Agenda Item E.8.a Supplemental STT Report 1 March 2020

SALMON TECHNICAL TEAM REPORT 1

Collation of Preliminary Salmon Management Alternatives for 2020 Ocean Fisheries

March 8, 2020

	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 #: Coho2009, Chinook0720	Model #: Coho2010, Chinook0820	Model #: Coho2011, Chinook0920	
 Overall non-Indian TAC: 60,000 Chinook and 35,000 coho marked with a healed adipose fin clip (marked). Non-Indian commercial troll TAC: 30,000 Chinook and 5,600 marked coho. Trade: May be considered at the April Council meeting. 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 non-Indian TAC: 45,000 Chinook and 25,000 coho marked with a healed adipose fin clip (marked). Non-Indian commercial troll TAC: 22,875 Chinook and 2,500 marked coho. Trade: Commercial troll traded 1,500 marked coho to the recreational fishery for 375 Chinook. Same as Alternative 1 	Closed	
II C /Councide Boundary to Counce Follows	II C /Conside Bandon to Cons Felican	II C /Canada Dandan ta Cana Falsan	
W.S./Canada Border to Cape Falcon May 6 through the earlier of June 28, or 20,000 Chinook. No more than 7,390 of which may be caught in the area between the U.S./Canada border and the Queets River, and no more than 5,450 of which may be caught in the area between Leadbetter Pt. and Cape Falcon (C.8).	Way 6 through the earlier of May 12 no more than 4,250 of which may be caught in the area between the U.S./Canada border and the Queets River, and no more than 3,140 of which may be caught in the area between Leadbetter Pt. and Cape Falcon (C.8).	U.S./Canada Border to Cape FalconClosed	
Open seven days per week (C.1). 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 100 Chinook per vessel per open period (C.1, C.6). In the area between the Queets River and Leadbetter Pt., the landing and possession limit is 200 Chinook per vessel per open period (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). (Continued next page)	In the area between the Leadbetter Pt. and Cape Falcon, the landing and possession limit is 100 Chinook per vessel per open period (C.1, C.6). (Continued next page)	(Continued next page)	

	A. SEASON ALTERNATIVE DESCRIPTIONS	
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
U.S./Canada Border to Cape Falcon (continued)	 U.S./Canada Border to Cape Falcon (continued) May 15 through the earlier of June 30, or 11,500 Chinook. No more than 4,250 of which may be caught in the area between the U.S./Canada border and the Queets River, and no more than 3,140 of which may be caught in the area between Leadbetter Pt. and Cape Falcon (C.8). 	U.S./Canada Border to Cape Falcon (continued)
	Open five days per week (FriTue.) (C.1). In the area between the U.S./Canada border and the Queets River, the landing and possession limit is 50 Chinook per vessel per open period (FriTue.) (C.1, C.6).	
	In the area between the Queets River and Leadbetter Pt., the landing and possession limit is 200 Chinook per open period (FriTue.) (C.1, C.6).	
	In the area between Leadbetter Pt. and Cape Falcon, the landing and possession limit is 50 Chinook per vessel per open period (FriTue.) (C.1, C.6).	
All salmon, except coho (C.4, C.7). Chinook minimum size timit of 28 inches total length (B). See compliance equirements (C.1) and gear restrictions and definitions C.2, C.3).	Chinook minimum size limit of 28 inches total length (B).	
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.	Chinook guideline has been landed, or approximately 50%	
n 2021, the season will open May 1 for all salmon except coho consistent with preseason regulations as described or this area and subareas for May 6-June 30, 2020, ncluding subarea salmon guidelines and weekly vessel imits. These regulations would apply from the opening of he fishery on May 1 2021, until modified following Council review at its March and/or April 2021 meetings. Catch during this opening will be counted towards quotas set for his area and subareas at the April 2021 meeting.		

TABLE 1. 2020 Commercial troll management Alternatives for	non-Indian ocean salmon fisheries – STT analyzed. (Page 3	of 13) Sunday, March 08, 2020,9:09 AM
	A. SEASON ALTERNATIVE DESCRIPTIONS	
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
U.S./Canada Border to Cape Falcon July 1 through the earlier of September 30, or 10,000 Chinook or 5,600 coho (C.8).	U.S./Canada Border to Cape Falcon July 3 through the earlier of September 29, or 11,370 Chinook or 2,500 coho (C.8).	U.S./Canada Border to Cape FalconClosed
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).	Open five days per week (FriTue.). 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).	
In the area between the U.S./Canada border and the Queets River, the landing and possession limit is 60 Chinook per vessel per landing week (ThursWed.) (C.1, C.6).		
In the area between the Queets River and Leadbetter Pt., the landing and possession limit is 100 Chinook per vessel per landing week (ThursWed.) (C.1, C.6).		
In the area between Leadbetter Pt. and Cape Falcon, the landing and possession limit is 60 Chinook per vessel per landing week (ThursWed.) (C.1, C.6).		
Landing and possession limit of 20 marked coho per vessel per landing week (ThursWed.) (C.1).	Landing and possession limit of 10 marked coho per vessel per open period (FriTue.) (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 10, the Grays Harbor Control Zone (C.5). Vessels must land and deliver their salmon within 24 hours of any closure of this fishery.

Vessels fishing or in possession of salmon <u>north</u> of Leadbetter Point must land and deliver all species of fish in a Washington port and must possess a Washington troll license. Vessels may not land fish east of the Sekiu River or east of the Megler-Astoria bridge. <u>For delivery to Washington ports south of Leadbetter Point</u>, vessels must notify the Washington Department of Fish and Wildlife at 360-249-1215 prior to crossing the Leadbetter Point line with area fished, total Chinook, coho, and halibut catch aboard, and destination with approximate time of delivery. During any single trip, only one side of the Leadbetter Point line may be fished (C.11).

Vessels fishing or in possession of salmon while fishing <u>south</u> 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).

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).

TABLE 1. 2020 Commercial troll management Alternatives	for non-Indian ocean salmon fisheries – STT analyzed. (Pa	ge 4 of 13) Sunday, March 08, 2020,9:09 AM		
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		
 Sacramento River fall Chinook spawning escapement of 231,621 hatchery and natural area adults. Sacramento Index exploitation rate of 51.1%. Klamath River recreational fishery allocation: 1,348 adult Klamath River fall Chinook. Klamath tribal allocation: 8,988 adult Klamath River fall Chinook. CA/OR share of Klamath River fall Chinook commercial ocean harvest: 58% / 42%. 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. 	 adult Klamath River fall Chinook. 4. Klamath tribal allocation: 8,750 adult Klamath River fall Chinook. 5. CA/OR share of Klamath River fall Chinook commercial ocean harvest: 60% / 40%. 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 	 Sacramento River fall Chinook spawning escapement of 234,132 hatchery and natural area adults. Sacramento Index exploitation rate of 50.5%. Klamath River recreational fishery allocation: 802 adult Klamath River fall Chinook. Klamath tribal allocation: 5,348 adult Klamath River fall Chinook. CA/OR share of Klamath River fall Chinook commercial ocean harvest: 58% / 42%. 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 		
Cape Falcon to Humbug Mt.	Cape Falcon to Humbug Mt.	Cape Falcon to Humbug Mt.		
 April 15-30; May 6-31; June 6-30; July 6-31 August 1-29; September 1-October 31 (C.9.a). 	 May 1-26; June 6-30; July 6-31; August 1-29; September 1-October 31 (C.9.a). 	 May 6-31; June 6-30; July 6-31; August 1-6 August 7-18 only open from Cape Falcon to south end of Heceta Bank (43°58′00″ N lat.). Closed from south end to Heceta Bank to Humbug Mt. September 1-30 (C.9.a). 		
Open seven days per week. 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).	Same as Alternative	Same as Alternative 1 Same as Alternative 1		
Beginning September 1 no more than 75 Chinook allowed per vessel per landing week (ThursWed.).	Same as Alternative 1			
In 2021, 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 2020. This opening could be modified following Council review at its March 2021 meeting.	In 2021, same as Alternative 1	In 2021, same as Alternative 1		

TABLE 1. 2020 Commercial troll management Alternatives for	non-Indian ocean salmon fisheries – STT analyzed. (Page 5	5 of 13) Sunday, March 08, 2020,9:09 AM		
A. SEASON ALTERNATIVE DESCRIPTIONS				
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III		
 Humbug Mt. to OR/CA Border (Oregon KMZ) April 15-30; 	Humbug Mt. to OR/CA Border (Oregon KMZ) • April 15-30;	Humbug Mt. to OR/CA Border (Oregon KMZ) • May 6-31; (C.9.a).		
 May 6 through the earlier of May 31, or a 500 Chinook quota; June 6 through the earlier of June 30, or a 700 Chinook quota; 	 May 1-26; June 6 through the earlier of June 30, or a 500 Chinook quota; (C.9.a). 	Same as Alternative 1		
• July 6 through the earlier of July 31, or a 300 Chinook quota; (C.9.a).				
Open seven days per week. 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). Prior to May 1, all salmon caught in this area must be landed and delivered in the State of Oregon.	Same as Alternative 1	Same as Alternative 1		
May 6-July 31 weekly landing and possession limit of 40 Chinook per vessel per landing week (ThursWed.). Any remaining portion of Chinook quotas may be transferred inseason on an impact neutral basis to the next open quota period (C.8.b).	June 6-30 weekly landing and possession limit of 40 Chinook per vessel per landing week (ThursWed.).	Same as Alternative 1		
All vessels fishing in this area during May, 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.	All vessels fishing in this area during June 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 (May, 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 2021, same as Alternative 1		
In 2021, 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 2020. This opening could be modified following Council review at its March 2021 meeting.	In 2021, same as Alternative 1			

