico border, non-Indian commercial all-salmon-except-coho fishery opens through August 29. The fishery reopens September 1 through September 30.

- May 5 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon-except-coho fishery closes to ensure the 29,800 chinook quota was not exceeded and at least 500 chinook remain on the quota for the June 26-30 opener.
- May 15-18 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon-except-coho fishery reopens with a 125 chinook per vessel landing limit for the five-day open period.

#### TABLE D.1-1. Sequence of events in ocean salmon fishery management through August 23, 2004.<sup>a/</sup> (Page 3 of 7)

#### NON-INDIAN COMMERCIAL TROLL SEASONS (continued)

- May 24-26 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon-except-coho fishery reopens with a 70 chinook per vessel landing limit for the three-day open period.
- May 31 Humbug Mt. to Oregon/California border, non-Indian commercial all-salmon-except-coho fishery closes.
- June 1 Humbug Mt. to Oregon/California border, non-Indian commercial all-salmon-except-coho fishery opens through the earlier of June 30 or a 2,600 chinook quota. The fishery reopens July 1 through the earlier of July 31 or a 1,600 chinook quota; August 1 through the earlier of August 29 or a 2,500 chinook quota; and September 1 through the earlier of September 30 or a 3,000 chinook quota.
- June 19 Humbug Mt. to Oregon/California border, non-Indian commercial all-salmon-except-coho fishery closes as the 2,600 chinook quota is reached.
- June 26 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon-except-coho fishery reopens through June 30 with a 50 chinook per vessel landing limit for the five-day open period.
- June 30 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon-except-coho fishery closes as scheduled.

Cape Falcon to Florence south jetty, non-Indian commercial all-salmon-except-coho fishery closes.

- July 1 Humbug Mt. to Oregon/California border, non-Indian commercial all-salmon-except-coho fishery reopens through the earlier of July 31 or a 1,600 chinook quota. The fishery reopens August 1 through the earlier of August 29 or a 2,500 chinook quota; and September 1 through the earlier of September 30 or a 3,000 chinook quota.
- July 6 Florence south jetty to Humbug Mt., non-Indian commercial all-salmon-except-coho fishery closes.
- July 7-12 Cape Falcon to Florence south jetty, non-Indian commercial all-salmon-except-coho fishery reopens.
- July 8-12 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery opens with a 100 chinook per vessel landing limit for the five-day open period. The fishery is scheduled to run through earlier of September 15 or 17,631 chinook quota (14,700 preseason plus 2,931 rollover from the May/June season) or a 67,500 mark-selective coho quota. The 67,500 coho quota includes a subarea quota of 8,000 marked coho for the area between the U.S./Canada border and the Queets River.
- July 10 Horse Mt. to Pt. Arena, non-Indian commercial all-salmon-except-coho fishery opens through August 29. The fishery reopens September 1-30.
- July 13-18 Florence south jetty to Humbug Mt., non-Indian commercial all-salmon-except-coho fishery reopens.
- July 16-19 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery opens with a 125 chinook per vessel landing limit for the 4-day open period.
- July 19 Humbug Mt. to Oregon/California border, non-Indian commercial all-salmon-except-coho fishery closes as the 1,600 chinook quota is reached.
- July 19-27 Cape Falcon to Florence south jetty, non-Indian commercial all-salmon-except-coho fishery reopens.
- July 22-26 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery opens with a 125 chinook per vessel landing limit for the five-day open period.
- July 26-29 Florence south jetty to Humbug Mt., non-Indian commercial all-salmon-except-coho fishery reopens.
- July 29-Aug. 2 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery opens with a 125 chinook per vessel landing limit for the five-day open period.

#### TABLE D.1-1. Sequence of events in ocean salmon fishery management through August 23, 2004.<sup>a/</sup> (Page 4 of 7)

#### NON-INDIAN COMMERCIAL TROLL SEASONS (continued)

- Aug. 1 Humbug Mt. to Oregon/California border, non-Indian commercial all-salmon-except-coho fishery reopens through the earlier of August 29 or a 2,500 chinook quota. The fishery reopens September 1 through the earlier of September 30 or a 3,000 chinook quota.
- Aug. 1-8 Florence south jetty to Humbug Mt., non-Indian commercial all-salmon-except-coho fishery reopens.
- Aug. 1-14 Cape Falcon to Florence south jetty, non-Indian commercial all-salmon-except-coho fishery reopens.
- Aug. 4 Humbug Mt. to Oregon/California border, non-Indian commercial all-salmon-except-coho fishery closes as the 2,500 chinook quota is reached.
- Aug. 5-9 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery opens with a 125 chinook per vessel landing limit for the five-day open period.
- Aug. 11-15 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery opens with a 125 chinook per vessel landing limit for the five-day open period.
- Aug. 15-22 Florence south jetty to Humbug Mt., non-Indian commercial all-salmon-except-coho fishery reopens.
- Aug. 18-22 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery opens with a 125 chinook per vessel landing limit for the five-day open period.
- Aug. 19-24 Cape Falcon to Florence south jetty, non-Indian commercial all-salmon-except-coho fishery reopens.
- Aug. 25-29 U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery opens with a 125 chinook per vessel landing limit for the five-day open period.
- Aug. 26-29 Florence south jetty to Humbug Mt., non-Indian commercial all-salmon-except-coho fishery reopens.
- Aug. 29 Horse Mt. to Pt. Arena, non-Indian commercial all-salmon-except-coho fishery closes.

Pt. Arena to U.S./Mexico border, non-Indian commercial all-salmon-except-coho fishery closes.

Sept. 1 Cape Falcon to Florence south jetty, non-Indian commercial all-salmon-except-coho fishery reopens through October 31.

Florence south jetty to Humbug Mt., non-Indian commercial all-salmon-except-coho fishery reopens through October 31.

Humbug Mt. to Oregon/California border, non-Indian commercial all-salmon-except-coho fishery reopens through the earlier of September 30 or a 3,000 chinook quota.

Oregon/California border to Humboldt south jetty, non-Indian commercial all-salmon-except-coho fishery opens through the earlier of September 30 or a quota of 6,000 chinook.

Horse Mt. to Pt. Arena, non-Indian commercial all-salmon-except-coho fishery reopens through September 30.

Pt. Arena to U.S./Mexico border, non-Indian commercial all-salmon-except-coho fishery reopens through September 30.

- Sept. 1-5 Scheduled opening of the U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery opens with a 125 chinook per vessel landing limit for the five-day open period. The quotas for the fishery were modified to 22,631 chinook (14,700 preseason plus 2,931 form the May/June fishery plus 5,000 from a trade with the recreational fishery); coho quotas of 10,000 non-mark-selective coho for the subarea between the Queets River and Cape Falcon, and 8,000 mark-selective coho for the subarea between the U.S./Canada border and the Queets River.
- Sept. 8-12 Scheduled opening of the U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery opens with a 125 chinook per vessel landing limit for the five-day open period.

