

**Harvest Management Plan
For Steelhead Returning to the Hoh River
In the Winter of 2020-2021**

**Prepared by the
Hoh Tribe and
Washington Department of Fish and Wildlife**

December 2020

Harvest Management Plan for Steelhead Returning to the Hoh River in the Winter of 2020-2021

Introduction

The Washington Department of Fish and Wildlife and the Hoh Tribe have prepared the following harvest management plan for the 2020-2021 winter steelhead season in Hoh River Watershed. This plan establishes management guidelines for the steelhead resources of the Hoh River system. The co-managers agree to a philosophy of cooperation in implementing management measures to maintain, perpetuate, harvest, and enhance the steelhead resource and the natural ecosystem that supports it.

This winter steelhead harvest management plan provides current stock status and the agreed to management for the 2020-2021 winter steelhead fisheries in the Hoh River system jointly managed by Hoh Tribe and the Washington Department of Fish and Wildlife (WDFW).

The Hoh River located on Washington's Olympic Peninsula is approximately 28 miles south of Forks and 80 miles north of Aberdeen. The Hoh River watershed is 56 miles (90 km) long, originates at the Hoh Glacier on Mount Olympus and flows west through the Olympic Mountains of Olympic National Park and Olympic National Forest, then through the foothills in a broad valley. As it nears the ocean, the Hoh passes through the coastal strip of the Olympic National Park, and forms the northern boundary of the Hoh Indian Reservation (Figure 1).

The Hoh River's drainage basin is 299 square miles (770 km²). Its discharge, or streamflow, has considerable seasonal variation, with summer streamflow averaging about one-third that of winter flows.

The Hoh River is fed by glaciers on Mount Olympus, such as the Blue Glacier. The glaciers grind rock into fine glacial flour which turns the Hoh River a milky, slate blue color. The river valley is generally broad and relatively flat, causing the glacial sediments to settle out, creating extensive gravel bars, river meanders, and the many side channels characteristic of a braided river.

2.1 Management Objectives

The Washington Department of Fish and Wildlife and the Hoh Tribe have prepared the following harvest management plan for the 2020-2021 winter steelhead season in Hoh River Watershed. This plan establishes management guidelines for the steelhead resources of the Hoh River system. The co-managers agree to a philosophy of cooperation in implementing

management measures to maintain, perpetuate, harvest, and enhance the steelhead resource and the natural ecosystem that supports it.

This plan is intended to ensure that Treaty and Non-Treaty fishermen, subject to their respective regulatory authorities, shall be afforded the opportunities to harvest their shares as determined in *United States v., Washington*, 384 F. Supp. 312, aff'd 520 F.2d 676 (9th Cir. 1975), cert. denied 423 U.S. 1086, aff'd sub nom *Washington v. Washington State Commercial Passenger Fishing Vessel Association*, 443 U.S. 658 (1979) and other orders under the court's continuing jurisdiction and to ensure that the escapement goal for wild spawning adults is achieved

Wild fish population goals (VSP parameters)

Abundance, productivity, spatial distribution, and genetic diversity can define the health of salmonid populations. Hoh steelhead have maintained a relatively steady abundance over the past 34 years, suggesting that productivity of the stock is fluctuating within a range that is able to provide adequate escapement and some harvest. WDFW and the Hoh Tribe have closely monitored the spawning escapement of winter steelhead in the Hoh River since the 1979-1980 return, walking or floating many miles of the mainstem and tributaries to collect counts of redds, used to estimate the number of spawning adults. The Hoh wild stock has maintained a spawning distribution extending into the upper Hoh and the South Fork Hoh, and though year to year fluctuations in number of redds occurs in any given area, the overall distribution of spawners has remained similar through the years.

Fishery goals

The 2020-2021 harvest management plan is intended to provide opportunity for both Treaty and State fisheries while meeting the conservation requirements of wild steelhead in the Hoh River, consistent with court orders.

The fishery goals for the hatchery and wild steelhead returning to the Hoh River for the 2020-2021 winter steelhead season are:

- Achieve a Hoh River wild steelhead escapement of at least 2,400.
- Provide season long tribal and recreational fishing opportunity.

