

ALP
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W. K. Adair
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2017-18 Co-Managers' List of Agreed Fisheries

(May 1, 2017 – April 30, 2018)

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(Bracketed and bolded language signifies areas where some unresolved issues remain. Additional Co-manager discussions will occur prior to the fisheries to resolve these remaining issues.)

Part I. Treaty/Non-Treaty OCEAN Fisheries (FRAM #2017 (Chinook) & #1731 (Coho))

Treaty Troll Quota	40,000 Chinook; 12,500 Coho
Non-treaty TAC	90,000 Chinook (and Mark Selective fishery impacts associated with a landed catch of 47,600 Coho.
NT Troll TAC	45,000 Chinook; Mark Selective Fishery impacts associated with a landed catch of 5,600 Coho
Recreational TAC	45,000 Chinook and Mark Selective Fishery impacts associated with a landed catch of 42,000 Coho.

1.1 Treaty Troll: Areas 2, 3, 4 & 4B

5/1-6/30	Chinook directed fishery with subquota of 20,000 Chinook. Open May 1 through June 30 or attainment of 20,000 Chinook subquota, whichever comes first. All salmon except Coho. If the Chinook quota for the May-June fishery is not fully utilized, the excess fish may be transferred into the later all-salmon season on an impact-neutral basis for limiting stocks into the later all-salmon season. If the Chinook quota is exceeded, the excess will be deducted from the later all-salmon season.
7/1-9/15	All salmon species with subquota of 20,000 Chinook plus any portion of uncaught Chinook rolled over from the May 1 st through June 30 th time period on an impact neutral basis <u>or</u> quota of 12,500 Coho whichever comes first. Chum release 8/1-9/15.

1.2 Non-Treaty Troll: U.S./Canada border to Cape Falcon

5/1- thru earliest of 6/30 or pre-season Chinook sub-quota of 27,000 (no more than 8,900 of which may be caught in the area between the U.S./Canada border and the Queets River and no more than 9,000 of which may be caught in the area between Leadbetter Pt. and Cape Falcon)	All salmon except Coho with 27,000 Chinook quota; no more than 8,900 of which may be caught in the area between the U.S./Canada border and the Queets River and no more than 9,000 of which may be caught in the area between Leadbetter Pt. and Cape Falcon; Open May 1-June 30, 7 days per week. In the area between the U.S.-Canada border and the Queets River, a landing and possession limit of 60 Chinook per vessel per calendar week (Monday through Sunday) is in place. An in-season conference call will occur when it is projected that 75% of the Chinook guideline have been landed overall or 75% of the sub-area guideline have been landed in the area between the U.S./Canada border and the Queets River or 75% of the sub-area guideline have been landed in the area between Leadbetter Pt and Cape Falcon to consider modifying the open period and adding or modifying landing and possession limits. Mandatory Yelloweye Rockfish Conservation Area, Columbia and Cape Flattery Control Zones closed. Trip limits, gear restrictions, and guidelines may be implemented or adjusted in-season. Vessels
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	<p>must land their fish within 24 hours of any closure of this fishery; under state law, vessels must report their catch on a state fish receiving ticket. Vessels in possession of salmon north of the Queets River may not cross the Queets River line without first notifying WDFW with area fished, total Chinook 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 with area fished, total Chinook and halibut catch aboard, and destination. Vessels fishing, or in possession of salmon while fishing north of Leadbetter Point must land and deliver their fish within the area and north of Leadbetter Point. Vessels fishing, or in possession of salmon while fishing south of Leadbetter Point must land and deliver their fish within the area and south of Leadbetter Point, except that Oregon permitted vessels may also land their fish in Garibaldi.</p>
<p>7/1 thru earliest of 9/19 or pre-season Chinook sub-quota of 18,000 (no more than 7,200 of which may be taken in the area between the U.S./Canada border and the Queets River) or Mark Selective Fishery quota of 5,600 Coho.</p>	<p>Open July 1-4, then Friday through Tuesday July 7 through September 19 with a landing and possession limit of 60 Chinook and 10 marked Coho per vessel per open period in the area between the U.S.-Canada border and the Queets River, or 75 Chinook and 10 marked Coho per vessel per open period in the area between the Queets River and Cape Falcon.. All salmon, except no Chum retention north of Cape Alava, Washington beginning August 1 (all retained Coho must have a healed adipose fin clip). An in-season conference call will occur when it is projected that 75% of the Chinook guideline Chinook have been landed overall or 75% of the sub-area guideline have been landed in the area between the U.S./Canada border and the Queets River to consider modifying the open period and modifying landing and possession limits. Mandatory Yelloweye Rockfish Conservation Area, Cape Flattery and Columbia Control Zones closed. Grays Harbor Control Zone closed beginning August 14. Trip limits, gear restrictions, and guidelines may be implemented or adjusted in-season. Vessels must land their fish within 24 hours of any closure of this fishery. Under state law, vessels must report their catch on a state fish receiving ticket. Vessels in possession of salmon north of the Queets River may not cross the Queets River line without first notifying WDFW 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 with area fished, total Chinook, Coho, and halibut catch aboard, and destination. Vessels fishing, or in possession of salmon while fishing north of Leadbetter Point must land and deliver their fish within the area and north of Leadbetter Point. Vessels fishing, or in possession of salmon while fishing south of Leadbetter Point must land and deliver their fish within the area and south of Leadbetter Point, except that Oregon permitted vessels may also land their fish in Garibaldi.</p>

1.3 Non-Treaty Recreational

Area 1: Leadbetter Point to Cape Falcon (Oregon)

6/24-9/4 (21,000 Mark Selective Fishery Coho sub quota)	Open 7 days per week; 2 fish per day, only one of which may be a Chinook; retained Coho must have a healed adipose fin clip; Chinook minimum size limit 24 inches and Coho minimum size 16"; Chinook guideline: 13,200; closed in Columbia Control Zone. In-season management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon.
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Buoy 10

8/1-9/7	Open 7 days/week; 2 fish per day, only one of which may be a Chinook; Chinook minimum size 24 inches and Coho minimum size 16 inches; retained Coho must have a healed adipose fin clip. Release all salmon other than Chinook and hatchery Coho. Barbless hooks only.
9/8-9/30	Open 7 days/week; 2 fish per day. Release all salmon other than hatchery Coho. Coho minimum size 16 inches retained Coho must have a healed adipose fin clip. Barbless hooks only.
10/1-12/31	Open 7 days/week; 6 fish per day, 2 adults (minimum size 12 inches) may be retained, Coho must have a healed adipose fin clip. Release all salmon other than Chinook and hatchery Coho. Barbless hooks only.
1/1-3/31	Open 7 days/week; 6 hatchery Chinook per day, 2 adults (minimum size 12 inches); retained Chinook must have a healed adipose fin clip; release sockeye, Chum, Coho and wild Chinook. Barbless hooks only.
North Jetty	Open 7 days per week when Area 1 or Buoy 10 area is open. When Buoy 10 area and Area 1 are open concurrently, the daily limit and minimum size restrictions follow the most liberal regulations of those areas. Barbless hooks only.

Area 2: Queets River to Leadbetter Point

7/1-9/4 (15,540 Mark Selective Fishery Coho sub quota)	Open 7 days per week; 2 fish per day, only one of which may be a Chinook; retained Coho must have a healed adipose fin clip; Chinook minimum size limit 24 inches and Coho minimum size 16 inches; Chinook guideline: 21,400. Grays Harbor Control Zone closed beginning August 14. In-season management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon.
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Area 2-1 (east of a line from Leadbetter Point to Cape Shoalwater): Willapa Bay

6/8-7/31	To be determined
8/1-1/31	To be determined

Area 2-2 (east of line between tips of exposed jetties): Grays Harbor

West of Buoy 13 line 7/1-9/4	Open concurrent with Area 2, when Area 2 is open for salmon. Area 2 rules apply. Grays Harbor Control Zone closed beginning 8/14.
East of Buoy 13 line, when open	All salmon required to be released may not be totally removed from the water, except anglers fishing from boats 30' or longer as listed on either their State or Coast Guard regulation are exempt. Single-point barbless hooks required.
East of Buoy 13 line 7/1-8/1	Closed.
East of Buoy 13 line 8/1-9/15	2 fish limit, 12" min size limit. Release wild Coho. Open to salmon angling only in the area described as Humptulips – North Bay (the area conforms to the commercial SMCRA 2C).
East of Buoy 13 line 9/16-11/30	2 fish limit, 12" min size limit, of which only one may be a wild Coho. Release Chinook. Open to salmon angling only in the area described as East Grays Harbor (the area conforms to the commercial SMCRA 2D).

Westport Boat Basin and Ocean Shores Boat Basin

8/16-1/31	6 fish limit, 4 adults; 12" min size limit. Release Chinook.
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Areas 3-4: U.S./Canada border to Queets River

Area 3: Cape Alava to Queets River

6/24-9/4 (1,090 Mark Selective Fishery Coho sub quota)	Open 7 days per week; 2 fish per day; retained Coho must have a healed adipose fin clip; Chinook minimum size limit 24 inches, Coho minimum size 16 inches; Chinook guideline: 2,500. In-season management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon.
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Area 4: U.S./Canada border to Cape Alava and east to Sekiu River

6/24-9/4 (4,370 Mark Selective Fishery Coho sub quota)	Open 7 days per week; 2 fish per day; retained Coho must have a healed adipose fin clip. Chum non-retention during August and September. Chinook minimum size limit 24 inches and Coho minimum size 16 inches; Chinook guideline: 7,900; Chinook non-retention east of Bonilla-Tatoosh line beginning August 1. Closed waters: east of a true north-south line running through Sail Rock in July; Closed to salmon angling July 1-Sept. 30 inside the area bounded by a line from Kydaka Point to Shipwreck Point. In-season management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon.
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Area 4A: Makah Bay Treaty Evaluation Marine Set Net Fishery

Chinook	Trty	Open 8/15 through 9/15 inside an area bounded by a
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line running from Strawberry Rock Point (48° 19' 07"N, 124° 40' 00"W) to the group of rocks (48° 19' 46"N, 124° 40' 35"W) which are located off Hobuck Beach and a line to the mouth of Hobuck Creek (48° 19' 54"N, 124° 39' 37"W), to be implemented per agreement between the Makah Tribe and WDFW.

Part II. PUGET SOUND including STRAIT of JUAN de FUCA and SAN JUAN ISLANDS fisheries (All fisheries modeled in FRAM #2017 (Chinook) & #1731 (Coho))

For all Puget Sound marine recreational Chinook fisheries, the minimum size is 22" unless otherwise noted.

2.1 Strait of Juan de Fuca Pre-terminal Areas

Areas 5, 6, 6C Treaty Troll (Ntrty net closed)

NOTE: Area 4B: 5/1-10/31 see Ocean Troll. For 11/1-12/31 & 1/1-4/15 see below.

5/1-6/15	Closed
6/16-9/30	Open for salmon, Chum release; Freshwater Bay closed, south of Angeles Pt./Observatory Pt. line; Pt. Angeles Harbor closed west of line from tip of Ediz Hook to ITT Rayonier Dock; Hoko Bay closed inside the area bounded by a line from Kydaka Point to Shipwreck Point; Area 6 closed east of a line true north from Green Point; 1,000 foot closure around stream mouths. The catch estimates for this fishery modeled in FRAM are statistically-derived predictions, and are the best available pre-season estimates of catch in this fishery. In order to have the actual catch reflect run strength, however, these estimates will not be treated as a ceiling when the managers make in-season fishery management decisions.
10/1-10/31	Closed
11/1-4/15	In Areas 4B, 5, 6, 6C the treaty troll fishery will be open from November 1, 2017 through April 15, 2018, or when the catch reaches the harvest ceiling of 8,500 Chinook, whichever comes first. 1,000-foot closures around stream mouths. Hoko Bay closed inside the area bounded by a line from Kydaka Point to Shipwreck Point for the month of November. The catch estimates for this fishery modeled in FRAM are statistically-derived predictions, and are the best available pre-season estimates of catch in this fishery. In order to have the actual catch reflect run strength, however, these estimates will not be treated as a ceiling when the managers make in-season fishery management decisions. The winter troll catch ceiling is

	8,500 Chinook.
4/16-4/30	Closed

Areas 4B, 5, & 6C Treaty Net (Ntrty net closed)

Note: The catch estimates for this fishery modeled in FRAM are statistically-derived predictions, and are the best available pre-season estimates of catch in this fishery. In order to have the actual catch reflect run strength, however, these estimates will not be treated as a ceiling when the managers make in-season fishery management decisions.

Chinook	Open for setnet gear only, 6/18 through 8/19; 7 days a week; Hoko Bay closed, inside the area bounded by a line from Kydaka Point to Shipwreck Point; Freshwater Bay closed, south of Angeles Pt./Observatory Pt. line; 1,000-ft. closure around stream mouths.
Sockeye/Pink	Start to be determined by Fraser River Panel. The Co-managers have identified the following management actions to control bycatch of Chinook. Estimated bycatches are best estimates and are not quotas or ceilings. The priority for this fishery is to harvest the full Treaty share of sockeye and pink salmon, while managing the fishery so as to not greatly exceed the projected incidental harvest of Chinook salmon. All Chinook bycatch in this fishery will be promptly reported by each Tribe to the NWIFC TOCAS database and reported to the U.S. section of the Fraser Panel at least weekly, including take home and ceremonial and subsistence (C&S). If in-season the Chinook bycatch in this fishery exceeds 1,300, the Tribes will consider management actions to limit the Chinook bycatch, such as time or area restrictions, while continuing the priority objective of harvesting sockeye salmon. If in-season the fishery is projected to result in a total Chinook bycatch exceeding 3,300 Chinook, the Tribes will, effective with that scheduled fishery opening, prohibit any commercial sales of Chinook salmon, and any Chinook salmon landed must be delivered to the fishers' respective Tribe.
Coho	Open for gillnets starting at 6 days per week with in-season adjustments based on cumulative catch. Fishery will target Coho from the end of Fraser Panel control, through 10/7; 1,000 ft. closure around stream mouths. Hoko Bay closed, inside the area bounded by a line from Kydaka Point to Shipwreck Point.
Chum	Open for gillnets, starting at 6 days per week (day may be added if effort is low), 10/8 through 11/11; 1,000-foot closure around stream mouths. Hoko Bay closed, inside the area bounded by a line from Kydaka Point to Shipwreck Point.

Area 5 Recreational

Kydaka Point Closure: Waters south of a line from Kydaka Point westerly approximately 4 miles to Shipwreck Point closed to salmon angling 5/31-10/31.

5/1-6/30	Closed
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7/1-8/15	2 fish limit, release wild Chinook, wild Coho, and Chum.
8/16-8/31	2 fish limit, release Chum, Chinook, and wild Coho.
9/1-3/15	Closed
3/16-4/30	2 fish limit, release wild Chinook and Coho.

Area 6 Recreational

5/1-6/30	Closed
7/1-8/15	2 fish limit, plus 2 additional Sockeye salmon, release Chum, wild Chinook, and wild Coho, E. of true N/S line through “2” buoy near tip of Ediz Hook release Chinook salmon. South of Angeles Pt./Observatory Pt. line – closed to angling. Pt. Angeles Hbr. W. of line from tip of Ediz Hook to ITT Rayonier Dock – closed to salmon angling.
8/16-2/28	Closed to salmon angling.
3/1-4/15	2 fish limit, release wild Chinook and Coho.
4/16-4/30	Closed

2.2 Strait of Juan de Fuca Terminal Areas

Area 6D Dungeness Bay Net

Chinook	All	Closed
Pink	Trty	Closed
	Ntrty	Closed.
Coho	Trty	Open 9/21 through 10/31; Additional days beyond 10/31 may be considered; 9/21 through 10/10: seven days per week, fishing 7 am to 7 pm only, nets must be attended by fisher, Chinook and Chum release; 10/11 through 10/31 (or 11/5 should conditions allow): seven days per week, 24 hours per day; 1,500 ft closure around mouth of Dungeness River.
	Ntrty	Open Wk 38 (wb 9/17) through Wk 44 (wb 10/29) for skiff gillnet gear; 7AM – 7PM daily, Wk 38: 2 days, Th-F, Wks 39-44; 5 days M-F; Chinook and Chum NR, release by cutting ensnaring meshes; 1,500 ft. (1/4 nautical mile) closure around each river mouth. Additional openings possible based on in-season information.

Chum	All	Closed
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Dungeness River (Treaty and Recreational)

Note: The following applies to all Dungeness River coho fisheries (Tribal & WDFW): Co-managers will meet on, or prior to October 7, 2017 to review river flow and weather conditions for the week of October 8-15. In the absence of river flow and weather conditions meeting agreed-to criteria, Dungeness River fisheries remain closed prior to the dates listed below.

Dungeness River Treaty (Ntrty net closed)

Chinook	Trty	Closed
Pink	Trty	Closed
Coho	Trty	Commercial fishing up to 3 days/wk, to be determined in-season, for Coho only, is scheduled to open on 10/16 and will be restricted to areas below the Dungeness hatchery intake using species selective (hand-held) gear. Subsistence fishing using selective gear is scheduled to open on 10/16. Refer to the co-management agreement above for possible emergency openings.
Chum	Trty	Closed

Elwha River Treaty (Ntrty net closed)

Chinook	Trty	Closed except Ceremonial Harvest of 4 fish in July.
Coho	Trty	Closed
Chum	Trty	Closed

Dungeness Bay Recreational

5/1-9/30	Closed to salmon angling.
10/1-10/31	2 fish limit, Hatchery Coho only.
11/1-4/30	Closed to salmon angling.

Dungeness River Recreational

(mouth to hatchery intake pipe at RM 11.3)	10/16-11/30	4 fish limit, Hatchery Coho only; 12" min size.
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Elwha River Recreational

Closed to all fishing.

Hoko River Recreational

(mouth to cement bridge (mile 7.0) on Hoko/Ozette Hwy.)	All year Closed to salmon.
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All other STRAIT OF JUAN DE FUCA REGION freshwater recreational closed to salmon angling.

2.3 San Juan Islands/Point Roberts Area

Areas 6, 7, & 7A Net

Chinook	All	Closed
Sockeye	Trty	Schedule to be determined. The Co-managers have identified the following management actions to track and control bycatch of Chinook. Estimated bycatches are best estimates and are not quotas. The priority for this fishery is to harvest the full treaty share of sockeye salmon, while managing the fishery so as to not greatly exceed the projected incidental harvest of Chinook salmon. All Chinook bycatch in this fishery will be promptly reported by each Tribe to the NWIFC TOCAS database and reported to the U.S. Section of the Fraser Panel at least weekly, including take home and ceremonial and subsistence (C&S). Prior to achieving a bycatch of 4,200 Chinook there will be no restrictions on the retention or sale of Chinook salmon. If, during the season, the Fraser Panel schedules a fishery that is projected to result in a total Chinook bycatch exceeding 4,200 fish, the Tribes will, effective with that scheduled fishery, prohibit any commercial sales of Chinook salmon, and any Chinook salmon landed must be delivered to the fisher's respective Tribe. Prior to achieving a purse seine bycatch of 2,300 coho for the month of September, there will be no restrictions on the retention or sale of coho salmon. After a purse seine bycatch of 2,300, the Tribes will prohibit coho retention for purse seines only. Reef net wild coho, wild Chinook, and chum NR. Reef net may retain marked Chinook through 9/30. July and August – C&S fishery. Further policy discussion may occur among the affected parties prior to the season.

	Ntrty	Schedule to be determined. The Co-managers have identified the following management actions to track and control by-catch. Modeled by-catches are best estimates and are not quotas. All vessel operators must complete best fishing practices certification prior to fishing. PS: brailing required. Chinook, Coho, and Chum NR. Reef net wild Coho, Chum, and wild Chinook NR. Reef net: fishers may retain hatchery Chinook, with a cap of 300 for all gears through 9/30. Estimates of by-catch will be shared at least weekly in the U.S. Section of the Fraser River Panel. Purse seine and gillnet fisheries will be managed to ensure that the non-treaty impact does not exceed 4,863 total Chinook (120% of pre-season estimate).
Pink	Trty	Purse seine, gill net, and reef net: schedule dependent upon Fraser Panel. See Chinook and coho bycatch in-season actions description in sockeye section above. Reef net: wild coho, wild Chinook, and chum NR. Reef net may retain marked Chinook through 9/30.
	Ntrty	Schedule to be determined. All vessel operators must complete best fishing practices certification prior to fishing. PS: brailing required. Chinook, Coho, and chum NR. Reef net: Chum, wild Chinook, and wild Coho NR. See Chinook by-catch in-season actions description in Sockeye section above.
Coho	Trty	Reef net: 7 days/wk beginning at end of Fraser Panel management through 11/8; Chinook NR after 9/30; wild Coho NR through 9/30, then coho retention. Chum NR through 9/30.
	Ntrty	Reef net: 7 days/wk beginning at end of Fraser Mgmt through Chum mgmt wk 45 (wb 11/5); Chinook NR after 9/30; unmarked-Coho release through 9/30, then Coho non-selective. Chum retention prohibited until after 9/30. All vessel operators must complete best fishing practices certification prior to fishing.
Chum	Trty	The Treaty fishery will open October 10 and remain open for the duration of the chum fishery, dependent on run status updates from CDFO. Prior to achieving a by-catch of 5,000 Coho there will be no restrictions on the retention or sale of Coho salmon. Prior to achieving a purse seine bycatch of 5,000 coho for October and November, there will be no restrictions on the retention or sale of coho salmon. After a purse seine bycatch of 5,000, the Tribes will prohibit coho retention for purse seines only. See attached 2017 7/7A Chum Fishing Plan. Reef nets open from end of Fraser Panel management through end of chum management (11/8), 7 days/wk. Reef net release requirements listed in Coho fishery description, above.

	Ntrty	Dependent on update of run status from CDFO. PS and GN open wk 41 (wb 10/8) through wk 45 (wb 11/5). Open 10/10, 10/11, 10/15, and 10/15 through end of season. Co-managers will meet via conference call on Monday 10/16 to discuss catch to date. Fishery will re-open based on conditions outlined in the attached agreement. PS: brailing required, Chinook and Coho NR. GN: during wks 41 and 42, Chinook and Coho NR, live box required and limited soak times in effect. Reef nets open from end of Fraser Panel management through wk 45 (wb 11/5), 7 days/wk, must release all Chinook after 9/30; unmarked-Coho release through 9/30. All vessel operators must complete best fishing practices certification prior to fishing.
Subsistence	Trty	12/1 – 4/30 subsistence troll fishery (Chinook 22” min size). Bellingham Bay closed 4/1 – 4/30.

Area 7 Recreational

5/1-6/30	Closed
7/1-7/31	2 fish limit, plus 2 additional Sockeye salmon; release wild Chinook and Coho. Waters of Area 7 in Rosario Strait and the eastern portion of the Strait of Juan de Fuca southerly of a line running true south from the westernmost point on Fidalgo Head to Burrows Island, then westerly and southerly along the shore of Burrows Island to the Burrows Island Lighthouse, then westerly to Bird Rocks, then westerly from Bird Rocks to the southernmost point on Decatur Island, then southerly across Lopez Pass to Lopez Island and following the shore of Lopez Island southerly and westerly to Iceberg Point, then from Iceberg Point to Cattle Point, then south southwest to the Salmon Bank Buoy, and then true south from the Salmon Bank Buoy to the Area 7 boundary, closed to salmon angling. Bellingham and Samish Bay closed to salmon angling.
8/1-9/30	2 fish limit, 1 Chinook plus 2 additional Sockeye salmon, release Chum and Coho. Waters of Area 7 in Rosario Strait and the eastern portion of the Strait of Juan de Fuca southerly of a line running true south from the westernmost point on Fidalgo Head to Burrows Island, then westerly and southerly along the shore of Burrows Island to the Burrows Island Lighthouse, then westerly to Bird Rocks, then westerly from Bird Rocks to the southernmost point on Decatur Island, then southerly across Lopez Pass to Lopez Island and following the shore of Lopez Island southerly and westerly to Iceberg Point, then from Iceberg Point to Cattle Point, then south southwest to the Salmon Bank Buoy, and then true south from the Salmon Bank Buoy to the Area 7 boundary, closed to salmon angling. Bellingham Bay closed to salmon angling 7/1-8/15; Samish Bay closed to salmon angling. Lummi Bay closure area: east of a line from Gooseberry Point to Sandy Point 9/8 – 10/15.
10/1-12/31	Closed to salmon angling.

1/1-4/30	2 fish limit, release wild Chinook and Coho. Bellingham Bay and Samish Bay closed to salmon angling 3/1 – 4/30.
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2.4 Nooksack/Samish Terminal Region

Bellingham Bay (Areas 7B, 7C, 7D; 7A On-Reservation) Net

Chinook/Pink	Trty	<p>Areas 7B, & 7D: August 1 through September 1, open weekly 4 PM Sunday to 4 PM Friday. Fishing pattern 3,5,5,5,5.</p> <p>Area 7C: August 1 through September 15, open weekly 4 PM Sunday to 4 PM Friday; fishing pattern 3,5,5,5,5,5.</p> <p>Samish Bay is closed southeasterly of a line from Oyster Creek to the fisheries marker on Samish Island, except that hand pull gill nets may fish from 4 PM Sunday – 4 PM Wednesday south to a line from Oyster Creek to Fish Point on Samish Island, August 1 through September 13 4 PM Sunday – 4 PM Wednesday, weekly; fishing pattern: 1,3,3,3,3,3,3. 6 ½” mesh in 7C and off-reservation areas of 7B, except when open for sockeye in 7 and 7A.</p>
	Ntrty	<p>Areas 7B & 7C: Wks 33 (wb 8/13) - 36 (wb 9/3); PS Coho NR through 9/1. GN fishing pattern: 3, 4, 4, 5; PS fishing pattern: 1,1,1,1. See Hales Pass closure below beginning 9/1. Area 7C Wk 37 (wb 9/10); GN fishing pattern: 5, PS fishing pattern 3.</p>
Coho	Trty	<p>Area 7A on-reservation fishery: September 10 through October 11. Open weekly 4 PM Sunday – 4 PM Wednesday. Fishing pattern 3,3,3,3.</p>
		<p>Areas 7B and 7D: September 3 through October 21, open 4 PM Sunday – 4 PM Saturday. Fishing Pattern: 6,6,6,6,6,6,6.</p>
		<p>7C: On October 2, a Co-manager conference call will be held to determine the status of Samish Chinook escapement. If the escapement goal appears to be attainable, and through development of a co-manager agreed in-season update methodology it is determined that there is a harvestable surplus of Samish Coho, then a Coho fishery will open October 8 – October 25, 4 PM Sunday – 4 PM Wednesday, weekly; fishing pattern 3,3,3.</p>

	Ntrty	Area 7B: Wks 37 (wb 9/10) - 43 (wb 10/22); GN fishing pattern: 5,5,7,7,7,7,7 (24 hrs for all days); PS fishing pattern: 3,3,7,7,7,7,7. Hales Pass closed for all GN openings from Sept. 1 - 21, in the waters of Area 7B west of a line from Point Francis (48°41'46"N, 122°36'32"W) to the red and green buoy southeast of Point Francis (48°40'27"N, 122°35'24"W), then to the northernmost tip of Eliza Island (48°39'38"N, 122°35'14"W), then along the eastern shore of the island to its southernmost tip (40°38'40"N, 122°34'57"W) then north of a line from the southernmost tip of Eliza Island to Carter Point (48°38'24"N, 122°36'31"W). NT purse seine fisheries fishing in this area must release Coho Sept. 1-21.
Chum	Trty	Areas 7B & 7D: Oct. 22 – Dec.13; open weekly 4 PM Sunday – 4 PM Wednesday; 3,3,3,3,3,3,3.
	Ntrty	Area 7B: Wks 44 (wb 10/29) - 49 (wb 12/3); PS/GN; 7.5,5,5,5,5. Whatcom Creek Zone (east of line from Post Point to flashing red light at west entrance of Squalicum Harbor) open 7 days per week.