TABLE 1. 2020 Commercial troll management Alternatives for	non-Indian ocean salmon fisheries - STT analyzed. (Page 6 of 1	3) Sunday, March 08, 2020,9:09 AM
A. SEASON ALTERNATIVE DESCRIPTIONS		
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
ALTERNATIVE I OR/CA Border to Humboldt South Jetty (California KMZ) • Closed (C.9.b)	ALTERNATIVE II OR/CA Border to Humboldt South Jetty (California KMZ) • May 6 through the earlier of May 30, or a 750 Chinook quota; • June 1 through the earlier of June 30, or a 1,500 Chinook quota; • July 1 through the earlier of July 30, or a 1,000 Chinook quota; • August 1 through the earlier of August 29, or a 750 Chinook quota (C.9.b). 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). Chinook minimum size limit of 28 inches total length (B, C.1). 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, and prior to	ALTERNATIVE III OR/CA Border to Humboldt South Jetty (California KMZ) • Closed (C.9.b)
	fishing outside the area (C.10). See compliance requirements (C.1) gear restrictions, and definitions (C.2, C.3). Klamath Control Zone closed (C.5.e). See California State regulations for additional closures adjacent to the Smith and Klamath rivers.	
In 2021, 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 2020. This opening could be modified following Council review at its March or April 2021 meetings. Catch during this opening will be counted towards guotas set for this area at the March or April 2021 meeting.	Same as Alternative 1	Same as Alternative 1.
Humboldt South Jetty to Horse Mt.	Humboldt South Jetty to Horse Mt.	Humboldt South Jetty to Horse Mt.
Closed.	Closed.	Closed.

TABLE 1. 2020 Commercial troll management Alternatives for	non-Indian ocean salmon fisheries - STT analyzed. (Page 7 of 1	13) Sunday, March 08, 2020,9:09 AM		
A. SEASON ALTERNATIVE DESCRIPTIONS				
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III		
 Horse Mt. to Point Arena (Fort Bragg) August 1-28; September 1-30 (C.9.b). 	Horse Mt. to Point Arena (Fort Bragg) • September 1-30 (C.9.b).	Horse Mt. to Point Arena (Fort Bragg) • September 1-30 (C.9.b).		
Open seven days per week. All salmon except coho (C.4, C.7). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3). All salmon must be landed in California and north of Point Arena (C.6). Chinook minimum size limit of 27 inches total length (B, C.1).	Same as Alternative 1	Same as Alternative 1		
All salmon caught in the area prior to September 1 must be landed and off-loaded no later than 11:59 p.m., August 30 (C.6).				
In 2021, the season will open April 15 for all salmon except coho. Chinook minimum size limit of 27 inches total length. Gear restrictions same as in 2020. This opening could be modified following Council review at its March or April 2021 meetings.	In 2021, same as Alternative 1	In 2021, same as Alternative 1		

When the fishery is closed between the OR/CA border and Humbug Mountain and open to the south, vessels with fish on board caught in the open area off California may seek temporary mooring in Brookings, Oregon prior to landing in California only if such vessels first notify the Chetco River Coast Guard Station via VHF channel 22A between the hours of 0500 and 2200 and provide the vessel name, number of fish on board, and estimated time of arrival (C.6).

TABLE 1. 2020 Commercial troll management Alternatives t	or non-Indian ocean salmon fisheries – STT analyzed. (Pag	e 8 of 13) Sunday, March 08, 2020,9:09 AM		
A. SEASON ALTERNATIVE DESCRIPTIONS				
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 7-28; June 13-30;	May 6-28; June 7-30;	May 6-31; June 12-30;		
July 15-28; August 1-28;	July 11-22; August 1-28;	August 1-20;		
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). All salmon must be landed in California.	Same as Alternative 1	Same as Alternative 1		
		Same as Alternative 1		
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). During September, all salmon must be landed south of Point Arena (C.6).	Same as Alternative 1			
	When the CA KMZ fishery is open, all fish caught in the area must be landed south of Horse Mountain until the CA KMZ fishery has been closed for at least 48 hours (C.6).			
In 2021, 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 2020. This opening could be modified following Council review at its March or April 2021 meetings.	Same as Alternative 1	Same as Alternative 1		
Point Reyes to Point San Pedro (Fall Area Target Zone) October 1-2, 5-9, 12-15. 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). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3).	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		

TABLE 1. 2020 Commercial troll management Alternative	es for non-Indian ocean salmon fisheries – STT analyzed. (P	age 9 of 13) Sunday, March 08, 2020,9:09 AM	
	A. SEASON ALTERNATIVE DESCRIPTIONS		
ALTERNATIVE I	ALTERNATIVE II ALTERNATIVE III		
 Pigeon Point to U.S./Mexico Border (Monterey) May 1-28; June 13-30; July 15-28; August 1-28 (C.9.b). 	 Pigeon Point to U.S./Mexico Border (Monterey) May 1-28; June 1-30; July 11-22; August 1-28 (C.9.b). 	Pigeon Point to U.S./Mexico Border (Monterey) • May 1-28; June 1-30; • July 12-31; August 1-28 (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). All salmon must be landed in California.	Same as Alternative 1	Same as Alternative 1	
	When the CA KMZ fishery is open, all fish caught in the area must be landed south of Horse Mountain until the CA KMZ fishery has been closed for at least 48 hours (C.6).		
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 2021, 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 2020. This opening could be modified following Council review at its March or April 2021 meeting	Same as Alternative 1	Same as Alternative 1	

California State regulations require all salmon be made available to a CDFW representative for sampling immediately at port of landing. Any person in possession of a salmon with a missing adipose fin, upon request by an authorized agent or employee of the CDFW, shall immediately relinquish the head of the salmon to the State (California Fish and Game Code §8226).

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

	Chinook		Coho		
Area (when open)	Total Length	Head-off	Total Length	Head-off	Pink
North of Cape Falcon	28	21.5	16	12	None
Cape Falcon to Humbug Mt.	28	21.5	-	-	None
Humbug Mt. to OR/CA Border	28	21.5	-	-	None
OR/CA Border to Humboldt South Jetty (Alt. 2)	28	21.5	-	-	28
Horse Mt. to Pt. Arena	28	21.5			28
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. Compliance with Minimum Size or Other Special Restrictions: 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:

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. 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.

Spread defined: A single leader connected to an individual lure and/or bait.

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.

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. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS (Continued)

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. lat.; 125°16.50' W. long. and connecting back to 48°00.00' N. lat.; 125°14.00' W. long.
- 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).