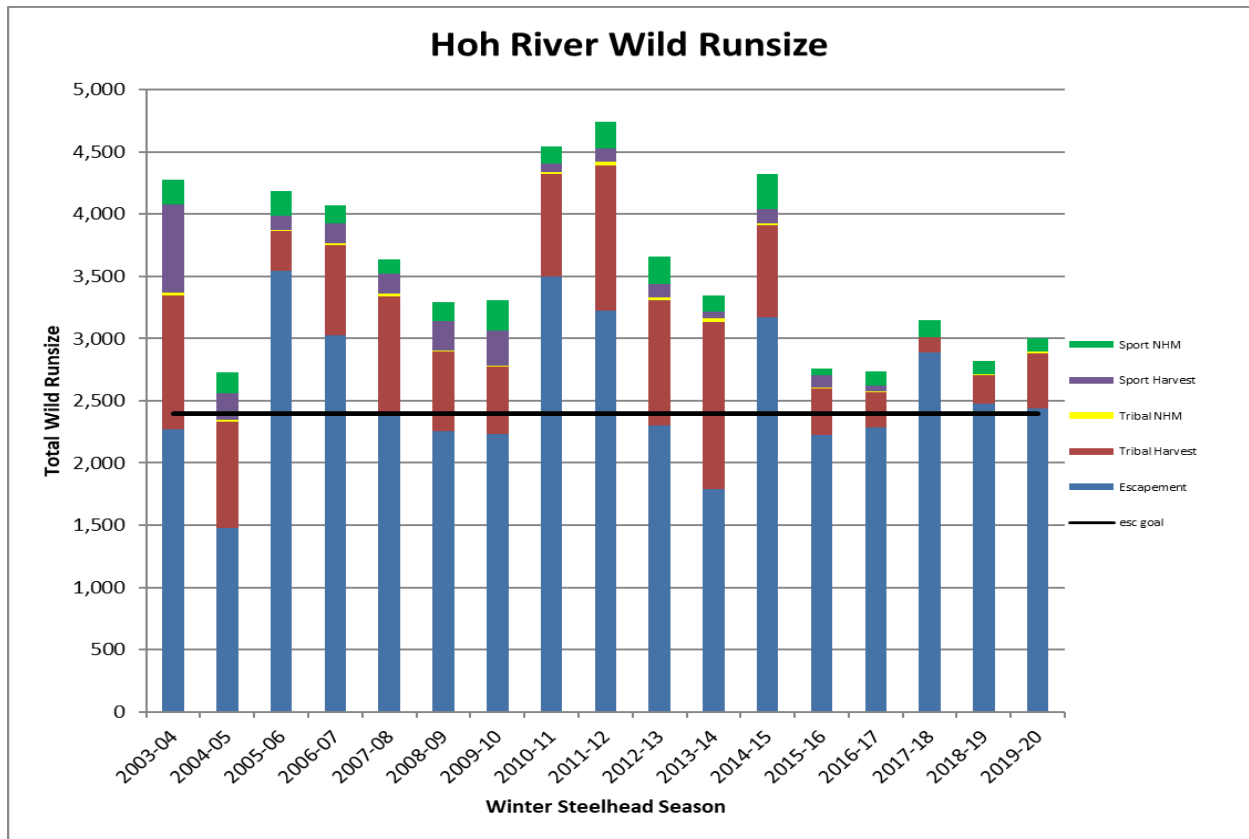
Hatchery fish production goals

The Hoh Tribe is broodstocking early timed hatchery steelhead returning to the Hoh, with the goal of producing 100,000 smolts to plant back into the Hoh River. The Tribe is using their Chalaat Creek facility to hatch and rear these fish, which are 100% adipose clipped prior to releasing at Chalaat Creek.

Historical wild runsize

The size and components of the wild steelhead runs returning to the Hoh River since 2003/04 are presented in Figure 1 below. The agreed to and adopted wild steelhead escapement goal for the basin is 2,400.

Figure 1. Hoh River total wild run size estimates, with escapement, sport and tribal harvest, non-harvest mortalities.



Fishery performance

During the seventeen winter steelhead seasons covering 2003-2004 to 2019-2020, the years for

which non-harvest mortality estimates are available for the sport fishery, the Hoh Tribal fishery and State Recreational fishery together have taken an average of 1,004 wild plus 636 hatchery steelhead per season. Average tribal harvest of wild steelhead during that period is 697, ranging from 1,374 in 2013-2014 to 123 in 2017-2018. The Tribe's hatchery catch averages 912 fish. Tribal catch estimates include a 2 percent place holder for non-harvest mortalities associated with their gill net fishery. Recreational anglers have averaged 307 wild and 306 hatchery fish, including non-harvest mortalities (10% of caught-and-released). Sport catch of wild steelhead range from a high of 908 during the 2003-2004 season to a low of 111 during the 2018-2019 season. The average tribal harvest rate on wild fish during these years is 19.27% of the estimated terminal run size. The corresponding sport harvest rate is 8.48%.