Nooksack River Treaty Net (Ntrty net closed)

Note: On a weekly basis, Nooksack Tribe commercial fisheries on the Nooksack River will open at 12:01 AM Sun, except that portion of the river between Marine Drive Bridge and the first turn ("Big Bend") in the river upstream of the Slater Road Bridge (approximately ¼ mile upriver from the Slater Road Bridge), which will open at 4:00 PM Sunday. On a weekly basis the Nooksack Tribe's commercial Chinook and pink fisheries will close 4:00 PM Friday; coho fisheries will close 4:00 PM Saturday and chum fisheries will close 4:00 PM Wednesday.

Chinook/Pink	4/1-6/15	April to mid-June: limited ceremonial and subsistence fishery will be managed for a total mortality of 15 NOR Chinook. A traditional fishery will occur 500 feet upriver from the Highway 9 bridge in the lower North Fork and the Nugents Corner Boat Launch in the mainstem (the boat launch is located just down river from Nugent's Corner Bridge) (RM 30.6 and 36.8). A total of 70 Chinook are projected in this fishery with an anticipated 3 NORs among the 70. This fishery is by permit only. Another fishery will occur in the lower Nooksack River between the Slater Road bridge and the river mouth (between RM 0.0 and 3.5). The lower river fishery will be selective and is projected to encounter 29 NOR Chinook with an estimated mortality of 12 NOR Chinook.
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	8/1-9/2	Open weekly 4 PM Sunday to 4 PM Saturday, August 1 to 4 PM September 2. Fishing pattern: 4,6,6,6,6. The river is divided into five zones during this period. These zones open in subsequent weeks, proceeding upriver, to protect migrating spring Chinook. The area in Zone 4 upriver of the Nooksack Tribal Works building will remain closed from August 20 through September 2 to protect holding Spring Chinook Zone 1 is from Marine Drive Bridge to Slater Bridge. Zone 2 is from Slater Bridge to Hannegan Bridge In Lynden. Zone 3 is from Hannegan Bridge to Nugents Corner Bridge. Zone 4 is from Nugents Corner Bridge to the confluence of the north and south forks. Zone 5 is upriver of the confluence of the north and south forks.
Coho	9/3 -10/21	Open weekly 4 PM Sunday through 4 PM Saturday. Fishing Pattern: 6,6,6,6,6,6,6. The area up-river of the Nooksack Tribal Works Building will remain closed until September 23 to protect holding Spring Chinook.
Chum	11/2-3 or 11/9-10	Subsistence harvest only. The Lummi Nation and Nooksack Tribe will determine in-season which two days to hold this subsistence fishery.
	10/22 – 12/13	Commercial. Open weekly 4 PM Sunday through 4 PM Wednesday. Fishing Pattern: 3,3,3,3,3,3,3.

Bellingham Bay Terminal Area Recreational

5/1-8/15	Closed to salmon angling.
8/16-9/30	4 fish limit, 2 Chinook; release wild Chinook from 10/1-10/31. Samish Bay closed to salmon angling through 10/15.
10/1-2/28	Same as Area 7.
3/1-4/30	Closed to salmon angling.

Nooksack River Recreational; mainstem and North Fork

(from Lummi Indian Reservation boundary to yellow marker at the FFA high school barn in Deming)	7/16-8/31	Daily limit 4 Pink salmon only.
	9/1-12/31	2 fish limit, plus 2 additional Coho; 12" min size. Release wild Chinook through 9/30 and release wild Coho.

(from yellow marker at the FFA high school barn in Deming to confluence of North and South forks)	10/1 – 12/31	2 fish limit, plus 2 additional Coho; 12” min size. Release wild Coho.
North Fork mouth to Maple Creek	10/1-11/30	2 fish limit, plus 2 additional Coho; 12” min size. Release wild Coho.
Nooksack River Recreational, South Fork		
(from mouth to Skookum Creek)	10/1 – 12/31	2 fish limit, plus 4 additional Coho; 12” min size. Release wild Chinook 10/1-10/15, and release wild Coho and Chum. Gamefish closed 6/1-9/30.
Samish River Recreational		
(from mouth to I-5 Bridge)	8/1-11/30	2 fish limit, 12” min size. Release wild Coho
Dakota Creek Recreational		
(mouth to Giles Road Bridge)	10/1 – 12/31	2 fish limit, 12” min size. Release wild Chinook and wild Coho.
Whatcom Creek Recreational		
(mouth to yellow markers below foot bridge below Dupont St. in Bellingham)	8/1 – 12/31	6 fish limit, 2 adults; 12” min size. Release wild Coho.

All other NOOKSACK/SAMISH TERMINAL REGION freshwater recreational: Closed to salmon angling.

2.5 Skagit Terminal Region

Terminal area fisheries will be managed so as not to exceed total projected incidental fishery mortalities of Skagit wild summer/fall Chinook. Treaty schedules may be changed in-season as necessary to meet management objectives and harvestable shares and to address river and weather conditions. Swinomish, Sauk-Suiattle, and Upper Skagit Tribes’ fisheries will be managed so as not to exceed their individual shares based on the preseason forecast and any in-season update that becomes available. The modeled inter-tribal catch distributions are forecasts only and do not set a precedent for future years.

The Skagit co-managers will utilize the same update models for Sockeye, and Chum ISU consideration (with data from 2016 added) that have been used in recent years. Coho ISU will also be the same as that of previous years, with special consideration (see below). Other models may be considered with co-manager agreement should they become available before the fishery. (see appendix for further details).

NOTE: See appendix for details for the conduct, monitoring, reporting, assessment, and in-season co-manager actions upon which the following fisheries are agreed to. Additionally, in-season update methodology for sockeye, coho, and chum are addressed.

Communication: Co-managers will share available information from the Area 4, 5, and 6 recreational fisheries (species, mark, size, catch, encounter) the second week of August. This information will be evaluated against pre-season expectation and provide co-managers with additional information which may be useful in management considerations

Skagit Bay (Area 8) Net		
Note: Fishing schedules for Skagit Bay, Skagit River, and Baker River are pre-season projections. Schedules subject to adjustment to accommodate weather and river conditions.		
Spring Chinook	Area 8 – Trty	<u>Swinomish Tribe fishing pattern:</u> Wk 19 (wb 5/7) thru wk 21 (wb 5/21);3,3,3. <u>Upper Skagit Tribe fishing pattern:</u> No scheduled fishery.
Chinook	Area 8 - Trty	Swinomish tribe may elect to take some or all of their C&S reserved Chinook in Area 8.
Sockeye	Area 8 – Trty	<u>Swinomish Tribe fishing pattern:</u> Wk 26 (wb 6/25) thru wk 29 (wb 7/16); 3,5,5,5. Swinomish fishery will be managed so as not to exceed their individual sockeye share based on the preseason forecast and any in-season update that becomes available. Additional fishing dependent on ISU, per MOU. <u>Upper Skagit Tribe fishing pattern:</u> No scheduled fishery.
	Ntrty	Closed
Pink	Area 8 - Trty	<u>Swinomish Tribe fishing pattern:</u> No scheduled fishery. <u>Upper Skagit Tribe fishing pattern:</u> No scheduled fishery.
	Area 8 – Ntrty	Closed. May open pending co-manager agreement on ISU that indicates harvestable run size.

Coho	Area 8	Forecast is for no harvestable surplus and in response to the “Critical” forecast abundance level there are no fisheries planned. Given that the 2017 wild coho forecast is considerably below the critical escapement threshold, the co-managers agree to be very cautious when considering in-season updates and potential fishery openings that may be considered should an ISU indicate harvestable surplus. For this reason, the agreed to in-season update value used for management purposes will be the lower 75% prediction interval of the ISU rather than the midpoint value. To allow for uncertainty and a sufficient number of harvestable fish, the co-managers will not consider opening fisheries unless an agreed ISU exceeds 53,000, at which point a 12.5% treaty commercial harvest rate could be considered.
	Area 8 – Trty	<u>Swinomish Tribe fishing pattern:</u> No scheduled fishery. Swinomish tribe may elect to take some or all of their C&S reserved coho in Area 8. <u>Upper Skagit Tribe fishing pattern:</u> No scheduled fishery.
	Ntrty	Closed
Chum Test	Area 8	1 boat at Jetty 1 day/wk 44 (wb 10/29) & 45 (wb 11/5) and 1 boat in Bay 1 day/wk 44 (wb 10/29) & 45 (wb 11/5).
Chum	Area 8 – Trty	<u>Swinomish Tribe fishing pattern:</u> No preseason harvestable. No scheduled fishery. Fishery dependent on ISU and harvestable fish. <u>Upper Skagit Tribe fishing pattern:</u> No preseason harvestable.
	Ntrty	Closed. May open pending co-manager agreement on ISU that indicates harvestable runsize.

Skagit River Treaty Net (Ntrty net closed)

Note: Fishers from the Sauk-Suiattle Tribe may be invited to participate in the 2017 Swinomish salmon fishery in Skagit River Area 78C from the Mount Vernon bridge to the Spudhouse pending annual Swinomish Senate resolution, subject to and in accordance with all provisions of fishing ordinances and regulations of the Swinomish Indian Tribal Community that apply to such fishery.

[Sauk-Suiattle Tribe reserves their treaty right to execute the release of C&S regulations that mirror their modeled impacts to obtain their species specific allocations if scheduled Skagit River fisheries are not implemented or an invitation to participate in commercial fisheries is not received.]

The Skagit co-managers will utilize the same update models for Sockeye, and Chum ISU consideration (with data from 2016 added) that have been used in recent years. Coho ISU will also be the same as that of previous years, with special consideration (see below). Other models may be considered with co-manager agreement should they become available before the fishery.

Chinook		Ceremonial and Subsistence – 950 fish (25 spring and 925 summer/fall) total Swinomish, Sauk-Suiattle, and Upper Skagit Tribes. The Upper Skagit Tribe reserves the opportunity to take C&S reserved Chinook across the entire duration of this LOAF agreement, May 1, 2017 through April 30, 2018.
Spring Chinook	Area 78C	<u>Swinomish and Sauk-Suiattle Tribes fishing pattern:</u> Wk 19 (wb 5/7) thru wk 21 (wb 5/21); 3,3,3. <u>Upper Skagit Tribe fishing pattern:</u> Wk 19 (wb 5/7) thru wk 21 (wb 5/21);1,1,1.
	Area 78D	<u>Upper Skagit Tribe fishing pattern:</u> Wk 19 (wb 5/7) thru wk 21 (wb 5/21);1,1,1.
Sockeye	Area 78C	Swinomish, Sauk-Suiattle, and Upper Skagit Tribes may elect to collect some of their allocation from the Baker River upstream fish trap. <u>Swinomish and Sauk-Suiattle Tribes fishing pattern:</u> Wk 26 (wb 6/25) thru wk 29 (wb 7/16);3,5,5,5. Additional fishing dependent on ISU, per MOU. <u>Upper Skagit Tribe fishing pattern:</u> Wk 26 (wb 6/25) thru wk 29 (wb 7/16);2,0.5,0.5,0.5; Additional fishing dependent on ISU, per MOU.
	Area 78D	Swinomish, Sauk-Suiattle, and Upper Skagit Tribes may elect to collect some of their allocation from the Baker River upstream fish trap. <u>Swinomish Tribe fishing pattern (Area 78D-4 and Baker River):</u> Wk 28 (wb 7/9) thru wk 29 (wb 7/16): 1,1; Additional fishing dependent on ISU, per MOU. <u>Upper Skagit Tribe fishing pattern:</u> Wk 26 (wb 6/25) thru wk 29 (wb 7/16); 2,0.5,0.5,0.5; Additional fishing dependent on ISU, per MOU.

Pink	Area 78C	<u>Swinomish and Sauk-Suiattle Tribes fishing pattern:</u> No scheduled fishery. Fishing dependent on ISU. <u>Upper Skagit Tribe fishing pattern:</u> No scheduled fishery. Fishing dependent on ISU.
	Area 78D	<u>Upper Skagit Tribe fishing pattern:</u> No harvestable surplus and no fisheries planned. Fishing dependent on ISU.
Coho	Forecast is for no commercial harvestable surplus and in response to the “Critical” forecast abundance level there are no fisheries planned. The Swinomish and Sauk-Suiattle, and Upper Skagit tribes reserve 100 coho each (300 coho total) for C&S fisheries. See Area 8 coho section for ISU.	
	Area 78C:	<u>Swinomish and Sauk-Suiattle Tribes fishing pattern:</u> No harvestable surplus and no fisheries planned.
	Area 78D	<u>Upper Skagit Tribe fishing pattern:</u> No harvestable surplus and no fisheries planned.
Chum	Area 78C	<u>Swinomish and Sauk-Suiattle Tribes fishing pattern:</u> No harvestable surplus and no fisheries planned. Fishery dependent on ISU and harvestable fish. <u>Upper Skagit Tribe fishing pattern:</u> No harvestable surplus and no fisheries planned. Fishery dependent on ISU and harvestable fish.
	Area 78D	<u>Upper Skagit Tribe fishing pattern:</u> No harvestable surplus and no fisheries planned. Fishery dependent on ISU and harvestable fish.
River Test	Chinook	Area 78C - Blakes wk 19 (wb 5/7) thru wk 35 (wb 8/27);1 boat, 6 hours/wk.
	Sockeye	Area 78C – Blakes wk 24 (wb 6/11) thru wk 29 (wb 7/16); 1 boat, 12 hours/wk; Area 78D-3 - Upper Skagit - wk 23 (wb 6/4) thru wk 30 (wb 7/23);1 boat, 4 hrs/wk.
	Coho	Area 78C - Blakes Drift wk 34 (wb 8/20) thru wk 45 (wb 11/5), 12 hours/wk; Area 78C – Spudhouse Drift, Upper Skagit, wk 34 (wb 8/20) thru wk 44 (wb 10/29);1 boat, 12 hours/wk; Area 78D-3 Wk 35 (wb 8/27) thru wk 44 (wb 10/29);1 boat, 4 hours/wk.
	Chum	Area 78C - Blakes Drift wk 44 (wb 10/29) and wk 45 (wb 11/5);1 boat, 12 hours/wk.
Swinomish Channel Treaty Net (Ntrty net closed)		
Coho	No separate openings. Area opens during Area 8 openings.	

Area 8-1 Recreational		
5/1-10/31	Closed	
11/1 – 4/30	2 fish limit, release wild Chinook and Coho.	
Baker River/Lake Recreational		
(mouth to Hwy 20 Bridge)	Closed.	
From Hwy 20 Bridge upstream to Dam	Closed.	
Baker Lake	7/8-9/7	4 fish limit, Sockeye only, 18” min. size.
Cascade River Recreational		
(mouth to Rockport-Cascade Road Bridge)	6/1–7/15	4 fish limit, only 2 may be adults, hatchery Chinook only, 12” min. size.
	9/16-11/30	Closed to salmon angling. Fishery may open pending in-season update from the Skagit test fishery and comanager agreement.
Skagit River Recreational		
See appendix for details for the conduct, monitoring, reporting, assessment, and in-season co-manager discussions and actions upon which the following fisheries are agreed.”		
(mouth to Memorial Hwy. Bridge (Hwy 536 at Mt. Vernon))	Closed to salmon angling. Fishery may open pending in-season update from the Skagit test fishery and comanager agreement.	
(From Memorial Hwy Bridge to Gilligan Creek)	6/11-7/15	3 fish limit, Sockeye only (12” min size). Closed on 6/28-6/29, 7/6-7/7, and 7/11 to avoid gear conflicts during Upper Skagit Indian Tribe commercial fisheries. Closure dates may be changed based on comanager discussion.
(From Gilligan Creek to Dalles Bridge at Concrete)	Closed to salmon angling. Fishery may open pending in-season update from the Skagit test fishery and comanager agreement.	
(From Dalles Bridge at Concrete to Hwy 530 Bridge at Rockport)	Closed to salmon angling. Fishery may open pending in-season update from the Skagit test fishery and comanager agreement.	
Hwy 530 Bridge at Rockport to	6/1–7/15	4 fish limit, only 2 may be adults, hatchery Chinook only, 12” min size.

Cascade River Road Bridge (Marblemount Bridge)	7/16-12/31	Closed to salmon angling. Fishery may open pending in-season update from the Skagit test fishery and comanager agreement.
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All other SKAGIT TERMINAL REGION freshwater recreational closed to salmon angling.

2.6 Stillaguamish/Snohomish Terminal Region

Area 8A Net

Chinook	Trty	Closed (Ceremonial set-aside of up to 100 Chinook, July-September period).
	Ntrty	Closed
Pink	Trty	Closed
	Ntrty	Closed.
Coho	Trty	Tulalip Tribes: (9/10 – 10/07) 2 days per week. Simultaneous opening as in 8D. Update fishery through 10/07. Manage for Comprehensive Coho Management Plan breakpoints and rates (i.e. particular concerns with Stillaguamish and Skagit natural stocks). Intensive sampling for CWT and DNA (see “Tulalip Tribes 2017 8A Coho Fishery Monitoring and Sampling program”).
	Test	Closed
	Ntrty	Closed.
Chum	Trty	Closed
	Test	Closed
	Ntrty	Closed.

Area 8D Net

Chinook	Trty	BS, RH, GN gear outside Tulalip Bay may be open during the following periods: 5/7 – 6/03 12:01 AM Sun – 11:59 PM Sat 6/04 – 8/26 12:01 PM Mon – 11:59 PM Thu 8/27 – 9/16 12:01 AM Mon – 11:59 PM Fri Setnets inside Tulalip Bay may be open during the following period: 5/7 – 9/09 12:01 AM Sun – 11:59 PM Sat
	Ntrty	Closed (see recreational SAF)

Coho	Trty	9/10 – 10/21; BS, RH, GN, SN open Mon, Wed, Fri; open to target Tulalip hatchery Coho. 10/22 – 11/11; BS, RH, GN, SN open Mon-Fri.
	Ntrty	Wks 38 (wb 9/17) - 45 (wb 11/5); PS Chinook NR; PS: 1,1,1,1,1,1,2; GN: 3,3,3,3,3,3,3, T and Th-F weekly. Closed east of the line from Mission Point to Hermosa Point.
Chum	Trty	BS, RH, GN gear outside Tulalip Bay: 11/12 – 12/02: Open Mon-Fri. Setnet. 11/12 – 12/02: Open Mon-Fri. Managed to allow for hatchery egg take needs based on Tulalip hatchery escapement updates and projections. All Area 8D fisheries will close concurrently as agreed to by Tulalip and WDFW to ensure egg take requirements are met.
	Ntrty	Wks 46 (wb 11/12) - 48 (wb 11/26); PS fishing pattern: 1,1,1; GN fishing pattern: 3,3,3 daylight hours. Closed east of the line from Mission Point to Hermosa Point. Managed to allow for hatchery egg take needs based on Tulalip hatchery escapement updates and projections. All Area 8D fisheries will close concurrently as agreed to by co-managers to ensure egg take requirements are met.

Stillaguamish River Treaty Net (Ntrty net closed)

Chinook	C&S fishery only; Open 5/1 – 7/29; Up to 7 days per week; Maximum catch of 35 Chinook; Open from mouth of Hatt Slough (RM 0) to Danielson Hole (RM 14).
Pink	C&S fishery only; Open 8/1 – 9/4; Up to 5 days per week; Maximum catch of 500 Pink; Open from mouth of Hatt Slough (RM 0) to Danielson Hole (RM 14).
Coho	C&S fishery only; Open 9/4 – 10/29; Up to 5 days per week; Maximum catch of 110 Coho; Open from mouth of Hatt Slough (RM 0) to Danielson Hole (RM 14).
Chum	C&S fishery only; Open 10/30 – 12/3; Up to 3 days per week; max catch of 300 Chum; Open from mouth of Hatt Slough (RM 0) to Danielson Hole (RM 14).

Snohomish River Treaty Net (Ntrty net closed)

Chinook, Pink, Coho, Chum	Closed
Coho Test	Closed

Area 8-2 Recreational

5/1-7/31	Closed
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8/1-9/4	2 fish limit, hatchery Coho only; shoreline fishing only from Possession Pt North through Possession Pt. waterfront park..
9/5–10/31	Closed to salmon angling.
11/1–4/30	2 fish limit, release wild Chinook and Coho.

Tulalip Special Area Recreational Fishery

Same as Area 8-2 Recreational, except during the period 5/30-9/30:	5/26-9/4	Open 12:01 AM Friday – 11:59 AM Monday each week. Closed June 17. Open within Tulalip Special Area boundaries only. Closed to all angling east of the line from Mission Point to Hermosa Point. 2 fish limit salmon, 2 pole endorsement (Chinook 22” min. size).
	9/5-9/8	Closed to salmon angling.
	9/9-9/30	Open Saturday and Sunday each week. Open within Tulalip Special Area boundaries only. Closed to all angling east of the line from Mission Point to Hermosa Point. 2 fish limit salmon, 2 pole endorsement (Chinook 22” min. size).

Snohomish River Recreational

Mouth to Highway 9 bridge	8/1–12/31	3 fish limit, 12” min. size. Release Chinook and Chum.
(mouth to confluence of Skykomish and Snoqualmie rivers, including all channels)	8/16–12/31	3 fish limit, 12” min. size. Release Chinook and Chum.

Snoqualmie River Recreational

(mouth to Snoqualmie Falls, including all channels)	9/1–12/31	3 fish limit, 12” min size. Release Chinook and Chum.
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Skykomish River Recreational

(From mouth to Wallace River)	6/1–7/31	4 fish limit, only 2 may be adults, hatchery Chinook only, 12” min. size.
(From mouth to Lewis St. Bridge in Monroe)	8/16 – 12/31	3 fish limit, 12” min size. Release Chinook and Chum.

From Lewis St Bridge in Monroe to confluence of North and South forks.	9/1 – 12/31	3 fish limit, 12” min size. Release Chinook and Chum
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Wallace River Recreational

Mouth to 200’ upstream of water intake of salmon hatchery	9/16 – 11/30	3 fish limit, 12” min size. Release Chinook and Chum.
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Stillaguamish River Recreational

(river and all sloughs downstream of Marine Drive to forks)	Closed to salmon angling.	
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All other STILLAGUAMISH/SNOHOMISH TERMINAL REGION freshwater recreational closed to salmon angling.

2.7 Admiralty Inlet Area

Area 9 Net

Chinook	Trty	Ceremonial and Subsistence – Up to 500 Chinook as agreed upon by those Tribes with U&A in Area 9, (PS and Hook & Line, release all Chum 6/1 – 9/30).
Chum	Trty	Currently, there is no tribal or co-manager agreement on a treaty commercial chum fishery in this management area. However, the Suquamish Tribe has proposed a treaty commercial chum fishery for 2017 and should it go forward all the tribes with adjudicated U&A in the proposed section of Area 9 may choose to participate. The Suquamish fishery will open with a proposed schedule of Wk 43 (wb 10/22) – wk 45 (wb 11/5); fishing pattern: 2,4,4; GN and PS. Open area restricted to that portion of North Hood Canal bounded to the south by the Hood Canal Bridge and bounded to the north by line from White Rock due east to landfall. If the fishery reaches a catch threshold of 30,000 chum salmon before 11/5, there will be a

		<p>conference call among the Tribes to discuss further fishery management actions.</p> <p>It is the desire of all participating tribes to develop a fishing plan for this portion of Area 9 (including monitoring and sampling components) for this year's fishery; and will in good faith work towards this objective for the 2017 season.</p> <p>Participating tribes agree to sample tissue for DNA analysis of their tribe's chum and wild coho bycatch to the extent practicable.</p>
	Ntrty	Closed

Area 9 Recreational

5/1 – 7/15	Closed
7/16 – 8/15	<p>2 fish limit, release wild Chinook, wild Coho, and Chum.</p> <p>South of Olele Pt. to Foulweather Bluff: open to angling from shoreline only, release chinook and chum.</p> <p>Pt Gamble Bay in waters east of a line from northern boundary of Salsbury Point Park to Cliffside Road closed.</p> <p>If Marine Area 9 Chinook MSF closes prior to 8/15 due to quota being reached, then Area 9 will remain open for shoreline fishing only as described for 8/16 – 9/4.</p>
8/16 – 9/4	2 fish limit, release Chinook, wild Coho, and Chum. Shoreline fishing only. Pt Gamble Bay in waters east of a line from northern boundary of Salsbury Point Park to Cliffside Road closed (2017).
9/5 – 10/31	Closed to salmon angling.
11/1 – 11/30	2 fish limit, release wild Chinook and Coho
12/1 – 1/15	Closed
1/16 – 4/15	2 fish limit, release wild Chinook and Coho.
4/16 – 4/30	Closed

Edmonds Pier Recreational

Year-Round	2 fish limit, 1 Chinook (Chinook 22" min size), release Chum 8/1-9/30.
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3.0 South Sound Region

3.1 Area 10 Sub region

Area 10 Net

Chinook	Closed
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Sockeye	Trty	Fishery dependent upon ISU (Ballard lock counts). Fishing schedule for Area 10 shall be set consistent with the MST agreement (1983).
	Ntrty	Closed
Pink	Trty	Chinook encounters limited to 400. Coho mortality limited to 250. Retention of Chinook prohibited. All waters within 1,800 feet of shoreline closed; Fishing schedule for Area 10 shall be set consistent with the MST agreement (1983). <u>Suquamish</u> – Wk 31 (wb 7/30) – wk 35 (wb 8/27), Maximum of 5 days/wk, 1 PS, <u>Tulalip</u> – Wk 34 (wb 8/20) – wk 35 (wb 8/27), Anticipated effort: 3 GN, 1 RH, East portion of Area 10 closed. Fishery monitoring will include observer and fisheries enforcement.
	Ntrty	Wks 34 (wb 8/20) – 36 (wb 9/3); PS limited participation (5 boats/day); fishing pattern 1,2,2; Brailing and live boxes required; NR for CK, CO, SO, and CH; GN limited participation (5boats/day); fishing pattern 1,2,2; Live boxes and limited soak times required; NR for CK, CO, SO, and CH; observers required on vessels. Fishery will close if 400 Chinook mortalities are reached prior to scheduled completion. Fisheries closed east inside of a line originating from West Point, extending west to the closest mid-channel buoy; thence true through Pt Wells, until reaching latitude 47 44 500, thence extending directly east to the shoreline. Comanager conference call on 9/1.
Coho	Test	Gillnet: Wk 37 (wb 9/10) - wk 39 (wb 9/24); 3 boats, 3 sites; fishing pattern: 2,2,2.
	Trty	Wk 36 (wb 9/3) – wk 40 (wb 10/1). Fishing schedule for Area 10 shall be set consistent with the MST agreement (1983).
	Ntrty	Closed

Chum	<p>In order to allow fishing opportunity that allows both the treaty and non-treaty fleets to have the ability to catch their shares and provide for escapement; better communication and cooperation is expected from both non-treaty and treaty co-managers. In order to improve management of all component stocks in the South Sound aggregate, the co-managers have agreed to improve in-season management and develop more refined in-season modeling methodologies. Both treaty and non-treaty co-managers will each compile relevant data sources, along with other relevant information such as timing of its availability in-season, predictive power, etc. that may improve ISU models or in-season management no later than May 1 and exchange those no later than May 15. The co-managers commit to schedule a conference call or in-person meeting to discuss these data and other possible data sets prior to June 1. The co-managers further commit to finalizing refinements to in-season management modeling, scheduling of fisheries, and processes for 2017 management no later than September 8, with an ongoing commitment to improve in-season management over the long term.</p>	
	Test	Purse Seine: Wk 41 (wb 10/8) - wk 46 (wb 11/12); 1 site, fishing pattern: 1,1,1,1,1,1.
	Trty	Treaty allocation based on intertribal sharing agreement; wk 41 (wb 10/8) – wk 45 (wb 11/12) fishing pattern – ISU dependent; Fishing schedule for Area 10 shall be set consistent with the MST agreement (1983).
	Ntrty	<p>Wks 42 (wb 10/15) - 47 (wb 11/19); PS Chinook and Coho NR; PS fishing pattern: 1,1,1,2,1,1; GN fishing pattern: 1,2,2,2,2,2. ISU Dependent. Area east of a line from Four Mile Rock south to Alki Point will be closed.</p> <p>Commercial fishing past week 45 for South Sound normal chum in Area 10/11 will proceed based on co-manager agreement. This will be informed by agreed to ISU results and real time watershed information, catch balances and equity, and information related to impacts associated with late timed chum salmon.</p>

Area 10A Treaty Net (Ntrty net closed): That portion of Elliott Bay east of the line from Pier 91 to the light at Duwamish Head.

Chinook	Trty Test	Gillnet: Wk 29 (wb 7/16) – Wk 31 (wb 7/30); 7/19, 7/26 & 8/2 (Wednesday nights); 5 fishing sites (one boat per site).8 PM to 8 AM.
	Trty	Gillnet: Wk 32 (wb 8/6) 8/9; 8 PM to 8 AM. Based on ISU consistent with the harvest plan.

		Ceremonial and Subsistence fisheries.
Pink	Trty	Gillnet: Wk 35 (wb 8/27); fishing pattern: up to 5 days per week (Sun – Fri).
Coho	Trty	Gillnet: Fishery will open Wk 36 (wb 9/3) – Wk 42 (wb 10/15) up to 5 days per week (Sun – Fri). (Fishery will be closed if the Duwamish/Green River ISU does not show harvestable coho. If the ISU shows harvestable coho the fishing pattern will be as stated above).
		Ceremonial and Subsistence fisheries.
Chum	Trty	Gillnet: Wk 43 (wb 10/22) - Wk 48 (wb 11/26); fishing pattern: up to 5 days per week (Sun – Fri).
		Ceremonial and Subsistence fisheries.

Duwamish/Green River (Area 80B) Treaty Net (Ntrty net closed)

Chinook	Trty	Gillnet: Wk 32 (wb 8/6) 8/9; 8 PM to 8 AM. Based on ISU consistent with the harvest plan.
		Ceremonial and Subsistence fisheries.
Pink	Trty	Gillnet: Wk 35 (wb 8/27) Wk 36 (wb 9/3); fishing pattern: up to 5 days per week (Sun – Fri).
Coho	Trty Test	Gillnet: Wk 36 (wb 9/3) 9/7; Coho ISU test fishery on the river (from the mouth of the East and West waterways up to 16 th Avenue Bridge). The 6 sites are as follows: East waterway, West waterway, Old Riverside Marina, Kellogg Island, 1 st Ave Bridge and 16 th Ave Bridge.
	Trty	Gillnet: wk 37 (wb 9/10) – wk 43 (wb 10/22) Starting September 13th fishery will open up to 16 th Avenue Street Bridge, starting September 20th fishery will open up to Boeing St. Bridge. Starting September 27th fishery will open up to Hwy 99 Bridge; fishing pattern: Sunday – Friday; 5 days per week.
Chum	Trty	Gillnet: Wk 44 (wb 10/29) – Wk 48 (wb 11/26); fishing pattern: 5 days per week (Sun – Fri).
		Ceremonial and Subsistence fisheries.

Area 10E Treaty Net (Ntrty net closed; see below for recreational SAF)

Chinook	Trty	Wk 30 (wb 7/23) - wk 38 (wb 9/17); fishing pattern: 7 days/wk. Possible extension for Sinclair Inlet.
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Coho	Trty	On-Reservation only; wk 38 (wb 9/17) - wk 43 (wb 10/22); gillnet/beach seine; 7 days/wk.
Chum	Trty	Wk 43 (wb 10/22) - wk 50 (wb 12/10); schedule dependent upon ISU.

Lake Washington System (includes Lake, Lake Union, Ship Canal, & Lake Sammamish)

Areas 10F, 10G, 10C, 10D Treaty Net (Ntrty net closed)

Sockeye	Wk 23 (wb 6/4) – Wk 32 (wb 8/6) Based on ISU (lock counts).	
	Wk 23 (wb 6/4) – Wk 33 (wb 8/13) Bio-sample program	
	Wk 25 (wb 6/18) PSC test fishery	
	Ceremonial and subsistence fisheries	
Chinook	Based on ISU and adaptive management consistent with the harvest plan and co-manager agreement.	
	Ceremonial and subsistence fisheries	
Coho	The Coho fisheries in the four following areas are based on the ISU (if lock counts project run size <10,000 Coho entering the lake, then no Coho fishery):	
	Ceremonial and subsistence fisheries	
	Lower ship canal (below Ballard Locks)	If the ISU is > than 10,000 the fishery could open as early as Wk 37 (wb 9/10) – Wk 44 (wb 10/29) with the fishing pattern up to 7 days per week (Sun – Sat).
	Upper ship canal (above Ballard Locks):	If the ISU is > than 10,000 the fishery could open as early as Wk 37 (wb 9/10) – Wk 44 (wb 10/29) with the fishing pattern up to 5 days per week (Sun – Fri).
	North end Lake Washington (North of Hwy. 520 bridge):	If the ISU is > than 10,000 the fishery could open Wk 39 (wb 9/24) – Wk 46 (wb 11/12) with the fishing pattern up to 5 days per week (Sun – Fri).

Lake Sammamish Treaty Net

Chinook	Based on ISU and adaptive management consistent with the harvest plan	
	Ceremonial and subsistence fisheries	
Coho	If the ISU is > than 10,000 the fishery could open Wk 41 (wb 10/8) – Wk 47 (wb 11/19) with the fishing pattern up to 5 days per week (Sun – Fri).	
	Ceremonial and subsistence fisheries	

Area 10 Recreational

5/1-6/30	Closed
7/1-7/15	2 fish limit, release Chinook, wild Coho, and Chum.
7/16-8/15	2 fish limit, release wild Chinook, wild Coho, and Chum.
8/16-10/31	2 fish limit, release Chinook, wild Coho, and release Chum through 9/15.
11/1-2/28	2 fish limit, release wild Chinook and wild Coho.
3/1-4/30	Closed

Shilshole Bay (East of Meadow Point/West Point line) closed 7/1-8/31.

Outer Elliott Bay (E of West Pt./Alki Pt line to Pier 91/Duwamish Head line) Closed to salmon angling 7/1-8/31. Except 8/16 – 8/31 see Elliott Bay recreational SAF.

Area 10 Piers Recreational

Seacrest Pier, Pier 86, Waterman Pier, Bremerton Boardwalk, Illahee State Park Pier	Year-Round	2 fish limit, 1 Chinook, release Chum 8/1-9/15.
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Elliott Bay Recreational SAF

5/1 – 8/10	Closed
8/11-8/13	2 fish limit, release wild Coho and Chum. Inner Elliot Bay waters open east of a line from Pier 91 to Duwamish Head.
8/18-8/31	2 fish limit, release Chinook, wild Coho, and Chum. Open Friday – Sunday in waters north of a line continuing from Jack Block Park through the north tip of Harbor island to shore northeast of the North Waterway (47°35.47'N, 122°20.58'W).
9/1-4/30	Same as Area 10.

Sinclair Inlet Recreational SAF

5/1-6/30	Same regulations as Area 10.
7/1-9/30	Open S of Manette Bridge, S of line drawn true W from Battle Point, and W of line drawn true S from Point White; 3 fish limit, release wild Chinook, wild Coho, and release Chum 8/1-9/15, 2 pole endorsement.
10/1-4/30	Same regulations as Area 10.

Green River Recreational

WDFW and MIT commit to developing and executing a monitoring plan to assess Chinook encounter rates and non-retention mortality rates in both directed Chinook fisheries and non-Chinook directed fisheries within the system prior to the beginning of the 2017 river fishery. The implementation of either portion of the plan is contingent on available funding. The portion of the plan to estimate encounter rates is likely to cost significantly less than the portion to estimate mortality rates, and will be prioritized due to the higher likelihood there will be sufficient funds available to cover its implementation.

(1st Ave South Bridge to Old Hwy.99/ Tukwila Intl. Blvd.)	8/20 – 12/31	Daily limit 6. No more than 3 adults may be any combination of Coho and Chum, 12” min size, release Chinook.
(Old Highway 99/Tukwila Intl. Boulevard to I-405)	8/20 – 12/31	Daily limit 6. 1 Chinook, no more than 3 adults may be any combination of Coho and Chum, 12” min size. Release chinook 8/20-8/31.
(I-405 to the S. 277 th Bridge in Auburn)	9/1 – 12/31	Daily limit 6. No more than 3 adults may be any combination of Coho and Chum, 12” min size, release Chinook.
(S. 277 th Bridge to Auburn Black Diamond Rd Bridge)	9/16 – 12/31	Daily limit 6. No more than 3 adults may be any combination of Coho and Chum, 12” min size, release Chinook.
(from Auburn-Black Diamond Rd Bridge to Tacoma Headworks Dam)	11/1 – 12/31	Daily limit 6. No more than 3 adults may be any combination of Coho and Chum, 12” min size, release Chinook, Closed waters - within 150’ of the Palmer Ponds outlet rack and within 150’ of the mouth of Keta (Crisp) Creek.

The 2017/2018 WDFW sport pamphlet will reflect the following season end dates for trout and other game fish fall/winter season. These end dates are subject to change based on State-Tribal agreement:

Mouth to S. 277th Bridge in Auburn: Dec. 31

S. 277th Bridge to Tacoma Headworks Dam: Dec. 31

Soos Creek Recreational

Closed

Lake Washington Recreational

East of the Montlake Bridge	July-August	Dependent upon ISU (lock counts). Potential fishery starting date to be determined. 2 fish limit, sockeye only, 12” min. size. Chinook retention dependent on ISU and co-manager agreement.
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North of Hwy 520 Bridge	9/16 – 10/31	4 fish limit, Coho only; 12" min size
Lake Sammamish Recreational		
10/1 – 11/30	4 fish limit, Coho only.	
12/1 – 5/31	Landlocked salmon rules apply. Hatchery Coho may be retained as part of the trout daily limit. 12-inch minimum size.	

All other SOUTH SOUND AREA 10 REGION freshwater: Closed to salmon angling.

3.2 Area 11 Sub region

Area 11 Net

Chinook	All	Closed
Pink	Trty	Commercial fishery open beginning wk 32 (wb 8/6) – wk 35 (wb 8/27) Drift gillnets only, 3 days per week, 2 hours before sunrise through 2 hours after sunset, times will vary per week. Fishery will end when either 100 Chinook or 200 Coho mortalities are reached or the end of week 35.
	Ntrty	Closed
Coho	Trty:	Commercial fishery open beginning Wk 36 (wb 9/3) - Wk 42 (wb 10/15); ISU dependent; gillnets 7 days/wk, could close any time. Beach seine daylight hours only, 7 days/wk.
	Ntrty:	Closed
Chum	In order to allow fishing opportunity that allows both the treaty and non-treaty fleets to have the ability to catch their shares and provide for escapement; better communication and cooperation is expected from both non-treaty and treaty co-managers. In order to improve management of all component stocks in the South Sound aggregate, the co-managers have agreed to improve in-season management and develop more refined in-season modeling methodologies. Both treaty and non-treaty co-managers will each compile relevant data sources, along with other relevant information such as timing of its availability in-season, predictive power, etc. that may improve ISU models or in-season management no later than May 1 and exchange those no later than May 15. The co-managers commit to schedule a conference call or in-person meeting to discuss these data and other possible data sets prior to June 1. The co-managers further commit to finalizing refinements to in-season management modeling, scheduling of fisheries, and processes for 2017 management no later than September 8, with an ongoing commitment to improve in-season management over the long term.	

	Trty:	Commercial fishery open Wk 42 (wb 10/15) - wk 45 (wb 11/5); gillnets 7 nights/wk, could close at any time. Beach seine daylight hours only, 7 days/wk. 2017 – Early closure to protect Nisqually Late Chum.
	Ntrty	Wks 42 (wb 10/15) - 47 (wb 11/19); PS Chinook and Coho NR; PS fishing pattern: 1,1,1,2,1,1; GN fishing pattern: 1,2,2,2,2,2. ISU dependent. Commercial fishing past week 45 for South Sound normal chum in Area 10/11 will proceed based on co-manager agreement. This will be informed by agreed to ISU results and real time watershed information, catch balances and equity, and information related to impacts associated with late timed chum salmon.

Area 11A Net Treaty Net (Ntrty net closed)

Chinook	Closed
Coho	Commercial fishery open Wk 36 (wb 9/3) - wk 42 (wb 10/15); 3 nights/wk.
Chum	Closed

Puyallup River (Area 81B) Treaty Net (Ntrty net closed)

Chinook	Spring Chinook	Ceremonial and Subsistence
	Summer - Fall	Commercial fishery Wk 33 8/13, fishing pattern: 12 hours.
Coho	Commercial fishery Wk 36 (wb 9/3) - wk 42 (wb 10/15) fishing pattern: 1,2,2,2,2,2.	
Chum	Test fishery Wk 43 (wb 10/22) - wk 46 (wb 11/12) 1 day/wk, drift net only.	
Winter Chum	Commercial fishery wk 46 (wb 11/12) – wk 53 (wb 12/31) 1 to 3 days a week	

White River Treaty Net

Ceremonial and subsistence fisheries. Fishing pattern 7 days/wk.

Area 11 Recreational

5/1-5/31	Closed
6/1-4/30	2 fish limit, release wild Chinook and release wild Coho 11/1-4/30; Commencement Bay (E. of Cliff House Restaurant/Sperry Ocean Dock line) closed to salmon angling 6/1-7/31 and 4/1-4/30.

Dash Point Dock, Point Defiance Boathouse Dock, Les Davis Pier, Des Moines Pier and Redondo Pier	Year-Round	2 fish limit, 1 Chinook.
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Puyallup River Recreational

(from 11 th St. Bridge to Freeman Rd.)	8/15 - 12/31	6 fish limit, 2 adults, 12" min size, release wild Chinook. 8/1-8/31 Closed Sundays. 9/1-10/31 Closed Sunday, Monday, Tuesday.
(from Freeman Rd. to Carbon R.)	8/1 – 12/31	6 fish limit, 2 adults, 12" min size, release wild Chinook. 8/1-8/31 Closed Sundays. 9/1-10/31 Closed Sunday, Monday, Tuesday.

Carbon River Recreational

(mouth to Voight Creek)	9/1 – 11/30	6 fish limit, 4 adults; no more than 2 adult Chinook may be retained; 12" min size, release Chum and wild adult Chinook.
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All other SOUTH SOUND AREA 11 REGION freshwater recreational: Closed to salmon angling

3.3 Area 13 Sub region

Fox Island/Ketron Island (Area 13)

Chinook	Treaty	8/1-9/15, 7 days/wk
	Ntrty	Closed
Coho	Treaty	9/15-10/20, 7 days/wk
	Ntrty	Closed
Chum	Treaty	Closed unless opened by Medicine Creek Treaty Tribes' agreement
	Ntrty	Closed

Area 13 Treaty Net (Ntrty net closed)

Chinook	Closed
Pink	Closed
Coho	Closed
Chum	Closed

Carr Inlet (Area 13A) Treaty Net ¹(Ntrty net closed) ¹ Based on Medicine Creek Treaty Tribal proposal annual regulations. Individual Tribal regulations may deviate from this schedule.

Chinook	8/1 - 9/23, 7 days/wk, opens in sections.
Coho	9/17– 10/28, 7 days/wk, in-season monitoring to meet hatchery escapement need.
Chum	10/29 – 11/11, 7 days/wk – then 11/12 – 12/5 Beach Seine Only.

Chambers Bay (Area 13C) Treaty Net¹ (Ntrty net closed)

Chinook	7/30 – 10/14; Beach seines Sunday noon to Tuesday noon. Set nets Wednesday noon to Friday noon.
Coho	10/15 – 11/4; Beach seines Sunday noon to Monday noon. Set nets Monday noon to Tuesday noon.
Chum	Closed

Area 13D Treaty Net (Ntrty net closed)

Chinook	7/15 - 9/9 or earlier date dependent on in-season management needs; 7 days/wk
Coho	9/10 - 11/19 or earlier date dependent on in-season management needs.
Dana Pass (13D-1)	7 days/wk
Pickering Pass (13D-2)	7 days/wk
Peale Pass (13D-3)	7 days/wk
Southern Case (13D-4)	7 days/wk
Chum	Open approximately 10/15; 2-3 days per week; managed weekly by updates (~10/15).
Area 13E Net	Closed to all fishing

Budd Inlet (Area 13F) Treaty Net (Ntrty net closed)

Chinook	7/15-9/9 or earlier date dependent on in-season management needs; 7 days/wk 9/10-9/22 open dependent on in-season monitoring to meet hatchery escapement needs.
Coho	Closed
Chum	Open approximately 11/6, 2-3 days per week, managed by weekly in-season updates

Eld Inlet (Area 13G) Treaty Net (Ntrty net closed)

Chinook	7/15-9/9; opening dependent upon in-season data, outer portion only.
Coho	Closed
Chum	Open approximately 11/6, 2-3 days per week, managed by weekly escapement updates
Totten Inlet (Area 13H) Treaty Net (Ntrty net closed)	
Chinook	8/1-9/9; schedule dependent on in-season data
Coho	Closed
Chum	Open approximately 10/9, 2-3 days per week; managed by weekly escapement updates
Little Skookum Inlet (Area 13I) Treaty Net (Ntrty net closed)	
Chinook	8/1-9/9; schedule dependent upon in-season data
Coho	Closed
Chum	Open approximately 11/12, 2-3 days per week; managed by weekly escapement updates
Hammersley Inlet (Area 13J) Treaty Net (Ntrty net closed)	
Chinook	8/1-9/9 or earlier date dependent on in-season management needs
Coho	Closed
Chum	Open approximately, 9/17 – 12/31, 2-3 days/wk; managed by weekly escapement updates
Northern Case Inlet (Area 13K) Treaty Net (Ntrty net closed)	
Chinook	7/15-9/9
Coho	9/10-10/31 or earlier date dependent on in-season management needs
Chum	Open approximately 9/17-12/31; 2-3 days/wk; managed by weekly escapement updates
Nisqually River (Area 83D) Treaty Net (Ntrty net closed)	
Chinook/Pink	Gill Net 2 days/wk during the following weeks: wk 33 (wb 8/13) through wk 36 (wb 9/3).
Coho	Gill Net 1 day wk 40 (wb 10/1) then 3 days/wk during the following weeks: wk 41 (wb 10/8) through wk 47 (wb 11/19).

Chum	Commercial Fishery Closed. Yelm Escapement ISU model will be used in season to determine if fisheries are possible. Projected ISU derived escapement must exceed 2,000 fish above spawning goal of 18,000 for fisheries to open (approximately 184 peak live in Yelm). Fisheries will be managed to the lower 6 miles of the River to protect projected spawners. Chum management wk 48 – wk 5.
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McAllister Creek (Area 83F) Treaty Net (Ntrty net closed)

Chinook/Pink	Closed.
Coho	Closed.
Chum	Closed.

Area 13 Recreational

5/1/17-4/30/18	2 fish limit, Release wild Chinook and wild Coho. 2 pole endorsement. Lower Budd Inlet Closure: 7/16-10/31. Minter Cr. Mouth Closure: 4/16-9/30.
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Fox Island Pier Recreational

Year-Round	2 fish limit, 1 Chinook.
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Chambers Creek Estuary Recreational

(downstream of markers 400' below Boise-Cascade Dam to Burlington Northern Railroad Bridge)	7/1 – 11/15	6 fish limit, 4 adults; 12" min size, release wild Coho.
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Deschutes River Recreational

Capitol Lake (from outlet to 400' below lowest Tumwater Falls (Deschutes River) fish ladder).	7/1 – 10/15	Closed
(from Old Hwy 99 Bridge on Capitol Blvd in Tumwater to Henderson Blvd Bridge)	7/1 – 10/15	6 fish limit, 2 adults, 12" min size, release Coho.
(upstream of Henderson Blvd Bridge)	7/1 – 10/15	6 fish limit, 2 adults, 12" min size, release Coho.

Kennedy Creek Recreational		
(mouth to northbound Hwy. 101 Bridge)	10/1 – 11/30	6 fish limit, 2 adults, 12” min size, release wild Coho.
McAllister Creek Recreational		
(mouth to Olympia-Steilacoom Rd Bridge)	7/1 – 11/30	6 fish limit, 2 adults, 12” min size.
McLane Creek Recreational		
(from a line 50’ north of and parallel to the Mud Bay Rd. Bridge to a line 100’ upstream of and parallel to the south bridge on Hwy.101)	Same as Area 13	Same as Area 13
Minter Creek Recreational		
(mouth to 50’ downstream of hatchery rack)	11/1 – 12/31	4 fish limit, 12” min size, Chum only.
Nisqually River Recreational		
(mouth to the military tank crossing bridge, one mile upstream of the mouth of Muck Creek)	7/1 –11/15	6 fish limit, 2 adults, 12” min. size; release wild Chinook and Chum.

All other SOUTH SOUND AREA 13 REGION freshwater recreational closed to salmon angling.

4.0 Hood Canal Region (All fisheries modeled in FRAM #2017 (Chinook) & #1731 (Coho))

Hood Canal Mainstem (Areas 12, 12B, 12C, 12D)

Treaty: 1,000 foot closure around streams that are closed to net fishing. Beach seines and hook and line gear release Chum through 9/30 (through 10/10 if within 500' of western shore of Areas 12B and 12C).

Nontreaty: See WAC 220-47-307 for Nontreaty exclusion zones.

Chinook	Trty	<p>Areas 12, 12B and 12D: Closed</p> <p>Area 12C: Beach seines open wb 7/23 - 8/31; 5 days/wk; release Chum 8/1-8/31. Open wb 7/23 – 8/24 for gillnets 5 days/wk; restricted to 7" min mesh starting 8/1.</p> <p>Area 12H: Open wb 7/09 through 9/16; hook and line gear continuous (daylight hours only); beach seines daylight hours Tues and Thur each week; possible in-season modifications; Chum release.</p>
	Ntrty	<p>Area 12H: Hoodspout Hatchery Zone, Wks 31 (wb 7/30) – 36 (wb 9/3); 5,000 Chinook quota. BS fishing pattern: 2,2,2,2,2,2; Release all Chum per the SCSCI.</p> <p>*We are using the tribal designation of 12H which is designated in state rules as the Hoodspout Hatchery Zone within area 12C.</p>
Pink	All	Same as Chinook openings.
Coho	Trty	<p>Area 12: Open 9/25 through 10/14 for gillnets. Beach seines for Coho only (release all Chinook and Chum through 9/30) may start no earlier than 9/16. Both gear types open 7 days/wk.</p>
		<p>Area 12B: Open 10/1 through 10/21 for gillnets; 500 foot closure along western shore through 10/10; beach seines for Coho only (release all Chinook and Chum through 9/30) may start no earlier than 9/16. Both gear types open 7 days/wk.</p>

		<p>Area 12C: Open 10/1 through 10/21.</p> <ul style="list-style-type: none"> a) Gillnets: 10/1-10/7 5 d/wk; 10/8-10/21 7 d/wk. b) Beach seines: 9/21-10/7 5 d/wk; 10/8-10/21 7 d/wk DAYLIGHT HOURS ONLY (release all Chum through 9/30). c) 500 foot beach closure from Ayock Pt. to approx. 2,000 feet south of Lilliwaup (at the large house, north of Octopus Hole) through 10/10 for both gear types. d) Beach seines for Coho DAYLIGHT HOURS ONLY (release all Chum through 9/30) may start no earlier than 9/21).
		<p>Area 12D (west of Madrona Pt. - local name): Open for gillnets no earlier than 10/1. Weekly schedules identical to Area 12C.</p>
	Ntrty	Closed
Chum	<p>The Co-Managers have agreed to a co-management process that is described in the attached 2017 Co-Management Agreement for Hood Canal Chum Salmon Fisheries. Chum fishing schedules may be modified (except the initial P.S. 1-1-1) if pre-season harvestable abundance and catch shares are changed using the agreed early window ISU, based on Non-Treaty purse seine cumulative CPUE for October 15 through October 31. If there are sufficient NT shares remaining for an additional P.S. day, then a co-manager agreed upon extended window ISU model will be used to make a final in-season update of the harvestable abundance and catch shares, and fishing schedules may be further modified accordingly.</p>	
	Trty	<p>Area 12: Open 10/15 through 11/20; 7 d/wk</p>
		<p>Area 12B: Open 10/22 through 11/20; 7 d/wk; except north of an East-West line from Zelatched Point to Seal Rock open through 11/27.</p>
		<p>Area 12C: Open 10/22 through 11/27; 7d/wk.</p>
		<p>Area 12D: Closed.</p>
		<p>Area 12H: Hook and line gear open from 10/15 through 11/25; beach seines open Tuesday and Thursday of each week. Then Monday and Wednesday for the week beginning 11/05; possible in-season adjustments to 3 days/wk. Starting 1, hatchery escapement control measures will go into effect.</p>

	Ntrty	Area 12, 12B. Wks 42 (wb 10/15) - 47 (wb 11/19): PS Chinook NR; PS fishing pattern: 1,1,1,2,1,1; GN fishing pattern: 1,2,2,2,2,2 daylight hours. PS closed within 2 miles south of the Hood Canal Bridge 10/24 and 10/30. Hazel Point Closure area open to PS when bridge area is closed.
		Area 12C Fisheries scheduled wks 45 (wb 11/5) - 48 (wb 11/26): PS Chinook NR; PS fishing pattern: 1,2,1,1; GN fishing pattern: 2,2,2,2 daylight hours. Fishing is contingent upon the results from the agreed to ISU.
		Area 12H: BS (Hoodsport Hatchery Zone) beach seine fishing wks 45-48, pattern pending discussions with tribal Co-managers.
		Area 12D Closed

Port Gamble (Area 9A)

Chinook	All	Closed
Coho	Trty	Open wb 8/13 through 10/28; 7 days/wk; gillnet only. Ceremonial Harvest of 20 Chinook in August.
	Ntrty	Open Wks 34 (wb 8/20) - 43 (wb 10/22) skiff GN limited to 100 fathoms length and 60 meshes in depth; 7 days/wk; Chinook NR; Chum NR through 9/30; release NR fish by cutting ensnaring meshes. The beach area of the Port Gamble Indian Reservation, between Pt. Julia and the boundary marker at the south end of the reservation - closed to all fishing.
Chum	Trty	Open 10/29 through 11/25; 7 days/wk; gillnet only.
	Ntrty	Closed

Quilcene / Dabob (Area 12A)

Coho	Trty	Open 8/21 through 10/14; Chum and Chinook release from hook and line and beach seine gear through 9/30; beach seines 5 days/wk, daylight hours. Hook and line fisheries for Coho only, open continuously. Gillnets closed until Summer Chum escapement exceeds 1500. (1) GN day/wk; when escapement reaches 2,500 GN (2) day/wk; when escapement reaches 3,500 GN will be determined as per the SCSCI BCR. Beach seine advance notification required prior to fishing.
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	Ntrty	Beach seine open wks 34 (wb 8/20) – 40 (wb 10/1); Limited participation (4 permits/day); CK and CH NR; fishing pattern 5,5,5,5,5,5,5; Fishery will be managed consistent with SCSCI. GN closed unless Treaty GN opening.
Chum	Trty	Open to set and drift gillnets wb 10/15 through 11/20, South of an E-W line through Pt. Whitney.
	Ntrty	Closed

Big Quilcene River (Area 82F) Treaty (Ntrty net closed)

Coho	Openings to be determined in-season, for Coho only, from 9/1 through 10/15. Closed below Rogers St. From Rogers St. to U.S. Hwy 101, hook and line gear only, release all other salmon. The hatchery area, from U.S. Hwy 101 to the Quilcene Hatchery rack, may be opened for short periods to take surplus Coho. Hand held gear only (dipnets, hand lines, etc.).
Chum	Closed

Skokomish River (Area 82G) Treaty (Ntrty net closed)

Purdy Creek (Area 82J) Treaty Net (Ntrty net closed)

The Skokomish Tribe will continue to sample all agreed to fisheries in order to provide weekly in-season updates (i.e. CWT, species, mark status, and mark rates). The WDFW will provide weekly in-season updates for Chinook returns to the George Adams Hatchery rack. Note: Hook and line gear and beach seines release Chum through 10/15 above Hwy 106 Bridge.

Skokomish River – Mouth to HWY 106 Bridge (Area 82G) Treaty (Ntrty net closed)

Coho	Open 10/08 – 11/04, 7 days/wk.
Chum	Open wb 11/05 through 11/25, 7 days/wk.

Skokomish River – HWY 106 Bridge to HWY 101 Bridge (Area 82G) Treaty (Ntrty net closed)

Chinook	Open wb 8/06 - wb 8/27, 3 days/wk.
Coho	Open wb 10/08 – wb 11/04, 7 days/wk.
Chum	Open 11/05 through 11/25; 7 days/wk.

Purdy Creek (Area 82J) Treaty Net (Ntrty net closed) 250 feet from the confluence/mouth of Purdy Creek to the HWY 101 Bridge (fishing nets may not be attached to any abutment or railings on the HWY 101 Bridge).

Chinook	Gill Nets only: Open every Saturday beginning July 09 – August 19. In-season adjustments will occur to ensure weekly broodstock targets are achieved.
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Chum	Gill Nets, Dip Nets and Hook & Line: Open beginning 11/12 as necessary to reach tribal share.
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Misc. Hood Canal Rivers (Dosewallips, Duckabush, Hamma Hamma, Tahuya, Dewatto, Union)

All species	Closed to commercial harvest.
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Area 12 Recreational (Including Quilcene/Dabob Bay)

5/1-6/30	Closed
7/1-9/30	South of Ayock Pt. - 4 fish limit, 2 Chinook (Chinook 20" min size); release Chum and wild Chinook; 2 pole endorsement. Waters within channels created by exposed tidelands including the free flowing waters of the Skokomish river downstream (North) of the City of Tacoma PUD overhead transfer powerlines are closed.
8/1-9/30	North of Ayock Pt. – 4 fish limit, release Chinook and Chum. River mouth closures on Dosewallips, Duckabush, Dewatto, Hamma Hamma rivers. Hook measuring ½ inch or less from point to shank from 8/1-8/15. Closed in Tarboo Bay north of Broad Spit starting 9/16.
10/1-12/31	4 fish limit, 2 Chinook; release wild Chinook and release Chum through 10/15.
1/1-4/30	2 fish limit, release wild Chinook.

Hoodsport Hatchery Zone Recreational

Same as Area 12 except:

7/1-12/31	4 fish limit, no minimum size, release wild Chinook and release Chum 7/1-10/15. 2 pole endorsement valid through 10/15.
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Dewatto River Recreational

(mouth to Dewatto-Holly Rd. Bridge)	10/1 – 10/31	2 fish limit, 12" min size, Coho only.
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Dosewallips River Recreational

(mouth to Hwy. 101 Bridge)	11/1 – 12/15	2 fish limit, 12" min size, Chum only.
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Duckabush River Recreational

(mouth to Mason Co. PUD #1 overhead electrical)	11/1 – 12/15	2 fish limit, 12" min size, Chum only.
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distribution line)		
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Quilcene River Recreational

(from Rodgers St. to Hwy 101 Bridge)	8/16 – 10/31	4 fish, 12” min size, Coho only.
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Skokomish River Recreational

	Closed	
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Tahuya River Recreational

	Closed	
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All other HOOD CANAL REGION freshwater recreational closed to salmon angling.

Appendix

2017 7/7A Chum Fishing Plan

04/11/2017

Chum salmon fisheries in Areas 7 and 7A are regulated to comply with a base harvest ceiling of 130,000 Chum salmon, unless a critically low level of abundance is identified for those stocks migrating through Johnstone Strait (“Inside Southern Chum salmon”) (PST 2008). Chapter 6 of Annex IV specifies that U.S. commercial fisheries for Chum salmon in Areas 7 and 7A will not occur prior to October 10. Paragraph 10 (a-b) specifies run sizes below 1.0 million as critical (estimated by Canada). For run sizes below the critical threshold, the U.S. catch of Chum salmon in Areas 7 and 7A will be limited to those taken incidentally to other species and in other minor fisheries, and shall not exceed 20,000.

In 2014, the U.S. landed 146,571 chum salmon from Area 7/7A, exceeding the U.S. catch ceiling of 130,000 by 16,571 chum salmon. This overage triggered the payback mechanism outlined in Chapter 6.10. (h) of the Pacific Salmon Treaty:

“Catches in excess of 135,000 Chum shall result in an overage being calculated by subtracting 130,000 from the total Chum catch. Overages will be accounted for by reducing the U.S. annual catch ceilings in up to two subsequent non-critical Inside Southern Chum salmon years;”

In 2015 and 2016, the co-managers landed 243,293 chum salmon, effectively paying back the 2014 overage (Table 1).

Table 1. U.S. 7/7A chum catches, 2009-2016

Year	NT catch	Treaty catch	Total U.S. catch	Total U.S. Share	Uncaught share	Overage	Paid Back
2009	16,406	7,667	24,073	20,000 ^{a/}	n/a	0	
2010	6,062	17,342	23,404	20,000 ^{a/}	n/a	0	
2011	24,084	36,401	60,485	130,000	69,515	0	
2012	32,157	40,709	72,866	130,000	57,134	0	
2013	30,239	49,411	79,650	130,000	50,350	0	
2014	60,135	86,436	146,571	130,000	0	16,571	
2015	59,754	65,303	125,057	130,000	4,943	0	4,943
2016	66,531	51,705	118,236	130,000	11,764	0	11,764

^{a/} In fishing years 2009 and 2010, the Inside Southern Chum run size was below the critical threshold of 1.0 million; thus, per Chapter 6 of the PST the harvest ceiling was 20,000 additional chum following the notice from Canada that the run size was below the critical threshold.

In 2013, the co-managers enacted a fishing plan intended to result in the full harvest of the 130,000 chum salmon allowed to be caught in Area 7/7A under the current Chapter 6 of the Pacific Salmon Treaty. Adoption of these annual pre-season chum fishing plans for Area 7/7A has resulted in the full harvest of the U.S. share in recent years (Table 1).

To continue to promote fishing opportunity that allows both the treaty and non-treaty fleets to catch their full shares, the co-managers will use the management approach below for the 2017 season.

- Treaty and non-treaty reef net fisheries will remain open continuously from the end of Fraser management to the end of the chum season or until their respective shares are harvested, whichever comes first. Reef nets will release all chum, unmarked coho and unmarked Chinook through September 30. Release all Chinook beginning October 1.
- Treaty purse seine (PS) and gillnet (GN) fisheries will open on Tuesday October 10 and remain open continuously until the end of the season or until the treaty share is harvested, whichever comes first.
- Non-treaty PS and GN fisheries will open on Tuesday October 10, Wednesday October 11, Saturday October 14, and Sunday October 15.
- Non-treaty purse seine and gillnet fisheries will be evaluated relative to the thresholds below based on non-treaty chum catch reported on the in-season co-manager conference call scheduled for Monday, October 16, 2017. Non-treaty fisheries will re-open on the prescribed dates and remain open continuously until the end of the season or until the non-treaty share is harvested, whichever comes first.

Table 2. 2017 Treaty and Non-Treaty chum fishing schedule for Area 7 & 7A

	10-Oct TUE	11-Oct WED	12-Oct THU	13-Oct FRI	14-Oct SAT	15-Oct SUN	16-Oct MON	17-Oct TUE
Treaty and Non-Treaty Reef Net								
Treaty Gillnet and Purse Seine								
Non-Treaty Gillnet and Purse Seine								
Co-manager Conference Call								

- If total non-treaty catch is:
 - <29,000; non-treaty fishery will reopen Wednesday, October 18.
 - >29,000; non-treaty fishery will reopen Thursday, October 19.
- The co-managers will exchange data on by-catch throughout the season, and take appropriate management actions should levels of by-catch greatly exceed expectations.
- The co-managers will meet by conference call and adjust schedules if needed in response to in-season notification by Canada’s Department of Fisheries and Oceans that chum salmon returns are below the critical thresholds identified in Chapter 6, paragraph 10 of the Pacific Salmon Treaty.

2017 Skagit Coho ISU - Blake's and Spudhouse Test Fishery Models

Pete Kairis, Swinomish Tribe, 4/10/2017

A wide variety of ISU models based on the Blake's and Spudhouse test fisheries were assessed using the 1986-2016 test fishery data. For each of the test fisheries, I examined models based on catch/hour and catch/set for weeks 38 through 43 individually, as well as models based on cumulative totals over several ranges of management weeks. For the cumulative models, I only included years for which a test fishery was conducted each week in the range. For example, if a test fishery occurred in week 39 but not week 40 of a certain year, then that year would be excluded when building a week 39-40 cumulative model. In an attempt to improve the model consistency, I also eliminated individual tests that had fewer than 6 hours of net-in-the-water, as these were abnormally short fisheries usually caused by gear failure or other problems.

Two Blake's coho tests were conducted during week 40 of both 2002 and 2005. For both years, the first of these tests was a test that was cancelled early because of an equipment failure, and the second test was the same test rescheduled. I removed the first (aborted) set from the data set. In 1986, two coho tests were conducted each week from week 38 through 43. Looking at the set log, these appear to be two complete tests with the same gear and location, so I combined them when calculating catch/hour for those weeks.

The Blake's test catch/hour for weeks 39 and 40 in 2010 appeared to be outliers relative to the rest of the data set, so these weeks were removed from the analysis (Figures 1 and 2). The week 39 Blake's test fishery in 2009 was also removed as an apparent outlier in terms of catch/hour. However, since the week 40 Blake's test fishery in 2009 was cut short due to equipment problems and lasted less than 6 hours, the 2009 test fisheries wouldn't have been included in the cumulative models anyway. Similarly if the week 40 point for 2010 was removed (the more pronounced outlier) but not week 39 of the same year, that year would not be included in the cumulative models. The decision to classify these points as outliers is subjective and open for discussion.

For each model analyzed, I calculated basic performance statistics based on the residuals. I also ran a leave-one-out cross-validation. For each year of each model, I re-fit the same catch/hour or catch/set vs. TRS model *without* that year's data point, and used it to predict the TRS that year. Performance criteria (MSE, MAPE, MPE) were then calculated across all years using the cross-validation predicted values. This process results in a better assessment of model performance than simply analyzing the regression residuals. Years that were dropped from the dataset (for example, if they had fewer than 6 hours net-in-the-water were removed as outliers) were not included in the performance analysis for that particular model. The final set of models analyzed, including the regression and performance statistics for each, is provided in Table 1. Because catch/hour models performed consistently better than catch/set models for the Blake's test fishery, and the catch/set models performed consistently better than the catch/hour models for the Spudhouse test fishery, the Blake's catch/set and Spudhouse catch/hour models were not included in the table.

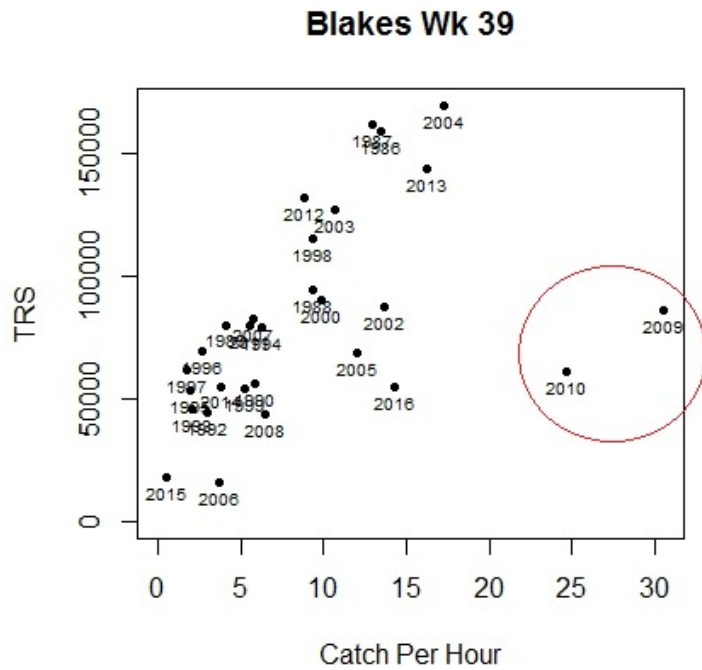


Figure 1. Blake's week 39 test fishery catch/hour. The 2009 and 2010 data points appear to be outliers, so they were removed from the analysis.

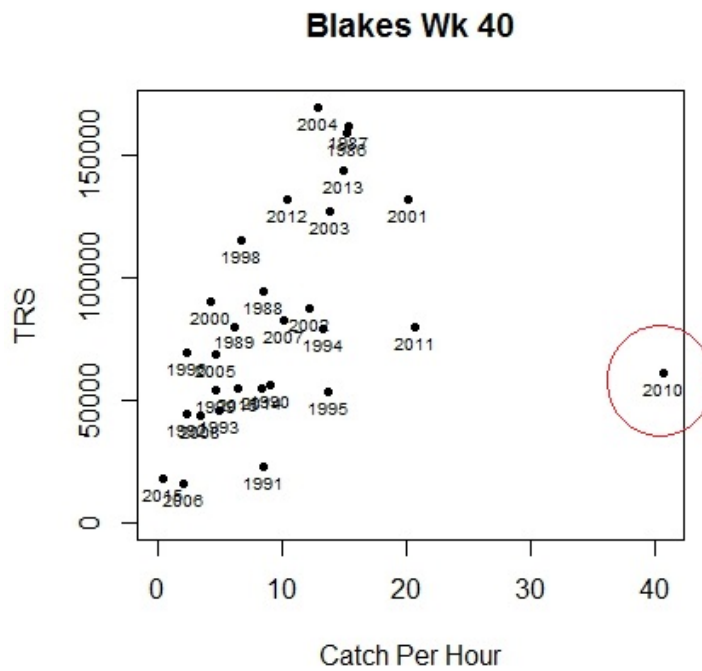


Figure 2. Blake's week 40 test fishery catch/hour. The 2010 data point appears to be an outlier, so it was removed from the analysis.

Table 1. The final set of models analyzed included those based on catch per hour (C/H) and catch per set (C/S). The range of years used to build the models was 1986-2016, with three outliers removed as described in the text. Weeks with a total time of net-in-the-water less than 6 hours were excluded. Blake's catch/set and Spudhouse catch/hour models were excluded from this table.

ISU Week	Description	r ²	P	Df	N	Slope	Intercept	RMS E	MPE	MAPE	Cross Validation RMSE	Cross Validation MPE	Cross Validation MAPE
Week 38	Blakes Wk 38 C/H	0.41	0.0004	24	26	6,484.29	44,652.74	30,304	-20.25%	42.58%	33,516	-22.52%	46.77%
	Spudhouse Wk 38 C/S	0.09	0.1727	20	22	5,120.52	52,951.40	32,955	-34.99%	58.21%	35,708	-38.52%	63.30%
Week 39	Blakes Wks 38-39 C/H	0.57	0.0000	21	23	7,925.58	29,751.98	25,095	-11.75%	28.91%	27,343	-13.09%	31.83%
	Spudhouse Wks 38-39 C/H	0.26	0.0365	15	17	7,786.37	33,454.32	24,596	-27.11%	49.41%	27,851	-30.90%	55.56%
	Blakes Wk 39 C/H	0.58	0.0000	25	27	6,625.17	32,253.64	27,039	-17.75%	37.57%	29,515	-19.30%	40.71%
	Spudhouse Wk 39 C/S	0.36	0.0040	19	21	7,456.90	35,282.46	24,166	-24.03%	45.20%	27,316	-26.62%	50.08%
Week 40	Blakes Wks 38-40 C/H	0.68	0.0000	21	23	8,837.28	16,963.12	21,776	-7.17%	24.82%	23,351	-7.49%	26.77%
	Spudhouse Wks 38-40 C/S	0.30	0.0342	13	15	8,418.10	27,987.67	24,996	-26.99%	50.62%	29,495	-31.52%	58.44%
	Blakes Wks 39-40 C/H	0.69	0.0000	24	26	8,251.37	15,363.17	23,573	-10.46%	28.83%	25,531	-11.16%	31.20%
	Spudhouse Wks 39-40 C/S	0.41	0.0044	16	18	7,908.25	29,681.49	24,921	-24.33%	47.51%	29,952	-28.38%	54.42%
	Blakes Wk 40 C/H	0.43	0.0001	26	28	5,274.37	35,128.46	32,485	-24.05%	46.17%	35,487	-26.43%	50.03%
	Spudhouse Wk 40 C/S	0.11	0.1074	22	24	3,533.29	55,232.04	31,963	-32.47%	55.89%	35,040	-35.51%	60.91%
Week 41	Blakes Wks 38-41 C/H	0.76	0.0000	18	20	9,243.84	8,567.54	18,883	-3.38%	20.33%	20,495	-3.02%	22.34%
	Spudhouse Wks 38-41 C/S	0.53	0.0048	11	13	13,224.21	11,114.86	22,002	-20.00%	42.53%	25,698	-22.92%	50.00%
	Blakes Wks 39-41 C/H	0.68	0.0000	20	22	7,873.94	14,324.30	22,392	-9.95%	26.66%	24,721	-10.76%	29.39%
	Spudhouse Wks 39-41 C/S	0.54	0.0017	13	15	11,062.71	16,098.68	20,734	-17.80%	38.86%	23,685	-20.83%	45.08%
	Blakes Wk 41 C/H	0.31	0.0041	23	25	3,571.78	48,136.97	33,502	-28.97%	50.67%	38,173	-32.68%	56.01%
	Spudhouse Wk 41 C/S	0.05	0.3234	18	20	2,120.89	61,653.85	33,220	-38.29%	60.46%	36,401	-42.69%	66.58%
Week 42	Blakes Wks 38-42 C/H	0.8	0.0000	15	17	10,250.8	5,983.30	15,07	-1.42%	17.27	16,861	-0.83%	19.69%

		6				2		6		%			
	Spudhouse Wks 38-42 C/S	0.6 2	0.0025	10	12	11,878.9 8	13,486.7 3	15,85 0	-17.18%	38.23 %	18,821	-19.76%	45.51%
	Blakes Wks 39-42 C/H	0.8 6	0.0000	16	18	10,007.6 8	3,405.34	15,87 4	-3.60%	21.65 %	17,610	-3.47%	24.81%
	Spudhouse Wks 39-42 C/S	0.6 4	0.0010	11	13	10,309.5 0	17,134.9 5	15,67 3	-16.16%	35.35 %	18,071	-18.98%	41.52%
	Blakes Wks 40-42 C/H	0.7 7	0.0000	18	20	9,174.84	6,132.07	21,20 6	-9.86%	30.04 %	23,041	-10.36%	33.28%
	Spudhouse Wks 40-42 C/S	0.2 9	0.0297	14	16	8,713.91	33,197.0 6	29,03 4	-29.02%	49.05 %	32,018	-34.44%	56.23%
	Blakes Wk 42 C/H	0.4 2	0.0004	23	25	5,424.08	45,090.0 1	33,97 5	-29.10%	49.31 %	40,284	-33.01%	54.54%
	Spudhouse Wk 42 C/S	0.6 5	0.0000	17	19	8,597.31	36,692.2 8	20,78 0	-21.71%	39.80 %	23,202	-24.21%	43.98%
Week 43	Blakes Wks 38-43 C/H	0.8 5	0.0000	13	15	10,779.5 6	5,173.70	16,49 8	-1.36%	15.43 %	18,411	-0.64%	18.07%
	Spudhouse Wks 38-43 C/S	0.8 2	0.0003	8	10	14,307.0 6	4,218.82	11,72 8	-11.98%	28.28 %	14,859	-13.98%	35.07%
	Blakes Wks 39-43 C/H	0.8 0	0.0000	14	16	9,962.53	7,822.87	20,20 4	-7.03%	23.59 %	23,583	-8.13%	27.61%
	Spudhouse Wks 39-43 C/S	0.8 0	0.0002	9	11	12,732.0 5	8,725.72	12,67 4	-12.28%	30.55 %	15,741	-14.82%	37.24%
	Blakes Wks 40-43 C/H	0.7 0	0.0000	15	17	9,354.38	9,921.26	24,94 6	-13.86%	34.12 %	28,705	-15.55%	38.79%
	Spudhouse Wks 40-43 C/S	0.4 1	0.0141	12	14	10,529.3 1	26,956.6 8	28,33 8	-27.83%	47.27 %	32,170	-34.23%	55.61%
	Blakes Wk 43 C/H	0.0 9	0.1650	21	23	1,858.06	71,120.5 1	42,92 9	-46.06%	70.18 %	68,406	-58.05%	83.64%
	Spudhouse Wk 43 C/S	0.2 6	0.0307	16	18	5,306.85	51,068.6 6	28,39 4	-34.06%	55.95 %	32,669	-37.97%	61.94%

In general, the best model performing models when assessing a combination of r^2 , P-value, and the cross-validation RMSE, MPE, and MAPE were the Blake's test fishery models using cumulative totals from week 38 through the ISU week. Some Spudhouse models also performed moderately well, but they exhibited worse MPE and MAPE than the corresponding Blake's models and were based on fewer data points. As mentioned above, the catch/hour models performed better than the catch/set models for the Blakes fishery, but the catch/set models performed better than the catch/hour models for the Spudhouse fishery. The reason for this difference is unknown.

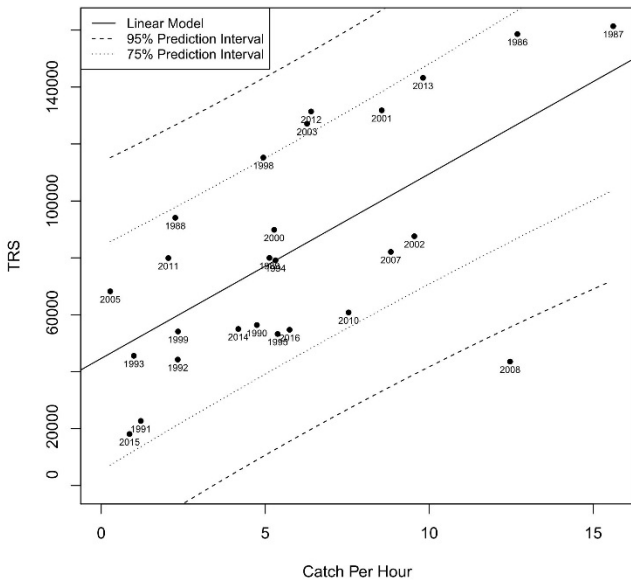
It should be noted that all of the models tend to over-predict run size (negative MPE) over the 1986-2016 time period, although the MPE of the cumulative Blake's catch/hour models for weeks 41 and later is quite low. Another point to consider is that removing points as outliers certainly changed the regressions and made the performance statistics look better than would have been the case if they were still in the data set. Because those outliers had very high catch/hour relative to the rest of the data set, an in-season update based on catch/hour in weeks 39/40 of greater than about 25 should be treated with caution as a potential abnormality. Because of intercepts higher than the pre-season forecast of run size (approximately 19,000 hatchery + wild) or low model performance, no models for weeks 38 or 39 are useful for 2017. The strongest ISU models use cumulative test data through weeks 40 or later. However, attention must be paid to the intercepts of each model, as many cannot predict a run size as low as the pre-season forecast and as such are of little use this year. After the week 40 test fishery, the Blake's Week 38-40 cumulative catch/hour model ($P < 0.0001$, $r^2 = 0.68$, cross-validation RMSE=23,351) could be used as a preliminary indicator of run size, but because the intercept of 16,963 is only slightly above forecast, using it as an agreed ISU would not make sense. Following the week 41 test fishery, the Blake's Week 38-41 cumulative catch/hour model ($P < 0.0001$, $r^2 = 0.76$, cross-validation RMSE=20,495) will be used as the ISU. The Blakes's Weeks 38-42 cumulative model ($P < 0.0001$, $r^2 = 0.86$, cross-validation RMSE=16,861) will be used following the week 42 test fishery, and the Blake's Weeks 38-43 cumulative model ($P < 0.0001$, $r^2 = 0.85$, cross-validation RMSE=18,411) will be used following the week 43 test fishery. The weeks 39-42 and 38-43 Spudhouse models could be considered as backups should the Blake's tests not occur (care must still be taken with regard to intercepts), or they could be used to create an average Blake's/Spudhouse ISU weighted by RMSE. However, the Spudhouse models are considerably more erratic in performance and have higher intercepts, and for those reasons should not be relied upon alone.

Given that the 2017 wild coho forecast is considerably below the critical escapement threshold, the co-managers agree to be very cautious when considering in-season updates and potential fishery openings that may be considered should an ISU indicate harvestable surplus. For this reason, the agreed to in-season update value used for management purposes will be the lower 75% prediction interval of the ISU rather than the midpoint value. To allow for uncertainty and a sufficient number of harvestable fish, the co-managers will not consider opening fisheries unless an agreed ISU (lower 75% prediction interval of the ISU model projection) exceeds 53,000, at which point a 12.5% treaty commercial harvest rate could be considered.

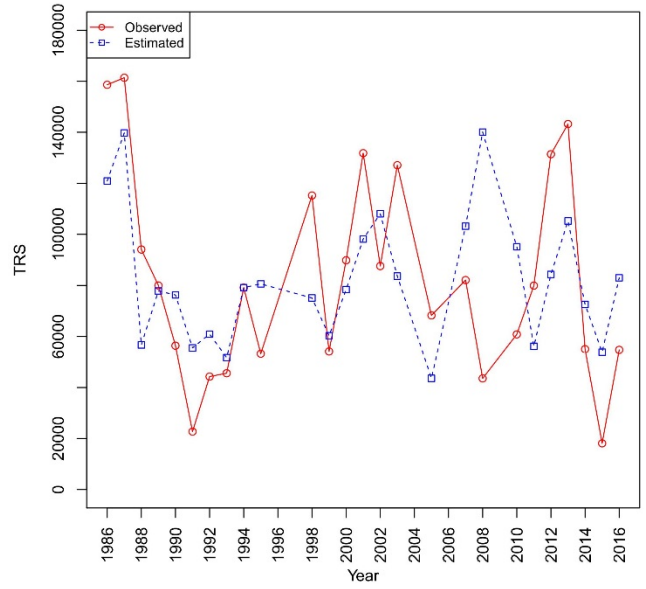
BLAKE'S MODELS

Week 38: Blake's Week 38 C/H – *NOT USEFUL FOR 2017*

Blakes Wk 38 Catch Per Hour

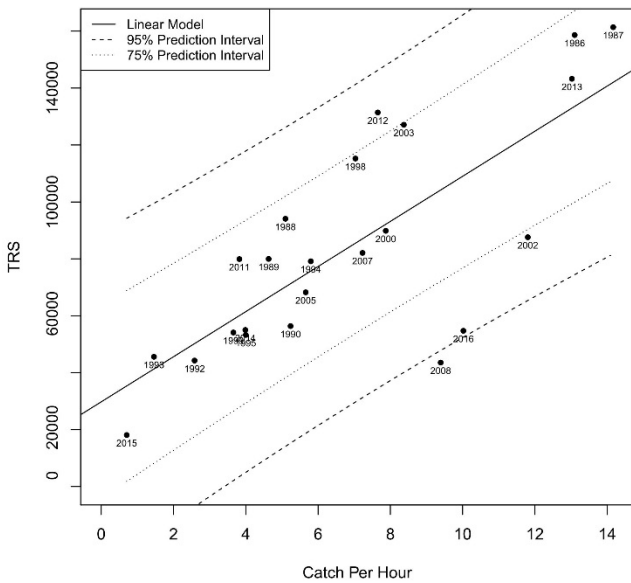


Cross-Validation Hindcast

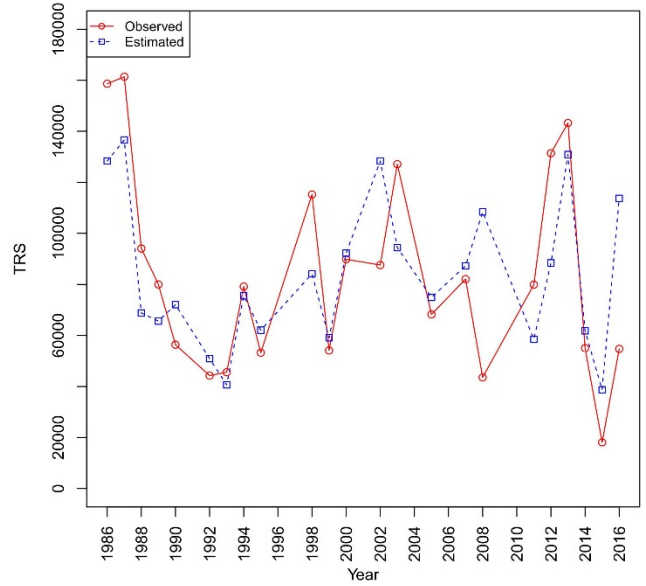


Week 39: Blake's Weeks 38-39 C/H -- *NOT USEFUL FOR 2017*

Blakes Wks 38-39 Catch Per Hour

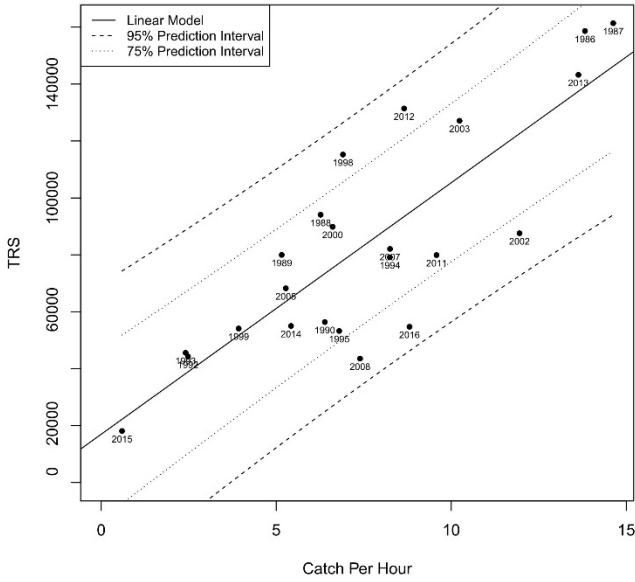


Cross-Validation Hindcast

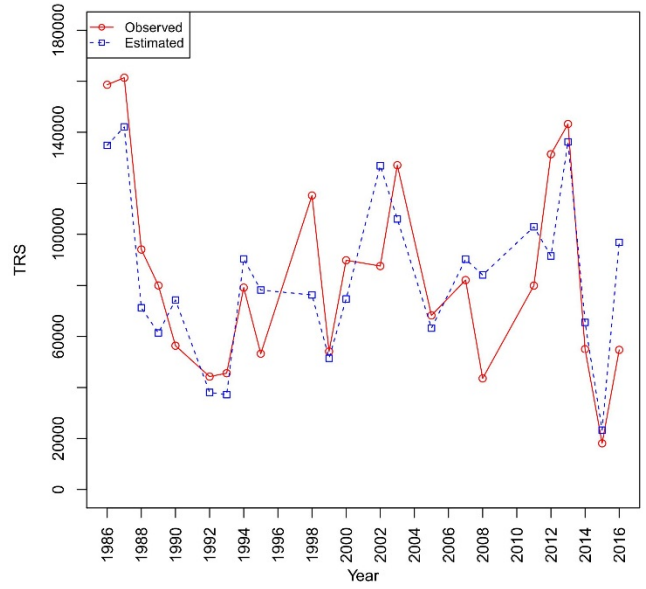


Week 40: Blake's Week 38-40 Cumulative C/H -- *NOT USEFUL FOR 2017*

Blakes Wks 38-40 Catch Per Hour

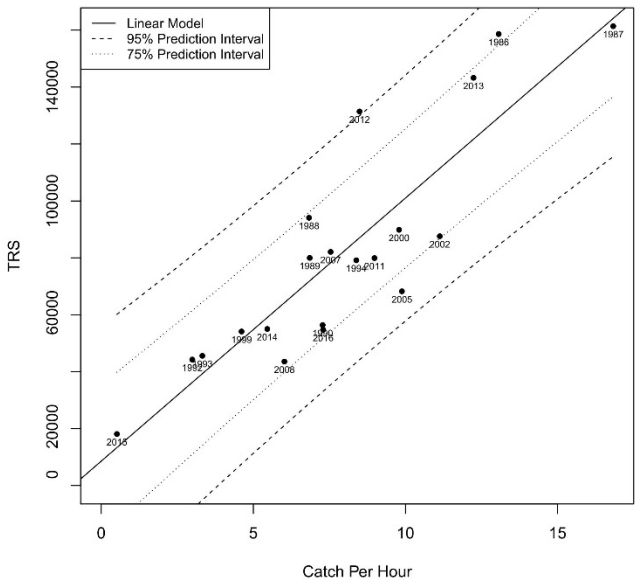


Cross-Validation Hindcast

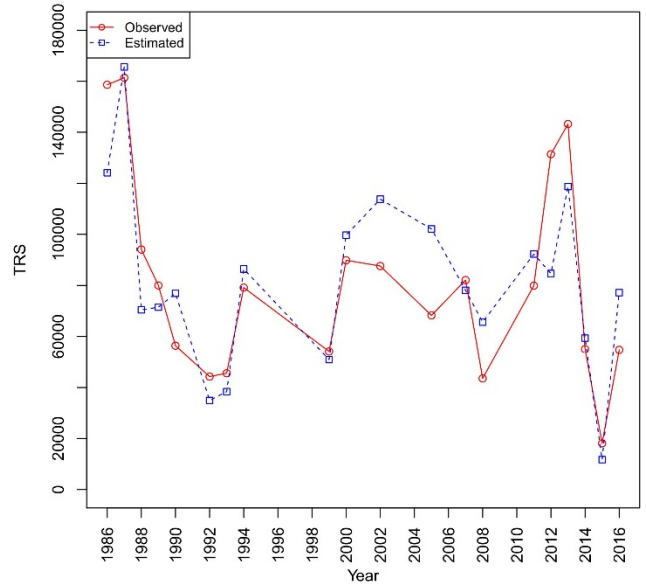


Week 41: ISU, Blake's Week 38-41 Cumulative C/H

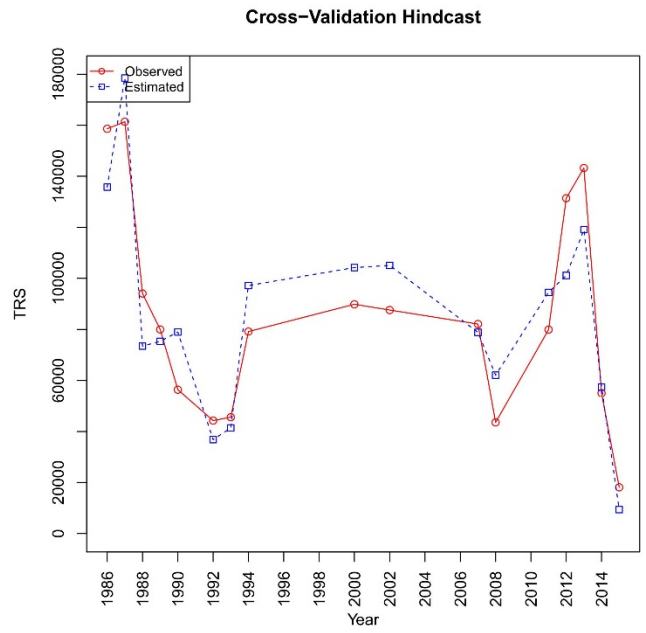
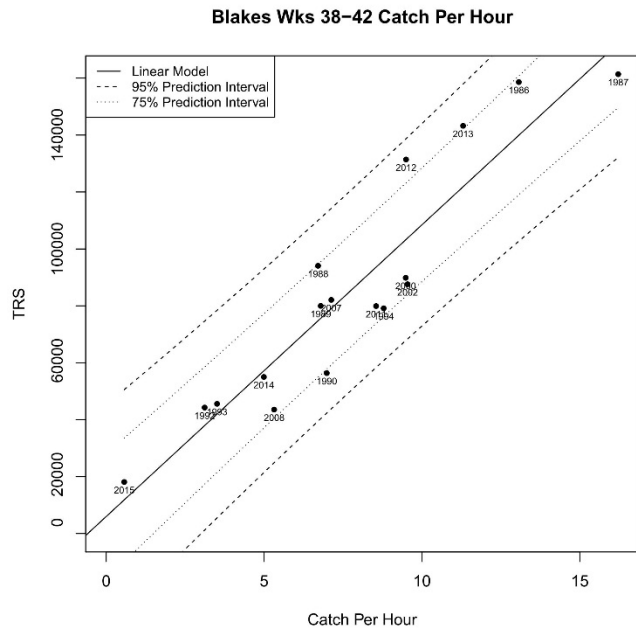
Blakes Wks 38-41 Catch Per Hour



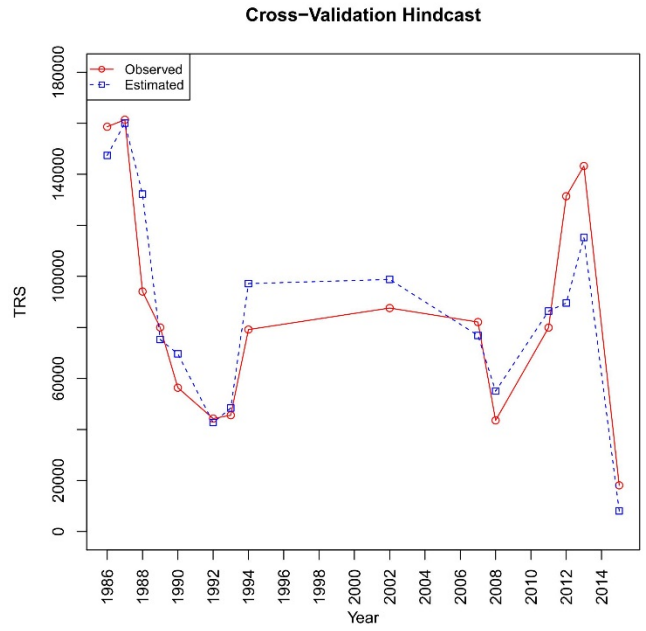
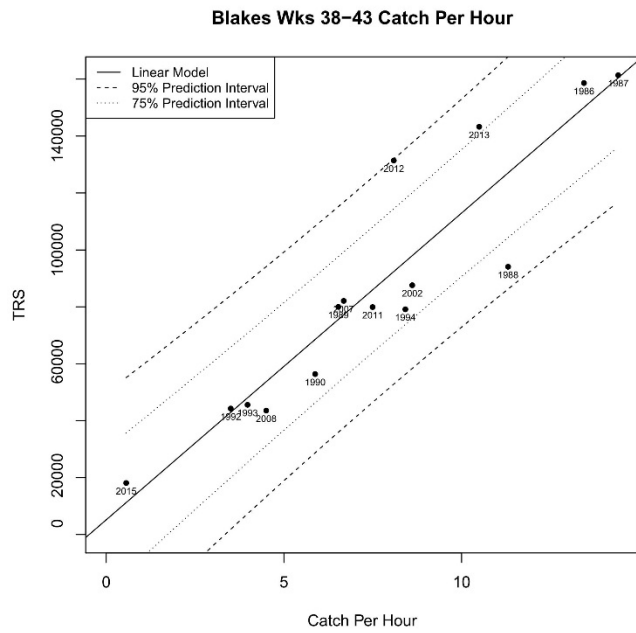
Cross-Validation Hindcast



Week 42: ISU, Blake's Week 38-42 Cumulative C/H

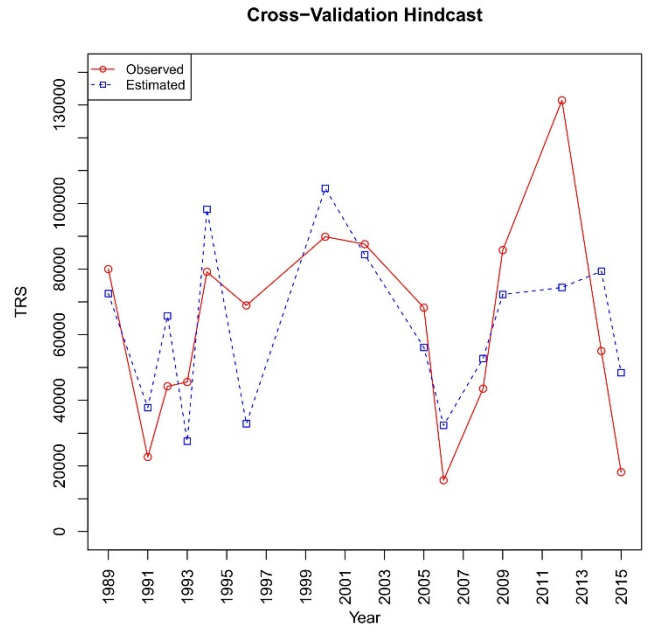
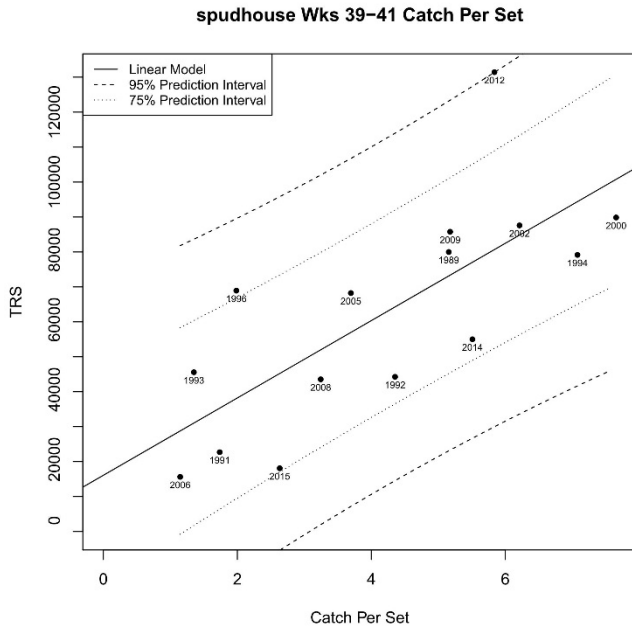


Week 43: ISU, Blake's Week 38-43 Cumulative C/H

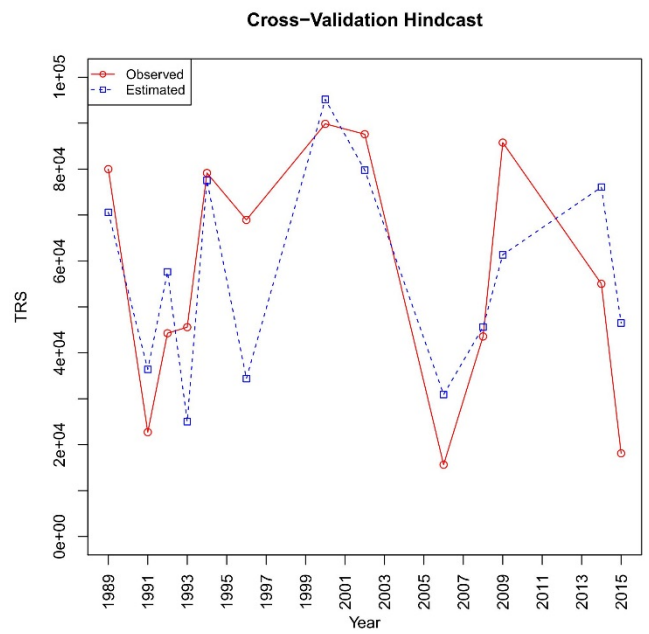
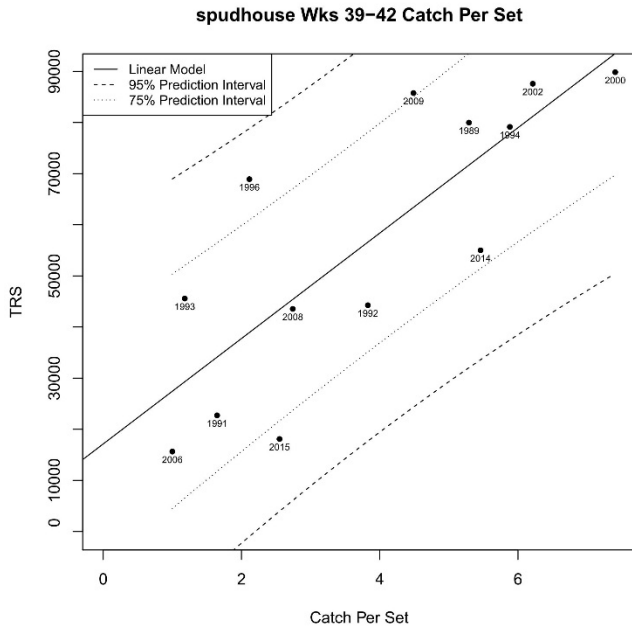


SPUDHOUSE MODELS

Week 41: Spudhouse Weeks 39-41 Cumulative C/S



Week 42: Spudhouse Weeks 39-42 Cumulative C/S



2017 WDFW Recreational Spring Chinook Fishery

Introduction

The Skagit Spring Chinook mark selective fishery occurs on the Skagit River between the Highway 530 Bridge at Rockport and the Cascade River Road Bridge at Marblemount, and in the Cascade River from the mouth to the Rockport–Cascade Road Bridge. Dates are from June 1 to July 15. The daily limit is four ad-clipped Chinooks per day, no more than two over 24". The bonus limit of jacks was first implemented in 2008 in an attempt to encourage anglers to keep jacks, instead of sorting and only keeping larger Chinooks. We are encouraging the removal of jacks in order to reduce genetic impacts caused by straying and hybridization with the native summer Chinooks.

This area and time frame was selected to avoid impacts to all but one wild stock. Three stocks, Sauk Springs, Suiattle Springs and Sauk Summers are not known to be present above the mouth of the Sauk River. From radio tagging studies performed by the Skagit System Cooperative from 1979-1981 (Granstrand and Gibson, 1981), Skagit Summer Chinook are rarely found above the mouth of the Sauk River until after July 15. Cascade River Spring Chinook are present, having to pass through the fishery to reach their spawning grounds.

Description of Sampling

The Skagit River spring Chinook fishery was monitored via creel from 2005 to 2012. In 2010 Dr. Kristen Ryding secured funding for three years in order to the indirect method for estimating the Coded Wire Tag (CWT) recoveries, for years 2010 through 2012. The indirect method of sampling will be used in future years in place of continued sampling.

2017 WDFW Skagit River Sockeye Fishery

Introduction:

The Skagit in river fishery will occur from the Memorial Highway Bridge in Mt. Vernon to Gilligan Creek, from June 11-July 15th. June 28, 29, July 6, 7 and 11 will be closed to avoid gear conflicts during Upper Skagit Indian Tribe commercial fisheries. The catch limit will be 3 Sockeye per day.

Description of Sampling

To assess angler effort, catch, total harvest and impacts to other stocks and species WDFW will conduct a creel survey on the Skagit River during the fishery. Sampling will occur four days a week and will cover both morning and afternoon time periods. They will sample for both effort and catch. Because two samplers can only cover eight of the potential fourteen time periods per week, expansions to time periods not covered will need to be made. Sampling will occur one day on weekends randomly selected. From Monday-Friday sampling will occur on three randomly selected days per week. Catch will be calculated on a daily basis, and for days not sampled expansions will be made using data collected from that week and strata (weekend or weekday).

During the creel interview two pieces of information will be collected, angler effort and catch data. Information collected from angler interviews include number in party, angler type (i.e., boat or shore), whether or not anglers have completed their trip, start and stop time, number of trailers and cars associated with the party, and the number of fish kept and released by species and mark.

Effort:

Index effort counts will be made by counting the number of boat trailers and cars at four public boat launches located within the fishing area and at several bank access sites. Two effort counts per shift, four per day will be made by samplers. Effort count times will be chosen by breaking the day into four time periods with times randomly chosen. In addition total effort will be counted twice a week by jet sled. The total number of boats and bank anglers within the fishing area will be counted. Total daily effort will be expanded by the ratio of index counts to actual counts.

Average numbers of anglers per boat, trailer, and by vehicle will come from angler interviews, each piece will be necessary to calculate total effort. Total hourly effort will be expanded by the total number hours of fishing available on any given day.

Catch: Interviews will take place at all know access sites in proportion to effort. CPUE for Sockeye, Chinook, steelhead and bull trout encounters will be calculated from interviews. Other species may also be calculated if interest/concern warrants. CPUE will be calculated by angler type (boat, bank) on a daily basis from angler interviews. Total catch will be calculated by multiplying CPUE by the total daily effort for each angler type.

Methods

The methods used to expand effort and angler catch data to estimate total effort and harvest are outlined in WDFW Methods Manual-Creel Information from Sport Fisheries (Hahn 2000).

Biological sampling: If sockeye are tagged for timing studies, the pertinent information will be collected. WDFW will work with biological staff from USIT to determine details. If Chinook or steelhead are encountered pertinent biological sampling will occur. **Skagit River tributaries; Gamefish fisheries.** The following tributaries will be closed to gamefish fishing, on the specified dates, in order to protect weak returns of salmon in 2017.

Skagit River tributaries; Gamefish fisheries. The following tributaries will be closed to gamefish fishing, on the specified dates, in order to protect weak returns of salmon in 2017.

Stream	Limiting Species	Closure Date
All Creek	Pink	July 31
Bacon Creek	Pink	Aug 15
Upper Baker River	Sockeye	Aug. 31
Boulder Creek	Pink	Aug 15
Buck Creek	Chinook	July 31
Camp Creek	Chinook	July 31
Cascade River	Chinook	July 15
Channel Creek	Sockeye	Aug. 31
Diobsud Creek	Pink	Aug. 15
Downey Creek	Chinook	July 31
Found Creek	Chinook	July 31
Goodell Creek	Pink	Aug. 15
Hansen Creek	Pink	Aug. 31
Illabot Creek	Pink	Aug. 15
Jordan Creek	Pink	Aug. 15
Kindy Creek	Chinook	July 31
Ladder Creek	Pink	Aug. 15
Lime Creek	Chinook	July 31
Marble Creek	Chinook	July 31
Milk Creek	Chinook	July 31
Nookachamps Creek	Pink	Aug. 31
Pugh Creek	Chinook	July 31
Sauk River	Chinook	July 15
Straight Creek	Chinook	July 31
Suiattle Creek	Chinook	July 15
Sulphur Creek	Chinook	July 31
Tenas Creek	Chinook	July 31
Thornton Creek above Hwy 20	Coho	Oct 31
White Chuck River	Chinook	July 15

Green/Duwamish coho salmon in-season update model

The Muckleshoot Indian Tribe conducted a coho test fishery during statistical week 36 from 2003-2010 and 2016. This test fishery was revived in 2016 due to the unprecedentedly low run sizes projections for many stocks in Puget Sound, including the Green River stock. This test fishery uses gill net catches from six sites in the lower Duwamish River between the mouth in the East and West Waterway and the 16th Avenue Bridge. One net (300 feet of 5 inch mesh webbing) is fished at each site from 7 PM to 7 AM. Coho from each net are enumerated and combined with the terminal run size to project returns for the current year.

This in-season update methodology models escapement as a function of test fishery catches. Initial modeling examined multiple metrics to predict escapement. These metrics included the maximum catch among the six sites and the geometric mean of the n (n = 2, 3, 4, and 6) largest catches (Table 1). These models were fit in R using a general linear model with a Poisson distribution. The model with the lowest Akaike's Information Criteria value was used to project the in-season run size.

Table 1. Available data for the Green River in-season update model. TRS is the terminal run size and projected is the projection from the model.

Year	Max	2	3	4	All	TRS	Projected
2003	71	70.5	69.3	62.9	29.4	80,414	64,220
2004	709	543.7	327.7	248.9	154.2	168,411	169,680
2005	44	37.5	28.2	24.1	17.0	75,060	60,017
2006	69	59.9	45.4	37.4	24.1	85,494	62,838
2007	98	77.3	69.4	59.3	37.4	52,101	65,126
2008	88	46.9	32.8	27.4	19.5	65,951	61,184
2009	52	39.5	32.0	28.8	22.5	43,021	60,260
2010	34	33.5	33.3	29.3	23.5	32,396	59,522
2016	182	96.3	53.0	37.3	25.5	52,146	65,893

Over the nine years of available data, the average projection was 11.3% greater than the observed terminal run size (Table 1).

South Sound chum salmon in-season update model - MIT

The Northwest Indian Fisheries Commission has conducted a chum test fishery during statistical week 41-49 from 1981-2016 (Table 1). This test fishery occurs near the area 9:10 line at Apple Cove Point using a purse seine boat that participates in the non-treaty commercial fishery.

Table 1. Available sample sizes from the 1981-2016 Apple Cove Point test fishery by week on the diagonal and sample sizes for groups of weeks on the off-diagonal. For example, 10 in week 41-46 means 10 years of data exist where these six weeks were all sampled.

Week	41	42	43	44	45	46	47	48	49
41	17	16	16	16	16	10	0	0	0
42 ¹		32	31	31	30	21	10	8	0
43			35	35	34	26	11	9	1
44				36	35	25	11	9	1
45 ²					35	25	11	9	1
46						26	12	9	1
47							12	9	1
48 ³								9	1
49									1

¹ Two sampling events during week 42 in 1983 were combined.

² The first of two sampling events during week 45 in 1985 and 1990 were moved to week 44.

³ The first of two sampling events during week 48 in 1988 was moved to week 47.

This in-season update methodology models South Sound terminal run sizes as a function of test fishery catches. Initial modeling examined multiple metrics to predict escapement. These metrics included geometric mean of all hauls in the weekly test fishery. Sequential multiple regression models were fit weekly beginning with the week 41 and 42 test fishery catches. These models were fit in R using a general linear model with a Poisson distribution. The model with the lowest Akaike's Information Criteria value was used to project the in-season run size.

These models improve as each week of data is added. This modeling structure can accommodate non-treaty gill net and purse seine catch per unit to further refine run size projections. Non-treaty net catches are most consistently available from weeks 43-46.

Warm Water Test Fishery 2017 – 2018 - MIT

This proposal put forth is designed to prosecute a test fishery that will collect a second year of information on the feasibility and potential impacts of a directed fishery (C&S and commercial) on warm-water fishes in the Lake Washington basin. The results of this test fishery will inform management moving forward with a full scale commercial fishery as well as a number of secondary considerations.

One major consideration is to determine the impact on ESA listed salmonids. This test fishery is scheduled to encompass times we can minimize impacts to ESA listed salmonids. Chinook adults typically start migrating into the lake in mid-June with spawning concluding the first week of November. The timing of the test fishery proposed, May-June 15 (2017) and January-April (2018), will eliminate impacts on migrating adult Chinook. The June portion of this test fishery will only occur in Lake Sammamish to eliminate impacts to adult migratory Chinook that beginning to enter the Lake Washington Ship Canal during this period. Using large mesh gillnets will eliminate impacts on age-0 Chinook and any potential steelhead smolts migrating out to sea. The probability of encountering an adult wild steelhead is very low to zero. If one is encountered, it would likely be a wild stray fish from a neighboring watershed such as the Green River. Steelhead surveys in the Sammamish River tributaries, including Lake Sammamish, were discontinued at the end of 2003 after five years of surveys in which no steelhead or steelhead redds were observed. Therefore, no risk of encounters exists in Lake Sammamish. There are very few remaining steelhead spawning in the Cedar River. From 2009 through 2015, redd-based escapement estimates for the Cedar River have averaged just over two (2) steelhead per year. Further, several of these redds may be the result of large cutthroat trout that are known to overlap with steelhead.

Regardless, the potential exists to encounter steelhead which necessitates structuring this test fishery to minimize these impacts. In the first year of this test fishery (January – April 2017), the entire Lake Washington Ship Canal and the southwestern shoreline of Lake Washington extending from the Ship Canal to slightly past the mouth of the Cedar River were excluded from the proposed test fishery. This closure was implemented because this area was believed to be the most likely area where migrating adult steelhead would be encountered. Through March 31, 2017 (12 weeks of effort), no steelhead have been encountered in any areas of the Lake Washington basin we have fished. In the second year of this test fishery, we propose to direct limited effort in a portion of this previously closed zone in Lake Washington on the western shoreline between the 520 bridge and the mouth of the Cedar River. To limit potential encounters with adult migrating steelhead in this zone, we will only fish it after March 31. This should eliminate adult steelhead encounters because they should have migrated into the Cedar River.

The test fishing area will be divided into 7 zones. Lake Washington will have six zones (eastside of Mercer Island below I-90, eastside between the two bridges (I-90 and 520), on the west side north of the 520 bridge, on the east side north of the 520 bridge, west side between I-90 and 520, and west side south of the 520 bridge). Lake Sammamish will be the seventh zone. Each zone will be fished separately with only one zone being fished at any given time with a maximum of eight 300 foot gillnets deployed. Three to four boats will be present at all times – up to two tribal boats, up to two additional research boats and one enforcement boat. The gillnet mesh will range from 3 ½ to 6 inch stretch mesh. To further minimize interactions with steelhead, the gear will be monitored very closely and any steelhead caught will be immediately released (ancillary to this project we have successfully tagged and released multiple walleye). The cold water in the lake during this period will help reduce mortality of any released fish. Fishing will occur from one to four nights per week. Nets will be initially set on Monday morning

and be retrieved no later than Friday morning.

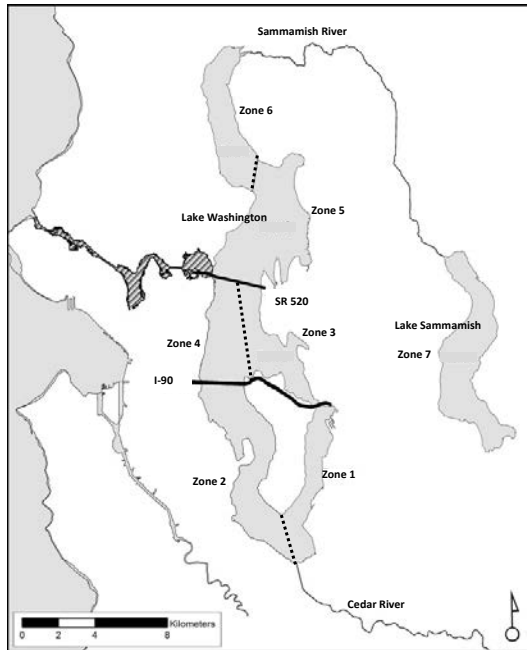


Figure 1. Proposed warmwater test fishery zones (1-7) and exclusion areas (cross-hatched) that will not be fished to minimize steelhead encounters.

A second consideration is that catch rates of targeted species (i.e. smallmouth bass, walleye) may be high enough to result in an economically viable fishery. The test fishery proposed will address this issue. Data collected will inform managers of areas and times that a tribal net fishery could be economically viable as well as areas to avoid/target minimizing bycatch and optimizing harvest.

Prosecuting this test fishery will allow us to address a number of other issues that will benefit salmonid management in the Lake Washington basin. A new predator, walleye, which likely has negative impacts to salmonids, has been introduced and a lack of information is available on adult diets and distribution in Lakes Washington and Sammamish is available. A second highly invasive predator, northern pike, was captured during the first year of our test fishery. We will instrument up to 15 walleye (or northern pike) with multi-year acoustic transmitters during this time to assess their overlap with migrating juvenile salmonids in addition to locating areas these invasive predators may be targeted in subsequent fisheries. Instrumented walleye (or pike) will be monitored with a network of fixed station acoustic receivers through the Lake Washington and Sammamish basin. This network is used to monitor the migratory behavior of smolting Coho salmon as well as returning adult Sockeye and Chinook salmon. We will use the overlap of juvenile Coho and walleye as a model of the potential interactions with ESA listed Chinook.

Take estimation and reporting

We believe there is a very small to zero potential impact for this test fishery to interact with adult steelhead in Lake Washington and no potential for interaction with adult migratory Chinook. Even with that we have designed this test fishery to minimize these interactions. Should there be an encounter, steelhead or Chinook will be handled carefully by trained professional staff and as much biological data will be taken as possible. Lengths, fin clips for genetic analyses, marks, and locations. Further, should

staff believe survival upon release is questionable; the steelhead will be retained and reported as ceremonial and subsistence treaty catch.

Understanding the potential for interaction with the public, we propose monthly reporting on this test fishery to NOAA. These reports will contain gear used, area fished, and effort. Further, any natural adult steelhead or Chinook encountered will be immediately reported. This test fishery will be immediately shut down if and when a third natural origin adult steelhead is encountered or fifth natural origin adult Chinook.

Monitoring Piscivorous Fish Populations in Lake Washington and In the Lake Washington Shipping Canal

4/10/2017

Objectives

1. Describe the utility of boat-mounted electrofishing and gill netting to remove predators of salmonids in the Lake Washington Shipping Canal (LWSC) and selected areas of Lake Washington.
2. Assess the species composition, relative abundance, and temporal changes of piscivorous fish populations (fish that prey on juvenile salmonids) in Lake Washington and the Lake Washington Shipping Canal.
3. Detect the presence of illegally introduced fish species such as walleye and northern pike.

Monitoring Plan Summary

Electrofishing catch rates coupled with variable-mesh gill nets are a common approach for monitoring temporal changes in fish abundance and species composition in lakes. This document describes a plan to monitor piscivorous (fish that prey on juvenile salmonids) fish populations in Lake Washington and the Lake Washington Ship Canal (LWSC) at “index sites” where piscivore fish populations are perceived to be high. The use of index sites will reduce variability in catch rates across sites and allow for an unbiased assessment of inter-annual changes in fish abundance. Additionally, electrofishing will allow for the capture of piscivorous fish with minimal impacts to ESA-listed salmonids.

Methods

Electrofishing: Electrofishing will be conducted at night using a boat electro-shocker and a three-person crew (two netters and one boat driver). Up to ten index areas will be identified within Lake Washington and the Lake Washington Ship Canal (Figures 1 & 2), and four 600-second (pedal-down time) “shock sections” will be established within each index area. The boat will be maneuvered through the shallows (depth range 0.2–1.5 m) adjacent to the shoreline at an average rate of 40 m/min.

Sampling of the index areas will occur during the night over a 6-week time period from early September to mid-October, with each shock section being sampled twice during the sampling period. Selected index sites may also be sampled with electrofishing gear during a spring (April 25 – June 3) sampling effort. Early fall is an effective time to electrofish, as piscivorous fishes are actively using the shallow water index areas identified in Figures 1 & 2. Early fall is also the optimal time to detect evidence of natural reproduction (juvenile fish) from illegally introduced species such as walleye. Catch per unit effort (CPUE) of electrofishing (fish/hour) will be calculated for each target species, and compared among weeks to describe changes in gear effectiveness throughout the study period.

Gill Netting: Variable-mesh monofilament gill nets (25 feet-2 inch; 25 feet-2.5 inch; 50 feet-3 inch; 50 feet-4 inch) will be set in selected index areas within Lake Washington and the LWSC at night (12-16 hour set time; Figure 2) during the spring (April 25 – June 3) sampling period.

Gill nets will be set with alternating orientations, i.e., parallel and perpendicular to shore, to evaluate the effect of net orientation on catch per unit effort (CPUE). Although setting nets perpendicular to shore is

effective for capturing bass, results from Wolvert and McLelland (2015, 2016) suggests setting nets parallel to shore is more effective. Locality data (Lat/Long) and depth range will be recorded for each net set.

Processing Samples: Target species including Walleye, Northern Pike, Smallmouth Bass, Largemouth Bass, Rock Bass, Yellow Perch, and Northern Pikeminnow will be removed, measured to the nearest millimeter and weighed to the nearest gram. All non-target species will be counted, and any captured alive will be released after being weighed.

Timing Considerations: Monitoring/sampling will occur during spring (April 25 – June 3) and fall (September 1 – October 15) sampling periods. Electrofishing will occur at night during both spring and fall sampling periods, and gill netting would occur only during the spring sampling period.

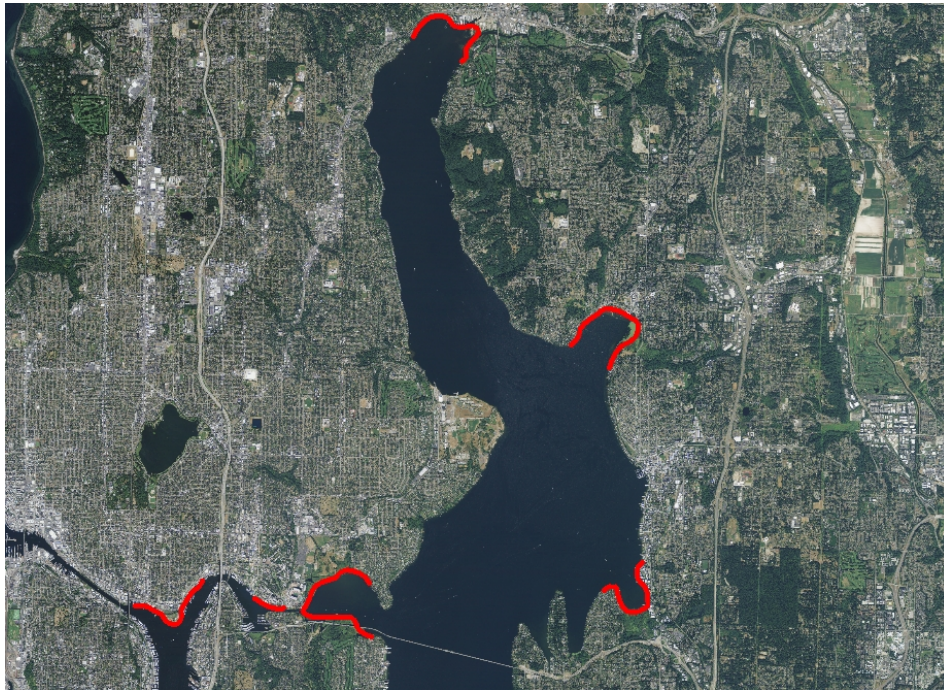


Figure 1. Potential index sites in the north half of Lake Washington, including the Lake Washington Shipping Canal, and Lake Union.

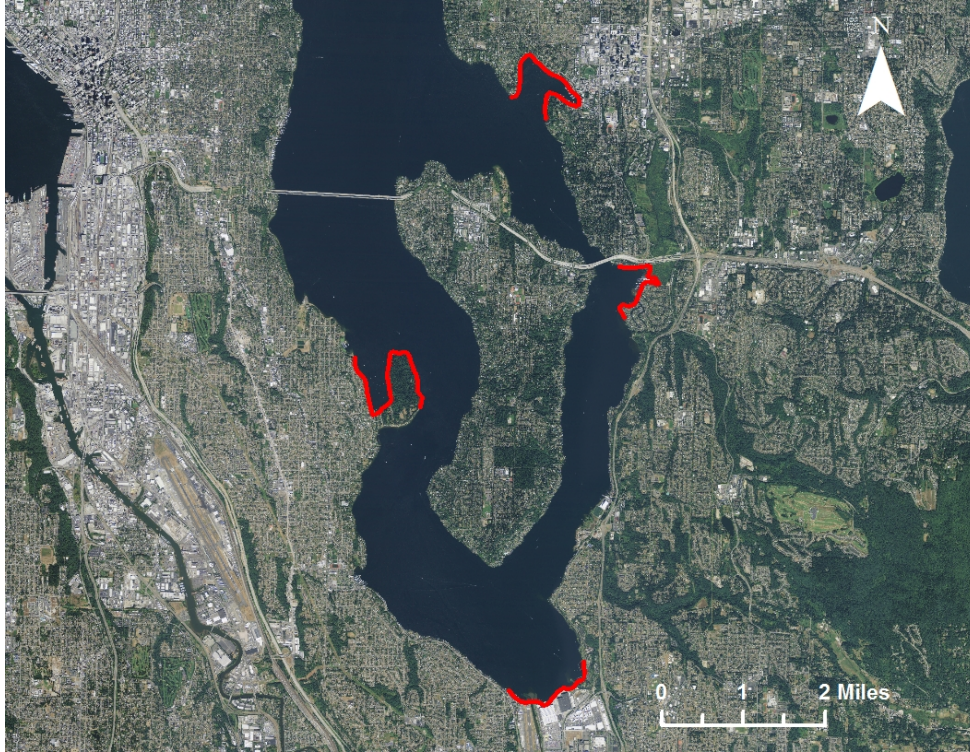


Figure 2. Potential index sites in the south half of Lake Washington.

ESA Considerations

The Puget Sound Chinook Harvest Management Plan (PSCHMP; NMFS 2010) as extended allows for limited take of listed species during research activities within each Management Unit (MU): "Mortality associated with certain monitoring and research activities (e.g. test fisheries and update fisheries), that primarily inform in-season harvest management decisions, will be accounted with other fishery related mortality under the ER ceilings defined for each MU. Mortality associated with other research and monitoring, which have broader applicability to stock assessment, will not be accounted under the ER ceilings. Mortality in this latter category will not exceed a level equivalent to 1% of the estimated annual abundance (i.e. 1% ER), for any MU." As such, there is limited take for Puget Sound Chinook available to this proposed project under the PSCHMP, in combination with other projects within the MU. Steelhead take for research purposes has historically been covered separately, but was written into the NMFS 2016-17 biological opinion for the Puget Sound salmon fisheries, which effectively extend the 2010 PSCHMP.

This piscivore monitoring study will have limited potential to take listed anadromous species (PS Chinook and PS steelhead). While it is likely no take will occur, the chance exists, and so estimated take values are provided below:

1. Steelhead adults: The probability of encountering an adult steelhead is low. Puget Sound adult steelhead would not be migrating through the Lake Washington watershed or any neighboring watersheds during either spring or fall sampling periods. If one is encountered, it would likely be a stray fish from a neighboring watershed such as the Green or Snohomish rivers. The take is estimated as one adult.

2. Steelhead juveniles: Due to the timing of the study, juvenile steelhead will likely have migrated through and exited the action area. Late migrants that may be present have a low likelihood of encountering the gear; gillnet mesh size is too large to entangle juveniles (2 to 4 inch stretch mesh), and boat electroshocking will be conducted in shallow nearshore areas where juvenile Steelhead are not likely

to be present. The take is estimated as two juvenile Steelhead.

3. Chinook adults: Chinook adults typically start migrating through the action area in mid-June. Although spring sampling would occur before Chinook adults are present in the action area, the fall portion of this project is scheduled to take place in the months of September and October, when Chinook adults will be migrating through the Lake Washington system. Electrofishing will be done in shallow embayments and nearshore areas above the thermocline where Chinook adults are unlikely to be present. Chinook adults migrating through the LWSC and Lake Washington are more likely to use deep-water off-shore habitats where electrofishing will not occur. A combined gear take of 10 Chinook adults (NOR and/or HOR) is estimated.

4. Chinook juveniles: Juvenile Chinook will likely have migrated through and exited the action area by September/October (the fall sampling period), but small numbers of juveniles may still be present during the spring sampling period (late-April – early June). Gillnet gear encounters will be unlikely as the mesh size is too large to catch a Chinook juvenile (2 to 4 inch stretch mesh) and poses very little threat. Late migrants or lake-rearing individuals that may be present have a low likelihood of encountering the boat electroshocker, as monitoring will be conducted in shallow nearshore areas where juvenile Chinook are less likely to be present. However, late migrating or lake-rearing juvenile Chinook may be encountered, and the take is estimated as 30 fish (NOR and/or HOR). The electroshocking portion of this study will stop once 30 juvenile Chinook are caught, and estimated take values for Chinook will be reassessed at that time. It is considered unlikely that this reassessment will be triggered.

As outlined above, the PSCHMP as extended provides coverage allotment for take of both Puget Sound Chinook and steelhead. Expected steelhead take is presented in bullets 1 and 2 above. Regarding Chinook take (HOR and NOR combined), the age classes need to be considered separately to relate them to the 1% annual abundance cap for this Chinook management unit (HOR and NOR combined). Accounting for the ten Chinook adults is straightforward. However, the Chinook smolt value needs to be equated to the loss of an adult fish in order to be considered as a portion of the annual adult abundance. Below is FRAM’s adult equivalent (AEQ) value for age 2 Chinook, as well as recent annual abundance values used in FRAM. (These HOR+NOR abundances were in the denominator for exploitation rate calculations in either the pre-season 2013-15, or the post-season FRAM runs 2010-12.) The age-2 AEQ value is used here as a proxy to a smolt AEQ value, and will therefore considerably overestimate the take percentage. The survival rate of a smolt to an age 2 fish is unknown, but is certainly considerably less than 100%.

- Equation: (#Handled * AEQ*Handling Mort)/Average Abundance. (Note that “Average Abundance” and “#Handled” refers to NOR and HOR fish combined.)
- Age 2 Chinook Lake Washington (Upper SPS FF) AEQ Mortality (May-June Time Step): 0.471
- Lake Washington Chinook Abundance (AEQ Mortality + Escapement) from FRAM Runs:

Year	Total Abundance	Natural Abundance	Source
2015	5164	722	Final pre-season
2014	8309	987	Final pre-season
2013	13182	1405	Final pre-season
2012	16164	2957	April 22 post-season
2011	6707	985	April 22 post-season
2010	6114	565	April 22 post-season

- $(30 \text{ smolt} * 0.471 * \text{Handling Mort}) / 9,300 = 0.15\%$
- $(10 \text{ adult} / 9,300) = 0.11\%$
- Total take = $0.15\% + 0.11\% = 0.26\%$

- At 100% handling mortality the exploitation rate is approximately 0.1% for two year old fish (n=30); note that this value is understood as significantly overestimating the actual percentage of take to the annual abundance as it assigns a smolt the same adult value as a 2 year old fish. Ten adult Chinook are also included in the take estimate. Thus, it can be assumed that the percentage of take from the annual abundance is considerably below the 1% allotment provided for in the PSCHMP (at 0.26%).

In summary, project impacts are significantly below the 1% allotment for Chinook annual abundance. The estimated take of HOR and NOR combined is 10 adults, and 30 smolts, which is 0.26% of annual abundance (when using the AEQ value of a 2 year old fish as a proxy for the AEQ of a smolt which is unknown).

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- Wolvert, S. and H. McLellan. 2016. Chief Joseph Kokanee Enhancement Project 2014 Annual Report. BPA Project # 1995-011-00.

Tulalip Tribes 2017 8A Coho Fishery Monitoring and Sampling program

Given the anticipated poor return of natural coho to the Skagit and Stillaguamish River during 2017, Tulalip has adjusted its regular fishing effort in the 8A management Area by i) reducing the 5 days per week schedule to only 2 days per weeks, ii) the two open fishing days will be simultaneous to Area 8D opening so the effort is accordingly split to the two areas, iii) limiting the open area to fishing in 8A to the eastern shore of 8A and proximal to the mouth of the Snohomish River (See Figure 1. below -- those waters of 8A east of a line from the southern tip of 8D at 2000 feet offshore to the marker off mission flat, thence to the buoy (yellow can) at the mouth of the Snohomish River, thence to 2,000 feet offshore, then to Mukilteo Point).

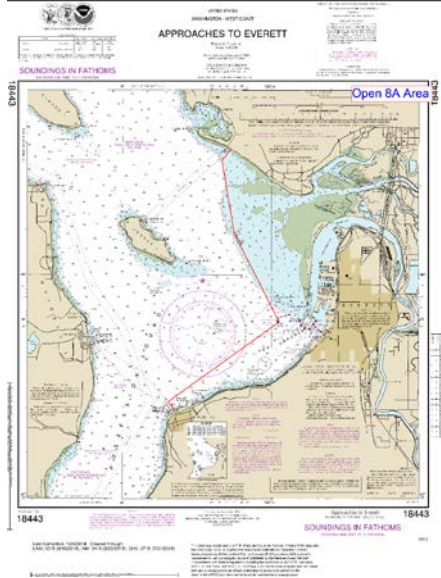
This area restriction was modeled in FRAM as a 50% reduction in the FRAM Base Period exploitation rate for the Stillaguamish and Skagit natural coho stocks. No changes were implemented to Snohomish natural, Wallace Hatchery, and Tulalip stocks. This reduced area also limits the access of larger gillnet boats (15% gillnet fleet) to the fishing grounds, which was modeled as a 15% reduction in the gillnet gear specific harvest rates.

Tulalip is also implementing an intense 8A sampling program including:

- High sampling rate for CWT, aiming to sample 50% of the coho catch each week. Each buyer station will be covered with a sampling team. This effort will be coordinated by Tulalip Tribes with sampling assistance from WDFW, and laboratory backup to the Tulalip Stock Assessment Lab from the Stillaguamish Tribe CWT Lab.
- At least 100 samples each week for DNA (SNP) analysis from unmarked and untagged coho.
- A coordinated plan with Stillaguamish, Skagit, Tulalip Tribes and WDFW to create a SNP baseline including the Snohomish, Stillaguamish and Skagit natural stocks, and potentially to other Puget Sound stocks as funding allows. Co-managers will collect 100 samples from natural adults during escapement surveys for three years (2017-2019) in each watershed.

Co-managers will have weekly conference calls starting in week 38 through week 42. On Tuesdays morning, Tulalip will provide 8A catch and sampling information from the previous week including (total catch, mark status and CWT detection and as available tag codes). Conference calls on Tuesday afternoon will include technical and policy staff. Additional policy meetings might be necessary to discuss potential management actions.

Figure 1. Area open to the 2017 Tulalip 8A Commercial Coho fishery



2017 Stillaguamish-Snohomish Terminal Area Run Size In-Season Update

Coho production in the Stillaguamish/Snohomish region of origin includes natural coho runs from both the Stillaguamish and Snohomish rivers, as well as hatchery production from the Tulalip Hatchery, the Wallace River Hatchery, and the Stillaguamish Hatchery.

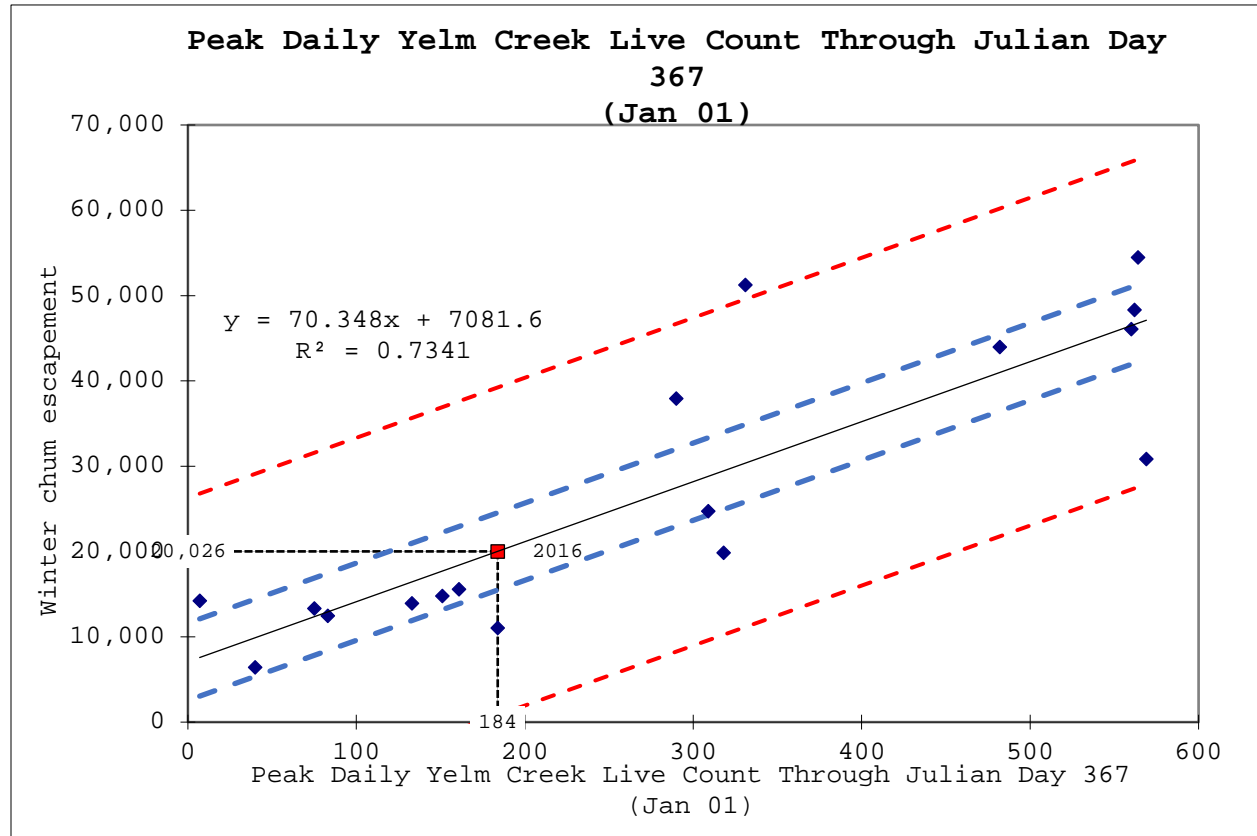
Managers will use information from the Tulalip commercial gillnet 8A fishery to evaluate the status of these management units in-season. The ISU update model(s) for the terminal Stillaguamish/Snohomish coho aggregate occurring in fishing area 8A relies on coho catch during calendar weeks 38-40 and reconstructed terminal abundances for the period 1985-2015 (in 2016 8A coho fisheries did not occur as the anticipated run strengths for the region stocks were very poor). We have previously identified week 39 as the best week to model the strength of the runs based on the mean or median catch per landing, with models explaining 75-80% of the variability of the modelled terminal run size. For the last two fishing 8A seasons, co-managers have implemented in R a linear model with bootstrap estimates of the median TRS, model parameters, as well as their empirical distributions. These estimates allows co-managers to assess the uncertainty in both, the run size estimates, as well as the model parameters.

During 2017, Tulalip coho fisheries in 8A will be targeting Snohomish coho and Tulalip hatchery stocks in the eastern portion of 8A (see map in “Tulalip Tribes 2017 8A Coho Fishery Monitoring and Sampling program”), and that poses challenges on how to make inferences on estimates based on this fishery.

Treaty and non-treaty co-managers will each compile and exchange relevant data sources to evaluate potential biases, along with other relevant information that may improve the ISU model(s) or inseason management no later than June 16. The co-managers commit to schedule a conference call or in-person meeting to discuss these data and other possible datasets prior to June 30. The co-managers further commit to finalizing refinements to inseason management modeling for the 2017 season, no later than August 4th, with an ongoing commitment to improve inseason management during 2017 and over the long term.

Nisqually Late Chum In-Season Update Model

The Nisqually Indian Tribe and NWIFC staff have built an in-season update model that predicts escapement using historical and current live counts in Yelm Creek, a small tributary at River Mile 13.5 in the Nisqually River. Live counts have been consistently surveyed weekly for over 40 years in Yelm Creek and recent years since 1990 have been regressed with total escapement for an escapement prediction tool. We plan to use this tool to predict an escapement at least 2,000 fish over the escapement goal of 18,000.



Nisqually HGMP Development 2017

The Co-managers are working with NOAA in developing a revised HGMP for the Nisqually River. The intent of the work is to capture the direction the co-managers are taking in the recovery of Nisqually Fall Chinook with the decision to move in a different direction absent the weir as a central tool for achieving local adaptation.

The co-managers have done a tremendous amount of quality work to date in the development of the HGMP, but some additional work is necessary to reach completion. To facilitate the incorporation of the best available science, the Nisqually Indian Tribe will be coordinating a number of workshops over the course of the summer. Topics for these workshops will include freshwater capacity monitoring and assessment, estuary capacity monitoring and assessment, stock productivity monitoring, habitat status and proposed future recovery actions. The schedules are being worked out with critical partners and will be available to all interested parties as they become more certain.

The intent of the co-managers, in close cooperation with NOAA, is to develop a draft HGMP by October 2nd of 2017. Specific elements including monitoring plans and implementation, harvest and habitat modeling and planning will continued to be refined as funding allows and updated through the co-managers annual adaptive management meeting with an intensive data review after 4 years to direct future actions.

2017-18 Summer Mark-Selective Sport Fishery

Marine Area 5

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 5 during the 2017 summer season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The summer Chinook MSF in Marine Area 5 will occur from July 1, 2017 through August 15, 2017. Anglers will be allowed a daily limit of up to two hatchery Chinook. All sub-area closures included in the 2017-18 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

The preseason prediction of total legal-sized Chinook encounters in Area 5 is 7,940 (FRAM 2017). WDFW plans to manage this fishery as a season, beginning and ending on the agreed-to dates (above). WDFW will ensure that the fishery does not exceed 9,528 predicted legal-sized Chinook encounters.

Sampling Design and Estimation Methodologies

WDFW will employ the 'Reduced Murthy' sampling design to monitor the Area 5 summer MSF and estimate total encounters and associated mortalities of legal, sublegal, marked and unmarked Chinook (see Attachment A). The size and mark-status composition of the targeted Chinook population will be estimated using Voluntary Trip Reports (VTRs). WDFW will employ the appropriate number of staff during the Area 5 summer MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will provide the co-managers with bi-weekly in-season catch and effort estimates beginning the week ending July 21, 2017.

WDFW will compile a comprehensive post-season report for all summer Chinook MSFs conducted in Marine Areas 5-13 by February 1, 2018. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 5 summer MSF, a full analysis of impact estimates (total encounters and mortalities by size and mark-status), and estimates of marked and unmarked mortalities of Double Index-Tagged (DIT) and other coded-wired tagged stocks as described in Attachment A.

2017-18 Summer Mark-Selective Sport Fishery

Marine Area 6

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 6 during the 2017 summer season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The summer Chinook MSF in Marine Area 6 will occur from July 1, 2017 through August 15, 2017, only in the portion of the area west of a true north/south line through buoy #2 near the tip of Ediz Hook. Anglers will be allowed a daily limit of up to two hatchery Chinook. All sub-area closures included in the 2017-18 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

WDFW will manage this fishery as a season, beginning and ending on the agreed-to dates (above).

Sampling Design and Estimation Methodologies

Sampling efforts will be conducted consistent with the 'Baseline Sampling Design' (see Attachment A). The size and mark-status of the targeted Chinook population will be estimated using Voluntary Trip Reports (VTRs). Total Chinook encounters and associated mortalities resulting from the Area 6 summer MSF will be estimated using the 'CRC for Encounters' methodology, described in Attachment A. WDFW will employ the appropriate number of staff during the Area 6 summer MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will compile a comprehensive post-season report for all summer Chinook MSFs conducted in Marine Areas 5-13 by February 1, 2018. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 6 summer MSF. A full analysis of impact estimates (total encounters and mortalities by size and mark-status) resulting from the Area 6 MSF, in addition to estimates of marked and unmarked mortalities of Double Index-Tagged (DIT) and other coded-wired tagged stocks as described in Attachment A will be provided at a later date, as Catch Record Card estimates become available (see Attachment A).

2017-18 Summer Mark-Selective Sport Fishery

Marine Area 7

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 7 during the 2017 summer season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The summer Chinook MSF in Marine Area 7 will occur from July 1, 2017 to July 31, 2017. Anglers will be allowed a daily limit of up to two hatchery Chinook salmon.

Fishery Controls

The preseason prediction of total legal sized Chinook salmon encounters in Area 7 is 2,236 (FRAM 2017). WDFW plans to manage this fishery as a season, beginning and ending on the agreed-to dates (above).

Sampling Design and Estimation Methodologies

WDFW will employ the 'Aerial Access' sampling design to monitor the Area 7 summer MSF and estimate total encounters and associated mortalities of legal, sublegal, marked and unmarked Chinook salmon (see Attachment A). The size and mark-status composition of the targeted Chinook population will be estimated using test fishing data. WDFW will employ the appropriate number of staff during the Area 7 summer MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will provide the co-managers with bi-weekly in-season catch and effort estimates beginning the week of July 23, 2017.

WDFW will compile a comprehensive post-season report for all summer Chinook MSFs conducted in Marine Areas 5-13 by February 1, 2018. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 7 summer MSF, a full analysis of impact estimates (total encounters and mortalities by size and mark-status), and estimates of marked and unmarked mortalities of Double Index-Tagged and other coded-wire tagged stocks as described in Attachment A.

2017-18 Summer Mark-Selective Sport Fishery

Marine Area 9

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement Chinook salmon mark-selective fisheries (MSFs) in Marine Area 9 during the 2017 summer season. These fisheries will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of these fisheries on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate these mark-selective fisheries.

Fishery Regulations

The summer Chinook MSF in Marine Area 9 will occur between July 16 and August 15, 2017. Anglers will be allowed a daily limit of up to two hatchery Chinook. All sub-area closures included in the 2017-18 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

The preseason modeled expected catch is 5,599 Chinook in Area 9 (FRAM 2017). WDFW will manage this fishery not to exceed the above catch quota. Upon reaching the quota, Area 9 will remain open to MSF coho fishing from shore until September 4, 2017.

Sampling Design and Estimation Methodologies

WDFW will employ the 'Full Murthy' sampling design to monitor the Area 9 summer MSFs and estimate total encounters and associated mortalities of legal, sublegal, marked and unmarked Chinook (see Attachment A). The size and mark-status composition of the targeted Chinook population will be estimated using test fishing data. WDFW will employ the appropriate number of staff during the Area 9 summer MSFs in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will provide the co-managers with preliminary weekly estimates of effort and encounters starting no later than Friday July 28, 2017 and continue through August 15, 2017. WDFW will compile a comprehensive post-season report for all summer Chinook MSFs conducted in Marine Areas 5-13 by February 1, 2018. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 9 summer MSF, a full analysis of impact estimates (total encounters and mortalities by size and mark-status), and estimates of marked and unmarked mortalities of Double Index-Tagged (DIT) and other CWT stocks as described in Attachment A.

2017-18 Summer Mark-Selective Sport Fishery

Marine Area 10

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement Chinook salmon mark-selective fisheries (MSFs) in Marine Area 10 during the 2017 summer season. These fisheries will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of these fisheries on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate these mark-selective fisheries.

Fishery Regulations

The summer Chinook MSF in Marine 10 will occur between July 16 and August 15, 2017. Anglers will be allowed a daily limit of up to two hatchery Chinook. All sub-area closures included in the 2017-18 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Thresholds

The preseason modeled expected catch is 2,166 Chinook in Area 10 (FRAM 2017). WDFW will manage these fisheries not to exceed the above catch quota.

Sampling Design and Estimation Methodologies

WDFW will employ the 'Full Murthy' sampling design to monitor the Areas 10 summer MSFs and estimate total encounters and associated mortalities of legal, sublegal, marked and unmarked Chinook (see Attachment A). The size and mark-status composition of the targeted Chinook population will be estimated using test fishing data. WDFW will employ the appropriate number of staff during the Area 10 summer MSFs in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will provide the co-managers with weekly in-season catch and effort estimates no later than Friday July 28, 2017 and continue through August 15, 2017. WDFW will compile a comprehensive post-season report for all summer Chinook MSFs conducted in Marine Areas 5-13 by February 1, 2018. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 10 summer MSFs, a full analysis of impact estimates (total encounters and mortalities by size and mark-status), and estimates of marked and unmarked mortalities of Double Index-Tagged (DIT) and other coded-wire tagged stocks as described in Attachment A.

2017-18 Summer Mark-Selective Sport Fishery

Marine Area 11

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 11 during the 2017 summer season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The summer Chinook MSF in Marine Area 11 will occur from June 1, 2017 through September 30, 2017. Anglers will be allowed a daily limit of up to two hatchery Chinook. All sub-area closures included in the 2017-18 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

The preseason prediction of total legal-sized Chinook encounters in Area 11 is 7,199 (FRAM 2017). WDFW plans to manage this fishery as a season, beginning and ending on the agreed-to dates (above). However, if in-season estimates indicate that total Chinook encounters will exceed 80% of the preseason modeled legal-size encounters, WDFW will initiate co-manager discussion regarding potential fishery actions. WDFW will ensure that the fishery does not exceed 8,638 predicted legal-sized Chinook encounters.

Sampling Design and Estimation Methodologies

WDFW will employ the 'Reduced Murthy' sampling design to monitor the Area 11 summer MSF and estimate total encounters and associated mortalities of legal, sublegal, marked and unmarked Chinook (see Attachment A). The size and mark-status composition of the targeted Chinook population will be estimated using Voluntary Trip Reports (VTRs). WDFW will employ the appropriate number of staff during the Area 11 summer MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will provide the co-managers with bi-weekly in-season catch and effort estimates beginning the week ending June 23, 2017.

WDFW will compile a comprehensive post-season report for all summer Chinook MSFs conducted in Marine Areas 5-13 by February 1, 2018. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 11 summer MSF, a full analysis of impact estimates (total encounters and mortalities by size and mark-status), and estimates of marked and unmarked mortalities of Double Index-Tagged (DIT) and other CWT stocks as described in Attachment A.

2017-18 Summer Selective Sport Fishery

Marine Area 12

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 12 during the 2017 summer season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The summer Chinook MSF in Marine Area 12 will occur from July 1, 2017 through September 30, 2017, only in the portion of the area located south of Ayock Point. Anglers will be allowed a daily limit of up to four salmon. All sub-area closures included in the 2017-18 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

WDFW will manage this fishery as a season, beginning and ending on the agreed-to dates (above).

Sampling Design and Estimation Methodologies

Sampling efforts will be conducted consistent with the 'Baseline Sampling Design' (see Attachment A). The size and mark-status of the targeted Chinook population will be estimated using Voluntary Trip Reports (VTRs). Total Chinook encounters and associated mortalities resulting from the Area 12 summer MSF will be estimated using the 'CRC for Encounters' methodology, described in Attachment A. WDFW will employ the appropriate number of staff during the Area 12 summer MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will compile a comprehensive post-season report for all summer Chinook MSFs conducted in Marine Areas 5-13 by February 1, 2018. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 12 summer MSF. A full analysis of impact estimates (total encounters and mortalities by size and mark-status) resulting from the Area 12 MSF, in addition to estimates of marked and unmarked mortalities of Double Index-Tagged (DIT) and other CWT stocks as described in Attachment A will be provided at a later date, as Catch Record Card estimates become available (see Attachment A).

2017-18 Summer Mark-Selective Sport Fishery

Marine Area 13

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 13 during the 2017 summer season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The summer Chinook MSF in Marine Area 13 will occur from May 1, 2017 through September 30, 2017. Anglers will be allowed a daily limit of up to two hatchery Chinook. All sub-area closures included in the 2017-18 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

WDFW will manage this fishery as a season, beginning and ending on the agreed-to dates (above).

Sampling Design and Estimation Methodologies

Sampling efforts will be conducted consistent with the 'Baseline Sampling Design' (see Attachment A). The size and mark-status of the targeted Chinook population will be estimated using Voluntary Trip Reports (VTRs). Total Chinook encounters and associated mortalities resulting from the Area 13 summer MSF will be estimated using the 'CRC for Encounters' methodology, described in Attachment A. WDFW will employ the appropriate number of staff during the Area 13 summer MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will compile a comprehensive post-season report for all summer Chinook MSFs conducted in Marine Areas 5-13 by February 1, 2018. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 13 summer MSF. A full analysis of impact estimates (total encounters and mortalities by size and mark-status) resulting from the Area 13 MSF, in addition to estimates of marked and unmarked mortalities of Double Index-Tagged (DIT) and other coded-wired tagged stocks as described in Attachment A will be provided at a later date, as Catch Record Card estimates become available (see Attachment A).

2017-18 Winter Mark-Selective Sport Fishery

Marine Area 5

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 5 during the 2017-2018 winter season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The winter Chinook MSF in Marine Area 5 will occur from March 16 to April 30, 2018. Anglers will be allowed a daily limit of up to two hatchery Chinook. All sub-area closures included in the 2017-18 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

WDFW will manage this fishery as a season, beginning and ending on the agreed-to dates (above).

Sampling Design and Estimation Methodologies

Sampling efforts will be conducted consistent with the 'Baseline Sampling Design' (see Attachment A). The size and mark-status composition of the targeted Chinook population will be estimated using Voluntary Trip Reports (VTRs). Total Chinook encounters and associated mortalities resulting from the Area 5 winter MSF will be estimated using the 'CRC for Encounters' methodology, described in Attachment A. WDFW will employ the appropriate number of staff during the Area 5 winter MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will compile a comprehensive post-season report for all winter Chinook MSFs conducted in Marine Areas 5-13 by November 30, 2018. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 5 winter MSF. A full analysis of impact estimates (total encounters and mortalities by size and mark-status) resulting from the Area 5 MSF, in addition to estimates of marked and unmarked mortalities of Double Index-Tagged (DIT) and other coded-wire tagged stocks as described in Attachment A will be provided at a later date, as estimates from Catch Record Card become available (see Attachment A).

2017-18 Winter Mark-Selective Sport Fishery

Marine Area 6

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 6 during the 2017-2018 winter season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery-origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The winter Chinook MSF in Marine Area 6 will occur from March 1 to April 15, 2018. Anglers will be allowed a daily limit of up to two hatchery Chinook. All sub-area closures included in the 2017-18 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

The preseason prediction of total Chinook encounters in Area 6 is 2,302 (FRAM 2017). WDFW plans to manage this fishery as a season, beginning and ending on the agreed-to dates (above). Given the shorter duration of this fishery for 2018, the precision and accuracy of in-season estimates may be compromised by lack of available effort data. Co-managers will initiate an in-season call sometime during the week of March 19-23, 2018 to discuss fishery progress. If at any time during the fishery in-season estimates indicate that total encounters for the fishery will significantly exceed this preseason modeled estimate, WDFW will modify the fishery to control impacts on stocks of concern.

Sampling Design and Estimation Methodologies

WDFW will employ the 'Aerial Access' sampling design to monitor the Area 6 winter MSF and estimate total encounters and associated mortalities of legal, sublegal, marked and unmarked Chinook (see Attachment A). The size and mark-status composition of the targeted Chinook population will be estimated using test fishing data. WDFW will employ the appropriate number of staff during the Area 6 winter MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will compile a comprehensive post-season report for all winter Chinook MSFs conducted in Marine Areas 5-13 by November 30, 2018. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 6 winter MSF. A full analysis of impact estimates (total encounters and mortalities by size and mark-status) resulting from the Area 6 MSF, in addition to estimates of marked and unmarked mortalities of Double Index-Tagged and other coded-wire tagged stocks as described in Attachment A will be provided at a later date as estimates from Catch Record Card become available (see Attachment A).

2017-18 Winter Mark-Selective Sport Fishery

Marine Area 7

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 7 during the 2017-2018 winter season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The winter Chinook MSF in Marine Area 7 will occur from January 1, 2018 to April 30, 2018. Anglers will be allowed a daily limit of up to two hatchery Chinook. All sub-area closures included in the 2017-18 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

The preseason prediction of total Chinook encounters in Area 7 is 9,889 (FRAM 2017) and total unmarked encounters (legal-unmarked plus sublegal-unmarked) is 2,887 (FRAM 2017). WDFW plans to manage this fishery as a season, beginning and ending on the agreed-to dates (above). However, if in-season estimates indicate that total Chinook encounters are projected to be at 80% of the preseason modeled encounters, WDFW will initiate co-manager discussion regarding potential fishery actions. WDFW will ensure the fishery does not exceed 3,176 total unmarked encounters and/or exceed 11,867 total encounters.

Sampling Design and Estimation Methodologies

WDFW will employ the 'Aerial Access' sampling design to monitor the Area 7 winter MSF and estimate total encounters and associated mortalities of legal, sublegal, marked and unmarked Chinook (see Attachment A). The size and mark-status composition of the targeted Chinook population will be estimated using test fishing data. WDFW will employ the appropriate number of staff during the Area 7 winter MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will provide the co-managers with bi-weekly in-season catch and effort estimates beginning the week ending January 13, 2018.

WDFW will compile a comprehensive post-season report for all winter Chinook MSFs conducted in Marine Areas 5-13 by November 30, 2018. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 7 winter MSF, a full analysis of impact estimates (total encounters and mortalities by size and mark-status), and estimates of marked and unmarked mortalities of Double Index-Tagged (DIT) and other CWT stocks as described in Attachment A.

2017-18 Winter Mark-Selective Sport Fishery

Marine Area 9

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 9 during the 2017-2018 winter season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The winter Chinook MSF in Marine Area 9 will occur from November 1 to November 30, 2017 and from January 16 to April 15, 2018. Anglers will be allowed a daily limit of up to two hatchery Chinook. All sub-area closures included in the 2017-18 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

The preseason prediction of total Chinook encounters in Area 9 is 11,053 (FRAM 2017). WDFW plans to manage this fishery as a season, beginning and ending on the agreed-to dates (above). However, if in-season estimates indicate that total Chinook encounters are projected to be at 80% of the preseason modeled encounters, WDFW will initiate co-manager discussion regarding potential fishery actions. WDFW will ensure that the fishery does not exceed 13,264 predicted total Chinook encounters.

Sampling Design and Estimation Methodologies

WDFW will employ the 'Aerial Access' sampling design to monitor the Area 9 winter MSF and estimate total encounters and associated mortalities of legal, sublegal, marked and unmarked Chinook (see Attachment A). The size and mark-status composition of the targeted Chinook population will be estimated using test fishing data. WDFW will employ the appropriate number of staff during the Area 9 winter MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will provide the co-managers with bi-weekly in-season catch and effort estimates beginning the week ending November 18, 2017.

WDFW will compile a comprehensive post-season report for all winter Chinook MSFs conducted in Marine Areas 5-13 by November 30, 2018. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 9 winter MSF, a full analysis of impact estimates (total encounters and mortalities by size and mark-status), and estimates of marked and unmarked mortalities of Double Index-Tagged (DIT) and other coded-wire tagged stocks as described in Attachment A.

2017-18 Winter Mark-Selective Sport Fishery

Marine Area 10

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 10 during the 2017-2018 winter season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The winter Chinook MSF in Marine Area 10 will occur from November 1, 2017 through February 28, 2018. Anglers will be allowed a daily limit of up to two hatchery Chinook. All sub-area closures included in the 2017-18 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

The preseason prediction of total Chinook encounters in Area 10 is 5,349 (FRAM 2017). WDFW plans to manage this fishery as a season, beginning and ending on the agreed-to dates (above). However, if in-season estimates indicate that total Chinook encounters are projected to be at 80% of the preseason modeled encounters, WDFW will initiate co-manager discussion regarding potential fishery actions. WDFW will ensure that the fishery does not exceed 6,419 predicted total Chinook encounters.

Sampling Design and Estimation Methodologies

WDFW will employ the 'Reduced Murthy' sampling design to monitor the Area 10 winter MSF and estimate total encounters and associated mortalities of legal, sublegal, marked and unmarked Chinook (see Attachment A). The size and mark-status composition of the targeted Chinook population will be estimated using test fishing data. WDFW will employ the appropriate number of staff during the Area 10 winter MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will provide the co-managers with bi-weekly in-season catch and effort estimates beginning the week ending November 18, 2017.

WDFW will compile a comprehensive post-season report for all winter Chinook MSFs conducted in Marine Areas 5-13 by November 30, 2018. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 10 winter MSF, a full analysis of impact estimates (total encounters and mortalities by size and mark-status), and estimates of marked and unmarked mortalities of Double Index-Tagged (DIT) and other coded-wire tagged stocks as described in Attachment A.

2017-18 Winter Mark-Selective Sport Fishery

Marine Area 11

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 11 during the 2017-2018 winter season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The winter Chinook MSF in Marine Area 11 will occur from October 1, 2017 to April 30, 2018. Anglers will be allowed a daily limit of up to two hatchery Chinook. All sub-area closures included in the 2017-18 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

WDFW will manage this fishery as a season, beginning and ending on the agreed-to dates (above).

Sampling Design and Estimation Methodologies

Sampling efforts will be conducted consistent with the 'Baseline Sampling Design' (see Attachment A). The size and mark-status composition of the targeted Chinook population will be estimated using Voluntary Trip Reports (VTRs). Total Chinook encounters and associated mortalities resulting from the Area 11 winter MSF will be estimated using the 'CRC for Encounters' methodology, described in Attachment A. WDFW will employ the appropriate number of staff during the Area 11 winter MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will compile a comprehensive post-season report for all winter Chinook MSFs conducted in Marine Areas 5-13 by November 30, 2018. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 11 winter MSF. A full analysis of impact estimates (total encounters and mortalities by size and mark-status) resulting from the Area 11 MSF, in addition to estimates of marked and unmarked mortalities of Double Index-Tagged (DIT) and other coded-wire tagged stocks as described in Attachment A will be provided at a later date, as Catch Record Card estimates become available (see Attachment A).

2017-18 Winter Mark-Selective Sport Fishery

Marine Area 12

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 12 during the 2017-2018 winter season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The winter Chinook MSF in Marine Area 12 will occur from October 1, 2017 to April 30, 2018. Anglers will be allowed a daily limit of up to two hatchery Chinook. All sub-area closures included in the 2017-18 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

WDFW will manage this fishery as a season, beginning and ending on the agreed-to dates (above).

Sampling Design and Estimation Methodologies

Sampling efforts will be conducted consistent with the 'Baseline Sampling Design' (see Attachment A). The size and mark-status of the targeted Chinook population will be estimated using Voluntary Trip Reports (VTRs). Total Chinook encounters and associated mortalities resulting from the Area 12 winter MSF will be estimated using the 'CRC for Encounters' methodology, described in Attachment A. WDFW will employ the appropriate number of staff during the Area 12 winter MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will compile a comprehensive post-season report for all winter Chinook MSFs conducted in Marine Areas 5-13 by November 30, 2018. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 12 winter MSF. A full analysis of impact estimates (total encounters and mortalities by size and mark-status) resulting from the Area 12 MSF, in addition to estimates of marked and unmarked mortalities of Double Index-Tagged (DIT) and other coded-wire tagged stocks as described in Attachment A will be provided at a later date, as Catch Record Card estimates become available (see Attachment A).

2017-18 Winter Mark-Selective Sport Fishery

Marine Area 13

The Northwest Treaty Tribes and the Washington Department of Fish and Wildlife (WDFW) have reached agreement to implement a Chinook salmon mark-selective fishery (MSF) in Marine Area 13 during the 2017-2018 winter season. This fishery will be implemented consistent with management objectives defined by the co-managers' Puget Sound Chinook Harvest Management Plan, the WDFW-Tulalip management plan for hatchery origin fish, and established principles concerning the allocation of harvestable salmon and the exercise of treaty rights. The co-managers will seek to minimize or eliminate any unintended effects of this fishery on individual treaty fisheries, including dislocation and/or disruption. Therefore, treaty fisheries will not be modified in order to accommodate this mark-selective fishery.

Fishery Regulations

The winter Chinook MSF in Marine Area 13 will occur from October 1, 2017 to April 30, 2018. Anglers will be allowed a daily limit of up to two hatchery Chinook. All sub-area closures included in the 2017-18 Co-Managers' List of Agreed Fisheries will remain in effect for the agreed-to dates.

Fishery Controls

WDFW will manage this fishery as a season, beginning and ending on the agreed-to dates (above).

Sampling Design and Estimation Methodologies

Sampling efforts will be conducted consistent with the 'Baseline Sampling Design' (see Attachment A). The size and mark-status composition of the targeted Chinook population will be estimated using Voluntary Trip Reports (VTRs). Total Chinook encounters and associated mortalities resulting from the Area 13 winter MSF will be estimated using the 'CRC for Encounters' methodology, described in Attachment A. WDFW will employ the appropriate number of staff during the Area 13 winter MSF in an effort to meet or exceed the sampling rate goal of 20%.

Reporting Schedule

WDFW will compile a comprehensive post-season report for all winter Chinook MSFs conducted in Marine Areas 5-13 by November 30, 2018. This report will include a summary of the information collected as part of our sampling and monitoring program during the Area 13 winter MSF. A full analysis of impact estimates (total encounters and mortalities by size and mark-status) resulting from the Area 13 MSF, in addition to estimates of marked and unmarked mortalities of Double Index-Tagged (DIT) and other coded-wire tagged stocks as described in Attachment A will be provided at a later date, as Catch Record Card estimates become available (see Attachment A).

Puget Sound Chinook Mark-Selective Sport Fisheries

Attachment A

Based on agreements between the State of Washington and the Northwest Treaty Tribes, the Washington Department of Fish and Wildlife (WDFW) has been conducting recreational mark-selective Chinook fisheries (MSFs) in the marine catch areas of Puget Sound since 2003. This attachment outlines the general intent, data needs, sampling and monitoring plans, estimation methodologies, and reporting schedules associated with these fisheries.

Fishery Intent

Agreed-to Chinook MSFs (see attached Fishery Management Plans for specific fisheries and dates) will be conducted in Marine Areas 5-13 during the summer and winter seasons to provide recreational fishing opportunity directed at hatchery Chinook salmon, while limiting impacts on wild stocks of conservation concern, particularly ESA-listed Puget Sound Chinook. Sampling and monitoring programs will be implemented along with these fisheries in order to provide the information necessary to evaluate and plan potential future Chinook MSFs. Prior to next fishing season, WDFW and the tribes will jointly review and analyze results of the sampling and monitoring programs for these fisheries to evaluate the effectiveness at achieving the intended objectives.

Data Needs for Evaluating the Fishery

Monitoring, sampling and reporting programs will be implemented by WDFW for the purpose of providing the data necessary to estimate the impact of these MSFs on unmarked Chinook and to support the evaluation of future MSFs.

These monitoring and sampling programs are designed to provide data to estimate the following parameters:

- Mark rate in the fishery – marked and unmarked encounters will be estimated using test fishing, voluntary trip reporting (VTR) or dockside sampling programs.
- Number of marked Chinook retained – estimated using dockside sampling programs
- Number of unmarked Chinook retained – estimated using dockside sampling programs
- Number of marked Chinook released – estimated using dockside sampling and test fishing or VTR programs
- Number of unmarked Chinook released – estimated using dockside sampling and test fishing or VTR programs
- Number of Chinook encounters of sublegal size - estimated using dockside sampling and test fishing or VTR programs
- Stock composition of mortalities – estimated using CWT data collected during dockside sampling
- Mortalities of marked and unmarked double-index tagged (DIT) and other CWT stocks

The co-managers agree to implement these fisheries with the understanding that the capability to estimate stock-specific unmarked fish mortalities is preserved. Methods for estimating unmarked mortalities of DIT-CWT stocks within these MSFs have been determined jointly by the co-managers, considering recommendations of the Selective Fisheries Evaluation Committee of the Pacific Salmon Commission. WDFW will be responsible for reporting the necessary fishery information and data to the Pacific States

Marine Fishery Commission that allows these estimates to be generated.

Estimates of total fishery related mortalities, including the total exploitation rate or the Southern US exploitation rate, that represents the management objective for Puget Sound Chinook management units under the co-managers' Harvest Management Plan, will be made by combining the mortality estimate for each Marine Area's mark-selective fishery with mortality estimates in other selective and non-selective fisheries. To ensure that all information necessary to make these estimates is collected, plans for sampling and monitoring of all fisheries will be included as a component of the co-managers' annual pre-season agreement.

Sampling Components

Dockside Sampling

WDFW samplers collect biological data and information regarding effort and catch by conducting angler interviews at assigned access sites. During interviews, samplers acquire data on the number of anglers fishing in each boat, the Marine Catch Area(s) fished, trip duration, trip intent (targeted species) and fish encounter composition (kept and/or released by species). When an interviewed party possesses Chinook or coho salmon, samplers inspect the fish for CWTs using wand detectors and collect snouts from CWT-positive individuals for later lab processing. Samplers also take length measurements and collect scale samples from landed Chinook. Lastly, samplers attempt to obtain information on fishing method in order to inform test-fishing methodologies.

Effort Surveys

On-the-Water Surveys

On-the-water Interviews (Boat Surveys) are conducted to provide information on the proportion of effort in a fishery originating from certain access sites. During these surveys, samplers attempt to intercept all anglers on the water in a given fishery and determine where they intend to tie up or exit the fishery upon completing their trip. This provides us with a list of sites (ramps/launches) used to access the fishery as well as information on the relative amount of use (# of anglers) each site receives. Based on this information we designate a "sample-frame" of 5-6 of the highest use access sites for each fishery, from which we select sample sites for dockside creel sampling. Information from the boat surveys also allows us to estimate the total effort that originates from non-sampled sites and include it in our estimates.

Aerial Surveys

Aerial effort surveys are conducted in fisheries where Boat Surveys are infeasible due to large survey areas and unsafe boating conditions. During these surveys flights are conducted to count the total number of boats on the water in a fishery. The sample-frame (sites where we station samplers) consists of the three to four access sites expected to be of highest use in the fishery. Paired with interviews conducted at these sites, the aerial surveys provide information on the proportion of total fishery effort that originates from non-sampled sites, enabling expansion of observed dockside counts to fishery-wide totals.

Size/Mark-status Composition Estimates

Test Fishing

Test fishing is used to obtain accurate estimates of the size and mark-status composition of the Chinook population being targeted by a fishery. When included in the sampling design for a given fishery, it is conducted for the duration of the fishery. Test fishers spend approximately five days per week on the

water attempting to mimic the behavior of the recreational fishing fleet. Fishing method information from dockside interviews is used to inform the methods used by test fishers and efforts are focused at locations that mirror choices made by the at-large private fleet. For each fish brought to the boat, test fishers record the encounter number, time sampled, species and mark-status. For all Chinook, test fishers record the fork length and total length and collect DNA and scale samples.

Voluntary Trip Reports

Voluntary Trip Reports (VTRs) are completed and returned by a subset of private fleet anglers to obtain additional information on Chinook encounter rates by size class and mark-status. Anglers are asked to record the date, number of anglers, target species, Marine Catch Area, and for each Chinook or coho hooked, whether the fish was kept or released, legal or sublegal sized, and marked (adipose clipped) or unmarked.

Sampling and Monitoring Plans

For complete details regarding the following sampling plans and associated assumptions, see the WDFW Methods Report (WDFW 2012).

Full Murthy

The Full Murthy sampling design is the most intensive of the four sampling plans. It utilizes intensive dockside sampling, on-the-water effort surveys and test fishing data to provide precise estimates of Chinook catch and effort, along with total encounters and associated mortalities. VTRs are also collected to be used as supplements to test fishing data, if necessary.

Dockside sampling is conducted on five days during each week. Sampling strata are divided into weekday (Monday through Thursday) and weekend (Friday, Saturday and Sunday) strata. During each week, $n=2$ out of $N=4$ days are randomly selected for sampling from the Monday through Thursday stratum. In addition, every Friday, Saturday, and Sunday is sampled. Samplers are stationed at two ramps on each of the selected sampling days. Samplers achieve 100% sampling coverage at the assigned ramps from approximately dawn until dark in order to intercept all boats. All anglers and fish exiting the fishery through the sampled sites will be counted. Any boats that are missed at the sampled sites will be counted and recorded on the sampling forms.

Sites from the sample frame for a given fishery are selected for sampling via a weighted-random site selection process (probability proportional to size). Initially, site selection is based on site size measures calculated from on-the-water survey data obtained during the previous year's fishery. Once the initial surveys are completed during the current year, updated size measures of sites in our sample frame are calculated based on the current year's data.

Reduced Murthy

The Reduced Murthy sampling design is a scaled-back version of the Full Murthy sampling design. It utilizes intensive dockside sampling, on-the-water effort surveys and test fishery or VTR data, depending on the fishery.

The main difference between the Reduced Murthy and Full Murthy is a reduced dockside sampling frequency. Dockside sampling is conducted on $n=6$ out of $N=14$ days during each two week period. Sampling strata are divided into weekday (Monday through Thursday) and weekend (Friday, Saturday and Sunday) strata. During each two-week period, $n=2$ out of $N=8$ days are randomly selected for weekday sampling. In addition, $n=2$ out of $N=3$ days are randomly selected for sampling during each weekend. Samplers are stationed at two ramps on each of the selected sampling days. Samplers achieve

100% sampling coverage at the assigned ramps from approximately dawn until dark in order to intercept all boats. All anglers and fish exiting the fishery through the sampled sites will be counted. Any boats that are missed at the sampled sites will be counted and recorded on the sampling forms.

Sites from the sample frame for a given fishery are selected for sampling via a weighted-random site selection process (probability proportional to size). Initially, site selection is based on site size measures calculated from on-the-water survey data obtained during the previous year's fishery. Once the initial surveys are completed during the current year, updated size measures of sites in our sample frame are calculated based on the current and previous year's data.

Unlike the Full Murthy sampling design, where test fishing is a mandatory component, some fisheries sampled with the Reduced Murthy sampling design will utilize a test fishery while others will use VTR data to estimate the size and mark-status composition of the targeted Chinook population. For details regarding a specific fishery, see the attached management plan for that fishery.

Aerial Access

The Aerial Access sampling design is a modified version of the Reduced Murthy sampling design that uses aerial effort surveys in place of on-the-water effort surveys. Dockside sampling frequencies are the same as those for the Reduced Murthy, however, instead of sampling at two sites (selected from the sampling-frame) on each sample day; samplers are stationed at all sites designated in the sample-frame (three to four sites of moderate to high effort). For each flight, the sample fraction is estimated by pairing the aerial total boat counts with the sample-frame total for boats active during the flight period (determined from dockside interviews). This allows for an expansion of estimates to account for out-of-frame effort.

As with the Reduced Murthy, fisheries monitored using the Aerial Access design may or may not include a test fishery. Those with no test fishery will use VTRs to provide an estimate of the size and mark-status composition of the targeted Chinook population.

Baseline

The Baseline sampling design is a less intensive monitoring program that includes dockside sampling and interviews and the collection of VTR data. Baseline sampling is opportunistic in nature, with overall sampling effort allocated across space and time in a manner that maximizes the number of angler interviews obtained per sample effort. While dockside sampling procedures remain the same as in other sampling designs, the frequency of sample days may be slightly reduced. The main difference between Baseline and other, more intensive, sampling designs is the absence of effort surveys. Due to this, Baseline sampling data cannot be used to produce in-season or immediate post-season estimates absolute catch and effort. These estimates become available at a later date through the WDFW Catch Record Card system, allowing further fishery evaluation including total Chinook encounters and associated mortalities by size and mark-status.

Estimation Methods

For fisheries monitored using the Full Murthy, Reduced Murthy and Aerial Access sampling designs, WDFW will produce periodic in-season and post-season estimates of catch and effort. To estimate total Chinook encounters and associated mortalities by size and mark-status category, WDFW will use the agreed-to 'bias-corrected M2' methodology (Conrad & McHugh 2008, WDFW 2012).

Fishery-total catch and effort estimates for fisheries monitored using the Baseline sampling design will be available approximately 1 to 1½ years after the close of the fishery, via the WDFW Catch Record Card system. Once these estimates are available, the appropriate methods for estimation of total encounters and mortalities will be determined using the decision support schematic provided in the 'CRC for

Encounters' report (WDFW & NWIFC 2013). For fisheries with adequate sample sizes of VTR encounters, this involves the 'bias-corrected M2' approach, as mentioned above. In situations where VTR sample sizes are insufficient, total encounters and mortalities will be estimated using an 'M1' approach, where the size and mark-status composition of the Chinook population is estimated using dockside sampling data (see WDFW & NWIFC 2013 for details).

Reporting

For some fisheries, WDFW will provide the co-managers with in-season updates of fishery performance (see attached Fishery Management Plans for details).

Following each summer and winter season, WDFW will compile a comprehensive post-season report for all Chinook MSFs conducted in Marine Areas 5-13. These reports will include a summary of the information collected as part of each fishery's sampling and monitoring program. In addition, for fisheries sampled using the Full Murthy, Reduced Murthy and Aerial Access sampling designs, the reports will also include:

- Weekly estimates of effort and number of Chinook caught and released, by mark-status
- Estimates of total Chinook encounters and associated mortalities by size and mark-status
- Comparisons of total encounters with pre-season FRAM modeled projections
- Comparisons of mortalities with pre-season FRAM modeled projections
- Estimated fishery-total mortalities of marked and unmarked DIT Chinook, by stock and age

References

- Conrad R and McHugh P. 2008. Assessment of Two Methods for Estimating Total Chinook Salmon Encounters in Puget Sound/Strait of Juan de Fuca Mark-Selective Chinook Fisheries. Northwest Fishery Resource Bulletin, Manuscript Series Report No 2. <http://wdfw.wa.gov/publications/00492>
- Washington Department of Fish and Wildlife (WDFW). 2012. Methods Report: Monitoring Mark-Selective Recreational Chinook Fisheries in the Marine Catch Areas of Puget Sound (Areas 5 through 13). Revised Draft Report: January 30, 2012. Olympia, Washington. <http://wdfw.wa.gov/publications/01357/>
- Washington Department of Fish and Wildlife (WDFW) and Northwest Indian Fisheries Commission (NWIFC). 2013. Estimating Total Chinook Encounters using Catch Record Card-Based Estimates of Harvest. Draft Report: November 26, 2013. Olympia, Washington.

2017-18 WDFW Proposal for Shore-Only Recreational Fishery Regulations in Marine Areas 8-2 and 9 Targeting Marked Coho Salmon during August and September

As part of the 2017 North of Falcon proposed fishing package, the Washington Department of Fish and Wildlife (WDFW) has proposed shore-only recreational fisheries targeting marked Coho salmon in Marine Area 9 (Area 9) during September and a limited Marine Area 8-2 (Area 8-2) shore fishery at the south end of Whidbey Island during August and September. WDFW has proposed shore-only fisheries in Areas 8-2 and 9 to help significantly reduce recreational fishing pressure on key stocks of concern compared to typical boat-based salmon fishing efforts in these areas.

The proposed shore fishery boundary in Area 8-2 extends from the southern border of the Area 9/Area 8-2 line north approximately 3,233 feet to the border of Possession Beach Waterfront Park (see map of Area 8-2 south shore fishery at the end of this document). The total estimated shoreline for all of Area 8-2 is 692,282 feet, while the proposed southern Area 8-2 beach fishery near Possession Point represents a small fraction of the total area at 3,233 feet, approximately 0.47% of the total shoreline in Area 8-2. This proposal represents a significant reduction in typical annual angling effort in Areas 8-2 and 9. For example, in Area 9 the average odd-year estimate of effort in the month of September is approximately 43,500 angler trips. We estimate that this proposal would reduce effort in Area 9 to approximately 2,300 angler trips, a 95% reduction. Similarly, in Area 8-2, the average angler trips for the months of August and September equate to 26,186 angler trips. We would expect approximately 4,678 angler trips from our proposal, a reduction of 82%.

Within Area 9 there will be a shore-only recreational fishery in the sub-area from the Hood Canal Bridge north to the Olele Point-Foulweather Bluff line. The fishery will target Pink and Coho salmon from July 16th through September 4th (Labor Day), with non-retention requirements for Chinook and Chum salmon.

Sampling Plan

WDFW has sampled shore-based recreational angling in Puget Sound for many years as part of our baseline level of sampling and monitoring. Baseline-sampling is opportunistic in nature, with overall sampling effort allocated across space and time in a manner that maximizes the number of angler interviews obtained per sample effort. Data collection activities will focus on conducting angler interviews with catch sampling as anglers exit the shore fishery. Also, WDFW samplers will distribute and collect voluntary trip reports from shore anglers to collect additional catch and effort information. The following is a list of data that will be collected and recorded on the sampling forms, per standard Baseline-sampling protocols, during each shore-based angler interview:

- Angling effort (angler trips, trip length);
- Encounters composition (retained and/or released) by species and mark status (marked versus unmarked); and
- Samplers will also inspect landed Coho salmon for coded-wire tags (CWTs) using wand detectors and acquire snouts when CWTs are present; resulting tag data are used to estimate the CWT-based composition (unexpanded) of landed catch.
- Further, data on bird encounters are collected as part of the standard angler interview protocol.

From these data we will estimate catch rates (i.e., catch per unit effort, CPUE), mark rates, and landed-catch composition (i.e., from CWT recoveries). Additionally, we will summarize relative catch and effort patterns over the shore-only season, based on the assumption that Baseline-sampling observations of these parameters are good indicators of associated fishery-wide trends. Additional WDFW sampling staff will be deployed in 2017 to monitor the below-listed beaches, compared to the number of samplers stationed at beaches in typical years. WDFW sampling staff who would usually sample boat-based effort

in Areas 8-2 and 9 during September will be redirected and shifted to beach sampling sites. The following beaches will be sampled at a higher frequency compared to past years during 2017. These areas will be sampled three to five days a week on a random schedule including one day per weekend or anticipated high use days.

Area 9

- Point Wilson Beach
- Marrowstone Island Beach
- Salisbury Point County Park
- Point No Point Beach
- Fort Casey Shore
- Driftwood Park and Beach
- Bush Point Ramp and Beach
- Lagoon Point Beach
- Double Bluff County Park

For the sub-area from the Hood Canal Bridge to the Olele Point-Foulweather Bluff line, sampling sites would include:

- Shine Tidelands State Park
- Salisbury Point County Park

Area 8-2

- Possession Point Bait Co
- Possession Beach Waterfront Park

Effort Assessment

In addition to increasing the angler interview sampling activities at shore-based sites, WDFW proposes to assess shore-based effort levels during the month of September by conducting effort surveys, either by boat or via aerial overflights on both weekday and weekend days. Effort surveys will be conducted opportunistically throughout the month when we would expect both high and low angler effort periods.

Communication

Co-managers will have weekly conference calls starting week 34 continuing through week 40 regarding Area 8A/8-2 fisheries. On Tuesday mornings, WDFW will provide catch and sampling information from the previous week of shore fishing including total catch, mark status and CWT detection and other species information. Conference calls on Tuesday afternoon will include technical and policy staff. Additional policy meetings may be necessary to discuss potential management actions.



2017-18 WDFW 8D Commercial Coho Fishery

WDFW is proposing a reduction to the commercial fishery for Coho in Area 8D. The reduction takes fishing days from 5 days per week to 3 days per week. The proposed gillnet schedule, in coordination with the Tulalip Tribes, is for WDFW to fish T, Th-F starting in Week 38 (week beginning Sep 17). Purse seines would remain at one day per week, Tuesdays for the initial part of the schedule and then mirror the South Sound and Hood Canal schedules. To address concerns over possible increases in effort due to large returns to the Tulalip Hatchery in 2016, WDFW will triple the gillnet effort modeled in the fishery (this, in combination with the reduction in days per week, effectively doubles the initial input). Given the potential impacts to the Stillaguamish Coho stock and the potential for increases in effort in this fishery, WDFW is proposing the following plan for in-season controls and communication:

- ✓ On the Monday following each fishery week, WDFW and co-managers will share catch and effort data for the fishery occurring within the previous week.
- ✓ If at any time, WDFW observes more than 8 landings from this fishery on a single day, an in-season call with co-managers will be initiated and an agreed-to management action will be implemented to control effort within this fishery.
- ✓ If at any time co-managers determine that additional fishery controls are necessary, an in-season call will be initiated to determine additional necessary actions.

Management Week	Week Begins	Area 8D		
		mgt	GN	PS
38	17-Sep	CO	T,Th-F	T
39	24-Sep	CO	T,Th-F	T
40	1-Oct	CO	T,Th-F	T
41	8-Oct	CO	T,Th-F	T
42	15-Oct	CO	T,Th-F	W
43	22-Oct	CO	T,Th-F	T
44	29-Oct	CO	T,Th-F	M
45	5-Nov	CO	T,Th-F	T,Th
46	12-Nov	CM	<W,Th,F>	M
47	19-Nov	CM	<W,Th,F>	T
48	26-Nov	CM	<W,Th,F>	W

Initial model inputs:

September	October
0.00670	0.01229

Revised model inputs:

September	October
0.01300	0.02155

**STATE OF WASHINGTON
DEPARTMENT OF FISH AND WILDLIFE
FISH MANAGEMENT PROGRAM
Mill Creek – Region 4 Office
16010 Mill Creek Blvd,
Mill Creek, WA 98012**

April 8, 2017

TO: Kate Konoski, Stillaguamish Tribe Fisheries Manager
Diego Holmgren, Tulalip Tribes Fisheries Manager

FROM: Jennifer Whitney, WDFW District 13 Fish Biologist

**SUBJECT: REVISED 2017 PROPOSED SPORT GAMEFISH SEASONS FOR THE
STILLAGUAMISH RIVER**

Stillaguamish salmon stocks are forecast to be in critical status in 2017 with forecasts of; Coho 7,622 wild and 1,520 hatchery (OA3), Chinook 438 wild and 1,038 hatchery (escapement without fishing), Pink 40,205 (4B) and chum 5,614 wild and 367 hatchery (4B). Co-managers discussed the following seasons to provide in-river sport gamefish (steelhead) opportunity while minimizing impacts on Stillaguamish salmon;

Main Stem Stillaguamish River;

- Closed to all fishing with the exception of the area downstream of Marine View Drive which will follow Marine Area 8-2 rules.

North Fork of the Stillaguamish River;

- First Saturday in June to July 31, open to fly-fishing only, from the mouth of the North Fork to the Swede Heaven Bridge, release all fish except up to 2 hatchery steelhead may be retained. Closed to all fishing from the Swede Heaven Bridge to North Fork Falls.
- August 1 to November 30, closed to all fishing, from the mouth to North Fork Falls.
- December 1 to January 31, open to fly fishing only, North Fork between the mouth of French Creek and the Swede Heaven Bridge, release all fish except up to 2 hatchery steelhead may be retained. Closed to all fishing below the mouth of French Creek and from the Swede Heaven Bridge to North Fork Falls.

South Fork of the Stillaguamish River;

- First Saturday in June through September 4, from the Mountain Loop Highway upstream, open for gamefish, selective gear rules, statewide minimum size and daily limit (2 trout). Closed below the Mountain Loop Highway.
- September 5th through January 31, South Fork closed to all fishing from the mouth upstream.

Areas above anadromous barriers; Open with a season from the Saturday before Memorial Day

through Oct 31st with statewide min size/daily limits;

- Pilchuck Creek, from Pilchuck Falls upstream, including tributaries.
- Boulder River, from Boulder Falls upstream.
- Stillaguamish River North Fork, upstream of falls including tributaries.
- Black Creek, from Bear Creek confluence upstream.

Closed to all Fishing;

- Boulder River from mouth to Boulder Falls
- Canyon Creek
- Pilchuck Creek from mouth to Pilchuck Falls
- Squire Creek

2017 Co-Management Agreement for Hood Canal Chum Salmon Fisheries

The Hood Canal Treaty Tribes (Skokomish Tribe, Port Gamble S'Klallam Tribe, Jamestown S'Klallam Tribe and Lower Elwha Klallam Tribe) and the Washington Department of Fish and Wildlife (WDFW) have reached agreement on application of an in-season abundance estimation (ISU) process for the 2017 season. All parties to this agreement have responsibility for ensuring their fisheries management actions are appropriate to ensure harvest of available shares. Both the treaty Indian and non-Treaty chum salmon fishing schedules are described in the List of Agreed Fisheries (April 2017). For the 2017 Hood Canal chum salmon season, the Hood Canal Tribes and WDFW agree:

- 1) To meet prior to August 31, 2017 to review and agree upon the final dataset to be used in conjunction with the ISU methods recommended by Tribal and WDFW biometricians, as described in the memorandum dated July 10, 2012 (2012 memorandum). December 8, 2016 the co-managers agreed to the dataset for the “early season” (October 15 – 31). The agreed to data for the “early season” were queried from WaFT for landings which resulted from openings within the date ranges for the window of time. Discrete landings were identified based on vessel ID; in-season individual tickets will be utilized for determining discrete landings. The dataset for any proposed “extended season” (using CCPUE data through November 7) ISU model will be generated using the same attributes as for the “early season” model.
- 2) The co-managers shall evaluate various “extended season” ISU models, with the expectation that WDFW and Tribal technical staffs will jointly develop and agree upon an extended ISU method. Final details on an “extended” model, with data collected through November 7th using cumulative CPUE as the independent predictor variable, and its use in-season will be agreed on or prior to September 15th. Specifically, the co-managers will address the use of an extended window of October 20th to November 7th as opposed to October 15th to November 7th. If co-manager consensus cannot be reached on an extended model and its use by September 15th, then the extended CCPUE model with the October 20th to November 7th date window will be used.
- 3) That the portion of Area 12 between the Hood Canal Bridge and extending two-mile south and west of the Hood Canal Bridge will be closed to Purse Seine fishing on Tuesday, October 24, and on Monday, October 30.
- 4) Those waters of Area 12 east of the Area 12/12B boundary and south of a line projected 94° true from Hazel Point to the light on the opposite shore are closed to purse seines except this area is open to purse seines on Tuesday, October 24, and on Monday, October 30.
- 5) That on-water enforcement will be sufficient to ensure compliance with all regulations, particularly the closed area described above on Tuesday, October 24, and on Monday, October 30.

- 6) To convene a conference call no earlier than 11:00am on October 31, 2017 to discuss results of the “early season” ISU model;
 - a. During the call co-managers would apply the CCPUE ISU method recommended by Tribal and WDFW biometricians, described as the “early season” model in the memorandum dated July 10, 2012 (2012 memorandum), to catch and effort estimates obtained from the Hood Canal non-Treaty Purse Seine fishery operating from October 15 through October 31;
 - b. The resulting run size would then be the basis for calculating total allowable catch shares of Hood Canal fall chum for managing Treaty and non-Treaty Hood Canal fall chum fisheries which might occur during the week that begins on November 5, 2017 if sufficient shares remain;
 - c. Pre-season fishing schedules as proposed in the 2017-18 List of Agreed Fisheries beginning November 5 will be adjusted as necessary to fully harvest allowable catch shares consistent with the Puget Sound Salmon Management Plan;

- 7) Should the remaining non-treaty catch share be sufficient for WDFW to implement a purse seine opening on Tuesday November 7, the co-managers will convene a conference call on November 8, 2017 to review catch information and discuss results of the “extended” ISU model;
 - a. Apply the agreed to co-manager “extended” ISU method to the catch and effort estimates obtained from the Hood Canal non-Treaty Purse Seine fishery operating during the specified window period for the model that is within the date range of October 15 through November 7 to update the estimate of Hood Canal fall chum abundance;
 - b. The resulting run size would then be the basis for calculating total allowable catch shares of Hood Canal fall chum for managing Treaty and non-Treaty Hood Canal fall chum fisheries which would occur beginning Thursday November 9, 2017.

Authorized Signatures:

The following parties agree to the above for the management of the 2017 Hood Canal chum salmon season, and the undersigned persons have authority to enter into this agreement:

Jamestown S'Klallam Tribe

Date

Lower Elwha Klallam Tribe

Date

Port Gamble S'Klallam Tribe

Date

Skokomish Tribe

Date

Washington Department of Fish and Wildlife

Date