45°46.00′ N. lat., 124°04.49′ W. long.;	44°51.28′ N. lat., 124°10.21′ W. long.;	44°08.30′ N. lat., 124°16.75′ W. long.;	43°10.96′ N. lat., 124°32.33′ W. long.;
45°44.34′ N. lat., 124°05.09′ W. long.;	44°49.49′ N. lat., 124°10.90′ W. long.;	44°01.18' N. lat., 124°15.42' W. long.;	43°05.65' N. lat., 124°31.52' W. long.;
		_	
45°40.64′ N. lat., 124°04.90′ W. long.;	44°44.96′ N. lat., 124°14.39′ W. long.;	43°51.61′ N. lat., 124°14.68′ W. long.;	42°59.66′ N. lat., 124°32.58′ W. long.;
45°33.00′ N. lat., 124°04.46′ W. long.;	44°43.44′ N. lat., 124°14.78′ W. long.;	43°42.66′ N. lat., 124°15.46′ W. long.;	42°54.97′ N. lat., 124°36.99′ W. long.;
45°32.27′ N. lat., 124°04.74′ W. long.;	44°42.26′ N. lat., 124°13.81′ W. long.;	43°40.49′ N. lat., 124°15.74′ W. long.;	42°53.81′ N. lat., 124°38.57′ W. long.;
45°29.26' N. lat., 124°04.22' W. long.;	44°41.68′ N. lat., 124°15.38′ W. long.;	43°38.77' N. lat., 124°15.64' W. long.;	42°50.00' N. lat., 124°39.68' W. long.;
45°20.25' N. lat., 124°04.67' W. long.;	44°34.87′ N. lat., 124°15.80′ W. long.;	43°34.52′ N. lat., 124°16.73′ W. long.;	42°49.13' N. lat., 124°39.70' W. long.;
45°19.99' N. lat., 124°04.62' W. long.;	44°33.74′ N. lat., 124°14.44′ W. long.;	43°28.82' N. lat., 124°19.52' W. long.;	42°46.47' N. lat., 124°38.89' W. long.;
45°17.50′ N. lat., 124°04.91′ W. long.;	44°27.66′ N. lat., 124°16.99′ W. long.;	43°23.91′ N. lat., 124°24.28′ W. long.;	42°45.74′ N. lat., 124°38.86′ W. long.;
45°11.29′ N. lat., 124°05.20′ W. long.;	44°19.13′ N. lat., 124°19.22′ W. long.;	43°20.83' N. lat., 124°26.63' W. long.;	42°44.79' N. lat., 124°37.96' W. long.;
45°05.80′ N. lat., 124°05.40′ W. long.;	44°15.35′ N. lat., 124°17.38′ W. long.;	43°17.96′ N. lat., 124°28.81′ W. long.;	42°45.01' N. lat., 124°36.39' W. long.;
45°05.08' N. lat., 124°05.93' W. long.;	44°14.38′ N. lat., 124°17.78′ W. long.;	43°16.75′ N. lat., 124°28.42′ W. long.;	42°44.14' N. lat., 124°35.17' W. long.;
45°03.83' N. lat., 124°06.47' W. long.;	44°12.80′ N. lat., 124°17.18′ W. long.;	43°13.97' N. lat., 124°31.99' W. long.;	42°42.14' N. lat., 124°32.82' W. long.;
45°01.70′ N. lat., 124°06.53′ W. long.;	44°09.23′ N. lat., 124°15.96′ W. long.;	43°13.72′ N. lat., 124°33.25′ W. long.;	42°40.50' N. lat., 124°31.98' W. long.
44°58.75′ N. lat., 124°07.14′ W. long.;	44°08.38' N. lat., 124°16.79' W. long.;	43°12.26′ N. lat., 124°34.16′ W. long.;	

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

C.6. Notification When Unsafe Conditions Prevent Compliance with Regulations: 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: During authorized periods, the operator of a vessel that has been issued an incidental halibut harvest license may retain Pacific halibut caught incidentally in Area 2A while trolling for salmon. Halibut retained must be no less than 32 inches in total length, measured from the tip of the lower jaw with the mouth closed to the extreme end of the middle of the tail, and must be landed with the head on. When halibut are caught and landed incidental to commercial salmon fishing by an IPHC license holder, any person who is required to report the salmon landing by applicable state law must include on the state landing receipt for that landing both the number of halibut landed, and the total dressed, head-on weight of halibut landed, in pounds, as well as the number and species of salmon landed.

License applications for incidental harvest must be obtained from the International Pacific Halibut Commission (phone: 206-634-1838). Applicants must apply prior to mid-March 2020 for 2020 permits (exact date to be set by the IPHC in early 2020). Incidental harvest is authorized only during April, May, and June of the 2020 troll seasons, and after June 30 in 2020 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 44,899 pound 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.

All alternatives are for the time period of May 1, 2020 through the end of the 2020 salmon troll fishery, and April 1-30, 2021

Alternative I – (status quo) license holders may land no more than one Pacific halibut per each two Chinook, except one Pacific halibut may be landed without meeting the ratio requirement, and no more than 35 halibut landed per trip.

Alternative II – license holders may land no more than one Pacific halibut per each two Chinook, except one Pacific halibut may be landed without meeting the ratio requirement, and no more than 30 halibut landed per trip.

Alternative III - license holders may land no more than one Pacific halibut per each two Chinook, except one Pacific halibut may be landed without meeting the ratio requirement, and no more than 25 halibut landed per trip.

Incidental Pacific halibut catch regulations in the commercial salmon troll fishery adopted for 2020, prior to any 2020 inseason action, will be in effect when incidental Pacific halibut retention opens on April 1, 2021 unless otherwise modified by inseason action at the March 2021 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:

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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°01' 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.
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C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS (continued)

- C.8. <u>Inseason Management</u>: 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 2021 meeting, the Council will consider inseason recommendations for special regulations for any experimental fisheries (proposals must meet Council protocol and be received in November 2020).
 - 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.
- 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 Horse Mountain. California.
- C.11.Latitudes for geographical reference of major landmarks along the west coast. 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.	Horse Mountain, CA	40°05′00″ N lat.
Queets River, WA	47°31′42" N lat.	Point Arena, CA	38°57′30″ N lat.
Leadbetter Point, WA	46°38′10" N lat.	Point Reyes, CA	37°59′44″ N lat.
Cape Falcon, OR	45°46′00″ N lat.	Point San Pedro, CA	37°35′40″ N lat.
Florence South Jetty, OR	44°00′54" N lat.	Pigeon Point, CA	37°11′00″ N lat.
Humbug Mountain, OR	42°40′30" 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. 2020 Recreational management Alternatives for	ABLE 2. 2020 Recreational management Alternatives for non-Indian ocean salmon fisheries – STT analyzed. (Page 1 of 9) Sunday, March 08, 2020,9:09 AM				
	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			
 Overall non-Indian TAC: 60,000 Chinook and 35,000 coho marked with a healed adipose fin clip (marked). Recreational TAC: 30,000 Chinook and 29,400 marked coho; all retained coho must be marked. 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. A trade with commercial troll may be considered in April. No Area 4B add-on fishery. Buoy 10 fishery opens August 1 with an expected landed catch of 13,000 marked coho in August and September. 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 non-Indian TAC: 45,000 Chinook and 25,000 coho marked with a healed adipose fin clip (marked). Recreational TAC: 22,125 Chinook and 22,500 marked coho; all retained coho must be marked. 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. Trade: No Area 4B add-on fishery. Buoy 10 fishery opens August 1 with an expected landed catch of 15,000 marked coho in August and September. Same as Alternative I 	Buoy 10 fishery opens August 1 with an expected landed catch of 17,000 marked coho in August and September.			
U.S./Canada Border to Cape Alava (Neah Bay) June 14 through earlier of June 28, or 6,000 coastwide Chinook guideline;(C.5). Open seven days per week. All salmon, except coho; one salmon per day (C.1). See minimum size limits (B). June 29 through earlier of September 30, or 3,060 marked coho subarea quota, with a subarea guideline of 5,100 Chinook (C.5).	U.S./Canada Border to Cape Alava (Neah Bay) June 27 through earlier of September 13, or 2,340 marked coho subarea quota, with a subarea guideline of 4,700 Chinook (C.5).	U.S./Canada Border to Cape Alava (Neah Bay) Closed			
Open seven days per week. All salmon, except no chum beginning August 1; 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). See minimum size limits (B).	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). See minimum size limits (B).				
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				

A. SEASON ALTERNATIVE DESCRIPTIONS			
ALTERNATIVE I ALTERNATIVE II ALTERNAT			
 Cape Alava to Queets River (La Push Subarea) June 14 through earlier of June 28, or 6,000 coastwide Chinook guideline; (C.5). Open seven days per week. All salmon, except coho; one salmon per day. (C.1). See minimum size limits (B). June 29 through earlier of September 30, or 760 marked coho subarea quota, with a subarea guideline of 1,050 Chinook (C.5). 	Cape Alava to Queets River (La Push Subarea) June 27 through earlier of September 13, or 580 marked coho subarea quota, with a subarea guideline of 1,100 Chinook (C.5).	Cape Alava to Queets River (La Push Subarea) Closed	
Open seven days per week. All salmon, except no chum beginning August 1; 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). See minimum size limits (B).	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). See minimum size limits (B).		
 October 1 through earlier of October 14, or a subarea quota of 150 Chinook (C.5) in the area north of 47°50'00 N. lat. and south of 48°00'00" N. lat. 			
All salmon, except coho; one salmon per day, (C.1). See minimum size limits (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).			

TABLE 2. 2020 Residence management Attendatives for	non-Indian ocean salmon fisheries – STT analyzed. (Page 2	of 9) Sunday, March 08, 2020,9:09 AM	
A. SEASON ALTERNATIVE DESCRIPTIONS			
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III	
 Queets River to Leadbetter Point (Westport Subarea) June 14 through earlier of June 28, or 6,000 coastwide Chinook guideline; (C.5). 	Queets River to Leadbetter Point (Westport Subarea) June 28 through earlier of September 13, or 8,330 marked coho subarea quota, with a subarea guideline of 10,500 Chinook (C.5).	Queets River to Leadbetter Point (Westport Subarea) Closed	
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 29 through earlier of September 30, or 10,880 marked coho subarea quota, with a subarea guideline of 11,400 Chinook (C.5). 			
Open five days per week (SunThurs.). 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 (SunThurs.). 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). See minimum size limits (B).		
See gear restrictions and definitions (C.2, C.3). Grays Harbor Control Zone closed beginning August 10 (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.		