#### TABLE D.1-1. Sequence of events in ocean salmon fishery management through August 23, 2004.<sup>a/</sup> (Page 5 of 7)

#### NON-INDIAN COMMERCIAL TROLL SEASONS (continued)

- Sept. 15 Scheduled opening of the U.S./Canada border to Cape Falcon, non-Indian commercial all-salmon fishery. The fishery is open for the last day with a 125 chinook per vessel landing limit for the final one-day open period.
- Sept. 30 Scheduled closure of the Oregon/California border to Humboldt south jetty, non-Indian commercial all-salmon-except-coho fishery.

Horse Mt. to Pt. Arena, non-Indian commercial all-salmon-except-coho fishery closes.

- Pt. Arena to U.S./Mexico border, non-Indian commercial all-salmon-except-coho fishery closes.
- Oct. 1 Pt. Reyes to Pt. San Pedro, non-Indian commercial all-salmon-except-coho fishery opens Monday to Friday through October 15.
- Oct. 15 Pt. Reyes to Pt. San Pedro, non-Indian commercial all-salmon-except-coho fishery closes.
- Oct. 31 Cape Falcon to Florence south jetty non-Indian commercial all-salmon-except-coho fishery closes.

Florence south jetty to Humbug Mt., non-Indian commercial all-salmon-except-coho fishery closes.

#### TREATY INDIAN COMMERCIAL TROLL SEASONS

- May 1 All-salmon-except-coho fisheries open through the earlier of June 30 or a 22,500 chinook quota for the May through June season (any remainder of the quota is not transferable to the July 1 through September 15 season, but overages to be deducted from the July 1 through September 30 quota).
- June 19 All-salmon-except-coho fisheries close as the 22,500 quota was reached.
- July 1 All-salmon fisheries open through the earlier of September 15, a 22,223 chinook quota (26,500 preseason minus 4,277 overage from the May/June fishery), or a 75,000 non-mark-selective coho quota.
- Sept. 15 Scheduled closure of the all-salmon commercial fisheries.

#### **RECREATIONAL SEASONS**

- Feb. 14 Horse Mt. to Pt. Arena, all-salmon-except-coho fishery opens through November 14.
- Mar. 15 Cape Falcon to Humbug Mt., all-salmon-except-coho fishery opens through October 31. The fishery (along with the area between Humbug Mt. and the Oregon/California border) allows mark-selective coho retention beginning June 19 through the earlier of August 31 or a 75,000 coho quota, then reverts back to all-salmon-except-coho for the remainder of the season.
- Apr. 3 Pigeon Pt. to the U.S./Mexico border, all-salmon-except-coho fishery opens through October 3.
- Apr. 17 Pt. Arena to Pigeon Pt., all-salmon-except-coho fishery opens through November 14.
- May 15 Humbug Mt. to Horse Mt., all-salmon-except-coho fishery opens through September 12. The fishery in the area north of the Oregon/California border (including the area between Humbug Mt. and Cape Falcon) allows retention of adipose fin clipped coho beginning June 19 through the earlier of August 31 or a 75,000 coho quota, then reverts back to all-salmon-except-coho for the remainder of the season.
- June 19 Cape Falcon to Oregon/California border, all-salmon mark-selective coho fishery opens through the earlier of August 31 or a quota of 75,000 coho; all coho must have a healed adipose fin clip. The fishery reopens for all-salmon-except-coho the earlier of September 1 or the attainment of the coho quota, and continues through October 31 for the area north of Humbug Mt., and through September 12 for the areas south of Humbug Mt.

#### TABLE D.1-1. Sequence of events in ocean salmon fishery management through August 23, 2004.<sup>a/</sup> (Page 6 of 7)

#### **RECREATIONAL SEASONS**, (continued)

June 27 U.S./Canada border to Cape Alava, all-salmon mark-selective coho fishery opens seven days per week through the earlier of September 19 or a 21,050 coho quota, with a 3,700 chinook guideline. Daily-bag-limit is two fish, only one of which can be a chinook; all coho must have a healed adipose fin clip. Cape Alava to Queets River, all-salmon mark-selective coho fishery opens seven days per week though the earlier of September 19 or, or a 5,200 coho quota, with a 1,900 chinook guideline. Dailybag-limit is two fish, only one of which can be a chinook; all coho must have a healed adipose fin clip. Queets River to Leadbetter Pt., all-salmon mark-selective coho fishery opens though the earlier of September 19 or a 74,900 coho quota, with a 30,800 chinook guideline. Fishery runs Sunday to Thursday through July 23, then seven days per week thereafter. Daily-bag-limit is two fish, only one of which can be a chinook; all coho must have a healed adipose fin clip. Leadbetter Pt. to Cape Falcon, all-salmon mark-selective coho fishery opens though the earlier of September 30 or a 101,250 coho quota, with a 8,000 chinook guideline. Fishery runs Sunday to Thursday through July 23, then seven days per week thereafter. Daily-bag-limit is two fish, only one of which can be a chinook; all coho must have a healed adipose fin clip. Closed between Tillamook Head and Cape Falcon beginning August 1. July 23 Queets River to Cape Falcon, all-salmon recreational fishery is opened seven days per week and the bag limit is modified to allow retention of two chinook. Aug. 13 Cape Alava to Cape Falcon all-salmon recreational fishery chinook minimum size limit is reduced from 26 inches total length to 24 inches total length, and the bag limit in the Cape Alava to Queets River is modified to allow retention of two chinook. Queets River to Leadbetter Pt. all-salmon recreational fishery mark-selective coho quota is reduced from 74,900 to 34,900 to allow the U.S./Canada border to Cape Alava coho quota to be increased by 6,600 to 27,650, and remain impact neutral with respect to Interior Fraser (Thompson River, British Columbia) coho. Queets River to Leadbetter Pt. all-salmon recreational fishery coho regulations were modified to allow Aug. 29 non-mark-selective retention of all legal sized coho, and the fishery scheduled to run through the earlier of September 19 or a non-mark-selective coho quota of 10,000, with a chinook guideline of 25,800 (30,800 preseason minus 5,000 for the trade to the commercial fishery). Aug. 31 Cape Falcon to Oregon/California border, all-salmon mark-selective coho fishery closes as scheduled. Sept. 1 Cape Falcon to Oregon/California border, all-salmon-except-coho fishery reopens through October 31. Sept. 12 Humbug Mt. to Horse Mt., all-salmon-except-coho fishery closes. Sept. 19 Scheduled closure of the U.S./Canada border to Cape Alava, all-salmon mark-selective coho fishery. Scheduled closure of the Cape Alava to Queets River, all-salmon mark-selective coho fishery. Scheduled closure of the Queets River to Leadbetter Point, all-salmon non-mark-selective fishery. La Push area ( 47°58'00" to 47°50'00" inside 3 nm), all-salmon mark-selective coho fishery reopens Sept. 25 through the earlier of October 10, a 100 chinook quota, or a 100 coho quota. Sept. 30 Scheduled closure of the Leadbetter Pt. to Cape Falcon, all-salmon mark-selective coho fishery. Oct. 3 Pigeon Pt. to U.S./Mexico border, all-salmon-except-coho fishery closes. Oct. 10 Scheduled closure of the La Push area, all-salmon mark-selective coho fishery.