Post season assessment

The Hoh Tribe and WDFW seek to promote wild steelhead conservation and fishery stability by annually compiling the following technical information:

1. estimates of catches of wild and hatchery steelhead in each fishery;
2. the previous winter steelhead season's escapement;
3. the upcoming season's hatchery and wild fish run size forecasts;
4. an updated model that accurately reflects expected fishery catches;
5. a tribal fishing schedule and sport fishery regulations that meet fishery goals while honoring court ordered or agreed-to sharing principles and meet the wild steelhead escapement goal of 2,400.

Forecast

Steelhead run size forecasts including NHM for the 2020-2021 winter season in the Hoh are 2,903 wild and 1,031 hatchery steelhead. The wild escapement goal is 2,400 fish, resulting in 503 harvestable wild fish, or shares of 251. Wild steelhead escapement is anticipated to be 2,485 fish.

Fishery Management Plan

Summary

The expected results of the fisheries described in the 2020-2021 Hoh River Winter Steelhead Harvest Management Plan are displayed in Table 1, below. Recreational non-harvest (release) mortality is estimated using the most recent 5 year average and doesn't take into account lower expected encounter rates resulting from gear restrictions and season reductions going into effect December of 2020.

Table 1. Summary of 2020-2021 anticipated harvest, associated mortalities, and escapement from the tribal and recreational fisheries.

	Wild	Hatchery
Pre-season Runsize Estimate	2,903	1,031 ¹
Escapement goal	2,400	150
Tribal Harvest (including C&S)	240	249
Shares	251 each	~515
Recreational Harvest	178 (NHM)	234
Estimated escapement-2020	2,485	398

¹ / Hatchery released pre-smolt in November 2017 in Hoh River; calculated as 33% survive to smolt. reduced 2-salt (Age 1.2+) return calculated.

Tribal fishery

The Tribal commercial fishery will operate with a prescribed number of fishing days per week, as presented in Table 2, below.

Table 2. The adopted 2020-21 winter steelhead tribal fishery schedule by statistical week.

Statistical Weeks	Days Fished/Week
45-49	0
50-51	2
52-08	1
09-16	Closed to commercial fishing
17-18	1

The Hoh Tribe’s fishery generally begins on Monday mornings of each week, and the days scheduled are fished contiguously with commercial fisheries occurring below the Highway 101 Bridge. Changes in the schedule due to unfishable conditions, holidays, or for other reasons are to be communicated to WDFW at least one day prior to the start of the rescheduled fishery. Fisheries in weeks 17 and 18 are dependent on not exceeding wild shares of 251 wild steelhead for the season. Comanagers will check in the second week of March to evaluate catch to date.

Ceremonial-and-Subsistence fisheries may be conducted by the Tribe at times other than the scheduled Treaty fishery. Regulations establishing the day, opening and closing times and numbers of fishers and fish to be taken are to be provided by the Hoh Tribe to WDFW prior to noon of the workday before the start of the fishery. All Ceremonial-and-Subsistence fish will be accounted for and sampled for scales, sex, length, marks, dorsal condition, and coded wire tags. The Tribal harvest rates for the 2020-2021 season include 10 wild & 30 hatchery Ceremonial-and-Subsistence steelhead.

Recreational fishery

The WDFW recreational fishing regulations are set forth in the 2020-2021 *Sportfishing Rules Pamphlet*. However, the state is implementing steelhead regulation changes to all Coastal Rivers in that will go into effect in December of 2020. Rules will be implemented through Fishing Rule Change (Emergency Regulation) and will supersede the rules in the Sport Fishing Rules pamphlet. These regulation changes are expected to result in a reduction of wild steelhead encounters of greater than 50 percent. Statewide rules require the release of all wild steelhead.

Rules going into effect December 14th, 2020;

In the Following Areas;

- Hoh River (Jefferson Co.), from Olympic National Park boundary upstream to Olympic National Park boundary below mouth of South Fork Hoh.
- Hoh River, South Fork (Jefferson Co.), outside of Olympic National Park boundary:

Rules for steelhead and trout;

- Fishing from a floating device prohibited.
- Season closed beginning April 1, 2021 (open through March 31).
- Selective Gear Rules in effect (no bait), and only one single-point barbless hook allowed.
- Daily limit statewide minimum size/daily limit (20"/2 fish) except from the Olympic National Park Boundary upstream to the DNR Hoh Oxbow Campground Nov. 1 and through Feb. 15th, minimum size 20" and daily limit 3.
- Release all rainbow trout, