Agenda Item E.5.a. Supplemental STT Report 1 March 2021

SALMON TECHNICAL TEAM REPORT: COLLATION OF PRELIMINARY SALMON MANAGEMENT ALTERNATIVES FOR 2021 OCEAN FISHERIES

PFMC 03/08/21

TABLE 1. 2021 Commercial troll management Alternatives for non-Indian ocean salmon fisheries – STT analyzed. (Page 1 of 13) Sunday, March 07, 2021, 3:45 PM A. SEASON ALTERNATIVE DESCRIPTIONS				
ALTERNATIVE I ALTERNATIVE II ALTERNATIVE III				
North of Cape Falcon	North of Cape Falcon	North of Cape Falcon		
Supplemental Management Information	Supplemental Management Information	Supplemental Management Information		
Model #: Coho-2102, Chinook 0121	Model #: Coho-2103, Chinook0221	Model #: Coho-2104, Chinook0321		
1. Overall non-Indian TAC: 60,000 Chinook and 120,000 coho marked with a healed adipose fin clip (marked).	1. Overall non-Indian TAC: 50,000 Chinook and 110,000 coho marked with a healed adipose fin clip (marked).	Closed.		
2. Non-Indian commercial troll TAC: 32,500 Chinook and 9,200 marked coho.	2. Non-Indian commercial troll TAC: 25,000 Chinook and 14,400 marked coho.			
3. Trade: commercial troll traded 10,000 marked coho to the recreational fishery for 2,500 Chinook.	3. Trade: may be considered at the April Council meeting.			
4. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.	4. Same as Alternative 1.			
 During May 1-15, 2021: See 2020 management measures, which are subject to inseason action and the 2021 season description described below. 	5. Same as Alternative 1.			

TABLE 1. 2021 Commercial troll management Alternatives	for non-Indian ocean salmon fisheries – STT analyzed. (Page 2	2 of 13) Sunday, March 07, 2021, 3:45 PM
	A. SEASON ALTERNATIVE DESCRIPTIONS	
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
 U.S./Canada Border to Cape Falcon May 16 through the earlier of June 29, or 16,250 Chinook. No more than 6,000 of which may be caught in the area between the U.S./Canada border and the Queets River, and no more than 4,430 of which may be caught in the area between Leadbetter Pt. and Cape Falcon (C.8). 	 U.S./Canada Border to Cape Falcon May 16 through the earlier of June 29, or 15,000 Chinook. No more than 5,540 of which may be caught in the area between the U.S./Canada border and the Queets River, and no more than 4,090 of which may be caught in the area between Leadbetter Pt. and Cape Falcon (C.8). 	 U.S./Canada Border to Cape Falcon Closed.
In the area between the U.S./Canada border and the Queets River the landing and possession limit is 75 Chinook per vessel per landing week (ThursWed.) (C.1, C.6).	In the area between the U.S./Canada border and the Queets River, the landing and possession limit is 50 Chinook per vessel <u>per trip</u> (C.1, C.6).	
In the area between the Leadbetter Pt. and Cape Falcon the landing and possession limit is 75 Chinook per vessel per landing week (ThursWed.) (C.1, C.6).	In the area between the Leadbetter Pt. and Cape Falcon landing and possession limit of 50 Chinook per vessel <u>per trip</u> (C.1, C.6).	
Open seven days per week (C.1). All salmon, except coho (C.4, C.7). Chinook minimum size limit of 27 inches total length (B). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3).	Open seven days per week (C.1). All salmon, except coho (C.4, C.7). Chinook minimum size limit of 28 inches total length (B). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3).	
	Inseason action may be taken to modify trip limits to landing week (ThursWed.) limits to ensure the Chinook quota is not exceeded.	
When it is projected that approximately 75% of the overall Chinook guideline has been landed, or approximately 75% of any of the individual Chinook subarea guidelines have been landed, inseason action will be considered to ensure the guideline is not exceeded.	When it is projected that approximately 60% of the overall Chinook guideline has been landed, or approximately 60% of any of the individual Chinook subarea guidelines have been landed, inseason action will be considered to ensure the guideline is not exceeded.	
In 2022, the season will open May 1 consistent with all preseason regulations in place in this area and subareas during May 16-June 30, 2021, including subarea salmon guidelines and quotas and weekly vessel limits. This opening could be modified following Council review at its March and/or April 2022 meetings.	In 2022, same as Alternative 1.	In 2022, same as Alternative 1.

TABLE 1. 2021 Commercial troll management Alternatives for non-Indian ocean salmon fisheries – STT analyzed. (Page 3 of 13) Sunday, March 07, 2021, 3:45 PM A. SEASON ALTERNATIVE DESCRIPTIONS					
ALTERNATIVE I ALTERNATIVE II ALTERNATIVE III					
U.S./Canada Border to Cape Falcon	U.S./Canada Border to Cape Falcon	U.S./Canada Border to Cape Falcon			
 July 1 through the earlier of September 30, or 16,250 Chinook or 9,200 coho (C.8). 	 July 1 through the earlier of September 30, or 10,000 Chinook or 14,400 coho (C.8). 	Closed.			
Open seven days per week. All salmon. Chinook minimum size limit of 27 inches total length.	Open seven days per week. All salmon. Chinook minimum size limit of 28 inches total length.				
Coho minimum size limit of 16 inches total length (B, C.1). All coho must be marked with a healed adipose fin clip (C.8.d). No chum retention north of Cape Alava, Washington in August and September (C.4, C.7). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3).	Same as Alternative 1.				
Landing and possession limit of 40 marked coho per vessel per landing week (ThursWed.) (C.1).	Landing and possession limit of 50 marked coho per vessel per landing week (ThursWed.) (C.1).				
For all commercial troll fisheries north of Cape Falcon:					
Mandatory closed areas include: Salmon troll Yelloweye Rockfish Conservation Area, Cape Flattery and Columbia Control Zones, and beginning August 9, Grays Harbor Control Zone (C.5). Vessels must land and deliver their salmon within 24 hours of any closure of this fishery.					
Vessels in possession of salmon <u>north of the Queets River</u> may not cross the Queets River line without first notifying WDFW at 360-249-1215 with area fished, total Chinook, coho and halibut catch aboard, and destination. Vessels in possession of salmon south of the Queets River may not cross the Queets River line without first notifying WDFW at 360-249-1215 with area fished, total Chinook, coho and halibut catch aboard, and destination (C.11).					
Vessels fishing or in possession of salmon <u>north of Leadbette</u> delivery license. Vessels may not land fish east of the Sekiu R		ton port and must possess a Washington troll and/or salmon			
For delivery to Washington ports south of Leadbetter Point, ves with area fished, total Chinook, coho, and halibut catch aboard, fished (C.11).					
Vessels fishing or in possession of salmon while fishing south of Leadbetter Point must land and deliver all species of fish within the area and south of Leadbetter Point, except that Oregon permitted vessels may also land all species of fish in Garibaldi, Oregon. Under state law, vessels must report their catch on a state fish receiving ticket. Oregon State regulations require all fishers landing salmon into Oregon from any fishery between Leadbetter Point, Washington and Cape Falcon, Oregon to notify ODFW within one hour of delivery or prior to transport away from the port of landing by either calling 541-867-0300 ext. 271 or sending notification via e-mail to nfalcon.trollreport@state.or.us. Notification shall include vessel name and number, number of salmon by species, port of landing and location of delivery, and estimated time of delivery. Inseason actions may modify harvest guidelines in later fisheries to achieve or prevent exceeding the overall allowable troll harvest impacts (C.8).					

TABLE 1. 2021 Commercial troll management Alternatives	for non-Indian ocean salmon fisheries – STT analyzed. (Pag	e 4 of 13) Sunday, March 07, 2021, 3:45 PM	
A. SEASON ALTERNATIVE DESCRIPTIONS			
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III	
South of Cape Falcon	South of Cape Falcon	South of Cape Falcon	
Supplemental Management Information	Supplemental Management Information	Supplemental Management Information	
1. Sacramento River fall Chinook spawning escapement of 87,617 hatchery and natural area adults.	 Sacramento River fall Chinook spawning escapement of 97,653 hatchery and natural area adults. 	 Sacramento River fall Chinook spawning escapement of 89,825 hatchery and natural area adults. 	
2. Sacramento Index exploitation rate of 67.7%.	2. Sacramento Index exploitation rate of 64.0%.	2. Sacramento Index exploitation rate of 66.8%.	
 Klamath River recreational fishery allocation: 2,104 adult Klamath River fall Chinook. 	 Klamath River recreational fishery allocation: 2,211 adult Klamath River fall Chinook. 	 Klamath River recreational fishery allocation: 1,866 adult Klamath River fall Chinook. 	
 Klamath tribal allocation: 14,025 adult Klamath River fall Chinook. 	 Klamath tribal allocation: 14,739 adult Klamath River fall Chinook. 	4. Klamath tribal allocation: 12,437 adult Klamath River fall Chinook.	
 CA/OR share of Klamath River fall Chinook commercial ocean harvest: 70.1% / 29.9%. 	 CA/OR share of Klamath River fall Chinook commercial ocean harvest: 76.2% / 23.8%. 	 CA/OR share of Klamath River fall Chinook commercial ocean harvest: 72.7% / 27.3%. 	
 Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission. 	 Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission. 	6. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission.	
7. For fisheries scheduled prior to May 16, 2021, see 2020 management measures, which are subject to inseason action and the 2021 season description described below.	7. For fisheries scheduled prior to May 16, 2021, see 2020 management measures, which are subject to inseason action and the 2021 season description described below.	7. For fisheries scheduled prior to May 16, 2021, see 2020 management measures, which are subject to inseason action and the 2021 season description described below.	

TABLE 1. 2021 Commercial troll management Alternatives for non-Indian ocean salmon fisheries – STT analyzed. (Page 5 of 13) Sunday, March 07, 2021, 3:45 PM				
A. SEASON ALTERNATIVE DESCRIPTIONS				
ALTERNATIVE I ALTERNATIVE II ALTERNATIVE III				
Cape Falcon to Humbug Mt.	Cape Falcon to Humbug Mt.	Cape Falcon to Humbug Mt.		
• April 29-30;	 May 1-3, 6-10, 13-17, 20-24, 27-31; 	 May 1-3, 7-10, 14-17, 21-24, 28-31; 		
 May 1-3, 6-10, 13-17, 20-24, 27-31; 	 June 3-7, 10-14, 17-21, 24-28; 	 June 4-7, 11-14, 18-21, 25-28; 		
 June 3-7, 10-14, 17-21, 24-28; 	 July 1-5, 8-12, 15-19, 22-26, 29-31; 	 July 2-5, 9-12, 16-19, 23-26, 30-31; 		
 July 1-5, 8-12, 15-19, 22-26, 29-31; 	 August 1-2, 5-9, 12-16; 	 August 1-2, 6-9, 13-16, 20-23; 		
 August 1-2, 5-9, 12-16; 	 September 1-October 31 (C.9.a). 	 September 1-October 31 (C.9.a). 		
September 1-October 31 (C.9.a).				
Open five days per week (ThursMon.) through August 16, and seven days per week beginning September 1. All salmon except coho, except as described below. (C.4, C.7). Chinook minimum size limit of 28 inches total length (B, C.1). All vessels fishing in the area must land their salmon in the State of Oregon. See gear restrictions and definitions (C.2, C.3).	Open five days per week (ThursMon.) through August 16, and seven days per week beginning September 1. All salmon except coho (C.4, C.7). Chinook minimum size limit of 28 inches total length (B, C.1). All vessels fishing in the area must land their salmon in the State of Oregon. See gear restrictions and definitions (C.2, C.3).	Open four days per week (FriMon.) through August 23, and seven days per week beginning September 1. All salmon except coho (C.4, C.7). Chinook minimum size limit of 28 inches total length (B, C.1). All vessels fishing in the area must land their salmon in the State of Oregon. See gear restrictions and definitions (C.2, C.3).		
Beginning September 1, no more than 75 Chinook allowed per vessel per landing week (ThursWed.).	Same as Alternative 1.	Same as Alternative 1.		
• July 1 through the earlier of August 16, or 10,000 marked coho quota				
All salmon, all retained coho must be marked with a healed adipose fin clip (C.4, C.7). No more than 20 coho per vessel per open period (ThursMon.) and all coho landings must be matched to a 1:1 ratio with Chinook that are being landed at the same time. Coho minimum size limit of 16 inches total length, and Chinook minimum size limit of 28 inches total length (B, C.1). All vessels fishing in the area must land their salmon in the State of Oregon. See gear restrictions and definitions (C.2, C.3).				
In 2022, the season will open March 15 for all salmon except coho. Chinook minimum size limit of 28 inches total length. Gear restrictions same as in 2021. This opening could be modified following Council review at its March 2022 meeting.	Same as Alternative 1.	Same as Alternative 1.		

A. SEASON ALTERNATIVE DESCRIPTIONS				
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III		
 Humbug Mt. to OR/CA Border (Oregon KMZ) April 29-30; May 1-3, 6-10, 13-17, 20-24, 27-31; June 3-7, 10-14, 17-21, 24-28, or the earlier of 700 Chinook quota; July 1-5, 8-12, 15-19, 22-26, 29-31, or the earlier of 300 Chinook quota (C.9.a). 	Humbug Mt. to OR/CA Border (Oregon KMZ) May 1-3, 6-10, 13-17, 20-24, 27-31 (C.9.a). 	Humbug Mt. to OR/CA Border (Oregon KMZ) • May 1-3, 7-10, 14-17, 21-24, 28-31 (C.9.a).		
Open five days per week (ThursMon.).	Same as Alternative 1.	Open four days per week (FriMon.).		
All salmon except coho (C.4, C.7). Chinook minimum size limit of 28 inches total length (B, C.1). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3).	Same as Alternative 1.	Same as Alternative 1.		
Prior to June 1, all salmon caught in this area must be landed and delivered in the State of Oregon.	All salmon caught in this area must be landed and delivered in the State of Oregon.	All salmon caught in this area must be landed and delivered in the State of Oregon.		
June 3-July 31 weekly landing and possession limit of 40 Chinook per vessel per open period (ThursMon.). Any remaining portion of Chinook quotas may be transferred inseason on an impact neutral basis to the next open quota period (C.8.b).				
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.				
For all quota managed seasons (June and July), Oregon state regulations require fishers to notify ODFW within one hour of landing and prior to transport away from the port of landing by calling 541-867-0300 Ext. 252 or sending notification via e-mail to kmzor.trollreport@state.or.us, with vessel name and number, number of salmon by species, location of delivery, and estimated time of delivery.				
In 2022, the season will open March 15 for all salmon except coho. Chinook minimum size limit of 28 inches total length. Gear restrictions same as in 2021. This opening could be modified following Council review at its March 2022 meeting.	In 2022, same as Alternative 1.	In 2022, same as Alternative 1.		

TABLE 1. 2021 Commercial troll management Alternatives for	A. SEASON ALTERNATIVE DESCRIPTIONS	13) Sunday, March 07, 2021, 3:45 PM
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
 OR/CA Border to Humboldt South Jetty (California KMZ) Closed. 	OR/CA Border to Humboldt South Jetty (California KMZ)Closed.	 OR/CA Border to Humboldt South Jetty (California KMZ) Closed.
In 2022, the season will open May 1 through the earlier of May 31, or a 3,000 Chinook quota. Chinook minimum size limit of 27 inches total length. Landing and possession limit of 20 Chinook per vessel per day (C.8.f). Open five days per week (FriTue.). All salmon except coho (C.4, C.7). Any remaining portion of Chinook quotas may be transferred inseason on an impact neutral basis to the next open quota period (C.8.b). All fish caught in this area must be landed within the area, within 24 hours of any closure of the fishery (C.6), and prior to fishing outside the area (C.10). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3). Klamath Control Zone closed (C.5.e). See California State regulations for an additional closure adjacent to the Smith River. This opening could be modified following Council review at its March or April 2022 meetings.	In 2022, same as Alternative 1.	In 2022, same as Alternative 1.
Humboldt South Jetty to Southern KMZ Boundary Closed. 	Humboldt South Jetty to Southern KMZ Boundary Closed.	Humboldt South Jetty to Southern KMZ BoundaryClosed.
 Southern California KMZ Boundary to Point Arena (Fort Bragg) August 1-10; September 1-30 (C.9.b). 	Southern California KMZ Boundary to Point Arena (Fort Bragg) • May 1-12, 20-31; • June 1-6, 18-30; • July 13-31; • August 1-28; • September 1-30 (C.9.b).	Southern California KMZ Boundary to Point Arena (Fort Bragg) • Closed.
Open seven days per week. All salmon except coho (C.4, C.7). Chinook minimum size limit of 27 inches total length (B, C.1). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3).	Same as Alternative 1.	
All salmon must be landed in California and north of Point Arena (C.6).	Same as Alternative 1.	
In 2022, the season will open April 16 for all salmon except coho. Chinook minimum size limit of 27 inches total length. Gear restrictions same as in 2021. This opening could be modified following Council review at its March or April 2022 meeting.	In 2022, same as Alternative 1.	In 2022, same as Alternative 1.
	mbug Mountain and open to the south, vessels with fish on bo if such vessels first notify the Chetco River Coast Guard Station ed time of arrival (C.6).	

	A. SEASON ALTERNATIVE DESCRIPTION	S			
ALTERNATIVE I ALTERNATIVE II ALTERNATIVE III					
Pt. Arena to Pigeon Pt. (San Francisco)	Pt. Arena to Pigeon Pt. (San Francisco)	Pt. Arena to Pigeon Pt. (San Francisco)			
• May 6-12, 18-31;	• May 1-12, 20-31;	• May 1-12, 20-31;			
• June 1-6, 14-30;	• June 1-6, 18-30;	• June 1-6,18-30;			
• July 13-31;	• July 13-31;	• July 12-31;			
• August 1-28;	 August 1-28; 	• August 1-25;			
• September 1-30 (C.9.b).	• September 1-30 (C.9.b).	• September 1-30 (C.9.b).			
Open seven days per week. All salmon except coho (C.4, C.7). Chinook minimum size limit of 27 inches total length through August, then 26 inches thereafter (B, C.1). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3).	Same as Alternative 1.	Same as Alternative 1.			
All salmon must be landed in California. During September, all salmon must be landed south of Point Arena (C.6, C.11). All salmon caught in the area prior to September 1 must be landed and offloaded no later than 11:59 p.m., August 30 (C.6).	Same as Alternative 1.	Same as Alternative 1.			
In 2022, the season will open May 1 for all salmon except coho. Chinook minimum size limit of 27 inches total length. Gear restrictions same as in 2021. This opening could be modified following Council review at its March or April 2022 meeting.	In 2022, Same as Alternative 1.	In 2022, Same as Alternative 1.			
Point Reyes to Point San Pedro (Fall Area Target Zone) • October 1, 4-8, 11-15.	Point Reyes to Point San Pedro (Fall Area Target Zone) • Same as Alternative 1.	Point Reyes to Point San Pedro (Fall Area Target Zone) • Same as Alternative 1.			
Open five days per week (MonFri.). All salmon except coho (C.4, C.7). Chinook minimum size limit of 26 inches total length (B, C.1). All salmon caught in this area must be landed between Point Arena and Pigeon Point (C.6, C.11). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3).	Same as Alternative 1.	Same as Alternative 1.			

	A. SEASON ALTERNATIVE DESCRIPTIONS				
ALTERNATIVE I	ALTERNATIVE I ALTERNATIVE II ALTERNATIVE III				
Pigeon Point to U.S./Mexico Border (Monterey)	Pigeon Point to U.S./Mexico Border (Monterey)	Pigeon Point to U.S./Mexico Border (Monterey)			
 May 1-12, 18-31; 	• May 1-12, 20-31;	• May 1-31;			
• June 1-6, 14-30;	• June 1-6, 18-30;	• June 1-30;			
• July 13-31;	• July 13-31;	• July 12-31;			
• August 1-28 (C.9.b).	• August 1-28 (C.9.b).	• August 1-25; (C.9.b).			
Open seven days per week. All salmon except coho (C.4, C.7). Chinook minimum size limit of 27 inches total length (B, C.1). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3).	Same as Alternative 1.	Same as Alternative 1.			
All salmon must be landed in California. All salmon caught in the area must be landed and offloaded no later than 11:59 p.m., August 30 (C.6).	Same as Alternative 1.	Same as Alternative 1.			
In 2022, the season will open May 1 for all salmon except coho. Chinook minimum size limit of 27 inches total length. Gear restrictions same as in 2021. This opening could be modified following Council review at its March or April 2022 meeting.	In 2022, same as Alternative 1.	In 2022, same as Alternative 1.			

TABLE 1. 2021 Commercial troll management Alternatives for non-Indian ocean salmon fisheries – STT analyzed. (Page 10 of 13)

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B. MINIMUM SIZE (Inches) (See C.1)					
	Chino	ok	Coho)	
Area (when open)	Total Length	Head-off	Total Length	Head-off	Pink
North of Cape Falcon (Alternative 1)	27	21.5	16	12	None
North of Cape Falcon (Alternatives 2 and 3)	28	21.5	16	12	None
Cape Falcon to Humbug Mt.	28	21.5	16	12	None
Humbug Mt. to OR/CA Border	28	21.5	-	-	None
OR/CA Border to Humboldt South Jetty	-	-	-	-	-
Southern KMZ Boundary to Pt. Arena	27	20.5	-	-	27
Pt. Arena to Pigeon Pt. through August	27	20.5		-	27
Pt. Arena to Pigeon Pt. September-October	26	19.5		-	26
Pigeon Pt. to U.S./Mexico Border	27	20.5	-	-	27

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

C.1. <u>Compliance with Minimum Size or Other Special Restrictions</u>: All salmon on board a vessel must meet the minimum size, landing/possession limit, or other special requirements for the area being fished and the area in which they are landed if the area is open or has been closed less than 48 hours for that species of salmon. Salmon may be landed in an area that has been closed for a species of salmon more than 48 hours only if they meet the minimum size, landing/possession limit, or other special requirements for the area in which they were caught. Salmon may not be filleted prior to landing.

Any person who is required to report a salmon landing by applicable state law must include on the state landing receipt for that landing both the number and weight of salmon landed by species. States may require fish landing/receiving tickets be kept on board the vessel for 90 days or more after landing to account for all previous salmon landings.

- C.2. Gear Restrictions:
 - a. Salmon may be taken only by hook and line using single point, single shank, barbless hooks.
 - b. Cape Falcon, Oregon, to the OR/CA border: No more than 4 spreads are allowed per line.
 - c. OR/CA border to U.S./Mexico border: No more than 6 lines are allowed per vessel, and barbless circle hooks are required when fishing with bait by any means other than trolling.
- C.3. Gear Definitions:
 - a. Trolling defined: Fishing from a boat or floating device that is making way by means of a source of power, other than drifting by means of the prevailing water current or weather conditions.
 - b. Troll fishing gear defined: One or more lines that drag hooks behind a moving fishing vessel engaged in trolling. In that portion of the fishery management area off Oregon and Washington, the line or lines must be affixed to the vessel and must not be intentionally disengaged from the vessel at any time during the fishing operation.
 - c. Spread defined: A single leader connected to an individual lure and/or bait.
 - d. Circle hook defined: A hook with a generally circular shape and a point which turns inward, pointing directly to the shank at a 90° angle.

TABLE 1. 2021 Commercial troll management Alternatives for non-Indian ocean salmon fisheries – STT analyzed. (Page 11 of 13)

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS (continued)

C.4. Vessel Operation in Closed Areas with Salmon on Board:

- a. Except as provided under C.4.b below, it is unlawful for a vessel to have troll or recreational gear in the water while in any area closed to fishing for a certain species of salmon, while possessing that species of salmon; however, fishing for species other than salmon is not prohibited if the area is open for such species, and no salmon are in possession.
- b. When Genetic Stock Identification (GSI) samples will be collected in an area closed to commercial salmon fishing, the scientific research permit holder shall notify NOAA OLE, USCG, CDFW, WDFW, ODFW, and OSP at least 24 hours prior to sampling and provide the following information: the vessel name, date, location and time collection activities will be done. Any vessel collecting GSI samples in a closed area shall not possess any salmon other than those from which GSI samples are being collected. Salmon caught for collection of GSI samples must be immediately released in good condition after collection of samples.

C.5.Control Zone Definitions:

- a. Cape Flattery Control Zone The area from Cape Flattery (48°23'00" N. lat.) to the northern boundary of the U.S. EEZ; and the area from Cape Flattery south to Cape Alava (48°10'00" N. lat.) and east of 125°05'00" W. long.
- b. Mandatory Yelloweye Rockfish Conservation Area The area in Washington Marine Catch Area 3 from 48°00.00' N. lat.; 125°14.00' W. long. to 48°02.00' N. lat.; 125°16.50' W. long. to 48°02.00' N. lat.; 125°16.50' W. long. to 48°00.00' N. l
- c. Grays Harbor Control Zone The area defined by a line drawn from the Westport Lighthouse (46° 53'18" N. lat., 124° 07'01" W. long.) to Buoy #2 (46° 52'42" N. lat., 124°12'42" W. long.) to Buoy #3 (46° 55'00" N. lat., 124°14'48" W. long.) to the Grays Harbor north jetty (46° 55'36" N. lat., 124°10'51" W. long.).
- d. Columbia Control Zone An area at the Columbia River mouth, bounded on the west by a line running northeast/southwest between the red lighted Buoy #4 (46°13'35" N. lat., 124°06'50" W. long.) and the green lighted Buoy #7 (46°15'09' N. lat., 124°06'16" W. long.); on the east, by the Buoy #10 line which bears north/south at 357° true from the south jetty at 46°14'00" N. lat., 124°03'07" W. long. to its intersection with the north jetty; on the north, by a line running northeast/southwest between the green lighted Buoy #7 to the tip of the north jetty (46°15'48" N. lat., 124°05'20" W. long.), and then along the north jetty to the point of intersection with the Buoy #10 line; and, on the south, by a line running northeast/southwest between the red lighted Buoy #4 and tip of the south jetty (46°14'03" N. lat., 124°04'05" W. long.), and then along the south jetty to the point of intersection with the Buoy #10 line.
- e. *Klamath Control Zone* The ocean area at the Klamath River mouth bounded on the north by 41°38'48" N. lat. (approximately 6 nautical miles north of the Klamath River mouth); on the west by 124°23'00" W. long. (approximately 12 nautical miles off shore); and on the south by 41°26'48" N. lat. (approximately 6 nautical miles south of the Klamath River mouth).
- f. Waypoints for the 40 fathom regulatory line from Cape Falcon to Humbug Mt. (50 CFR 660.71 (k) (12)-(70), when in place.

45°46.00' N. lat., 124°04.49' W. long.; 45°44.34' N. lat., 124°05.09' W. long.; 45°40.64' N. lat., 124°04.90' W. long.; 45°33.00' N. lat., 124°04.46' W. long.; 45°32.27' N. lat., 124°04.46' W. long.; 45°29.26' N. lat., 124°04.22' W. long.; 45°20.25' N. lat., 124°04.62' W. long.; 45°19.99' N. lat., 124°04.62' W. long.; 45°17.50' N. lat., 124°04.62' W. long.; 45°11.29' N. lat., 124°04.91' W. long.; 45°05.80' N. lat., 124°05.20' W. long.; 45°05.80' N. lat., 124°05.40' W. long.; 45°03.83' N. lat., 124°06.47' W. long.;	44°51.28' N. lat., 124°10.21' W. long.; 44°49.49' N. lat., 124°10.90' W. long.; 44°44.96' N. lat., 124°14.39' W. long.; 44°43.44' N. lat., 124°14.78' W. long.; 44°42.26' N. lat., 124°13.81' W. long.; 44°41.68' N. lat., 124°15.38' W. long.; 44°34.87' N. lat., 124°15.80' W. long.; 44°33.74' N. lat., 124°15.80' W. long.; 44°19.13' N. lat., 124°16.99' W. long.; 44°15.35' N. lat., 124°17.38' W. long.; 44°14.38' N. lat., 124°17.78' W. long.; 44°14.38' N. lat., 124°17.78' W. long.;	44°08.30' N. lat., 124°16.75' W. long.; 44°01.18' N. lat., 124°15.42' W. long.; 43°51.61' N. lat., 124°14.68' W. long.; 43°40.49' N. lat., 124°15.74' W. long.; 43°38.77' N. lat., 124°15.74' W. long.; 43°34.52' N. lat., 124°16.73' W. long.; 43°28.82' N. lat., 124°19.52' W. long.; 43°20.83' N. lat., 124°24.28' W. long.; 43°20.83' N. lat., 124°26.63' W. long.; 43°17.96' N. lat., 124°28.81' W. long.; 43°13.97' N. lat., 124°31.99' W. long.;	43°10.96' N. lat., 124°32.33' W. long.; 43°05.65' N. lat., 124°31.52' W. long.; 42°59.66' N. lat., 124°32.58' W. long.; 42°53.81' N. lat., 124°36.99' W. long.; 42°50.00' N. lat., 124°39.68' W. long.; 42°49.13' N. lat., 124°39.70' W. long.; 42°46.47' N. lat., 124°38.86' W. long.; 42°44.79' N. lat., 124°38.86' W. long.; 42°45.74' N. lat., 124°37.96' W. long.; 42°45.01' N. lat., 124°36.39' W. long.; 42°44.14' N. lat., 124°35.17' W. long.; 42°42.14' N. lat., 124°32.82' W. long.;
45°01.70′ N. lat., 124°06.53′ W. long.; 44°58.75′ N. lat., 124°07.14′ W. long.;	44°09.23' N. lat., 124°15.96' W. long.; 44°08.38' N. lat., 124°16.79' W. long.;	43°13.72′ N. lat., 124°33.25′ W. long.; 43°12.26′ N. lat., 124°34.16′ W. long.;	42°40.50' N. lat., 124°31.98' W. long.

TABLE 1. 2021 Commercial troll management Alternatives for non-Indian ocean salmon fisheries – STT analyzed. (Page 12 of 13) Sunday, March 07, 2021, 3:45 PM

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS (continued)

C.6. <u>Notification When Unsafe Conditions Prevent Compliance with Regulations</u>: If prevented by unsafe weather conditions or mechanical problems from meeting special management area landing restrictions, vessels must notify the U.S. Coast Guard and receive acknowledgment of such notification prior to leaving the area. This notification shall include the name of the vessel, port where delivery will be made, approximate number of salmon (by species) on board, the estimated time of arrival, and the specific reason the vessel is not able to meet special management area landing restrictions.

In addition to contacting the U.S. Coast Guard, vessels fishing south of the Oregon/California border must notify CDFW within one hour of leaving the management area by calling 800-889-8346 and providing the same information as reported to the U.S. Coast Guard. All salmon must be offloaded within 24 hours of reaching port.

C.7. Incidental Halibut Harvest: License applications for incidental harvest for halibut during commercial salmon fishing must be obtained from IPHC.

During the 2021 salmon troll season, incidental harvest is authorized only during April, May, and June, and after June 30 if quota remains and if announced on the NMFS hotline (phone: 800-662-9825 or 206-526-6667). WDFW, ODFW, and CDFW will monitor landings. If the landings are projected to exceed the IPHC's preseason allocation or the total Area 2A non-Indian commercial halibut allocation, NMFS will take inseason action to prohibit retention of halibut in the non-Indian salmon troll fishery.

Beginning May 16, 2021 through the end of the 2021 salmon troll fishery, and beginning April 1, 2022, until modified through inseason action or superseded by the 2022 management measures the following applies:

(PENDING) License holders may land no more than X Pacific halibut per each X Chinook, except one Pacific halibut may be landed without meeting the ratio requirement, and no more than XX halibut may be landed per trip.

Incidental Pacific halibut catch regulations in the commercial salmon troll fishery adopted for 2021, prior to any 2021 inseason action, will be in effect when incidental Pacific halibut retention opens on April 1, 2022 unless otherwise modified by inseason action at the March 2022 Council meeting.

a. "C-shaped" yelloweye rockfish conservation area is an area to be voluntarily avoided for salmon trolling. NMFS and the Council request salmon trollers voluntarily avoid this area in order to protect yelloweye rockfish. The area is defined in the Pacific Council Halibut Catch Sharing Plan in the North Coast subarea (Washington marine area 3), with the following coordinates in the order listed:

48°18' N. lat.; 125°18' W. long.; 48°18' N. lat.; 124°59' W. long.; 48°11' N. lat.; 124°59' W. long.; 48°04' N. lat.; 125°11' W. long.; 48°04' N. lat.; 125°11' W. long.; 48°04' N. lat.; 124°59' W. long.; 48°00' N. lat.; 124°59' W. long.; 48°00' N. lat.; 125°18' W. long.; and connecting back to 48°18' N. lat.; 125°18' W. long. TABLE 1. 2021 Commercial troll management Alternatives for non-Indian ocean salmon fisheries – STT analyzed. (Page 13 of 13) Sunday, March 07, 2021, 3:45 PM

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS (continued)

- C.8. Inseason Management: In addition to standard inseason actions or modifications already noted under the season description, the following inseason guidance is provided to NMFS:
 - a. Chinook remaining from the May through June non-Indian commercial troll harvest guideline north of Cape Falcon may be transferred to the July through September harvest guideline if the transfer would not result in exceeding preseason impact expectations on any stocks.
 - b. Chinook remaining from May, June, and/or July non-Indian commercial troll quotas in the Oregon or California KMZ may be transferred to the Chinook quota for the next open period if the transfer would not result in exceeding preseason impact expectations on any stocks.
 - c. NMFS may transfer salmon between the recreational and commercial fisheries north of Cape Falcon if there is agreement among the areas' representatives on the Salmon Advisory Subpanel (SAS), and if the transfer would not result in exceeding preseason impact expectations on any stocks.
 - d. At the March 2022 meeting, the Council will consider inseason recommendations for special regulations for any experimental fisheries (proposals must meet Council protocol and be received in November 20221.
 - e. If retention of unmarked coho (adipose fin intact) is permitted by inseason action, the allowable coho quota will be adjusted to ensure preseason projected impacts on all stocks is not exceeded.
 - f. Landing limits may be modified inseason to sustain season length and keep harvest within overall quotas.
 - g. NMFS may close fisheries through inseason action on the recommendation of the affected state(s) of Washington, Oregon or California where the recommendation to close is informed by an evaluation of actions or orders promulgated or issued by jurisdictions in these areas to address public health concerns related to COVID-19 concluding that these actions would likely make access to the fishery impracticable (e.g., restrictions on activities or closure of harbors, launch ramps and other forms of access) or would make information essential to manage and implement the fishery unavailable. NMFS should open fisheries closed on this basis through inseason action upon notice from the affected State(s) that said actions or orders making access to the fishery impracticable have been lifted and information essential to manage and implement the fishery would be available.
- C.9. State Waters Fisheries: Consistent with Council management objectives:
 - a. The State of Oregon may establish additional late-season fisheries in state waters.
 - b. The State of California may establish limited fisheries in selected state waters.
 - c. Check state regulations for details.
- C.10. For the purposes of California Fish and Game Code, Section 8232.5, the definition of the Klamath Management Zone (KMZ) for the ocean salmon season shall be that area from Humbug Mountain, Oregon, to the Southern Boundary of the California KMZ.
- C.11. Latitudes for geographical reference of major landmarks along the west coast. Majority of information from source: 2018 West Coast federal salmon regulations. https://www.govinfo.gov/content/pkg/FR-2018-05-01/pdf/2018-09164.pdf.

Cape Flattery, WA	48°23′00″ N lat.	Humboldt South Jetty, CA	40°45′53″ N lat.
Cape Alava, WA	48°10′00″ N lat.	Helliwell Line	40°10′00″ N lat
Queets River, WA	47°31′42″ N lat.	Horse Mountain, CA	40°05′00″ N lat.
Leadbetter Point, WA	46°38'10" N lat.	Point Arena, CA	38°57′30″ N lat.
Cape Falcon, OR	45°46′00″ N lat.	Point Reyes, CA	37°59′44″ N lat.
Florence South Jetty, OR	44°00′54″ N lat.	Point San Pedro, CA	37°35′40″ N lat.
South end Heceta Bank line, OR	44°00′54″ N lat.	Pigeon Point, CA	37°11′00″ N lat.
Humbug Mountain, OR	43°58′00″ N lat.	Point Sur, CA	36°18′00″ N lat.
Oregon-California border	42°00′00″ N lat.	Point Conception, CA	34°27′00″ N lat.

TABLE 2. 2021 Neoleational management Alternatives for I	non-Indian ocean salmon fisheries – STT analyzed. (Page 1	of 9) Saturday, March 06, 2021,4:20 PM			
A. SEASON ALTERNATIVE DESCRIPTIONS					
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III			
North of Cape Falcon	North of Cape Falcon	North of Cape Falcon			
Supplemental Management Information	Supplemental Management Information	Supplemental Management Information			
 coho; all retained coho must be marked. 3. Various daily limits and species combinations of one and two salmon will be considered. Including one fish, two fish only, one of which may be a Chinook, and two fish only one of which may be a coho. 4. Trade: commercial troll traded 10,000 marked coho to the recreational fishery for 2,500 Chinook. 	 coho marked with a healed adipose fin clip (marked). 2. Recreational TAC: 25,000 Chinook and 95,600 marked coho; all retained coho must be marked. 3. Various daily limits and species combinations of one and two salmon will be considered. Including one fish, two fish only, one of which may be a Chinook, and two fish only one of which may be a coho. 4. Trade: May be considered at the April Council meeting. 5. No Area 4B add-on fishery. 6. Buoy 10 fishery opens August 1 with an expected landed catch of 80,000 marked coho in August and September. 7. Same as Alternative I. 	Closed. Buoy 10 fishery opens August 1 with an expected landed catch of 110,000 marked coho in August and September			

A. SEASON ALTERNATIVE DESCRIPTIONS					
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III			
 U.S./Canada Border to Cape Alava (Neah Bay) June 12-25 (C.5). 	 U.S./Canada Border to Cape Alava (Neah Bay) June 19-25 (C.5). 	 U.S./Canada Border to Cape Alava (Neah Bay) Closed. 			
Open seven days per week. All salmon, except coho; one salmon per day (C.1).	Open seven days per week. All salmon, except coho; two salmon per day (C.1).				
• June 26 through the earlier of September 30, or 11,520 marked coho subarea quota, with a subarea guideline of 5,900 Chinook (C.5).	• June 26 through the earlier of September 30, or 7,860 marked coho subarea quota, with a subarea guideline of 5,400 Chinook (C.5).				
Open seven days per week. All salmon, except no chum beginning August 1; two salmon per day. All coho must be marked with a healed adipose fin clip (C.1).	Same as Alternative 1.				
Beginning August 1, Chinook non-retention east of the Bonilla-Tatoosh line (C.4.a) during Council managed ocean fishery. See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook and coho recreational TACs for north of Cape Falcon (C.5).	Same as Alternative 1.				
Cape Alava to Queets River (La Push Subarea) • June 12-25 (C.5).	Cape Alava to Queets River (La Push Subarea) June 19-25 (C.5). 	Cape Alava to Queets River (La Push Subarea) Closed. 			
Open seven days per week. All salmon, except coho; two salmon per day (C.1).	Same as Alternative 1.				
• June 26 through earlier of September 30, or 2,880 marked coho subarea quota, with a subarea guideline of 1,300 Chinook (C.5).	• June 26 through earlier of September 30, or 1,970 marked coho subarea quota, with a subarea guideline of 1,200 Chinook (C.5).				
Open seven days per week. All salmon, except no chum beginning August 1; two salmon per day. All coho must be marked with a healed adipose fin clip (C.1).	Same as Alternative 1.				
Inseason management may be used to sustain season length and keep harvest within the overall Chinook and coho recreational TACs for north of Cape Falcon (C.5).	Same as Alternative 1.				

TABLE 2. 2021 Recreational management Alternatives for non-Indian ocean salmon fisheries – STT analyzed. (Page 3 of 9) Saturday, March 06, 2021,4:20 PM					
	A. SEASON ALTERNATIVE DESCRIPTIONS				
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III			
 Queets River to Leadbetter Point (Westport Subarea) June 12 -18 (C.5). 	 Queets River to Leadbetter Point (Westport Subarea) June 19-26 (C.5). 	 Queets River to Leadbetter Point (Westport Subarea) Closed. 			
Open seven days per week. All salmon, except coho; two salmon per day. (C.1). Chinook minimum size limit of 22 inches total length (B).	Open seven days per week. All salmon, except coho; one salmon per day. (C.1). Chinook minimum size limit of 22 inches total length (B).				
• June 19 through earlier of September 30, or 41,000 marked coho subarea quota, with a subarea guideline of 13,000 Chinook (C.5).	• June 27 through earlier of September 30, or 27,970 marked coho subarea quota, with a subarea guideline of 11,800 Chinook (C.5).				
Open seven days per week. All salmon; two salmon per day, no more than one of which may be a Chinook. All coho must be marked with a healed adipose fin clip (C.1). Chinook minimum size limit of 22 inches total length (B).	Open five days per week (Sun.–Thurs.). Same as Alternative 1.				
See gear restrictions and definitions (C.2, C.3). Grays Harbor Control Zone closed beginning August 9 (C.4.b). Inseason management may be used to sustain season length and keep harvest within the overall Chinook and coho recreational TACs for north of Cape Falcon (C.5).	Same as Alternative 1.				
Leadbetter Point to Cape Falcon	Leadbetter Point to Cape Falcon	Leadbetter Point to Cape Falcon			
(Columbia River Subarea)	(Columbia River Subarea)	(Columbia River Subarea)			
• June 12-18 (C.5).	• June 19-26 (C.5).	Closed.			
Open seven days per week. All salmon, except coho; two salmon per day (C.1). Chinook minimum size limit of 22 inches total length (B).	Open seven days per week. All salmon, except coho; one salmon per day (C.1). Chinook minimum size limit of 22 inches total length (B).				
• June 19 through earlier of September 30, or 55,400 marked coho subarea quota, with a subarea guideline of 7,300 Chinook (C.5).	• June 27 through earlier of September 30, or 57,800 marked coho subarea quota, with a subarea guideline of 6,600 Chinook (C.5).				
Open seven days per week. All salmon; two salmon per day, no more than one of which may be a Chinook. All coho must be marked with a healed adipose fin clip (C.1). Chinook minimum size limit of 22 inches total length (B).	Same as Alternative 1.				
Columbia Control Zone closed (C.4.c). Inseason management may be used to sustain season length and keep harvest within the overall Chinook and coho recreational TACs for north of Cape Falcon (C.5).	Same as Alternative 1.				

A. SEASON ALTERNATIVE DESCRIPTIONS					
South of Cape Falcon	South of Cape Falcon	South of Cape Falcon			
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III			
Supplemental Management Information	Supplemental Management Information	Supplemental Management Information			
1. Sacramento River fall Chinook spawning escapement of 87,617 hatchery and natural area adults.	1. Sacramento River fall Chinook spawning escapement of 97,653 hatchery and natural area adults.	1. Sacramento River fall Chinook spawning escapement of 89,825 hatchery and natural area adults.			
2. Sacramento Index exploitation rate of 67.7%.	2. Sacramento Index exploitation rate of 64.0%.	2. Sacramento Index exploitation rate of 66.8%.			
 Klamath River recreational fishery allocation: 2,104 adult Klamath River fall Chinook. 	3. Klamath River recreational fishery allocation: 2,211 adult Klamath River fall Chinook.	 Klamath River recreational fishery allocation: 1,866 adu Klamath River fall Chinook. 			
4. Klamath tribal allocation: 14,025 adult Klamath River fall Chinook.	4. Klamath tribal allocation: 14,739 adult Klamath River fall Chinook.	4. Klamath tribal allocation: 12,437 adult Klamath River fall Chinook.			
5. Overall recreational coho TAC: 140,000 coho marked with a healed adipose fin clip (marked), and 15,500 coho in the non-mark-selective coho fishery.	5. Overall recreational coho TAC: 120,000 coho marked with a healed adipose fin clip (marked), and 15,000 coho in the non-mark-selective coho fishery.	5. Overall recreational coho TAC: 110,000 coho marked with a healed adipose fin clip (marked), and 11,000 coho in the non-mark-selective coho fishery.			
 Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the CFGC. 	 Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the CFGC. 	 Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the CFGC. 			
7. For fisheries scheduled prior to May 16, 2021, see 2020 management measures, which are subject to inseason action and the 2021 season description described below.	7. Fisheries scheduled prior to May 16, 2021, see 2020 management measures, which are subject to inseason action and the 2021 season description described below.	7. Fisheries scheduled prior to May 16, 2021, see 2020 management measures, which are subject to inseasor action and the 2021 season description described below.			

A. SEASON ALTERNATIVE DESCRIPTIONS							
ALTERNATIVE I ALTERNATIVE II ALTERNATIVE III							
 Cape Falcon to Humbug Mt. March 15-October 31 (C.6), except as provided below during the all-salmon mark-selective fishery and the non-mark-selective coho fishery (C.5). 	Cape Falcon to Humbug Mt.Same as Alternative 1.	Cape Falcon to Humbug Mt. Same as Alternative 1. 					
Open seven days per week. All salmon except coho, two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B). See gear restrictions and definitions (C.2, C.3).	Same as Alternative 1.	Same as Alternative 1.					
In 2022, the season will open March 15 for all salmon except coho, two salmon per day (C.1). Chinook minimum size limit of 24 inches total length (B); and the same gear restrictions as in 2021 (C.2, C.3). This opening could be modified following Council review at its March 2022 meeting.	In 2022, same as Alternative 1.	In 2022, same as Alternative 1.					
Cape Falcon to OR/CA Border.	Cape Falcon to OR/CA Border/ Humbug Mt.	Cape Falcon to Humbug Mt.					
 All-salmon mark-selective coho fishery: June 12 through the earlier of August 28, or 140,000 marked coho quota (C.6). 	 All-salmon mark-selective coho fishery: June 19 through July 25 Cape Falcon to OR/CA Border and July 26-August 28 Cape Falcon to Humbug Mt., or 120,000 marked coho quota (C.6). 	 All-salmon mark-selective coho fishery: June 26 through the earlier of August 28, or 110,000 marked coho quota (C.6). 					
Open seven days per week. All salmon, two salmon per day. All retained coho must be marked with a healed adipose fin clip (C.1). See minimum size limits (B). See gear restrictions and definitions (C.2, C.3).	Same as Alternative 1.	Same as Alternative 1.					
Any remainder of the mark-selective coho quota may be transferred inseason on an impact neutral basis to the non-selective coho quota from Cape Falcon to Humbug Mountain (C.5).	Same as Alternative 1.	Same as Alternative 1.					
 Non-mark-selective coho fishery: September 10-12, and open each Friday, Saturday, and Sunday through the earlier of September 30, or 15,500 non-mark-selective coho quota (C.6). Open days may be modified inseason. 	 Non-mark-selective coho fishery: September 10-12, and open each Friday, Saturday, and Sunday through the earlier of September 30, or 15,000 non-mark-selective coho quota (C.6). Open days may be modified inseason. 	 Non-mark-selective coho fishery: September 10-12, and open each Friday, Saturday, and Sunday through the earlier of September 30, or 11,000 non-mark-selective coho quota (C.6). Open days may be modified inseason. 					
All salmon, two salmon per day (C.1). See minimum size limits (B). See gear restrictions and definitions (C.2, C.3).	Same as Alternative 1.	Same as Alternative 1.					

TABLE 2. 2021 Recreational management Alternatives for	TABLE 2. 2021 Recreational management Alternatives for non-Indian ocean salmon fisheries – STT analyzed. (Page 6 of 9) Saturday, March 06, 2021,4:20 PM						
A. SEASON ALTERNATIVE DESCRIPTIONS							
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III					
 Humbug Mt. to OR/CA Border (Oregon KMZ) May 16-August 1 (C.6). 	 Humbug Mt. to OR/CA Border (Oregon KMZ) May 29-July 25 (C.6). 	 Humbug Mt. to OR/CA Border (Oregon KMZ) May 29-June 13; July 3-11; July 31-August 8 (C.6). 					
Open seven days per week. All salmon except coho, except as listed above for the mark-selective coho fishery from Cape Falcon to the OR/CA Border (June 12-August 28). Two salmon per day (C.1). Chinook minimum size limit of 24 inches total length (B). See gear restrictions and definitions (C.2, C.3).	Open seven days per week. All salmon except coho, except as listed above for the mark-selective coho fishery from Cape Falcon to the OR/CA Border (June 19-July 25). Two salmon per day (C.1). Chinook minimum size limit of 24 inches total length (B). See gear restrictions and definitions (C.2, C.3).	Open seven days per week. All salmon except coho, two salmon per day (C.1). Chinook minimum size limit of 24 inches total length (B). See gear restrictions and definitions (C.2, C.3).					
• August 2 to the earlier of August 28 or the Cape Falcon to OR/CA Border quota of 140,000 marked coho is reached (C.6).							
Open seven days per week. All salmon except Chinook, two salmon per day. All retained coho must be marked with a healed adipose fin clip (C.1). See minimum size limits (B). See gear restrictions and definitions (C.2, C.3).							
OR/CA Border to Southern Boundary of California KMZ • May 1-August 31 (C.6).	 OR/CA Border to Southern Boundary of California KMZ June 12-July 31(C.6). 	OR/CA Border to Southern Boundary of California KMZ • June 19-July 31 (C.6).					
Open seven days per week. All salmon except coho, two salmon per day (C.1). Chinook minimum size limit of 20 inches total length (B). See gear restrictions and definitions (C.2, C.3).	Same as Alternative 1.	Same as Alternative 1.					
Klamath Control Zone closed in August (C.4.e). See California State regulations for additional closures adjacent to the Smith, Eel, and Klamath Rivers.							
In 2022, season opens May 1 for all salmon except coho, two salmon per day (C.1). Chinook minimum size limit of 20 inches total length (B); and the same gear restrictions as in 2021 (C.2, C.3). This opening could be modified following Council review at its March 2022 meeting.	In 2022, same as Alternative 1.	In 2022, same as Alternative 1.					

TABLE 2. 2021 Recreational management Alternatives for non-Indian ocean salmon fisheries – STT analyzed. (Page 7 of 9) Saturday, March 06, 2021,4:20 PM					
A. SEASON ALTERNATIVE DESCRIPTIONS					
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III			
Southern Boundary of California KMZ to Point Arena (Fort Bragg) • April 3-November 7 (C.6).	Southern Boundary of California KMZ to Point Arena (Fort Bragg) • April 10-November 7 (C.6).	Southern Boundary of California KMZ to Point Arena (Fort Bragg) • April 17-October 31 (C.6).			
Open seven days per week. All salmon except coho, two salmon per day (C.1). Chinook minimum size limit of 20 inches total length (B). See gear restrictions and definitions (C.2, C.3).	Same as Alternative 1.	Same as Alternative 1.			
In 2022, season opens April 2 for all salmon except coho, two salmon per day (C.1). Chinook minimum size limit of 20 inches total length (B); and the same gear restrictions as in 2021 (C.2, C.3). This opening could be modified following Council review at its March 2022 meeting.	In 2022, same as Alternative 1.	In 2022, same as Alternative 1.			
Point Arena to Pigeon Point (San Francisco)	Point Arena to Pigeon Point (San Francisco)	Point Arena to Pigeon Point (San Francisco)			
• April 3-November 7(C.6).	• April 10-November 7 (C.6).	• April 17-October 31 (C.6).			
Open seven days per week. All salmon except coho, two salmon per day (C.1). Chinook minimum size limit of 24 inches total length through May 15, and 20 inches total length thereafter. See gear restrictions and definitions (C.2, C.3).	Same as Alternative 1.	Same as Alternative 1. In 2022, same as Alternative 1.			
In 2022, season opens April 2 for all salmon except coho, two salmon per day (C.1). Chinook minimum size limit of 24 inches total length (B); and the same gear restrictions as in 2021 (C.2, C.3). This opening could be modified following Council review at its March 2022 meeting.	In 2022, same as Alternative 1.				
 Pigeon Point to U.S./Mexico Border (Monterey) April 3-September 30 (C.6). 	 Pigeon Point to U.S./Mexico Border (Monterey) April 3-August 29 (C.6). 	 Pigeon Point to U.S./Mexico Border (Monterey) April 3-August 22 (C.6). 			
Open seven days per week. All salmon except coho, two salmon per day (C.1). Chinook minimum size limit of 24 inches total length (B). See gear restrictions and definitions (C.2, C.3).	Same as Alternative 1.	Open seven days per week. All salmon except coho, two salmon per day (C.1). Chinook minimum size limit of 24 inches total length through May 15, and 20 inches total length thereafter (B). See gear restrictions and definitions (C.2, C.3).			
In 2022, season opens April 2 for all salmon except coho, two salmon per day (C.1). Chinook minimum size limit of 24 inches total length (B); and the same gear restrictions as in 2021 (C.2, C.3). This opening could be modified following Council review at its March 2022 meeting.	In 2022, same as Alternative 1.	In 2022, same as Alternative 1.			
	able to a CDFW representative for sampling immediately at p employee of the CDFW, shall immediately relinquish the hear				

TABLE 2. 2021 Recreational management Alternatives for non-Indian ocean salmon fisheries – STT analyzed. (Page 8 of 9)

Saturday, March 06, 2021,4:20 PM

Area (when open)	Chinook	Coho	Pink
North of Cape Falcon (Alt 1 and Alt 2 Westport and Col R)	22	16	None
North of Cape Falcon (Alt 1 and Alt 2 Neah Bay and La Push)	24	16	None
Cape Falcon to Humbug Mt.	24	16	None
Humbug Mt. to OR/CA Border	24	16	None
OR/CA Border to Southern Boundary of California KMZ	20	-	20
Southern Boundary of California KMZ to Pt. Arena	20	-	20
Pt. Arena to Pigeon Pt. through May 15	24	-	24
Pt. Arena to Pigeon Pt. beginning May 16	20	-	20
Pigeon Pt. to U.S./Mexico Border (Alt 1 and 2, and through May 15 in Alt 3)	24	-	24
Pigeon Pt. to U.S./Mexico Border (beginning May 16 in Alt 3)	20		20

B. MINIMUM SIZE (Inches) (See C.1)

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

C.1. <u>Compliance with Minimum Size and Other Special Restrictions</u>: All salmon on board a vessel must meet the minimum size or other special requirements for the area being fished and the area in which they are landed if that area is open. Salmon may be landed in an area that is closed only if they meet the minimum size or other special requirements for the area in which they were caught. Salmon may not be filleted prior to landing.

Ocean Boat Limits: Off the coast of Washington, Oregon, and California, each fisher aboard a vessel may continue to use angling gear until the combined daily limits of Chinook and coho salmon for all licensed and juvenile anglers aboard have been attained (additional state restrictions may apply).

- C.2. <u>Gear Restrictions</u>: Salmon may be taken only by hook and line using barbless hooks. All persons fishing for salmon, and all persons fishing from a boat with salmon on board must meet the gear restrictions listed below for specific areas or seasons.
 - a. U.S./Canada Border to Pt. Conception, California: No more than one rod may be used per angler; and no more than two single point, single shank, barbless hooks are required for all fishing gear.
 - b. Southern Boundary of California KMZ to Pt. Conception, California: Single point, single shank, barbless circle hooks (see gear definitions below) are required when fishing with bait by any means other than trolling, and no more than two such hooks shall be used. When angling with two hooks, the distance between the hooks must not exceed five inches when measured from the top of the eye of the top hook to the inner base of the curve of the lower hook, and both hooks must be permanently tied in place (hard tied). Circle hooks are not required when artificial lures are used without bait.

C.3. Gear Definitions:

- a. Recreational fishing gear defined: Off Oregon and Washington, angling tackle consists of a single line that must be attached to a rod and reel held by hand or closely attended; the rod and reel must be held by hand while playing a hooked fish. No person may use more than one rod and line while fishing off Oregon or Washington. Off California, the line must be attached to a rod and reel held by hand or closely attended; weights directly attached to a line may not exceed four pounds (1.8 kg). While fishing off California north of Pt. Conception, no person fishing for salmon, and no person fishing from a boat with salmon on board, may use more than one rod and line. Fishing includes any activity which can reasonably be expected to result in the catching, taking, or harvesting of fish.
- b. Trolling defined: Angling from a boat or floating device that is making way by means of a source of power, other than drifting by means of the prevailing water current or weather conditions.
- c. Circle hook defined: A hook with a generally circular shape and a point which turns inward, pointing directly to the shank at a 90° angle.

TABLE 2. 2021 Recreational management Alternatives for non-Indian ocean salmon fisheries – STT analyzed. (Page 9 of 9)

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS (continued)

C.4. Control Zone Definitions:

- a. The Bonilla-Tatoosh Line: A line running from the western end of Cape Flattery to Tatoosh Island Lighthouse (48°23'30" N. lat., 124°44'12" W. long.) to the buoy adjacent to Duntze Rock (48°24'37" N. lat., 124°44'37" W. long.), then in a straight line to Bonilla Pt. (48°35'39" N. lat., 124°42'58" W. long.) on Vancouver Island, British Columbia.
- b. Grays Harbor Control Zone The area defined by a line drawn from the Westport Lighthouse (46° 53'18" N. lat., 124° 07'01" W. long.) to Buoy #2 (46° 52'42" N. lat., 124°12'42" W. long.) to Buoy #3 (46° 55'00" N. lat., 124°14'48" W. long.) to the Grays Harbor north jetty (46° 55'36" N. lat., 124°10'51" W. long.).
- c. Columbia Control Zone: An area at the Columbia River mouth, bounded on the west by a line running northeast/southwest between the red lighted Buoy #4 (46°13'35" N. lat., 124°06'50" W. long.) and the green lighted Buoy #7 (46°15'09' N. lat., 124°06'16" W. long.); on the east, by the Buoy #10 line which bears north/south at 357° true from the south jetty at 46°14'00" N. lat., 124°03'07" W. long. to its intersection with the north jetty; on the north, by a line running northeast/southwest between the green lighted Buoy #7 to the tip of the north jetty (46°15'48" N. lat., 124°05'20" W. long. and then along the north jetty to the point of intersection with the Buoy #10 line; and on the south, by a line running northeast/southwest between the red lighted Buoy #4 and tip of the south jetty (46°14'03" N. lat., 124°04'05" W. long.), and then along the south jetty to the point of intersection with the Buoy #10 line.
- d. Stonewall Bank Yelloweye Rockfish Conservation Area: The area defined by the following coordinates in the order listed:

44°37.46' N. lat.; 124°24.92' W. long. 44°37.46' N. lat.; 124°23.63' W. long. 44°28.71' N. lat.; 124°21.80' W. long. 44°28.71' N. lat.; 124°24.10' W. long. 44°31.42' N. lat.; 124°25.47' W. long. and connecting back to 44°37.46' N. lat.; 124°24.92' W. long.

- e. Klamath Control Zone: The ocean area at the Klamath River mouth bounded on the north by 41°38'48" N. lat. (approximately 6 nautical miles north of the Klamath River mouth); on the west by 124°23'00" W. long. (approximately 12 nautical miles off shore); and, on the south by 41°26'48" N. lat. (approximately 6 nautical miles south of the Klamath River mouth).
- C.5. <u>Inseason Management</u>: Regulatory modifications may become necessary inseason to meet preseason management objectives such as quotas, harvest guidelines, and season duration. In addition to standard inseason actions or modifications already noted under the season description, the following inseason guidance is provided to NMFS:
 - a. Actions could include modifications to bag limits, or days open to fishing, and extensions or reductions in areas open to fishing.
 - b. Coho may be transferred inseason among recreational subareas north of Cape Falcon to help meet the recreational season duration objectives (for each subarea) after conferring with representatives of the affected ports and the Council's SAS recreational representatives north of Cape Falcon, and if the transfer would not result in exceeding preseason impact expectations on any stocks.
 - c. Chinook and coho may be transferred between the recreational and commercial fisheries north of Cape Falcon if there is agreement among the representatives of the SAS, and if the transfer would not result in exceeding preseason impact expectations on any stocks.
 - d. Fishery managers may consider inseason action modifying regulations restricting retention of unmarked (adipose fin intact) coho. To remain consistent with preseason expectations, any inseason action shall consider, if significant, the difference between observed and preseason forecasted (adipose-clipped) mark rates. Such a consideration may also include a change in bag limit of two salmon, no more than one of which may be a coho.
 - e. Marked coho remaining from the Cape Falcon to Humbug Mt. recreational mark-selective coho quota may be transferred inseason to the Cape Falcon to Humbug Mt. nonmark-selective recreational fishery if the transfer would not result in exceeding preseason impact expectations on any stocks.
- C.6. <u>Additional Seasons in State Territorial Waters</u>: Consistent with Council management objectives, the States of Washington, Oregon, and California may establish limited seasons in state waters. Check state regulations for details.

TABLE 3a. (QTA Tribes) 2021 Treaty Indian Troll Manager	TABLE 3a. (QTA Tribes) 2021 Treaty Indian Troll Management Alternatives for Ocean Salmon Fisheries - Tribe Proposed. (Page 1 of 3) Sunday, March 07, 2021,3:46 PM					
	A. SEASON ALTERNATIVE DESCRIPTIONS					
QTA ALTERNATIVE I	QTA ALTERNATIVE II	QTA ALTERNATIVE III				
Supplemental Management Information	Supplemental Management Information	Supplemental Management Information				
 Overall Treaty-Indian TAC: 35,000 Chinook and 16,500 coho. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries. 	 Overall Treaty-Indian TAC: 25,000 Chinook and 10,000 coho. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries. 	Closed				
 May 1 through the earlier of June 30 or 17,500 Chinook quota. All salmon may be retained except coho. If the Chinook quota is exceeded, the excess will be deducted from the later all-salmon season (C.5). See size limit (B) and other restrictions (C). July 1 through the earlier of September 15, or 17,500 Chinook quota, or 16,500 coho quota. All Salmon. See size limit (B) and other restrictions (C). 	 May 1 through the earlier of June 30 or 12,500 Chinook quota. All salmon may be retained except coho. If the Chinook quota is exceeded, the excess will be deducted from the later all-salmon season (C.5). See size limit (B) and other restrictions (C). July 1 through the earlier of September 15, or 12,500 Chinook quota or 10,000 coho quota All salmon. See size limit (B) and other restrictions (C). 					

A. SEASON ALTERNATIVE DESCRIPTIONS					
MAKAH ALTERNATIVE I	MAKAH ALTERNATIVE II	MAKAH ALTERNATIVE III			
Supplemental Management Information	Supplemental Management Information	Supplemental Management Information			
 Overall Treaty-Indian TAC: 50,000 Chinook and 50,000 coho. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries. 	 Overall Treaty-Indian TAC: 35,000 Chinook and 35,000 coho. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries. 	Closed			
 May 1 through the earlier of June 30 or 25,000 Chinook quota. 	May 1 through the earlier of June 30 or 17,500 Chinook quota.				
All salmon may be retained except coho. If the Chinook quota is exceeded, the excess will be deducted from the later all-salmon season (C.5). See size limit (B) and other restrictions (C).	All salmon may be retained except coho. If the Chinook quota is exceeded, the excess will be deducted from the later all-salmon season (C.5). See size limit (B) and other restrictions (C).				
 July 1 through the earlier of September 15, or 25,000 Chinook quota, or 50,000 coho quota. 	 July 1 through the earlier of September 15, or 17,500 Chinook quota or 35,000 coho quota 				
All Salmon. See size limit (B) and other restrictions (C).	All salmon. See size limit (B) and other restrictions (C).				

Table 3a and 3b. 2021 Treaty Indian Troll Management Alternatives for Ocean Salmon Fisheries - Tribe Proposed.

B. MINIMUM LENGTH (TOTAL INCHES)

	Chir	nook	_	Coł	10	
Area (when open)	Total Length	Head-off		Total Length	Head-off	Pink
North of Cape Falcon	24.0 (61.0 cm)	18.0 (45.7 cm)		16.0 (40.6 cm)	12.0 (30.5 cm)	None

TABLE 3a and 3b. 2021 Treaty Indian troll Management Alternatives for Ocean Salmon Fisheries - Tribe proposed. (Page 3 of 3) Sunday, March 07, 2021,3:46 PM

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

C.1. <u>Tribe and Area Boundaries</u>. All boundaries may be changed to include such other areas as may hereafter be authorized by a Federal court for that tribe's treaty fishery.

<u>S'KLALLAM</u> - Washington State Statistical Area 4B (defined to include those waters of Puget Sound easterly of a line projected from the Bonilla Point light on Vancouver Island to the Tatoosh Island light, thence to the most westerly point on Cape Flattery and westerly of a line projected true north from the fishing boundary marker at the mouth of the Sekiu River [WAC 220-301-030]).

MAKAH - Washington State Statistical Area 4B and that portion of the FMA north of 48°02'15" N. lat. (Norwegian Memorial) and east of 125°44'00" W. long.

<u>QUILEUTE</u> - A polygon commencing at Cape Alava, located at latitude 48°10'00" north, longitude 124°43'56.9" west; then proceeding west approximately forty nautical miles at that latitude to a northwestern point located at latitude 48°10'00" north, longitude 125°44'00" west; then proceeding in a southeasterly direction mirroring the coastline at a distance no farther than forty nautical miles from the mainland Pacific coast shoreline at any line of latitude, to a southwestern point at latitude 47°31'42" north, longitude 125°20'26" west; then proceeding east along that line of latitude to the Pacific coast shoreline at latitude 47°31'42" north, longitude 124°21'9.0" west.

HOH - That portion of the FMA between 47°54'18" N. lat. (Quillayute River) and 47°21'00" N. lat. (Quinault River) and east of 125°44'00" W. long.

QUINAULT - A polygon commencing at the Pacific coast shoreline near Destruction Island, located at latitude 47°40'06" north, longitude 124°23'51.362" west; then proceeding west approximately thirty nautical miles at that latitude to a northwestern point located at latitude 47°40'06" north, longitude 125°08'30" west; then proceeding in a southeasterly direction mirroring the coastline no farther than thirty nautical miles from the mainland Pacific coast shoreline at any line of latitude, to a southwestern point at latitude 46°53'18" north, longitude 124°53'53" west; then proceeding east along that line of latitude to the pacific coast shoreline at latitude 46°53'18" north, longitude 124°7'36.6" west.

C.2. Gear restrictions

- a. Single point, single shank, barbless hooks are required in all fisheries.
- b. No more than eight fixed lines per boat.
- c. No more than four hand held lines per person in the Makah area fishery (Washington State Statistical Area 4B and that portion of the FMA north of 48°02'15" N. lat. (Norwegian Memorial) and east of 125°44'00" W. long.)

C.3. Quotas

- a. The quotas include troll catches by the S'Klallam and Makah Tribes in Washington State Statistical Area 4B from May 1 through September 15.
- b. The Quileute Tribe may continue a ceremonial and subsistence fishery during the time frame of October 1 through October 15 in the same manner as in 2004-2015. Fish taken during this fishery are to be counted against treaty troll quotas established for the 2021 season (estimated harvest during the October ceremonial and subsistence fishery: 20 Chinook; 40 coho).

C.4. Area Closures

- . The area within a six nautical mile radius of the mouths of the Queets River (47°31'42" N. lat.) and the Hoh River (47°45'12" N. lat.) will be closed to commercial fishing.
- b. A closure within two nautical miles of the mouth of the Quinault River (47°21'00" N. lat.) may be enacted by the Quinault Nation and/or the State of Washington and will not adversely affect the Secretary of Commerce's management regime.
- C.5. Inseason Management: In addition to standard inseason actions or modifications already noted under the season description, the following inseason guidance is provided to NMFS:
 - a. Chinook remaining from the May through June treaty-Indian ocean troll harvest guideline north of Cape Falcon may be transferred to the July through September harvest guideline on a fishery impact equivalent basis.

Preseason II Report TABLE 5a. Projected key stock escapements (thousands of fish) or management criteria for 2021 ocean fishery Alternatives – QTA Tribes - STT analyzed^{a/} (Page 1 of 2).

(1 4go 1 61 2).		PROJECTED		2021
Key Stock/Criteria	Alt I	Alt II	Alt III	Criteria Spaw ner Objective or Other Comparative Standard as Noted ^{b/}
CHINOOK				CHINOOK
Columbia Upriver Brights	353.0	356.0	366.7	74.0 Minimum ocean escapement to attain 40.0 adults over McNary Dam, with normal distribution and no mainstem harvest. The management goal has been increased to 60.0 by Columbia River managers.
Mid-Columbia Brights	85.9	86.6	89.2	14.9 Minimum ocean escapement to attain 7.9 for Little White Salmon egg-take, assuming average conversion and no mainstem harvest.
Columbia Low er River Hatchery Tules	72.5	73.5	77.8	25.0 Minimum ocean escapement to attain 14.8 adults for hatchery egg-take, with average conversion and no low er river mainstem or tributary harvest.
Columbia Low er River Natural Tules ^{c/} (threatened)	38.0%	36.4%	30.0%	≤ 38.0% Total adult equivalent fishery exploitation rate (2021 NMFS ESA guidance).
Columbia Low er River Wild ^{e/} (threatened)	19.8	20.1	21.0	6.9 Minimum ocean escapement to attain MSY spaw ner goal of 5.7 for N. Lew is River fall Chinook (NMFS ESA consultation standard).
Spring Creek Hatchery Tules	46.3	47.1	51.3	8.2 Minimum ocean escapement to attain 6.0 adults for Spring Creek Hatchery egg-take, assuming average conversion and no mainstem harvest.
Upper Columbia River Summer	77.4	77.9	81.1	29.0 Aggregate escapement to mouth of Columbia River.
Snake River Fall (threatened) SRFI	50.8%	45.8%	23.3%	≤ 70.0% Of 1988-1993 base period exploitation rate for all ocean fisheries (NMFS ESA consultation standard).
Klamath River Fall	24.2	23.2	26.0	≥ 31.574 2021 minimum natural area adult escapement (FMP control rule).
Federally recognized tribal harvest	50.0%	50.0%	50.0%	50.0% Equals 14.0, 14.7, and 12.4 (thousand) adult fish for Yurok and Hoopa Valley tribal fisheries.
Exploitation (spaw ner reduction) rate	42.6%	44.9%	38.1%	≤ 25.0% FMP control rule.
Adult river mouth return	58.3	57.7	59.2	NA Total adults in thousands.
Age-4 ocean harvest rate	17.9%	19.0%	16.4%	≤ 16.0% NMFS ESA consultation standard for threatened California Coastal Chinook.
KMZ sport fishery share	12.7%	6.0%	5.7%	
River recreational fishery share	15.0%	15.0%	15.0%	NA Equals 2.1, 2.2, and 1.9 (thousand) adult fish for recreational inriver fisheries.
Sacramento River Winter (endangered)	16.7%	15.1%	18.7%	≤ 20.0% Age-3 ocean impact rate in fisheries south of Pt. Arena. In addition, the following season restrictions apply: <u>Recreational</u> - Pt. Arena to Pigeon Pt. betw een the first Saturday in April and the second Sunday in November; Pigeon Pt. to the U.S./Mexico border betw een the first Saturday in April and the first Sunday in October. Minimum size limit ≥ 20 inches total length. <u>Commercial</u> - Pt. Arena to the U.S./Mexico border betw een May 1 and September 30, except Pt. Reyes to Pt. San Pedro betw een October 1 and 15 (Monday-Friday). Minimum size limit ≥ 26 inches total length (NMFS 2021 ESA Guidance).
Sacramento River Fall	87.6	97.7	89.8	≥ 122.0 2021 minimum hatchery and natural area adult escapement (FMP control rule).
Sacramento Index Exploitation Rate	67.7%	64.0%	66.8%	≤ 55.0% FMP control rule.
Ocean commercial impacts	109.6	102.3	112.8	Includes fall (Sept-Dec) 2020 impacts (9.1 thousand SRFC).
Ocean recreational impacts	59.5	55.1	53.7	Includes fall (Sept-Dec) 2020 impacts (5.2 thousand SRFC).
River recreational impacts	14.3	15.9	14.6	
SRKW Prey Abundance				
North of Falcon	1,363.8	1,364.0	1,363.9	≥ 966.0 Oct 1 starting abundance of age 3+ Chinook from U.S./Canada Border to Cape Falcon
Oregon Coast	1,128.6	1,128.9	1,128.6	NA Oct 1 starting abundance of age 3+ Chinook from Cape Falcon to Horse Mt.
California Coast	461.8	462.2	461.8	NA Oct 1 starting abundance of age 3+ Chinook south of Horse Mt.
Southw est WCVI	734.7	734.7	734.7	NA Oct 1 starting abundance of age 3+ Chinook off Southwest Vancouver Island
Salish Sea	611.4	611.4	611.4	NA Oct 1 starting abundance of age 3+ Chinook in the Salish Sea
	011.4	011.4	011.4	

Preseason II Report TABLE 5a. Projected key stock escapements (thousands of fish) or management criteria for 2021 ocean fishery Alternatives - QTA Tribes - STT analyzed^{a/} (Page 2 of 2).

		PROJECTED		021	
Key Stock/Criteria	Alt I	Alt II	Alt III	iteria Spaw ner Objective or Other Comparative Standard a	s Noted ^{b/}
СОНО		соно		СОНО	
Interior Fraser (Thompson River)	6.0%(1.8%)	5.5%(1.2%)	4.4%(0.1%)	10.0% 2021 Southern U.S. exploitation rate ceiling; PSC coho agreement.	
Skagit	30.2%(1.6%)	29.7%(1.1%)	28.8%(0.1%)	35.0% 2021 total exploitation rate ceiling; FMP matrix ^{d/}	
Stillaguamish	25.9%(1.2%)	25.6%(0.8%)	24.9%(0.1%)	50.0% 2021 total exploitation rate ceiling; FMP matrix ^{d/}	
Snohomish	20.8%(1.2%)	20.5%(0.8%)	19.8%(0.1%)	40.0% 2021 total exploitation rate ceiling; FMP matrix ^{d/}	
Hood Canal	41.7%(2.0%)	41.2%(1.4%)	40.3%(0.1%)	45.0% 2021 total exploitation rate ceiling; FMP matrix ^{d/}	
Strait of Juan de Fuca	8.5%(1.5%)	8.2%(1.2%)	7.2%(0.3%)	20.0% 2021 total exploitation rate ceiling; FMP matrix ^{d/}	
Quillayute Fall	7.3	7.3	7.4	6.3 FMP MSY adult spaw ner estimate. Value depicted is ocean escapement.	
Hoh	2.6	2.6	2.7	2.0 FMP MSY adult spaw ner estimate. Value depicted is ocean escapement.	
Queets Wild	3.4	3.4	3.5	5.8 FMP MSY adult spaw ner estimate. Value depicted is ocean escapement.	
Grays Harbor	42.8	43.1	43.6	24.4 FMP MSY adult spaw ner estimate. Value depicted is ocean escapement.	
Willapa Bay	31.7	32.2	33.5	17.2 FMP MSY natural area adult spaw ner estimate. Value depicted is ocean e	scapement.
Low er Columbia River Natural (threatened)	7.9%	6.9%	3.6%	30.0% Total marine and mainstem Columbia R. fishery exploitation rate (2021 NMF Value depicted is marine ER before Buoy 10.	S ESA guidance).
Upper Columbia ^{c/}	77%	78%	82%	≥ 50% Minimum percentage of the run to Bonneville Dam.	
Columbia River Hatchery Early	772.1	786.5	821.7	77.2 Minimum ocean escapement to attain hatchery egg-take goal of 21.7 early with average conversion and no mainstem or tributary fisheries.	adult coho,
Columbia River Hatchery Late	425.4	439.9	499.0	9.7 Minimum ocean escapement to attain hatchery egg-take goal of 6.4 late ad with average conversion and no mainstem or tributary fisheries.	ult coho,
Oregon Coastal Natural	12.9%	12.0%	9.7%	15.0% Marine and freshwater fishery exploitation rate (NMFS ESA consultation s	tandard)
Southern Oregon/Northern California Coast (threatened)	4.5%	4.3%	2.7%	13.0% Marine fishery exploitation rate for R/K hatchery coho (NMFS ESA consult	

a/ Coho projections in the table assume post-season 2019 fishery scalars for Canadian fisheries, except Johnstone Strait troll (postseason 2018), Johnstone Strait net (postseason 2016), and northern BC sport and troll (approximately half postseason 2019) and north Georgia Strait sport in Sept. Model results for Chinook in this table used 2021 allow able catches for SEAK, 2020 preseason effort scalars for NBC and WCVI AABM fisheries, recent 2-yr average catches for BC ISBM fisheries, and 2020 preseason catches for Puget Sound fisheries. Assumptions for these fisheries will be changed prior to the April meeting as new information becomes available.

b/ Ocean escapement is the number of salmon escaping ocean fisheries and entering freshwater with the following clarifications. Ocean escapement for Puget Sound stocks is the estimated number of salmon entering Area 4B that are available to U.S. net fisheries in Puget Sound and spaw ner escapement after impacts from the Canadian, U.S. ocean, and Puget Sound troll and recreational fisheries have been deducted. Numbers in parentheses represent Council area exploitation rates for Puget Sound coho stocks. For Columbia River early and late coho stocks, ocean escapement represents the number of coho after the Buoy 10 fishery. Values reported for Klamath River fall Chinook are natural area adult spaw ners. Values reported for Sacramento River fall Chinook are hatchery and natural area adult spaw ners.

c/ Includes projected impacts of inriver fisheries that have not yet been shaped.

d/ Annual management objectives may be different than FMP goals, and are subject to agreement between WDFW and the treaty tribes under U.S. District Court orders. It is anticipated that fishery management will be adjusted by state and tribal comanagers during the preseason planning process to comply with stock management objectives.

e/ Includes minor contributions from East Fork Lew is River and Sandy River.

Preseason II Report TABLE 5b. Projected key stock escapements (thousands of fish) or management criteria for 2021 ocean fishery Alternatives – Makah Tribe - STT analyzed^{a/} (Page 1 of 2.

		PROJECTED		2021
Key Stock/Criteria	Alt I	Alt II	Alt III	Criteria Spaw ner Objective or Other Comparative Standard as Noted ^{b/}
CHINOOK				СНІЛООК
Columbia Upriver Brights	351.3	354.9	366.7	74.0 Minimum ocean escapement to attain 40.0 adults over McNary Dam, with normal distribution and no mainstem harvest. The management goal has been increased to 60.0 by Columbia River managers.
Mid-Columbia Brights	85.5	86.4	89.2	14.9 Minimum ocean escapement to attain 7.9 for Little White Salmon egg-take, assuming average conversion and no mainstem harvest.
Columbia Low er River Hatchery Tules	72.1	73.2	77.8	25.0 Minimum ocean escapement to attain 14.8 adults for hatchery egg-take, with average conversion and no low er river mainstem or tributary harvest.
Columbia Low er River Natural Tules ^{c/} (threatened)	38.6%	36.8%	30.0%	≤ 38.0% Total adult equivalent fishery exploitation rate (2021 NMFS ESA guidance).
Columbia Low er River Wild ^{e/} (threatened)	19.7	20.0	21.0	6.9 Minimum ocean escapement to attain MSY spaw ner goal of 5.7 for N. Lew is River fall Chinook (NMFS ESA consultation standard).
Spring Creek Hatchery Tules	45.9	46.8	51.3	8.2 Minimum ocean escapement to attain 6.0 adults for Spring Creek Hatchery egg-take, assuming average conversion and no mainstem harvest.
Upper Columbia River Summer	77.1	77.7	81.1	29.0 Aggregate escapement to mouth of Columbia River.
Snake River Fall (threatened) SRFI	54.0%	48.0%	23.3%	≤ 70.0% Of 1988-1993 base period exploitation rate for all ocean fisheries (NMFS ESA consultation standard).
Klamath River Fall	24.2	23.2	26.0	≥ 31.574 2021 minimum natural area adult escapement (FMP control rule).
Federally recognized tribal harvest	50.0%	50.0%	50.0%	50.0% Equals 14.0, 14.7, and 12.4 (thousand) adult fish for Yurok and Hoopa Valley tribal fisheries.
Exploitation (spaw ner reduction) rate	42.6%	44.9%	38.1%	≤ 25.0% FMP control rule.
Adult river mouth return	58.3	57.7	59.2	NA Total adults in thousands.
Age-4 ocean harvest rate	17.9%	19.0%	16.4%	≤ 16.0% NMFS ESA consultation standard for threatened California Coastal Chinook.
KMZ sport fishery share	12.7%	6.0%	5.7%	
River recreational fishery share	15.0%	15.0%	15.0%	NA Equals 2.1, 2.2, and 1.9 (thousand) adult fish for recreational inriver fisheries.
Sacramento River Winter (endangered)	16.7%	15.1%	18.7%	≤ 20.0% Age-3 ocean impact rate in fisheries south of Pt. Arena. In addition, the following season restrictions apply: <u>Recreational</u> - Pt. Arena to Pigeon Pt. betw een the first Saturday in April and the second Sunday in November; Pigeon Pt. to the U.S./Mexico border betw een the first Saturday in April and the first Sunday in October. Minimum size limit ≥ 20 inches total length. <u>Commercial</u> - Pt. Arena to the U.S./Mexico border betw een May 1 and September 30, except Pt. Reyes to Pt. San Pedro betw een October 1 and 15 (Monday-Friday). Minimum size limit ≥ 26 inches total length (NMFS 2021 ESA Guidance).
Sacramento River Fall	87.6	97.7	89.8	≥ 122.0 2021 minimum hatchery and natural area adult escapement (FMP control rule).
Sacramento Index Exploitation Rate	67.7%	64.0%	66.8%	≤ 55.0% FMP control rule.
Ocean commercial impacts	109.6	102.3	112.8	Includes fall (Sept-Dec) 2020 impacts (9.1 thousand SRFC).
Ocean recreational impacts	59.5	55.1	53.7	Includes fall (Sept-Dec) 2020 impacts (5.2 thousand SRFC).
River recreational impacts	14.3	15.9	14.6	
SRKW Prey Abundance				
North of Falcon	1,363.8	1,364.0	1,363.9	≥ 966.0 Oct 1 starting abundance of age 3+ Chinook from U.S./Canada Border to Cape Falcon
Oregon Coast	1,128.6	1,128.9	1,128.6	NA Oct 1 starting abundance of age 3+ Chinook from Cape Falcon to Horse Mt.
California Coast	461.8	462.2	461.8	NA Oct 1 starting abundance of age 3+ Chinook south of Horse Mt.
Southw est WCVI	734.7	734.7	734.7	NA Oct 1 starting abundance of age 3+ Chinook off Southwest Vancouver Island
Salish Sea	611.4	611.4	611.4	NA Oct 1 starting abundance of age 3+ Chinook in the Salish Sea
	071.4	571.7	011.4	

Preseason II Report TABLE 5b. Projected key stock escapements (thousands of fish) or management criteria for 2021 ocean fishery Alternatives - Makah Tribe - STT analyzed^{a/} (Page 2 of 2).

		PROJECTED		2021
Key Stock/Criteria	Alt I	Alt II	Alt III	Criteria Spaw ner Objective or Other Comparative Standard as Noted ^{b/}
СОНО		соно		СОНО
Interior Fraser (Thompson River)	8.0%(3.8%)	7.0%(2.7%)	4.4%(0.1%)	≤ 10.0% 2021 Southern U.S. exploitation rate ceiling; PSC coho agreement.
Skagit	31.9%(3.5%)	30.8%(2.5%)	28.8%(0.1%)	$\leq 35.0\%$ 2021 total exploitation rate ceiling; FMP matrix ^{d/}
Stillaguamish	26.9%(2.4%)	26.3%(1.8%)	24.9%(0.1%)	$\leq 50.0\%$ 2021 total exploitation rate ceiling; FMP matrix ^{d/}
Snohomish	21.9%(2.5%)	21.3%(1.8%)	19.8%(0.1%)	$1 \leq 40.0\%$ 2021 total exploitation rate ceiling; FMP matrix ^{d/}
Hood Canal	43.1%(4.0%)	42.3%(2.9%)	40.3%(0.1%)	$\leq 45.0\%$ 2021 total exploitation rate ceiling; FMP matrix ^{d/}
Strait of Juan de Fuca	10.1%(3.1%)	9.3%(2.3%)	7.2%(0.3%)	$\leq 20.0\%$ 2021 total exploitation rate ceiling; FMP matrix ^{d/}
Quillayute Fall	7.1	7.2	7.4	6.3 FMP MSY adult spaw ner estimate. Value depicted is ocean escapement.
Hoh	2.5	2.5	2.7	2.0 FMP MSY adult spaw ner estimate. Value depicted is ocean escapement.
Queets Wild	3.3	3.4	3.5	5.8 FMP MSY adult spaw ner estimate. Value depicted is ocean escapement.
Grays Harbor	42.2	42.6	43.6	24.4 FMP MSY adult spaw ner estimate. Value depicted is ocean escapement.
Willapa Bay	31.1	31.7	33.5	17.2 FMP MSY natural area adult spaw ner estimate. Value depicted is ocean escapement.
Low er Columbia River Natural	9.2%	7.9%	3.6%	≤30.0% Total marine and mainstem Columbia R. fishery exploitation rate (2021 NMFS ESA guidance).
(threatened)				Value depicted is marine ER before Buoy 10.
Upper Columbia ^{c/}	76%	78%	82%	≥ 50% Minimum percentage of the run to Bonneville Dam.
Columbia River Hatchery Early	761.5	778.6	821.7	77.2 Minimum ocean escapement to attain hatchery egg-take goal of 21.7 early adult coho,
		101.0	100.0	with average conversion and no mainstem or tributary fisheries.
Columbia River Hatchery Late	418.8	434.9	499.0	9.7 Minimum ocean escapement to attain hatchery egg-take goal of 6.4 late adult coho,
Oragon Coastal Natural	13.2%	12.2%	9.7%	with average conversion and no mainstem or tributary fisheries.
Oregon Coastal Natural Southern Oregon/Northern California	4.5%	4.3%	9.7% 2.7%	 ≤ 15.0% Marine and freshw ater fishery exploitation rate (NMFS ESA consultation standard). ≤ 13.0% Marine fishery exploitation rate for R/K hatchery coho (NMFS ESA consultation standard).
Coast (threatened)	4.570	4.570	2.7 /0	

a/ Coho projections in the table assume post-season 2019 fishery scalars for Canadian fisheries, except Johnstone Strait troll (postseason 2018), Johnstone Strait net (postseason 2016), and northern BC sport and troll (approximately half postseason 2019) and north Georgia Strait sport in Sept. Model results for Chinook in this table used 2021 allow able catches for SEAK, 2020 preseason effort scalars for NBC and WCVI AABM fisheries, recent 2-yr average catches for BC ISBM fisheries, and 2020 preseason catches for Puget Sound fisheries. Assumptions for these fisheries will be changed prior to the April meeting as new information becomes available.

b/ Ocean escapement is the number of salmon escaping ocean fisheries and entering freshw ater with the following clarifications. Ocean escapement for Puget Sound stocks is the estimated number of salmon entering Area 4B that are available to U.S. net fisheries in Puget Sound and spaw ner escapement after impacts from the Canadian, U.S. ocean, and Puget Sound troll and recreational fisheries have been deducted. Numbers in parentheses represent Council area exploitation rates for Puget Sound coho stocks. For Columbia River early and late coho stocks, ocean escapement represents the number of coho after the Buoy 10 fishery. Values reported for Klamath River fall Chinook are natural area adult spaw ners. Values reported for Sacramento River fall Chinook are hatchery and natural area adult spaw ners.

c/ Includes projected impacts of inriver fisheries that have not yet been shaped.

d/ Annual management objectives may be different than FMP goals, and are subject to agreement betw een WDFW and the treaty tribes under U.S. District Court orders. It is anticipated that fishery management will be adjusted by state and tribal comanagers during the preseason planning process to comply with stock management objectives.

e/ Includes minor contributions from East Fork Lew is River and Sandy River.

					ł	Exploitation I	Rate (Percen	t)				
		LCN Coho			OCN Coho			RK Coho		LCR Tule Chinook		
Fishery	I	-			-		I	-		I	I	=
SOUTHEAST ALASKA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	2.2%	2.4%
BRITISH COLUMBIA	0.3%	0.3%	0.3%	0.9%	0.9%	0.9%	0.6%	0.6%	0.6%	13.7%	13.9%	14.7%
PUGET SOUND/STRAIT	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.4%	0.4%
NORTH OF CAPE FALCON												
Treaty Indian Ocean Troll	0.6%	0.4%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	1.9%	1.4%	0.0%
Recreational	2.1%	1.8%	0.0%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	3.3%	3.0%	0.0%
Non-Indian Troll	0.4%	0.5%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	5.2%	3.9%	0.0%
SOUTH OF CAPE FALCON												
Recreational:										0.3%	0.2%	0.2%
Cape Falcon to Humbug Mt.	3.5%	3.1%	2.7%	7.4%	6.7%	5.4%	0.4%	0.4%	0.3%	-	-	-
Humbug Mt. to OR/CA border (KMZ)	0.1%	0.0%	0.0%	0.3%	0.2%	0.0%	0.6%	0.5%	0.0%	-	-	-
OR/CA border to Horse Mt. (KMZ)	0.1%	0.0%	0.0%	0.4%	0.1%	0.1%	1.4%	0.5%	0.4%	-	-	-
Fort Bragg	0.0%	0.0%	0.0%	0.2%	0.2%	0.2%	0.7%	0.7%	0.7%	-	-	-
South of Pt. Arena	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%	-	-	-
Troll:										1.0%	1.1%	1.0%
Cape Falcon to Humbug Mt.	0.6%	0.5%	0.4%	0.8%	0.6%	0.5%	0.2%	0.1%	0.1%	-	-	-
Humbug Mt. to OR/CA border (KMZ)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	-	-	-
OR/CA border to Horse Mt. (KMZ)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-
Fort Bragg	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	1.1%	0.0%	-	-	-
South of Pt. Arena	0.0%	0.0%	0.0%	0.3%	0.2%	0.4%	0.2%	0.1%	0.2%	-	-	-
BUOY 10	1.6%	1.8%	2.4%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	10.0%	10.3%	11.3%
ESTUARY/FRESHWATER	NA	NA	NA	1.7%	1.7%	1.7%	0.2%	0.2%	0.2%	10.0%	10.370	11.370
TOTAL ^{a/}	7.9%	6.9%	3.6%	12.9%	12.0%	9.7%	4.5%	4.3%	2.7%	38.0%	36.4%	30.0%

Preseason II Report TABLE 7a. Expected coastwide lower Columbia Natural (LCN) Oregon coastal natural (OCN) and Rogue/Klamath (RK) coho, and Lower Columbia River (LCR) tule Chinook exploitation rates by fishery for 2021 ocean fisheries management Alternatives - QTA Tribes - STT analyzed.

a/ Totals do not include Buoy 10 and estuary/freshw ater for LCN and RK coho; estuary/freshw ater catch is included in the total for OCN. For LCR Tule Chinook, includes projected impacts of inriver fisheries that have not yet been shaped. Bolded values identify ocean exploitation rates that, when combined with freshw ater harvest rates, would exceed the total allow able exploitation rate.

					E	Exploitation I	Rate (Percen	t)				
		LCN Coho			OCN Coho			RK Coho		LCR Tule Chinook		
Fishery	I			I			I	I		I	I	II
SOUTHEAST ALASKA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	2.2%	2.4%
BRITISH COLUMBIA	0.3%	0.3%	0.3%	0.9%	0.9%	0.9%	0.6%	0.6%	0.6%	13.7%	13.9%	14.7%
PUGET SOUND/STRAIT	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.4%	0.4%
NORTH OF CAPE FALCON												
Treaty Indian Ocean Troll	1.9%	1.3%	0.0%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	2.7%	1.9%	0.0%
Recreational	2.1%	1.8%	0.0%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	3.3%	3.0%	0.0%
Non-Indian Troll	0.4%	0.5%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	5.1%	3.9%	0.0%
SOUTH OF CAPE FALCON												
Recreational:										0.3%	0.2%	0.2%
Cape Falcon to Humbug Mt.	3.5%	3.1%	2.7%	7.4%	6.7%	5.4%	0.4%	0.4%	0.3%	-	-	-
Humbug Mt. to OR/CA border (KMZ)	0.1%	0.0%	0.0%	0.3%	0.2%	0.0%	0.6%	0.5%	0.0%	-	-	-
OR/CA border to Horse Mt. (KMZ)	0.1%	0.0%	0.0%	0.4%	0.1%	0.1%	1.4%	0.5%	0.4%	-	-	-
Fort Bragg	0.0%	0.0%	0.0%	0.2%	0.2%	0.2%	0.7%	0.7%	0.7%	-	-	-
South of Pt. Arena	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%	-	-	-
Troll:										1.0%	1.1%	1.0%
Cape Falcon to Humbug Mt.	0.6%	0.5%	0.4%	0.8%	0.6%	0.5%	0.2%	0.1%	0.1%	-	-	-
Humbug Mt. to OR/CA border (KMZ)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	-	-	-
OR/CA border to Horse Mt. (KMZ)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-
Fort Bragg	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	1.1%	0.0%	-	-	-
South of Pt. Arena	0.0%	0.0%	0.0%	0.3%	0.2%	0.4%	0.2%	0.1%	0.2%	-	-	-
BUOY 10	1.6%	1.8%	2.4%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	9.9%	10.2%	11.3%
ESTUARY/FRESHWATER	NA	NA	NA	1.7%	1.7%	1.7%	0.2%	0.2%	0.2%	9.970	10.270	11.370
TOTAL ^{a/}	9.2%	7.9%	3.6%	13.2%	12.2%	9.7%	4.5%	4.3%	2.7%	38.6%	36.8%	30.0%

Preseason II Report TABLE 7b. Expected coastwide lower Columbia Natural (LCN) Oregon coastal natural (OCN) and Rogue/Klamath (RK) coho, and Lower Columbia River (LCR) tule Chinook exploitation rates by fishery for 2021 ocean fisheries management Alternatives - Makah Tribe - STT analyzed.

a/ Totals do not include Buoy 10 and estuary/freshw ater for LCN and RK coho; estuary/freshw ater catch is included in the total for OCN. For LCR Tule Chinook, includes projected impacts of inriver fisheries that have not yet been shaped. Bolded values identify ocean exploitation rates that, when combined with freshw ater harvest rates, would exceed the total allow able exploitation rate.

Table A-1. Sacramento River winter run Chinook age-3 ocean impact rate south of Pt. Arena by fishery and Alternative. The age-3 SRWC impact rate was projected for each of the proposed 2021 fishing season Alternatives. The impacts are displayed as a percent for each Alternative by fishery, port area, and month. Max rate: 20%.

	Commercial										Recreational									
Alterna	tive I	16.7 1	Total							Alternat	tive I									
Port									Year	Port										Year
Area	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Area	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SF	0.10	0.55	0.59	0.48	0.18	0.08			1.97	SF	0.27	0.87	1.29	1.90	0.69	0.10	0.19	0.02		5.33
MO	0.40	1.43	0.60	0.73					3.17	MO	1.27	0.58	1.04	2.34	0.97	0.07				6.27
Total	0.50	1.98	1.19	1.22	0.18	0.08	0.00	0.00	5.14	Total	1.54	1.45	2.33	4.23	1.66	0.17	0.19	0.02	0.00	11.60
Alterna	tive II	15.1 Total								Alternative II										
Port									Year	Port										Year
Area	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Area	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SF	0.08	0.34	0.31	0.33	0.18	0.08			1.32	SF	0.20	0.87	1.30	1.92	0.70	0.11	0.20	0.02		5.31
MO	0.21	0.85	0.53	0.75					2.34	MO	1.27	0.58	1.04	2.37	0.92					6.18
Total	0.29	1.19	0.84	1.07	0.18	0.08	0.00	0.00	3.66	Total	1.47	1.45	2.34	4.28	1.62	0.11	0.20	0.02	0.00	11.49
Alterna	tive III	18.7 Total								Alternat	tive III									
Port									Year	Port										Year
Area	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Area	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SF	0.11	0.45	0.60	0.50	0.18	0.08			1.92	SF	0.14	0.87	1.28	1.86	0.67	0.10	0.19			5.10
MO	0.49	2.08	0.62	0.63					3.82	MO	1.27	1.27	1.67	2.95	0.76					7.91
Total	0.60	2.53	1.22	1.13	0.18	0.08	0.00	0.00	5.73	Total	1.41	2.14	2.95	4.81	1.42	0.10	0.19	0.00	0.00	13.01

SF Pt. Arena to Pigeon Pt. (San Francisco)

MO Pigeon Pt. to the U.S./Mexico Border (Monterey)

Table P	-z. Kiar	nath River f	an Chin	OOK OC	ean im	pacts if	Inump		1511 Dy 1151	lery and i	Alternativ	ve.										
Commercial															Rec	reatio	onal					
Alterna	tive I										Altern	ative I										
24,151 n	atural are	ea spawners,	,42.6% s	pawner	reductio	on rate,	17.9% ag	ge-4 oc	ean harve:	st rate												
Port	Fall	2020		-	Summe	r 2021			Summer	Year	Port	Fall 2020			Summer 2021						Summer	Year
Area	Sep	Oct-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total	Area	Sep	Oct	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	0	0		2	25	54	435	542	1,058	1,058	NO	0	0		0	0	0	0	2	69	71	71
CO	0	0		14	125	464	710	476	1,789	1,789	co	0	0		0	0	0	0	7	178	185	185
KO				0	77	108	66		251	251	ко						6	141	46	28	221	221
KC											кс						257	454	332	353	1,396	1,396
FB	0							267	267	267	FB	0	0	0		11	29	64	160	47	311	311
SF	57	0			500	2,102	2,010	1,010	5,622	5,679	SF	0	0	0		24	56	313	347	87	827	827
MO					444	371	128	87	1,030	1,030	мо	0	0			13	0	0	0	0	13	13
Total	57	0		16	1,172	3,099	3,349	2,382	10,018	10,075	Total	0	0	0	0	49	347	973	894	760	3,023	3,023
		· · · · ·																				
Alternative II											Alternative II											
23,203 r	natural ar	ea spawners	s, 44.9% s	spawnei	r reduct	ion rate,	, 19.0% a	ge-4 oc	ean harve	st rate												
Port	Fall	2020			Summe	r 2021		•	Summer	Year	Port	Port Fall 2020 Summer 2021							Summer	Year		
Area	Sep	Oct-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total	Area	Sep	Oct	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	0	0			25	53	425	535	1,038	1,038	NO	0	0		0	0	0	0	2	68	70	70
CO	0	0			126	451	696	470	1,743	1,743	co	0	0		0	0	0	0	7	176	183	183
KO					77				77	77	ко						1	140	37		178	178
KC											КС							284	329		613	613
FB	0				1,803	1,002	1,228	739	4,772	4,772	FB	0	0	0		8	29	64	159	46	306	306
SF	57	0			409	1,264	1,030	659	3,362	3,419	SF	0	0	0		18	56	310	345	86	815	815
MO					228	214	109	86	637	637	MO	0	0			13	0	0	0	0	13	13
Total	57	0			2,668	2,984	3,488	2,489	11,629	11,686	Total	0	0	0	0	40	85	798	878	376	2,177	2,177
Alterna											Altern	ative III										
		rea spawners	s, 38.1% s	pawner			16.4% a	ge-4 oc			<u> </u>											
Port		2020			Summe				Summer	Year	Port	-	Fall 20			-	Summe				Summer	Year
Area	Sep	Oct-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total	Area	Sep	Oct	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	0	0			21	43	345	641	1,050	1,050	NO	0	0		0	0	0	0	2	70	72	72
CO	0	0			104	372	562	563	1,601	1,601	CO	0	0		0	0	0	0	7	179	186	186
KO					64				64	64	KO						1	61	15	37	114	114
KC											KC							182	335		517	517
FB	0										FB	0	0	0		6	29	65	161	47	308	308
SF	57	0			572	1,737	2,144	1,085	5,538	5,595	SF	0	0	0		12	56	314	350	88	820	820
MO					537	544	137	79	1,297	1,297	MO	0	0			13	0	0	0	0	13	13
Total	57	0			1,297	2,695	3,187	2,367	9,546	9,603	Total	0	0	0	0	31	85	621	870	421	2,028	2,028

Table A-2. Klamath River fall Chinook ocean impacts in numbers of fish by fishery and Alternative.

NO Cape Falcon to S. End of Heceta Bank

- FB Southern KMZ Boundary to Pt. Arena (Fort Bragg)
- CO S. End of Heceta Bank to Humbug Mt.KO Humbug Mt. to OR/CA Border (Oregon KMZ)

SF Pt. Arena to Pigeon Pt. (San Francisco) MO Pigeon Pt. to U.S./Mexico Border (Monterey)

KC OR/CA Border to Southern KMZ Boundary (California KMZ)

	Commercial											Recreational											
Altern	ative I	169,078	Total								Alterr	ative I											
Port	Fall	2020			Summe	r 2021			Summer	Year	Port Fall 2020						Summe	er 2021			Summer	Year	
Area	Sep	Oct-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total	Area	Sep	Oct	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total	
NO	131	0		129	1,726	1,001	2,728	1,712	7,296	7,427	NO	71	0		6	0	5	118	225	185	539	610	
CO	0	0		123	1,848	1,995	933	865	5,764	5,764	CO	13	0		0	0	3	336	302	220	861	874	
KO				0	382	242	139		763	763	КО						143	223	515	42	923	923	
KC											KC						1,737	1,332	1,378	1,212	5,659	5,659	
FB	146							2,345	2,345	2,491	FB	68	0	0		164	411	650	2,655	1,083	4,963	5,031	
SF	6,922	1,867			8,163	16,670	19,308	12,125	56,266	65,055	SF	3,187	1,800	12		2,045	3,881	6,590	12,237	5,702	30,455	35,454	
MO					14,593	10,234	2,594	642	28,063	28,063	MO	14	0			5,960	1,222	1,276	2,095	397	10,950	10,964	
Total	7,199	1,867		251	26,713	30,142	25,702	17,689	100,497	109,563	Total	3,353	1,800	12	6	8,169	7,403	10,524	19,406	8,842	54,350	59,515	
	ative II	157,408	Total									ative I											
Port		2020			Summe				Summer	Year	Port		Fall 20				Summe				Summer	Year	
Area	Sep	Oct-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total	Area	Sep	Oct	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total	
NO	131	0			1,726	1,001	2,728	1,712	7,167	7,298	NO	71	0		6	0	5	79	225	185	500	571	
CO	0	0			1,848	1,995	933	865	5,641	5,641	CO	13	0		0	0	3	239	302	220	764	777	
KO					382				382	382	ко						27	223	415		665	665	
KC											KC							843	1,378		2,221	2,221	
FB	146				5,511	6,421	9,973	6,565	28,470	28,616	FB	68	0	0		123	411	650	2,655	1,083	4,922	4,990	
SF	6,922	1,867			,	10,305	,	8,007	35,123	43,912	SF	3,187	1,800	12		1,533	3,881	,	12,237	5,702	29,943	34,942	
MO					7,486	6,044	,	647	16,454	16,454	MO	14	0			5,960	1,222	1,276	2,095	372	10,925	10,939	
Total	7,199	1,867			23,635	25,766	26,039	17,796	93,236	102,302	Total	3,353	1,800	12	6	7,616	5,549	9,901	19,307	7,562	49,941	55,106	
	ative III	166,510	Iotal									ative I											
Port		2020		-	Summe				Summer	Year	Port	-	Fall 20				Summe				Summer	Year	
Area	Sep	Oct-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total	Area	Sep	Oct	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total	
NO	131	0			1,426	801	2,135	1,997	6,359	6,490	NO	71	0		6	0	5	41	225	185	-	533	
CO	0	0			1,527	1,596	730	1,010	4,863	4,863	CO	13	0		0	0	3	143	302	220	668	681	
KO					315				315	315	KO						27	96	166	71	360	360	
KC											KC							533	1,378		1,911	1,911	
FB	146									146	FB	68	0	0		82	411	650	2,655	1,083	4,881	4,949	
SF	6,922	1,867			'	'	20,324	,	56,293	65,082	SF	3,187	1,800	12		1,022	3,881		12,237	5,702	29,432	34,431	
MO					17,624	,	2,731	571	35,902	35,902	MO	14	0			5,960	1,222	1,276	2,095	282	10,835	10,849	
Total	7,199	1,867			30,222	31,143	25,920	16,447	103,732	112,798	Total	3,353	1,800	12	6	7,064	5,549	9,328	19,057	7,543	48,547	53,712	

Table A-3. Sacramento River fall Chinook ocean impacts in numbers of fish by fishery and Alternative.

NO Cape Falcon to S. End of Heceta BankCO S. End of Heceta Bank to Humbug Mt.

FB Southern KMZ Boundary to Pt. Arena (Fort Bragg)

SF Pt. Arena to Pigeon Pt. (San Francisco)

KO Humbug Mt. to OR/CA Border (Oregon KMZ) MO Pigeon Pt. to U.S./Mexico Border (Monterey)

KC OR/CA Border to Southern KMZ Boundary (California KMZ)