## TABLE D.1-1. Sequence of events in ocean salmon fishery management through August 23, 2004.<sup>a/</sup> (Page 7 of 7)

#### **RECREATIONAL SEASONS**, (continued)

Oct. 31 Cape Falcon to Humbug Mt., all-salmon-except-coho fishery closes.

Nov. 14 Horse Mt. to Pt. Arena, all-salmon-except-coho fishery closes.

Pt. Arena to Pigeon Pt., all-salmon-except-coho fishery closes.

a/ Unless stated otherwise, season openings or modifications of restrictions are effective at 0001 hours of the listed date. Closures are effective at midnight.

#### STATUS REPORT OF THE 2004 OCEAN SALMON FISHERIES OFF WASHINGTON, OREGON, and CALIFORNIA. Preliminary Data Through August 31, 2003.

	Season	eason Effort CHINOOK				СОНО			
Fishery and Area	Dates	Days fished	Catch	Quota	Percent	Catch	Quota	Percent	
TROLL									
Treaty Indian	5/1-6/30	143	15,657	30,000	52%		Non-Retention		
	7/1-9/15	138	17,585	30,000	59%	8,392	90,000	9%	
Non-Indian North of Falcon	5/1-6/30	762	35,920	40,000	90%	6 Non-Retention			
	6/26/-6/30	96	1,024	800		Non-Retention			
	7/3-9/14	1,179	30,644	32,400	95%	11,236	75,000	159	
Cape Falcon-Florence S. Jetty	3/15-7/16	3,210	82,377	None	NA		Non-Retention		
	8/1-8/19	793	24,433	None	NA		Non-Retention		
	9/1-10/31			None	NA	Non-Retention			
Florence S. Jetty - Humbug Mt.	3/15-6/30	3,279	95,553	None	NA	Non-Retention			
	7/17-7/31	199	4,785	None	NA	Non-Retention			
	8/11-8/29	128	2,643	None	NA	Non-Retention			
	9/1-10/31			None	NA		Non-Retention		
Humbug Mtn-OR/CA Border	3/15-5/31	53	649	None	NA	Non-Retention			
	6/1-6/30	71	515	2,500	21%				
	7/1-7/31	99	1,061	1,200	88%		Non-Retention		
	8/1-8/29	84	821	2,500	33%		Non-Retention		
	9/1-9/30			3,000	0%		Non-Retention		
OR/CA Border -Humboldt S. Jetty	9/1-9/30			10,000	0%	0% Non-Retention			
Horse Mtn-Pt. Arena	5/1-5/31	620	31,750	None	NA	Non-Retention			
	7/3-7/14	540	35,640	None	NA	Non-Retention			
	7/18-9/30	1,543	106,220	None	NA	Non-Retention			
Pt.Arena - Pigeon Pt.	5/1-9/30	3,360	182,410	None	NA	Non-Retention			
	10/1-3,6-					Non-Retention			
Pt. Reyes - Pt. San Pedro	10, 13-17								
Pigeon PtUS/Mexico Border	5/1-9/30	1,900	33,200	None	NA		Non-Retention		
	Season	Effort		CHINOOK			COHO		
Fishery and Area	Dates	Angler Days	Catch	Quota	Percent	Catch	Quota	Percent	
RECREATIONAL									
US/Canada Border-Cape Alava	6/22-9/14	19,701	4,772	3,900	122%	18,976	23,400	819	
Cape Alava-Queets River	6/22-9/14	3,650	1,734	2,300	75%	3,259	5,750	579	
	9/20-10/5			100	0%		100	04	
Queets River-Leadbetter Pt.	6/22-9/14	43,405	20,032	40,600	49%	34,949	83,250	429	
Leadbetter PtCape Falcon	6/29-9/30	59,973	7,024	12,700	55%	93,636	112,500	839	
Cape Falcon-Humbug Mtn	3/15-10/31	8,051	3,150	None	NA		Non-Retention		
	6/21-8/24	90,190	24,400	None	NA	83,760	88,000	959	
Humbug Mtn-Horse Mtn	5/17-9/14	24,979	11,592	None	NA	Non-Retention			
Horse Mtn-Pt. Arena	2/15-11/16	22,470	15,480	None	NA	Non-Retention			
Pt. Arena-Pigeon Pt.	4/12-11/9	57,490	52,050	None	NA	Non-Retention			
Pigeon PtUS/Mexico Border	3/29-9/28	26,380	11,820	None	NA		Non-Retention		
		<b>F</b> //						Oaka Oak	
	2004	Effort		2004	Chinook Catch 2003	2002	Coho Cato 2004 2003		
TOTALS TO DATE	2004	2003	2002	2004	2003	2002	2004	2003	
TROLL					00.040	001			

TOTALS TO DATE	2004	2003	2002	2004	2003	2002	2004	2003	2002
TROLL									
Treaty Indian		281	286	33,242	33,242	281	8,145	8,145	8,145
Washington Non-Treaty		1,103	1,338	54,914	54,914	1,103	180	180	180
Oregon		8,276	7,700	222,719	222,719	8,276	1,500	1,500	1,500
California		7,963	14,800	389,220	389,220	7,963	0	0	0
Total Troll	0	17,623	24,124	700,095	700,095	17,623	9,825	9,825	9,825
RECREATIONAL									
Washington		110,662	85,300	31,594	31,594	110,662	61,957	61,957	61,957
Oregon		124,559	76,500	32,799	32,799	124,559	35,300	35,300	35,300
California		120,620	195,100	87,710	87,710	120,620	0	0	0
Total Recreational	0	355,841	356,900	152,103	152,103	355,841	97,257	97,257	97,257
PFMC Total	N/A	N/A	N/A	852,198	852,198	N/A	107,082	107,082	107,082

a/ All non-Treaty coho fisheries are mark selective

b/ Treaty troll effort is reported as landings.

c/ Numbers shown as chinook quotas for non-Indian troll and recreational fisheries North of Falcon are guidelines rather than quotas.

Only the total chinook allowable catch is a quota.

1

## SALMON METHODOLOGY REVIEW

Each year, the Scientific and Statistical Committee (SSC) completes a methodology review to help assure new or significantly modified methodologies employed to estimate impacts of the Council's salmon management use the best available science. This review is preparatory to the Council's adoption, at the November meeting, of all proposed changes to be implemented in the coming season, or, in certain limited cases, of providing directions for handling any unresolved methodology problems prior to the formulation of salmon management options the following March. Because there is insufficient time to review new or modified methods at the March meeting, the Council may reject their use if they have not been approved the preceding November.