A. SEASON ALTERNATIVE DESCRIPTIONS			
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III	
Leadbetter Point to Cape Falcon (Columbia River Subarea) June 14 through earlier of June 28, or 6,000 coastwide Chinook guideline; (C.5). 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 29 through earlier of September 30, or 14,700 marked coho subarea quota, with a subarea guideline	Leadbetter Point to Cape Falcon (Columbia River Subarea) • June 28 through earlier of September 13, or 11,250 marked coho subarea quota, with a subarea guideline of 5,800 Chinook (C.5).	Leadbetter Point to Cape Falcon (Columbia River Subarea) Closed	
of 6,300 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 (SunThurs.). 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). See minimum size limits (B).		
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	
 Sacramento River fall Chinook spawning escapement of 231,621 hatchery and natural area adults. Sacramento Index exploitation rate of 51.1%. Klamath River recreational fishery allocation: 1,348 adult Klamath River fall Chinook. Klamath tribal allocation: 8,988 adult Klamath River fall Chinook. Overall recreational coho TAC: 22,500 coho marked with a healed adipose fin clip (marked), and 3,000 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. 	 Sacramento River fall Chinook spawning escapement of 226,277 hatchery and natural area adults. Sacramento Index exploitation rate of 52.2%. Klamath River recreational fishery allocation: 1,312 adult Klamath River fall Chinook. Klamath tribal allocation: 8,750 adult Klamath River fall Chinook. Overall recreational coho TAC: 18,000 coho marked with a healed adipose fin clip (marked), and 4,000 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. 	 Sacramento River fall Chinook spawning escapement of 234,132 hatchery and natural area adults. Sacramento Index exploitation rate of 50.5%. Klamath River recreational fishery allocation: 802 adult Klamath River fall Chinook. Klamath tribal allocation: 5,348 adult Klamath River fal Chinook. Overall recreational coho TAC: 30,000 coho marked with a healed adipose fin clip (marked), and 0 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. 	
 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). 	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. March 15-October 31 (C.6), except as provided below during the all-salmon mark-selective fishery (C.5). 	
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 2021, 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 2020 (C.2, C.3). This opening could be modified following Council review at its March 2021 meeting	In 2021, same as Alternative 1	In 2021, same as Alternative 1	

Fishing in the Stonewall Bank yelloweye rockfish conservation area restricted to trolling only on days the all depth recreational halibut fishery is open (call the halibut fishing hotline 1-800-662-9825 for specific dates) (C.3.b, C.4.d).

TABLE 2. 2020 Recreational management Alternatives for	non-Indian ocean salmon fisheries – STT analyzed. (Page 5	of 9) Sunday, March 08, 2020,9:09 AM	
A. SEASON ALTERNATIVE DESCRIPTIONS			
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III	
Cape Falcon to Humbug Mt. All-salmon mark-selective coho fishery: June 27 through the earlier of August 2, or 22,000 marked coho quota (C.6).	Cape Falcon to Humbug Mt. All-salmon mark-selective coho fishery: June 27 through the earlier of August 2, or 18,000 marked coho quota (C.6).	Cape Falcon to Humbug Mt. All-salmon mark-selective coho fishery: June 27 through the earlier of August 16, or 30,000 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		
Non-mark-selective coho fishery: September 4-5, and open each Friday and Saturday through the earlier of September 30, or 3,000 non-mark-selective coho quota (C.6). Open days may be modified inseason.	Non-mark-selective coho fishery: August 28-30, September 11-13, and open each Friday through Sunday through the earlier of September 30, or 4,000 non-mark-selective coho quota (C.6). Open days may be modified inseason	Non-mark-selective coho fishery: No season	
All salmon, two salmon per day (C.1). See minimum size limits (B). See gear restrictions and definitions (C.2, C.3).	All salmon, two salmon per day, but no more than one coho (C.1). See minimum size limits (B). See gear restrictions and definitions (C.2, C.3).		
Fishing in the Stonewall Bank yelloweye rockfish conservation area restricted to trolling only on days the all depth recreational halibut fishery is open (call the halibut fishing hotline 1-800-662-9825 for specific dates) (C.3.b, C.4.d).			
Humbug Mt. to OR/CA Border (Oregon KMZ)May 16-July 31 (C.6).	Humbug Mt. to OR/CA Border (Oregon KMZ) • May 23-July 5 (C.6).	Humbug Mt. to OR/CA Border (Oregon KMZ) ■ June 20-July 5 (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	Same as Alternative 1	

TABLE 2. 2020 Recreational management Alternatives for r	A. SEASON ALTERNATIVE DESCRIPTION:	· · ·
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
OR/CA Border to Horse Mt. (California KMZ) • June 6-July 31 (C.6).	OR/CA Border to Horse Mt. (California KMZ) • June 6-July 31 (C.6).	OR/CA Border to Horse Mt. (California KMZ) • July 1-19 (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.	Same as Alternative 1	Same as Alternative 1
In 2021, 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 2020 (C.2, C.3). This opening could be modified following Council review at its March 2021 meeting.	Same as Alternative 1	Same as Alternative 1
Horse Mt. to Point Arena (Fort Bragg)	Horse Mt. to Point Arena (Fort Bragg)	Horse Mt. to Point Arena (Fort Bragg)
 April 4-30; 	April 11-30;	• April 4-30;
May 1-October 31 (C.6).	May 1-October 31 (C.6).	• May 1-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 2021, season opens April 3 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 2020 (C.2, C.3). This opening could be modified following Council review at its March 2021 meeting.	In 2021, same as Alternative 1	In 2021, same as Alternative 1

TABLE 2. 2020 Recreational management Alternatives for non-Indian ocean salmon fisheries – STT analyzed. (Page 7 of 9) Sunday, March 08, 2020,9:09 AM A. SEASON ALTERNATIVE DESCRIPTIONS				
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III		
Point Arena to Pigeon Point (San Francisco) April 4-30:	Point Arena to Pigeon Point (San Francisco) • April 11-30:	Point Arena to Pigeon Point (San Francisco) April 4-30:		
• May 1-October 31 (C.6).	May 1-October 31 (C.6).	May 23-June 30;July 1- 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 April, then 20 inches total length thereafter (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 June, then 20 inches total length thereafte (B). See gear restrictions and definitions (C.2, C.3).		
In 2021, season opens April 3 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 2020 (C.2, C.3). This opening could be modified following Council review at its March 2021 meeting.	In 2021, same as Alternative 1	In 2021, same as Alternative 1		
Pigeon Point to U.S./Mexico Border (Monterey) • April 4-October 4(C.6).	Pigeon Point to U.S./Mexico Border (Monterey) • April 4-September 27 (C.6).	Pigeon Point to U.S./Mexico Border (Monterey) • April 4-September 7 (C.6).		
Open seven days per week. All salmon except coho, two salmon per day (C.1). See gear restrictions and definitions (C.2, C.3). Chinook minimum size limit of 24 inches total length (B).	Same as Alternative 1	Same as Alternative 1		
In 2021, season opens April 3 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 2020 (C.2, C.3). This opening could be modified following Council review at its March 2021 meeting.	In 2021, same as Alternative 1	In 2021, same as Alternative 1		

California State regulations require all salmon be made available to a CDFW representative for sampling immediately at port of landing. Any person in possession of a salmon with a missing adipose fin, upon request by an authorized agent or employee of the CDFW, shall immediately relinquish the head of the salmon to the State (California Code of Regulations Title 14 Section 1.73).

B. MINIMUM SIZE (Inches) (See C	: 1	1	١
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Area (when open)	Chinook	Coho	Pink
North of Cape Falcon (Alt 1 Westport and Col R)	22	16	None
North of Cape Falcon (Alt 1 Neah Bay and La Push, Alt II all areas)	24	16	None
Cape Falcon to Humbug Mt.	24	16	None
Humbug Mt. to OR/CA Border	24	16	None
OR/CA Border to Horse Mt.	20	-	20
Horse Mt. to Pt. Arena	20	-	20
Pt. Arena to Pigeon Pt. through April 30	24	-	24
Pt. Arena to Pigeon Pt. May 1-October 31 (Alt I, Alt II)	20	-	20
Pt. Arena to Pigeon Pt. May 23-June 30 (Alt III)	24	-	24
Pt. Arena to Pigeon Pt. July 1-October 31 (Alt III)	20	-	20
Pigeon Pt. to U.S./Mexico Border	24	-	24

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

- C.1. Compliance with Minimum Size and Other Special Restrictions: 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. Horse Mt., California, 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.

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. non-mark-selective recreational fishery if the transfer would not result in exceeding preseason impact expectations on any stocks.
- C.6. Additional Seasons in State Territorial Waters: 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) 2020 Treaty Indian troll management Ali	ternatives for ocean salmon fisheries - Tribe proposed. (Page	1 of 3) Saturday, March 07, 2020,8:45 PM	
A. SEASON ALTERNATIVE DESCRIPTIONS			
QTA ALTERNATIVE II QTA ALTERNATIVE III QTA ALTERNATIVE III			
Supplemental Management Information	Supplemental Management Information Supplemental Management Information		
Overall Treaty-Indian TAC: 30,000 Chinook and 12,500 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.	Overall Treaty-Indian TAC: 20,000 Chinook and 0 coho. Overall Chinook and/or coho TAC 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.	
May 1 through the earlier of June 30 or 18,000 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).	May 1 through the earlier of June 30 or 15,000 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).	May 1 through the earlier of June 30 or 12,000 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 August 31, or 12,000 Chinook quota, or 12,500 coho quota. All Salmon. See size limit (B) and other restrictions (C).	July 1 through the earlier of August 31, or 10,000 Chinook quota or 10,000 coho quota All salmon. See size limit (B) and other restrictions (C).	July 1 through the earlier of August 31, or 8,000 Chinook quota or 0 coho quota. All salmon. See size limit (B) and other restrictions (C).	

TABLE 3b. (Makah Tribal) 2020 Treaty Indian troll management Alternatives for ocean salmon fisheries - Tribe proposed. (Page 2 of 3) Saturday, March 07, 2020,8:45 PM				
A. SEASON ALTERNATIVE DESCRIPTIONS				
MAKAH TRIBAL ALTERNATIVE I	MAKAH TRIBAL ALTERNATIVE II	MAKAH TRIBAL ALTERNATIVE III		
Supplemental Management Information	mental Management Information Supplemental Management Information Supplemental Management			
Overall Treaty-Indian TAC: 45,000 Chinook and 30,000 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 22,500 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 15,000 coho. Overall Chinook and/or coho TAC 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.		
May 1 through the earlier of June 30 or 22,500 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 22,500	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	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 30,000 coho quota. All Salmon. See size limit (B) and other restrictions (C).	Chinook quota or 22,500 coho quota All salmon. See size limit (B) and other restrictions (C).	Chinook quota or 15,000 coho quota. All salmon. See size limit (B) and other restrictions (C).		

Table 3a and 3b. 2020 Treaty Indian troll management Alternatives for ocean salmon fisheries - Tribe proposed.

B. Minimum Length (total inches).

	Chir	nook	Cor	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

Saturday, March 07, 2020,8:45 PM

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

C.1. Tribe and Area Boundaries. 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.

QUILEUTE - 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 2020 season (estimated harvest during the October ceremonial and subsistence fishery: 20 Chinook; 40 coho).

C.4. Area Closures

- a. 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. <u>Inseason Management</u>: 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.

TABLE 5a. (QTA) Projected key stock escapements (thousands of fish) or management criteria for 2020 ocean fishery Alternatives - STT analyzed^{a/} (Page 1 of 2)

IABLE 5a. (QTA) Projected key stock	escapement		r tish) or mai	nagement criteria for 2020 ocean fishery Alternatives - STT analyzed ^{ar} (Page 1 of 2)
		PROJECTED		2020
Key Stock/Criteria	Alt I	Alt II	Alt III	Criteria Spawner Objective or Other Comparative Standard as Noted b/
CHINOOK				CHINOOK
Columbia Upriver Brights	230.4	233.2	239.3	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	78.7	79.6	81.7	14.9 Minimum ocean escapement to attain 7.9 for Little White Salmon egg-take, assuming average conversion and no mainstem harvest.
Columbia Lower River Hatchery Tules	50.0	50.9	53.9	25.0 Minimum ocean escapement to attain 14.8 adults for hatchery egg-take, with average conversion and no lower river mainstem or tributary harvest.
Columbia Lower River Natural Tules ^{c/} (threatened)	36.0%	34.2%	28.3%	≤ 38.0% Total adult equivalent fishery exploitation rate (2020 NMFS ESA guidance).
Columbia Lower River Wild ^{e/} (threatened)	19.7	19.7	20.6	6.9 Minimum ocean escapement to attain MSY spawner goal of 5.7 for N. Lewis River fall Chinook (NMFS ESA consultation standard).
Spring Creek Hatchery Tules	44.6	46.2	49.9	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	37.4	38.2	39.1	29.0 Aggregate escapement to mouth of Columbia River.
Snake River Fall (threatened) SRFI	50.9%	45.4%	27.3%	≤ 70.0% Of 1988-1993 base period exploitation rate for all ocean fisheries (NMFS ESA consultation standard).
Klamath River Fall	35.7	35.9		≥ 36.2 2020 minimum natural area adult escapement (FMP control rule).
			40.7	≥ 40.7 2020 minimum natural area adult escapement (Council guidance).
Federally recognized tribal harvest	50.0% 26.0%	50.0% 25.5%	50.0% 	50.0% Equals 9.0, 8.8, and 5.3 (thousand) adult fish for Yurok and Hoopa Valley tribal fisheries. ≤ 25.0% FMP control rule.
Exploitation (spawner reduction) rate				
A 1 % :			15.7%	≤ 15.7% Council guidance.
Adult river mouth return	58.9	58.9	60.9	NA Total adults in thousands.
Age-4 ocean harvest rate	9.0%	9.5%	6.1%	≤ 16.0% NMFS ESA consultation standard for threatened California Coastal Chinook.
KMZ sport fishery share	7.2%	6.4%	3.5%	NA Favole 4.2.4.2 and 0.0 (the great) odds find for representational inviting finds and
River recreational fishery share	15.0%	15.0%	15.0%	NA Equals 1.3, 1.3, and 0.8 (thousand) adult fish for recreational inriver fisheries.
Sacramento River Winter (endangered)	16.6%	17.6%	20.0%	≤ 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. between the first Saturday in April and the second Sunday in November; Pigeon Pt. to the U.S./Mexico border between 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 between May 1 and September 30, except Pt. Reyes to Pt. San Pedro between October 1 and 15 (Monday-Friday). Minimum size limit ≥ 26 inches total length (NMFS 2020 ESA guidance).
Sacramento River Fall	231.6	226.3	234.1	≥ 141.955 2020 minimum hatchery and natural area adult escapement (FMP control rule).
Sacramento Index Exploitation Rate	51.1%	52.2%	50.5%	≤ 70.0% FMP control rule.
Ocean commercial impacts	144.0	151.4	145.4	Includes fall (Sept-Dec) 2019 impacts (5.7 thousand SRFC).
Ocean recreational impacts	56.7	55.6	52.3	Includes fall (Sept-Dec) 2019 impacts (3.3 thousand SRFC).
River recreational impacts	40.9	39.9	41.3	
SRKW Prey Abundance				
North of Falcon	1,250.9	1,250.9	1,250.9	≥ 972.0 Oct 1 starting abundance of age 3+ Chinook from U.S./Canada Border to Cape Falcon
Falcon to Horse Mt.	1,063.6	1,063.6	1,063.6	NA Oct 1 starting abundance of age 3+ Chinook from Cape Falcon to Horse Mt.
South of Horse Mt.	543.8	543.8	543.8	NA Oct 1 starting abundance of age 3+ Chinook south of Horse Mt.
Cour. of Fiores Mil.	1 0.0.0	0.10.0	0.0.0	13. 55. Starting addition of ago of Orimboth South of Fordor Mil.

TABLE 5a. (QTA) Projected key stock escapements (thousands of fish) or management criteria for 2020 ocean fishery management measures - STT analyzed. al (Page 2 of 2)

		PROJECTED		2020
Key Stock/Criteria	Alt I	Alt II	Alt III	Criteria Spawner Objective or Other Comparative Standard as Noted b/
СОНО		СОНО		соно
Interior Fraser (Thompson River)	6.3%(2.3%)	5.7%(1.8%)	4.6%(0.6%)	≤ 10.0% 2020 Southern U.S. exploitation rate ceiling; PSC coho agreement.
Skagit	34.1%(2.2%)	33.7%(1.7%)	32.8%(0.6%)	≤ 35.0% 2020 total exploitation rate ceiling; FMP matrix ^{d/}
Stillaguamish	27.0%(1.7%)	26.7%(1.2%)	26.0%(0.4%)	≤ 35.0% 2020 total exploitation rate ceiling; FMP matrix ^{d/}
Snohomish	24.0%(1.7%)	23.6%(1.2%)	22.9%(0.4%)	≤ 20.0% 2020 total exploitation rate ceiling; FMP matrix ^{d/}
Hood Canal	41.7%(2.6%)	41.3%(2.0%)	40.4%(0.7%)	≤ 45.0% 2020 total exploitation rate ceiling; FMP matrix ^{d/}
Strait of Juan de Fuca	8.4%(2.1%)	7.9%(1.6%)	6.8%(0.6%)	≤ 20.0% 2020 total exploitation rate ceiling; FMP matrix ^{d/}
Quillayute Fall	8.7	8.8	8.9	6.3 FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Hoh	3.6	3.7	3.8	2.0 FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Queets Wild	6.7	6.8	7.1	5.8 FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Grays Harbor	47.2	47.6	48.2	24.4 FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Willapa Bay	27.5	28.3	29.2	17.2 FMP MSY natural area adult spawner estimate. Value depicted is ocean escapement.
Lower Columbia River Natural (threatened)	11.4%	8.9%	5.2%	≤ 18.0% Total marine and mainstem Columbia R. fishery exploitation rate (2020 NMFS ESA guidance). Value depicted is marine exploitation rate before Buoy 10.
Upper Columbia ^{c/}	69%	71%	75%	$\geq 50\%$ Minimum percentage of the run to Bonneville Dam.
Columbia River Hatchery Early	87.8	92.1	93.8	77.2 Minimum ocean escapement to attain hatchery egg-take goal of 21.7 early adult coho,
				with average conversion and no mainstem or tributary fisheries.
Columbia River Hatchery Late	34.5	37.3	42.2	9.7 Minimum ocean escapement to attain hatchery egg-take goal of 6.4 late adult coho,
One was One and all Network	44.00/	44.00/	40.00/	with average conversion and no mainstem or tributary fisheries.
Oregon Coastal Natural	11.8%	11.2%	10.3%	≤ 15.0% Marine and freshwater fishery exploitation rate (NMFS ESA consultation standard).
Southern Oregon/Northern California Coast (threatened)	3.2%	3.5%	2.7%	≤ 13.0% Marine fishery exploitation rate for Rogue/Klamath hatchery coho (NMFS ESA consultation standard).

a/ Coho projections in the table assume post-season 2018 fishery scalars for Canadian fisheries, except Fraser net and terminal fisheries (post-season 2016), and Fraser pport (post-season 2017). Model results for Chinook in this table used 2018 preseason catches and fishing effort scalers, and are updated with 2018 post season data if available. 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 spawner 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. Exploitation rates for LCN coho include marine impacts only. Exploitation rates for OCN coho represent marine and freshwater impacts. Values reported for Klamath River fall Chinook are natural area adult 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 Lewis River and Sandy River.

TABLE 5b. (Makah Tribe) Projected key stock escapements (thousands of fish) or management criteria for 2020 ocean fishery Alternatives - STT analyzedal (Page 1 of 2)

TABLE 5b. (Makah Tribe) Projected k	ey stock escar		sands of fish) or management criteria for 2020 ocean fishery Alternatives - STT analyzed (Page 1 of 2)
		PROJECTED		2020
Key Stock/Criteria	Alt I	Alt II	Alt III	Criteria Spawner Objective or Other Comparative Standard as Noted ^{b/}
CHINOOK				CHINOOK
Columbia Upriver Brights	229.1	232.2	238.8	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	78.2	79.3	81.5	14.9 Minimum ocean escapement to attain 7.9 for Little White Salmon egg-take, assuming average conversion and no mainstem harvest.
Columbia Lower River Hatchery Tules	49.7	50.7	53.8	25.0 Minimum ocean escapement to attain 14.8 adults for hatchery egg-take, with average conversion and no lower river mainstem or tributary harvest.
Columbia Lower River Natural Tules ^{c/} (threatened)	36.6%	34.6%	28.5%	≤ 38.0% Total adult equivalent fishery exploitation rate (2020 NMFS ESA guidance).
Columbia Lower River Wild ^{e/} (threatened)	19.6	19.6	20.6	6.9 Minimum ocean escapement to attain MSY spawner goal of 5.7 for N. Lewis River fall Chinook (NMFS ESA consultation standard).
Spring Creek Hatchery Tules	44.3	46.0	49.8	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	37.3	38.1	39.1	29.0 Aggregate escapement to mouth of Columbia River.
Snake River Fall (threatened) SRFI	54.4%	47.9%	28.7%	≤ 70.0% Of 1988-1993 base period exploitation rate for all ocean fisheries (NMFS ESA consultation standard).
Klamath River Fall	35.7	35.9		≥ 36.2 2020 minimum natural area adult escapement (FMP control rule).
			40.7	≥ 40.7 2020 minimum natural area adult escapement (Council guidance).
Federally recognized tribal harvest	50.0%	50.0%	50.0%	50.0% Equals 9.0, 8.8, and 5.3 (thousand) adult fish for Yurok and Hoopa Valley tribal fisheries.
Exploitation (spawner reduction) rate	26.0%	25.5%		≤ 25.0% FMP control rule.
			15.7%	≤ 15.7% Council guidance.
Adult river mouth return	58.9	58.9	60.9	NA Total adults in thousands.
Age-4 ocean harvest rate	9.0%	9.5%	6.1%	≤ 16.0% NMFS ESA consultation standard for threatened California Coastal Chinook.
KMZ sport fishery share	7.2%	6.4%	3.5%	
River recreational fishery share	15.0%	15.0%	15.0%	NA Equals 1.3, 1.3, and 0.8 (thousand) adult fish for recreational inriver fisheries.
Sacramento River Winter (endangered)	16.6%	17.6%	20.0%	≤ 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. between the first Saturday in April and the second Sunday in November; Pigeon Pt. to the U.S./Mexico border between 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 between May 1 and September 30, except Pt. Reyes to Pt. San Pedro between October 1 and 15 (Monday-Friday). Minimum size limit ≥ 26 inches total length (NMFS 2020 ESA guidance).
Sacramento River Fall	231.6	226.3	234.1	≥ 141.955 2020 minimum hatchery and natural area adult escapement (FMP control rule).
Sacramento Index Exploitation Rate	51.1%	52.2%	50.5%	≤ 70.0% FMP control rule.
Ocean commercial impacts	144.0	151.4	145.4	Includes fall (Sept-Dec) 2019 impacts (5.7 thousand SRFC).
Ocean recreational impacts	56.7	55.6	52.3	Includes fall (Sept-Dec) 2019 impacts (3.3 thousand SRFC).
River recreational impacts	40.9	39.9	41.3	
SRKW Prey Abundance				
North of Falcon	1,250.9	1,250.9	1,250.9	≥ 972.0 Oct 1 starting abundance of age 3+ Chinook from U.S./Canada Border to Cape Falcon
Falcon to Horse Mt.	1,063.6	1,063.6	1,063.6	NA Oct 1 starting abundance of age 3+ Chinook from Cape Falcon to Horse Mt.
South of Horse Mt.	543.8	543.8	543.8	NA Oct 1 starting abundance of age 3+ Chinook south of Horse Mt.
	1			

TABLE 5b. (Makah Tribe) Projected key stock escapements (thousands of fish) or management criteria for 2020 ocean fishery management measures - STT analyzed. ^{a/} (Page 2 of 2)

		PROJECTED	, ,	2020
Key Stock/Criteria	Alt I	Alt II	Alt III	Criteria Spawner Objective or Other Comparative Standard as Noted b/
СОНО		СОНО		СОНО
Interior Fraser (Thompson River)	8.4%(4.4%)	7.2%(3.3%)	6.0%(2.0%)	≤ 10.0% 2020 Southern U.S. exploitation rate ceiling; PSC coho agreement.
Skagit	35.5%(4.1%)	34.7%(3.0%)	33.7%(1.8%)	≤ 35.0% 2020 total exploitation rate ceiling; FMP matrix ^{d/}
Stillaguamish	28.1%(3.0%)	27.4%(2.2%)	26.7%(1.3%)	≤ 35.0% 2020 total exploitation rate ceiling; FMP matrix ^{d/}
Snohomish	25.1%(3.0%)	24.4%(2.2%)	23.6%(1.3%)	≤ 20.0% 2020 total exploitation rate ceiling; FMP matrix ^{d/}
Hood Canal	43.0%(4.4%)	42.2%(3.3%)	41.2%(2.0%)	≤ 45.0% 2020 total exploitation rate ceiling; FMP matrix ^{d/}
Strait of Juan de Fuca	9.9%(3.7%)	9.0%(2.7%)	7.9%(1.6%)	≤ 20.0% 2020 total exploitation rate ceiling; FMP matrix ^{d/}
Quillayute Fall	8.6	8.7	8.8	6.3 FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Hoh	3.5	3.6	3.7	2.0 FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Queets Wild	6.5	6.7	6.9	5.8 FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Grays Harbor	46.3	47.0	47.7	24.4 FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Willapa Bay	27.0	27.9	28.9	17.2 FMP MSY natural area adult spawner estimate. Value depicted is ocean escapement.
Lower Columbia River Natural	13.1%	10.1%	6.1%	≤ 18.0% Total marine and mainstem Columbia R. fishery exploitation rate (2020 NMFS ESA guidance).
(threatened)				Value depicted is marine exploitation rate before Buoy 10.
Upper Columbia ^{c/}	68%	71%	74%	≥ 50% Minimum percentage of the run to Bonneville Dam.
Columbia River Hatchery Early	86.2	91.0	92.9	77.2 Minimum ocean escapement to attain hatchery egg-take goal of 21.7 early adult coho,
				with average conversion and no mainstem or tributary fisheries.
Columbia River Hatchery Late	33.8	36.8	41.7	9.7 Minimum ocean escapement to attain hatchery egg-take goal of 6.4 late adult coho,
	40.00/	44.50/	10.50/	with average conversion and no mainstem or tributary fisheries.
Oregon Coastal Natural	12.2%	11.5%	10.5%	≤ 15.0% Marine and freshwater fishery exploitation rate (NMFS ESA consultation standard).
Southern Oregon/Northern California Coast (threatened)	3.2%	3.5%	2.7%	≤ 13.0% Marine fishery exploitation rate for Rogue/Klamath hatchery coho (NMFS ESA consultation standard).

a/ Coho projections in the table assume post-season 2018 fishery scalars for Canadian fisheries, except Fraser net and terminal fisheries (post-season 2016), and Fraser sport (post-season 2017). Model results for Chinook in this table used 2018 preseason catches and fishing effort scalers, and are updated with 2018 post season data if available. 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 spawner 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. Exploitation rates for LCN coho include marine impacts only. Exploitation rates for OCN coho represent marine and freshwater impacts. Values reported for Klamath River fall Chinook are natural area adult spawners. Values reported for Sacramento River fall Chinook are hatchery and natural area adult spawners.

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 Lewis River and Sandy River.

TABLE 7a. (QTA) 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 2020 ocean fisheries management Alternatives - STT analyzed.

		_				Exploitation R	ate (Percent	:)					
		LCN Coho			OCN Coho		•	RK Coho		LC	R Tule Chin	inook	
Fishery	ı	11	III	I	II	Ш	1	II	III	I	II	III	
SOUTHEAST ALASKA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	2.3%	2.5%	
BRITISH COLUMBIA	0.3%	0.3%	0.3%	0.6%	0.6%	0.6%	0.5%	0.4%	0.5%	12.3%	12.6%	13.2%	
PUGET SOUND/STRAIT	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.7%	0.8%	
NORTH OF CAPE FALCON													
Treaty Indian Ocean Troll	0.9%	0.7%	0.3%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	1.8%	1.5%	1.2%	
Recreational	4.3%	3.1%	0.0%	0.7%	0.5%	0.0%	0.0%	0.0%	0.0%	4.2%	3.2%	0.0%	
Non-Indian Troll	1.6%	0.8%	0.0%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	5.2%	3.9%	0.0%	
SOUTH OF CAPE FALCON													
Recreational:										0.1%	0.2%	0.2%	
Cape Falcon to Humbug Mt.	3.6%	3.3%	3.9%	6.7%	6.3%	6.6%	0.6%	0.5%	0.8%	-	-	-	
Humbug Mt. to OR/CA border (KMZ)	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.2%	0.1%	0.0%	-	-	-	
OR/CA border to Horse Mt. (KMZ)	0.0%	0.0%	0.0%	0.2%	0.2%	0.0%	0.7%	0.7%	0.2%	-	-	-	
Fort Bragg	0.0%	0.0%	0.0%	0.3%	0.3%	0.3%	0.7%	0.7%	0.7%	-	-	-	
South of Pt. Arena	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.3%	0.3%	0.3%	-	-	-	
Troll:										1.3%	1.4%	1.2%	
Cape Falcon to Humbug Mt.	0.5%	0.5%	0.4%	0.6%	0.6%	0.5%	0.1%	0.1%	0.1%	-	-	-	
Humbug Mt. to OR/CA border (KMZ)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-	
OR/CA border to Horse Mt. (KMZ)	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.7%	0.0%	-	-	-	
Fort Bragg	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	-	-	-	
South of Pt. Arena	0.0%	0.0%	0.0%	0.3%	0.4%	0.4%	0.2%	0.2%	0.3%	-	-	-	
BUOY 10	2.3%	2.5%	2.8%	0.1%	0.2%	0.2%	0.0%	0.0%	0.0%	8.2%	8.4%	9.2%	
ESTUARY/FRESHWATER	NA	NA	NA	1.4%	1.4%	1.4%	NA	NA	NA	0.2 /0	0.4 /0	3.∠ /0	
TOTAL ^{a/}	11.4%	8.9%	5.2%	11.8%	11.2%	10.3%	3.2%	3.5%	2.7%	36.0%	34.2%	28.3%	

a/ Totals do not include Buoy 10 and estuary/freshwater for LCN and RK coho; estuary/freshwater catch is included in the total for OCN. For LCR Tule Chinook, Buoy 10 and estuary/freshwater assume 2019 preseason harvest rates. Bolded values identify ocean exploitation rates that, when combined with 2019 freshwater harvest rates, would exceed the total allowable exploitation rate.

TABLE 7b. (Makah Tribe) 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 2020 ocean fisheries management Alternatives - STT analyzed.

		LCN Coho			OCN Coho	•	•	RK Coho		LC	R Tule Chin	ook
Fishery	ı	II	III	I	II	III	I	II	III	I	II	III
SOUTHEAST ALASKA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	2.3%	2.5%
BRITISH COLUMBIA	0.3%	0.3%	0.3%	0.6%	0.6%	0.6%	0.5%	0.4%	0.5%	12.3%	12.6%	13.2%
PUGET SOUND/STRAIT	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.7%	0.8%
NORTH OF CAPE FALCON												
Treaty Indian Ocean Troll	2.5%	1.9%	1.3%	0.6%	0.4%	0.3%	0.0%	0.0%	0.0%	2.5%	2.0%	1.5%
Recreational	4.3%	3.1%	0.0%	0.7%	0.5%	0.0%	0.0%	0.0%	0.0%	4.1%	3.2%	0.0%
Non-Indian Troll	1.6%	0.8%	0.0%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	5.1%	3.9%	0.0%
SOUTH OF CAPE FALCON												
Recreational:										0.1%	0.2%	0.2%
Cape Falcon to Humbug Mt.	3.6%	3.3%	3.9%	6.7%	6.3%	6.6%	0.6%	0.5%	0.8%	-	-	-
Humbug Mt. to OR/CA border (KMZ)	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.2%	0.1%	0.0%	-	-	-
OR/CA border to Horse Mt. (KMZ)	0.0%	0.0%	0.0%	0.2%	0.2%	0.0%	0.7%	0.7%	0.2%	-	-	-
Fort Bragg	0.0%	0.0%	0.0%	0.3%	0.3%	0.3%	0.7%	0.7%	0.7%	-	-	-
South of Pt. Arena	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.3%	0.3%	0.3%	-	-	-
Troll:										1.3%	1.3%	1.2%
Cape Falcon to Humbug Mt.	0.5%	0.5%	0.4%	0.6%	0.6%	0.5%	0.1%	0.1%	0.1%	-	-	-
Humbug Mt. to OR/CA border (KMZ)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-
OR/CA border to Horse Mt. (KMZ)	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.7%	0.0%	-	-	-
Fort Bragg	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	-	-	-
South of Pt. Arena	0.0%	0.0%	0.0%	0.3%	0.4%	0.4%	0.2%	0.2%	0.3%	-	-	-
BUOY 10	2.3%	2.5%	2.8%	0.1%	0.2%	0.2%	0.0%	0.0%	0.0%	8.1%	8.4%	9.2%
ESTUARY/FRESHWATER	NA	NA	NA	1.4%	1.4%	1.4%	NA	NA	NA	0.176	0.4%	5.2%
TOTAL ^{a/}	13.1%	10.1%	6.1%	12.2%	11.5%	10.5%	3.2%	3.5%	2.7%	36.6%	34.6%	28.5%

a/ Totals do not include Buoy 10 and estuary/freshwater for LCN and RK coho; estuary/freshwater catch is included in the total for OCN. For LCR Tule Chinook, Buoy 10 and estuary/freshwater assume 2019 preseason harvest rates. Bolded values identify ocean exploitation rates that, when combined with 2019 freshwater harvest rates, would exceed the total allowable exploitation rate.

PROJECTED IMPACTS FOR AGE-3 SACRAMENTO RIVER WINTER CHINOOK, ADULT KLAMATH RIVER FALL CHINOOK, AND ADULT SACRAMENTO RIVER FALL CHINOOK

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 2020 fishing season Alternatives. The impacts are displayed as a percent for each Alternative by fishery, port area, and month. Max rate: 20%.

														- 77	,						
	Commercial										Recreational										
Alterna	tive I	16.6	Γotal							Alternat	ive 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	0.43	0.45	0.36	0.19	0.07			1.61	SF	0.29	0.89	1.30	1.90	0.70	0.11	0.20			5.39	
MO	0.44	1.27	0.49	0.76					2.96	MO	1.25	0.61	1.07	2.49	1.10	0.08				6.60	
Total	0.54	1.70	0.95	1.11	0.19	0.07	0.00	0.00	4.56	Total	1.55	1.50	2.37	4.39	1.80	0.18	0.20	0.00	0.00	11.99	
Alterna	native II 17.6 Total									Alternat	ive 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	0.11	0.57	0.38	0.63	0.19	0.07			1.95	SF	0.22	0.89	1.30	1.88	0.69	0.11	0.19			5.29	
MO	0.43	2.24	0.42	0.77	0.00				3.86	MO	1.25	0.61	1.07	2.46	1.09	0.07				6.55	
Total	0.54	2.81	0.80	1.40	0.19	0.07	0.00	0.00	5.81	Total	1.47	1.50	2.37	4.34	1.78	0.17	0.19	0.00	0.00	11.83	
Alterna	tive III	20.0	Γotal							Alternat	ive 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	0.14	0.46	0.00	0.44	0.18	0.07			1.29	SF	0.29	0.11	0.79	1.91	0.68	0.10	0.19			4.08	
MO	0.43	2.35	2.83	2.54					8.15	MO	1.25	0.61	1.08	2.49	1.08	0.02				6.53	
Total	0.57	2.81	2.83	2.98	0.18	0.07	0.00	0.00	9.44	Total	1.55	0.72	1.87	4.40	1.76	0.12	0.19	0.00	0.00	10.60	

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

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

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

				C	Commo	ercial			Recreational													
Alternat	ive I										Alterna	itive I										
35,734 na	atural are	a spawners, 26	6.0% spau	ner redu	ıction ra	te, 9.0%	age-4 oc	ean har	vest rate													
Port		<u>2019</u>		9	Summer	r 2020			Summer	Year	Port		Fall 20	<u>19</u>		3	Summe	r 2020			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	Tota
NO	60	0		32	90	40	89	429	680	740	NO	0	0		0	0	0	0	18	7	25	25
CO		0		94	166	191	364	1,388	2,203	2,203	CO	0	0	0	0	0	2	12	36	31	81	81
KO		0			40	74	50		164	164	KO		0				2	42	88		132	132
KC											KC							220	227		447	447
FB								1,330	1,330	1,330	FB	0	0	0		6	39	89	143	34	311	311
SF		0			308	663	1,118	426	2,515	2,515	SF	0	0			37	28	115	139	10	329	329
MO					161	96	65	2		324	MO					28	5	9	21	3	66	66
Total	60	0		126	765	1,064	1,685	3,575	7,215	7,275	Total	0	0	0	0	71	76	487	672	86	1,392	1,392
Alternat											Alterna	itive II										
		a spawners, 25	.5% spau				age-4 oc	ean har														
Port		2019		_	<u>Summer</u>			_	Summer	Year	Port	_	Fall 20				<u>Summe</u>				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	60	0			90	39	88	426		703	NO	0	0	_	0	0	0	0	18	10	28	28
CO		0			166	191	361	1,380	1 '	2,098	CO	0	0	0	0	0	2	11	36	32	81	81
KO		0			42	53			95	95	KO		0				1	42	14		57	57
KC					253	362	160	223	998	998	KC					_		219	226		445	445
FB					000		0.50	750	0.000	0.000	FB	0	0	0		5	39	89	142	34	309	309
SF		0			323	882	950	753	,	2,908	SF	0	0			27	28	115	138	10	318	318
MO					160	168	55	2	385	385	MO_					28	5	9	21	3	66	66
Total	60	0			1,035	1,696	1,614	2,784	7,129	7,189	Total	0	0	0	0	60	75	487	594	89	1,305	1,305
Alternat	الامين										Alterna	الامينا										
		a spawners, 15	70/		4!	4- 6 40/	4				Aiterna	itive iii										
Port		2019	.1 % span		Summer		aye-4 oc	ean nai	Summer	Year	Port		Fall 20	10		-	Summe	r 2020		-	Summer	Year
Area	Sep	Oct-Dec	Mar	Apr	May	Jun	Jul	Aug		Total	Area	Sep	Oct	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	60	0		, .p.	90	40	89	459		738	NO	0	0	1101 2 00	0	0	0	0	18	19	37	37
CO		0			166	192	365	290	1	1.013	co	0	0	0	0	0	2	12	36	37	87	87
KO		0			42				42	42	ко	,	0		-	_	_	15	14	- 1	29	29
KC											KC		ŭ					. •	140		140	140
FB											FB	0	0	0		6	39	89	143	35	312	312
SF		0			411	700		548	1,659	1.659	SF	0	0			37	8	113	139	10	307	307
MO					160	176	372	7	715	715	MO	,	-			28	5	9	21	3	66	66
Total	60	0			870	1,108	825	1,305	•	4,168	Total	0	0	0	0	71	54	238	511	103	977	977

NO Cape Falcon to S. End of Heceta Bank

FB Horse Mt. to Pt. Arena (Fort Bragg)

CO S. End of Heceta Bank to Humbug Mt.

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 Horse Mt. (California KMZ)

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

Commercial

	Commercial											Redicational										
Alterna	tive I	200,687	Total								Altern	ative I										
Port	Fall	2019			Summe	r 2020			Summer	Year	Port		Fall 20	1 <u>9</u>			Summe	er 2020			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	187	0		1,340	3,361	2,265	3,866	5,879	16,711	16,898	NO	39	0		8	5	9	38	329	68	457	496
CO	0	0		1,992	2,805	3,096	1,637	3,401	12,931	12,931	CO	0	0		2	3	11	112	355	296	779	779
KO				0	188	293	147		628	628	KO	0					101	198	360		659	659
KC											KC	27		1				919	1,033		1,952	1,979
FB								11,417	11,417	11,417	FB	76	0			252	633	1,158	2,408	867	5,318	5,394
SF	4,929	561			16,419	17,794	18,241	10,317	62,771	68,261	SF	2,844	296			2,800	3,804	6,150	11,973	6,604	31,331	34,471
MO					18,024	11,640	3,466	738	33,868	33,868	MO					6,262	1,702	1,951	2,538	454	12,907	12,907
Total	5,116	561		3,332	40,797	35,088	27,357	31,751	138,325	144,002	Total	2,986	296		10	9,323	6,259	10,527	18,995	8,289	53,403	56,685
Alterna	tive II	206,975	Total						,		Altern	ative II										
Port		<u>2019</u>			Summe	r 2020			Summer	Year	Port		Fall 20				Summe	er 2020			Summer	Year
Area	Sep	Oct-Dec	Mar	Apr	May	Jun	Jul	Aug		Total	Area	Sep	Oct	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	187	0			3,361	2,265	3,866	5,879	15,371	15,558	NO	39	0		8	5	9	38	329	90	479	518
CO	0	0			2,805	3,096	1,637	3,401	10,939	10,939	CO	0	0		2	3	11	112	355	307	790	790
KO					592	209			801	801	ко	0					57	198	58		313	313
KC					338	543	600	250	1,731	1,731	KC	27						919	1,033		1,952	1,979
FB											FB	76	0			187	633	1,158	2,408	867	5,253	5,329
SF	4,929	561				23,725	,	,	1 '	80,374	SF	2,844	296			2,074	3,804	6,150	11,973	6,604	30,605	33,745
MO						20,473		759	, , , , , , , , ,	41,992	MO					6,262	1,702	1,951	2,538	454	12,907	12,907
Total	5,116	561			42,050	50,311	24,709	28,648	145,718	151,395	Total	2,986	296		10	8,531	6,215	10,527	18,693	8,322	52,298	55,580
											l											
Alterna		197,733	Total									ative III										
Port		2019			Summe				Summer	Year	Port	_	Fall 20					er 2020		3	Summer	Year
Area	Sep	Oct-Dec	Mar	Apr	May	Jun	Jul	Aug	}	Total	Area	Sep	Oct	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	187	0			3,361	2,265	3,866	6,214	1 '	15,893	NO	39	0		8	5	9	38	329	169	558	597
CO	0	0			2,805	3,096	1,637	704	- '	8,242	CO	0	0		2	3	11	112	355	347	830	830
KO					592				592	592	KO	0						73	58		131	131
KC											KC	27	0			250	600	1 150	633	067	633	660
FB	4 000	504			04.074	40.700		10 111	F0 707	50.057	FB	76	0			252	633	1,158	2,408	867	5,318	5,394
SF	4,929	561			21,871	-, -		13,114	, -	59,257	SF MO	2,844	296			2,800	1,104	6,150	11,973	6,604	28,631	31,771
MO Total	5,116	561				21,367 45,511		2,535	61,460 139,766	61,460 145,443	Total	2,986	296		10	6,262 9,323	1,702 3,459	1,951 9,482	2,538 18,293	454 8,441	12,907 49,008	12,907 52,290
lotal	5,176	561			40,418	45,511	25,271	22,566	139,766	145,443	lotai	2,986	296		10	9,323	3,459	9,482	10,293	0,441	49,008	52,290

Recreational

NO Cape Falcon to S. End of Heceta Bank

FB Horse Mt. to Pt. Arena (Fort Bragg)

CO S. End of Heceta Bank to Humbug Mt.

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

KO Humbug Mt. to OR/CA Border (Oregon KMZ)

KC OR/CA Border to Horse Mt. (California KMZ)

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