At its April 2004 meeting, the Council identified a list of potential subjects for the methodology review. These subjects are identified in a reminder letter sent out to the responsible agencies in July 2004, which requests agencies be prepared to speak to the status of the subjects in terms of completeness and priority (Agendum D.2.a, Attachment 1). All materials for review are to be received at the Council office at least three weeks prior to the scheduled review meeting of the SSC Salmon Subcommittee, which is likely to be in mid- to late-October.

## **Council Action:**

- 1. Determine whether or not it is likely methodologies identified for review will be ready for the SSC Salmon Subcommittee meeting in October.
- 2. Set priorities for SSC review of methodologies.

## Reference Materials:

1. Agendum D.2.a, Attachment 1: email to the agencies from Mr. Chuck Tracy dated July 28, 2004.

## Agenda Order:

- a. Agendum Overviewb. Agency and Tribal Reports and Comments
- c. Model Evaluation Workgroup Report
- d. Reports and Comments of Advisory Bodies
- e. Public Comment
- f. **Council Action:** Establish Final Prioritization and Schedule for Review of Salmon Methodology Changes for the 2005 Season

PFMC 8/28/04 Chuck Tracy

Dell Simmons

## Subject: Salmon Methodology Review From: Chuck Tracy <Chuck.Tracy@noaa.gov> Date: Wed, 28 Jul 2004 14:07:22 -0700

To: Henry Yuen <henry\_yuen@fws.gov>, Doug Milward <Milwadam@dfw.wa.gov>, Dell Simmons <Dell.Simmons@noaa.gov>, Robert Kope <Robert.Kope@noaa.gov>, Gary Morishima <Morikog@aol.com>, Michael Mohr <Michael.Mohr@noaa.gov>, Chuck Tracy <Chuck.Tracy@noaa.gov>, Curt Melcher <Curt.Melcher@state.or.us>, Wendy Beeghley <BEEGHWLB@dfw.wa.gov>, Melodie Palmer-Zwahlen <mpalmer@dfg.ca.gov>, Allen Grover <agrover@dfg.ca.gov>, Craig Foster <Craig.A.Foster@state.or.us>, Eric Larson <elarson@dfg.ca.gov>, Neal Coenen <neal.coenen@state.or.us>, Phil Anderson <anderpma@dfw.wa.gov>, Dell Simmons <Dell.Simmons@noaa.gov>, Curt Melcher <Curt.Melcher@state.or.us>, "Robert H. Conrad" <bconrad@nwifc.wa.gov>, Larrie LaVoy <LaVoyLWL@dfw.wa.gov>, Jim Packer <PackeJFP@dfw.wa.gov>, Allen Grover <agrover@dfg.ca.gov>, Andy Rankis <ARankis@nwifc.org>, Rishi Sharma <shar@critfc.org>, Kevin Hill <khill@ucsd.edu>, Peter Lawson <Peter.W.Lawson@noaa.gov>, "Robert H. Conrad" <bconrad@nwifc.wa.gov>, Jim Harp <Jeharp@aol.com>

Greetings all:

This is just a reminder that the Council will be establishing priorities for salmon methodology review by the SSC at the September Council meeting. The review itself usually occurs in mid- to late October.

A prioritized list of potential subjects was considered at the April Council Meeting (see below), and it will be useful to have updates on the priorities and whether some of the projects are suitably complete for review.

It is unlikely that the SSC will have time to review all the subjects this year, or that all will be ready for review. Please discuss these projects with appropriate parties and have recommendations ready for the September meeting.

• Chinook and coho Fishery Regulation Assessment Model (FRAM) documentation: An overview document for the chinook and coho FRAMs has been produced by the Model Evaluation Workgroup (MEW). The MEW plans to produce detailed technical documentation for each of the FRAMs. The SSC views this as the highest priority for the MEW during the coming year.

• Chinook FRAM for mark-selective fisheries: The Washington Department of Fish and Wildlife has modified the chinook FRAM to accommodate mark-selective fisheries. The SSC could not endorse chinook FRAM as a tool to evaluate mark-selective fisheries in 2003, but application of the model to estimate mark-selective fishery impacts should be reviewed if such fisheries are planned for 2005 and beyond. Model documentation is a pre-requisite for this review. A limited mark-selective fishery for chinook was conducted in Washington Marine Catch Areas 5 and 6 in 2003. The results from this fishery, in comparison to FRAM predictions, may allow a limited empirical evaluation of the chinook FRAM for mark-selective fisheries.

• Chinook Rebuilding Exploitation Rate Analysis: An evaluation of rebuilding exploitation rates (RERs) for ESA-listed chinook stocks based on coded-wire tag (CWT) data in comparison to RERs based on chinook FRAM is projected to be completed by October 2004.

• Coho FRAM fisheries for Canadian stocks: The Coho Technical Committee of the Pacific Salmon Commission (PSC) has modified the coho FRAM to add fishery and stock strata for Canadian management. The SSC has reviewed an interim version of these changes.

Oregon Department of Fish and Wildlife Oregon coastal natural (OCN) matrix: The Oregon Department of Fish and Wildlife is developing a technical appendix to the OCN Work Group matrix as recommended by the Council at its November 2000 meeting.
Oregon Department of Fish and Wildlife management plan for Lower Columbia River coho salmon: The plan is based on new methods that are currently undergoing inter-agency review.

• Columbia River Fall chinook ocean abundance predictors: There has been some preliminary work on producing ocean run-size predictors for these stocks. The SSC will review these predictors when they have been fully developed and documented.

 OCN coho salmon prediction methodology: New predictors are in development. The SSC will review any proposals for change as requested.

Chuck Tracy Pacific Fishery Management Council 7700 NE Ambassador Avenue, Suite 200 Portland, Oregon 97220 Phone: 503-820-2280 or toll free 866-806-7204 Fax: 503-820-2299 e-mail: <u>Chuck.Tracy@noaa.gov</u> url: <u>www.pcouncil.org</u> <')}}}>< <')}}}>< <')}}

Agendum D.2.a Attachment 1 September 2004

Subject: Salmon Methodology Review From: Chuck Tracy <Chuck.Tracy@noaa.gov> Date: Wed, 28 Jul 2004 14:07:22 -0700

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Greetings all:

This is just a reminder that the Council will be establishing priorities for salmon methodology review by the SSC at the September Council meeting. The review itself usually occurs in mid- to late October.

A prioritized list of potential subjects was considered at the April Council Meeting (see below), and it will be useful to have updates on the priorities and whether some of the projects are suitably complete for review.

It is unlikely that the SSC will have time to review all the subjects this year, or that all will be ready for review. Please discuss these projects with appropriate parties and have recommendations ready for the September meeting.

• Chinook and coho Fishery Regulation Assessment Model (FRAM) documentation: An overview document for the chinook and coho FRAMs has been produced by the Model Evaluation Workgroup (MEW). The MEW plans to produce detailed technical documentation for each of the FRAMs. The SSC views this as the highest priority for the MEW during the coming year.

• Chinook FRAM for mark-selective fisheries: The Washington Department of Fish and Wildlife has modified the chinook FRAM to accommodate mark-selective fisheries. The SSC could not endorse chinook FRAM as a tool to evaluate mark-selective fisheries in 2003, but application of the model to estimate mark-selective fishery impacts should be reviewed if such fisheries are planned for 2005 and beyond. Model





documentation is a pre-requisite for this review. A limited mark-selective fishery for chinook was conducted in Washington Marine Catch Areas 5 and 6 in 2003. The results from this fishery, in comparison to FRAM predictions, may allow a limited empirical evaluation of the chinook FRAM for mark-selective fisheries.

Chinook Rebuilding Exploitation Rate Analysis: An evaluation of rebuilding • exploitation rates (RERs) for ESA-listed chinook stocks based on coded-wire tag (CWT) data in comparison to RERs based on chinook FRAM is projected to be completed by October 2004.

Coho FRAM fisheries for Canadian stocks: The Coho Technical Committee of the Pacific Salmon Commission (PSC) has modified the coho FRAM to add fishery and stock strata for Canadian management. The SSC has reviewed an interim version of these changes.

- Oregon Department of Fish and Wildlife Oregon coastal natural (OCN) matrix: The Oregon Department of Fish and Wildlife is developing a technical appendix to the OCN Work Group matrix as recommended by the Council at its November 2000 meeting. Oregon Department of Fish and Wildlife management plan for Lower Columbia River coho salmon: The plan is based on new methods that are currently undergoing inter-agency review.
- Columbia River Fall chinook ocean abundance predictors: There has been some preliminary work on producing ocean run-size predictors for these stocks. The SSC will review these predictors when they have been fully developed and documented.
- OCN coho salmon prediction methodology: New predictors are in development.

The SSC will review any proposals for change as requested.

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# 2 of 2

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## MODEL EVALUATION WORKGROUP RECOMMENDATIONS FOR SALMON METHODOLOGY REVIEW

The Washington Department of Fish and Wildlife conducted mark selective fisheries for Chinook in Marine Catch Areas 5 and 6 in 2003 and 2004. The Model Evaluation Workgroup (MEW) recommends that an empirical evaluation of the results of these fisheries compared to Fishery Regulation Assessment Model (FRAM) preseason predictions be reviewed by the Scientific and Statistical Committee. The evaluation should include a comparison of actual stock composition of the catch as estimated from coded-wire tag recoveries or through other means with FRAM preseason estimates.

PFMC 09/14/04

## SALMON ADVISORY SUBPANEL SALMON METHODOLOGY REVIEW

The Salmon Advisory Subpanel (SAS) recommends the Methodology Review concerning mark selective fisheries in Washington Catch Areas 5 and 6 go forward. Comparing actual coded-wire tag recoveries from the fishery to predicted stock composition provided by the Chinook Fishery Regulation Assessment Model may aid in this evaluation.

In addition, the SAS urges the Council to move forward with development of improved Oregon coastal natural coho salmon prediction methodology, as the mark rate in selective fisheries appears to be consistently underestimated. Given the likelihood for consideration of non-mark, selective fisheries in the future, it is important to have better estimates.

PFMC 09/13/04

## SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON SALMON METHODOLOGY REVIEW

At the April 2004 meeting, the Scientific and Statistical Committee (SSC) identified eight methodology issues for possible review during the November 2004 meeting. These were:

- 1. Chinook and coho Fishery Regulation Assessment Model (FRAM) technical documentation.
- 2. Chinook FRAM for mark-selective fisheries: A limited mark-selective fishery for chinook was conducted in Washington Marine Catch Areas 5 and 6 in 2003. The results from this fishery, in comparison to chinook FRAM predictions, may allow a limited empirical evaluation of the chinook FRAM for mark-selective fisheries.
- 3. Chinook Rebuilding Exploitation Rate Analysis.
- 4. Coho FRAM fisheries for Canadian stocks.
- 5. Oregon Department of Fish and Wildlife Oregon coastal natural (OCN) matrix.
- 6. Oregon Department of Fish and Wildlife management plan for Lower Columbia River coho salmon.
- 7. Columbia River Fall chinook ocean abundance predictors.
- 8. OCN coho salmon prediction methodology.

A report documenting the results for the limited mark-selective fishery for chinook conducted in Washington Marine Catch Areas 5 and 6 in 2003 is the only new material currently available for SSC review. The SSC plans to review this report at the November 2004 meeting.

PFMC

09/14/04

## SALMON TECHNICAL TEAM REPORT ON SALMON METHODOLOGY REVIEW

The Washington Department of Fish and Wildlife conducted mark selective fisheries for Chinook in Marine Catch Areas 5 and 6 in 2003 and 2004. The Salmon Technical Team (STT) recommends that an empirical evaluation of the results of these fisheries compared to Fishery Regulation Assessment Model (FRAM) preseason predictions be reviewed by the Scientific and Statistical Committee. The evaluation should include a comparison of actual stock composition of the catch as estimated from coded-wire tag recoveries or through other means with FRAM preseason estimates.

PFMC 9/14/04

## FISHERY MANAGEMENT PLAN AMENDMENT UPDATE

At the March 2004 meeting, the Council received updates on several issues relating to Salmon Fishery Management Plan (FMP) issues, including a report of the Sacramento River Winter and Spring Chinook Workgroup (Workgroup) and selective fishery allocation criteria.

The Council directed the Salmon Technical Team (STT) to review the Workgroup report, as requested by the Workgroup. The STT met in July 2004 and reviewed the Workgroup report; the results of the STT review are presented in Agendum D.3.b, STT Report 1.

The Council also directed the STT to review the process by which the Council has been allocating selective fishery coho quotas north of Cape Falcon for consistency with FMP Chapter 6.5.3.2. The concern was that allocating the overall total allowable catch (TAC) calculated as a landed catch of marked fish was not equivalent to setting the TAC based on non-mark selective fisheries, then allowing each sector or port to utilize impacts in a selective fishery, as required by the FMP. The results of the STT review are presented in Agendum D.3.b, Supplemental STT Report 2.

The Council should expect updates on these and other Salmon FMP issues, including conservation objectives, allocation issues, National Environmental Policy Act requirements, and essential fish habitat updates at the November meeting.

## **Council Task:**

## Discuss issues relevant to FMP amendment issues.

## Reference Materials:

- 1. Agendum D.3.b, STT Report 1: STT memo to Sacramento River Winter and Spring Chinook Workgroup.
- 2. Agendum D.3.b, Supplemental STT Report 2: Selective Coho Fisheries and Allocation in the North of Cape Falcon Salmon Fisheries.

## Agenda Order:

- a. Agendum Overview
- b. Reports and Comments of Advisory Bodies
- c. Public Comment
- d. Council Discussion

PFMC 08/28/04 Chuck Tracy

Agendum D.3.b STT Report 1 September 2004

## PACIFIC FISHERY MANAGEMENT COUNCIL

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## **MEMORANDUM**

- DATE: August 26, 2004
- TO: Sacramento River Winter and Spring Chinook Workgroup
- FROM: Salmon Technical Team
- SUBJECT: Report on recommendations for developing fishery management plan (FMP) conservation objectives for Sacramento River winter Chinook and Sacramento River spring Chinook

## Winter Chinook

<u>Stock description</u>. A brief description of spawn timing and freshwater juvenile life history should be added.

<u>Red Bluff Diversion Dam Counts</u>. The report should also note that the estimate of 15% passage after May 15 (range 3% to 48%) was based on passage through the ladders when the gates at Red Bluff Diversion Dam (RBDD) were in. Inadequate attraction flows at the ladders delayed passage by an average of approximately 20 days, so the spawner estimates based on expansion of post May15 dam counts are biased low, as well as inaccurate.

<u>Carcass Surveys and Table 1</u>. An explanation of the methods used to collect the data reported in Table 1 should be added to facilitate interpretation. For instance, how are fish identified as being jacks or adults or from the winter versus spring versus fall stocks? Table 1 indicates that from 2000 to 2003, females comprised from 64% to 82% of the total spawning population based on Jolly-Seber (J-S) estimates from carcass surveys. This wouldn't be surprising for some populations with older age structures because older, larger fish, primarily females, are more readily recovered from spawning grounds than males. However, for this stock, the fish are believed to spawn predominantly as three-year-olds, so the uneven sex structure is a bit puzzling. Do the carcass survey estimates for total population include jacks or only adults? RBDD data indicate a very high proportion of jacks in the population (17% to 69% of the run in the same

CHAIRMAN Donald K. Hansen years)– if this is indeed the case, then there would be very few adult males in the spawning population if the J-S estimates are accurate.

The data from the RBDD, J-S, and cohort analyses do not seem to be consistent – e.g., estimated maturation rates from the coded-wire tag (CWT) cohort analysis do not seem compatible with the RBDD or the J-S estimates. There appear to be problems in estimating age-sex structure for spawning escapements for this stock. Perhaps data collected at Keswick Dam could be used for estimating sex-age structures rather than RBDD or the J-S approach. At the very least, scales taken from naturally produced fish should be aged and compared with CWT data for consistency with interpretations of maturation and return rates. Additionally, if males and females have vastly different maturation and growth rates, a sex-specific cohort analysis and model should be employed for evaluating fishery impacts on this stock

<u>Cohort Analysis</u>. A list of specific tag codes included in the analyses should be provided. Appendix IV seems to list all recoveries of winter chinook releases, but the purpose for this listing is unclear. The number of fish released for the biennial year (BY)1998-2000 cohort analysis is relatively small (Table 10), so its not surprising that recoveries would be few (especially for the 1999 BY with a release of 30,000). The data available from the CWT recoveries are insufficient to provide a basis for estimation of length distributions and growth patterns, yet these factors are obviously integral parts of cohort analysis. An explanation of the source of the length data should be included in the report.

Age-2 maturation rate of 1998 brood year is suspiciously low given the high proportion of jacks typically seen in the RBDD counts. These jacks would have returned in 2000, and that is also the first year that J-S estimates, based on carcass surveys, are presented. There were apparently no recoveries of CWTs from this brood year in the spawning escapement or in freshwater catch either. The appendix IV lists no age-2 freshwater recoveries for the 1998 brood year at all. The cohort reconstruction shows an age-2 escapement of 8 fish. Where did that number come from? How was the maturation rate estimated, and could the lack of inland recoveries be due to a lack of data rather than an observation of zero tags?

<u>General Considerations</u>. While we generally concur with these comments, the framework for evaluation should include specific proposals for monitoring methodologies and incorporating risk averse approaches into predictive models. Given that all production from Livingstone Stone Hatchery is already CWT'd, it seems unlikely the number of CWTs recovered from fisheries for this stock could be substantially increased. The only opportunity to increase tagging would be to initiate a wild smolt tagging program, but this would require a means to positively identify the stock-origin of wild smolts.

<u>Management Framework</u>. The general frameworks are fine as theoretical bases for management. However, further work is necessary to develop details for implementation. The framework should present an evaluation of expected performance in terms of stock (escapement?) recovery trajectories and economic repercussions of implementing the proposed policy. Issues pertaining to length (size at age distributions) and aging (natural population) need to be addressed before the proposed impact rate conservation objective can be evaluated. While uncertainty is considered in developing the frameworks, the issue of uncertainly also arises in assessing compliance with the conservation objective. A postseason assessment could be expressed as a probability that the objective was met (or a probability of observing the post –season point estimate if the objective was met) rather than as a point estimate. The feasibility of developing usable methods to project marine survival rates and monitor impact rates should be fully explored – the framework without the means to implement it does little good. Additionally, constraints on allowable impact rates could be developed and presented to provide bounds for policy decisions – e.g., given estimates of variability fecundity and fresh water survival, it should be possible to determine the allowable upper limit for exploitation rates for given assumptions for marine survivals.

Contact rate-effort estimators are not terribly compelling. With the possible exception of June, the contact-rate, effort relationships depicted in Figures 2 and 3 are not very informative or useful as a basis for prediction. The paucity of recovery data reflect patterns that would be expected from rare events representing recovery of small numbers of CWTs, and it will take a long time to improve them given current CWT numbers being released. Given the reliance on CWTs to estimate impact rates, evaluating a management objective expressed as an impact rate and linked to population dynamics will also be problematic.

## **Spring Chinook**

<u>Stock Description</u>. A brief description of freshwater juvenile life history should be added. This spring stock is believed to have a markedly different life history pattern than more northerly spring stocks in that most of the juvenile production is believed to migrate as fingerlings rather than yearlings, although fishery recovery rates of the few yearling fish that were tagged appears to be much higher.

<u>Spawning Surveys</u>. The footnotes to Table 9 regarding inclusion of prespawning mortalities are somewhat ambiguous.

The reference on page 12 should be to Table 9 instead of Table 5.

<u>Spawning escapement</u>. The cohort analyses indicate very high exploitation rates on this stock; substantially higher than for winter run (cohort analysis presented in the report) and fall run fish from the Sacramento (Central Valley Index). This suggests there may be a substantial problem in estimating CWT recoveries from spawning escapements for this stock. High pre-spawning mortalities were reported for 2002 and 2003, but it is unclear whether CWT recovery estimates for escapements have been expanded to reflect these losses; if not, this could well explain ocean contact rates that appear excessive.

<u>Recommendations - Cohort Analysis.</u> A list of specific tag codes included in the analyses should be provided. It is doubtful that available CWTs from Butte Creek provide an adequate basis to perform a useful cohort analysis. Although there are doubts regarding the use of Feather River releases of spring chinook, recovery data for this stock should be examined for consistency in distributions with available Butte Creek CWT releases. Relatively large numbers of fish identified as spring chinook have been released from the Feather River Hatchery. Due to the paucity of CWT data from the Butte, it could well be that data from the Feather River releases would comprise the best available information to evaluate fishery distribution patterns and exploitation rates, despite potential issues regarding brood stock selection. Additionally, the source of information relied upon to estimate length distributions should be disclosed. <u>Management Framework</u>. Age-4 Ocean Impact Rate. The STT is not completely convinced that CWT recoveries of fish from Butte Creek would provide a sufficient basis for monitoring and evaluation. The number of recoveries in ocean fisheries will be so small, and uncertainty surrounding escapement so great, that it is doubtful that useful estimates of ocean age-4 impacts could be generated.

All three spring stocks appear to be approaching historic levels of spawning escapements. However, information is lacking as to whether these escapement levels are appropriate as management objectives. Given the lack of estimates of total production, it may be useful to employ the approach developed by Mr. Chuck Parken of the Canadian Department of Fisheries and Oceans, to obtain estimates of maximum sustainable yield escapement levels for Deer, Mill, and Butte stocks based on accessible watershed area.

The difficulty of monitoring fishery impacts on this stock complex, and the belief that spawning escapements are approaching historic levels, suggests there may not be an urgent need to establish rebuilding targets. Instead, some consideration should be given to focusing attention on identification of threshold values based on surrogate measures – e.g., monitoring exploitation rates for fall or Feather River spring fish and establishing a framework containing values for escapements that would trigger broad scale management action.

## SELECTIVE COHO FISHERIES AND ALLOCATION IN THE NORTH OF CAPE FALCON SALMON FISHERIES

The Council's Pacific Coast Salmon Plan (FMP) has historically divided the coho salmon north of Cape Falcon among non-Indian gear sectors by a percentage of landed catch. The percentages given to each sector has changed over time, but the current allocation schedule is as follows:

## 5.3.1.2 Allocation Schedule Between Gear Types

Initial commercial and recreational allocation will be determined by the schedule of percentages of total allowable harvest as follows:

	Coho		Chinook			
Harvest (thousands of fish)	Pe	ercentage <sup>a/</sup>	Harvest (thousands of fish)	Percentage <sup>a/</sup>		
,	Troll	Recreational	, <u> </u>	Troll	Recreational	
0-300	25	75	0-100	50	50	
>300	60	40	>100-150	60	40	
			>150	70	30	

TABLE 5-1. Initial commercial/recreational harvest allocation schedule north of Cape Falcon.

a/ The allocation must be calculated in additive steps when the harvest level exceeds the initial tier.

Without selective fishing the landed catch represented the vast majority of mortalities in the fishery. With the advent of mark-selective fishing for coho, release mortality becomes a much larger percent of the total mortality. Although both sectors accrue release mortality with selective fishing, a higher hooking mortality rate is used for modeling the troll fishery (26%) compared to the sport fishery (14%). This difference means that if the fisheries change from non-selective to selective, the sport fishery will expand up to a larger percentage of the total landed catch than when both fisheries were non-selective.

The first mark selective coho fishery in the ocean fisheries north of Cape Falcon was in the Columbia River Area from Cape Falcon, Oregon to Leadbetter Point, Washington in 1998. Using the FMP to allocate coho north of Cape Falcon, the Council adopted a season that allowed the non-Indian troll fishery to trade its coho quota (4,000) to the recreational fishery for chinook, and fish for chinook only in May and June. The sixteen thousand coho in the total allowable catch (TAC) was then split according to the FMP allocation schedule with eight thousand to the Columbia River subarea, seven thousand

four hundred to the Westport subarea and the remaining six hundred to La Push and Neah Bay subareas. Representatives from Neah Bay agreed to give the six hundred coho all to La Push in exchange for a state waters 4B add-on fishery for eight thousand coho. The eight thousand coho quota for the Columbia River subarea was converted to a mark-selective coho fishery by reducing the quota to seven thousand marked coho to account for additional hooking mortality.

In 1999 the non-Indian troll fishery was nonselective for coho, but all four recreational subarea fisheries were mark selective for coho. The coho were distributed between sectors and sport subareas using landed catch (marked coho) according to the FMP allocation schedule.

During 1998 and 1999 the Council worked on and adopted Amendment 14 to the FMP. Included in the new amendment was language governing selective fisheries allocation north of Cape Falcon. The following language is what is currently contained in the FMP:

#### 6.5.3 Species-Specific and Other Selective Fisheries

#### 6.5.3.1 Guidelines

In addition to the all-species and single or limited species seasons established for the commercial and recreational fisheries, other species-limited fisheries, such as "ratio" fisheries and fisheries selective for marked or hatchery fish, may be adopted by the Council during the preseason regulatory process. In adopting such a fishery, the Council will consider the following guidelines:

- 1. Harvestable fish of the target species are available.
- 2. Harvest impacts on incidental species will not exceed allowable levels determined in the management plan.
- 3. Proven, documented, selective gear exists (if not, only an experimental fishery should be considered).
- 4. Significant wastage of incidental species will not occur or a written economic analysis demonstrates the landed value of the target species exceeds the potential landed value of the wasted species.
- 5. The species specific or ratio fishery will occur in an acceptable time and area where wastage can be minimized and target stocks are maximally available.
- 6. Implementation of selective fisheries for marked or hatchery fish must be in accordance with U.S. v. Washington stipulation and order concerning co-management and mass marking (Case No. 9213, Subproceeding No. 96-3) and any subsequent stipulations or orders of the U.S. District Court, and consistent with international objectives under the Pacific Salmon Treaty (e.g., to ensure the integrity of the coded-wire tag program).

## 6.5.3.2 Selective Fisheries Which May Change Allocation Percentages North of Cape Falcon

As a tool to increase management flexibility to respond to changing harvest opportunities, the Council may implement deviations from the specified port area allocations and/or gear allocations to increase harvest opportunity through fisheries that are selective for marked salmon stocks (e.g., marked hatchery salmon). The benefits of any selective fishery will vary from year to year

and fishery to fishery depending on stock abundance, the mix of marked and unmarked fish, projected hook-and-release mortality rates, and public acceptance. These factors should be considered on an annual and case-by-case basis when utilizing selective fisheries. The deviations for selective fisheries are subordinate to the allocation priorities in Section 5.3.1.1 and may be allowed under the following management constraints:

- 1. Selective fisheries will first be considered during the months of August and/or September. However, the Council may consider selective fisheries at other times, depending on year to year circumstances identified in the preceding paragraph.
- 2. The total impacts within each port area or gear group on the critical natural stocks of management concern are not greater than those under the original allocation without the selective fisheries.
- 3. Other allocation objectives (i.e., treaty Indian, or ocean and inside allocations) are satisfied during negotiations in the North of Cape Falcon Forum.
- 4. The selective fishery is assessed against the guidelines in Section 6.5.3.1.
- 5. Selective fishery proposals need to be made in a timely manner in order to allow sufficient time for analysis and public comment on the proposal before the Council finalizes its fishery recommendations.

If the Council chooses to deviate from the specified port and/or gear allocations, the process for establishing a selective fishery would be as follows:

- 1. Allocate the TAC among the sectors and port areas according to the basic FMP allocation process described in Section 5.3.1 without the selective fishery.
- 2. Each gear group or port area may utilize the critical natural stock impacts allocated to its portion of the TAC to access additional harvestable, marked fish, over and above the harvest share established in step one, within the limits of the management constraints listed in the preceding paragraph.

#### 6.5.4 Procedures for Calculating Quotas

Quotas will be based on the total allowable ocean harvest and the allocation plan as determined by the procedures of Chapter 5.

To the extent adjustable quotas are used, they may be subject to some or all of the following inseason adjustments:

- 1. For coho, private hatchery contribution to the ocean fisheries in the OPI area.
- 2. Unanticipated loss of shakers (bycatch mortality of undersized fish or unauthorized fish of another species that have to be returned to the water) during the season. (Adjustment for coho hooking mortality during any all-salmon-except-coho season will be made when the quotas are established.)
- 3. Any catch that take place in fisheries within territorial waters that are inconsistent with federal regulations in the EEZ.
- 4. If the ability to update inseason stock abundance is developed in the future, adjustments to total allowable harvest could be made where appropriate.

5. The ability to redistribute quotas between subareas depending on the performance toward achieving the overall quota in the area.

Changes in the quotas as a result of the inseason adjustment process will be avoided unless the changes are of such magnitude that they can be validated by the STT and Council, given the precision of the original estimates.

The basis for determining the private hatchery contribution in (1) above will be either coded-wire tag analysis or analysis of scale patterns, whichever is determined by the STT to be more accurate, or another more accurate method that may be developed in the future, as determined by the STT and Council.

In reference to (4) and (5) above, if reliable techniques become available for making inseason estimates of stock abundance, and provision is made in any season for its use, a determination of techniques to be applied will be made by the Council and discussed during the preseason regulatory process.

In 2000 through 2004 the non-Indian troll fishery, as well as all four recreational subarea fisheries were planned as mark-selective coho fisheries. The marked coho landed catch was distributed between sectors and sport subareas using the FMP allocation schedule. The Council and the Salmon Technical Team (STT) continued to allocate the marked coho landed catch in this manner while all sectors were proposing selective fisheries because of the difficulty of using the new FMP selective fishery rules. During the preseason process, the ocean fisheries options are constantly being expanded, reduced, or otherwise changed to meet various conservation and allocation objectives. If all non-Indian sectors are using the same selective "currency" it is much easier to apply the allocation schedule to the new selective TC than to recalculate the selective quotas from a non-selective TAC. If the STT has to model based on critical natural stock impacts allocated to each sector and sport subarea, then it becomes an iterative process requiring many more model runs. The negative side to not modeling based on critical natural stock impacts is that because the sectors have different hooking mortality rates, the allocation of non-selective impacts do not meet the FMP schedule. By applying the FMP allocation schedule to a non-selective TAC, fish are reallocated from one sector to another.

A modeling exercise was done using the final model run from the 2003 preseason process. The TAC for the non-Indian fisheries north of Cape Falcon was a landed catch of 300,000 marked coho, and all fisheries were selective. The coho were allocated 75% to recreational (225,000) and 25% to non-Indian troll (75,000). If allocated according to the new language in the FMP for selective fisheries, the TAC would be calculated assuming non-selective fisheries. The non-selective fishery with roughly the same impacts on critical natural stock impacts would be 112,500 nonselective coho. The coho would then be allocated with 75% to recreational (84,500) and 25% to non-Indian troll (28,000). If these fisheries were then expanded back to selective fisheries with equivalent impacts, the resulting quotas would be 250,000 for sport (83%) and 50,000 for troll (17%). The difference is the higher hooking mortality rate used for modeling the troll fishery (26%) as compared to sport (14%).

The deviation from the FMP has not been much of a problem in the last five years of selective fisheries for two main reasons: 1) all the fisheries have been mark-selective; and 2) there have been enough coho to allow each sector to have a full season, although trades have been used to achieve this objective. This situation may be changing with both sport and commercial fisheries exploring the possibility of non-selective coho fisheries north of Cape Falcon in 2004. With sectors and sport subareas exploring non-selective and/or selective fisheries (even both in the same season), the fairness of coho allocation will become more of an issue as each group tries to stretch its share, and trades between selective and non-selective quotas are proposed. The STT needs clear direction from the Council in order to carry out its task of modeling impacts in fisheries without becoming embroiled in allocation issues.

There seem to be three alternatives:

- 1. Continue to use the landed catch method as in the last few years to allocate coho to the sectors based on selective fisheries. The STT feels this should only be done with clear explanation to the representatives for each gear and sport subarea that this changes the allocation percentages. Unless all fisheries are selective, this will no longer be a shortcut; and for that reason and the allocation issues, the STT does not favor this alternative.
- 2. Change the framework plan to better match the method used the last few years to allocate coho to the sectors based on selective fisheries. This could be done by changing the allocation percentages to something near 17% for troll and 83% for recreational. This is not the STT preferred alternative either because there is really no advantage to starting with all selective fisheries unless all fisheries are going to stay selective. It does not appear that in the future fisheries north of Cape Falcon will remain all selective.
- 3. The fisheries could be modeled the way the FMP currently states regarding selective fishery considerations. The fisheries would start out as all non-selective, and each sector and/or sport subarea could then propose a selective fishery if they choose. The fisheries would then be modeled as a mix, or all one way or the other. Although this creates a lot more work for the STT during the preseason process, it is the STT's preferred alternative at this time. The STT feels this method would meet the intent of the FMP and the historical allocation schedule, and should be tried at least for one management cycle.

Once the allowable impacts on constraining stocks has been estimated for each sector and sport subarea, inseason trades would have to be conducted in that currency, then converted to selective on non-selective landed catch for implementation. It may be desirable to clarify this process in Chapter 10 of the FMP (Inseason Management Actions and Procedures)

The STT may request some limitation on season proposals to allow adequate time to model season alternatives.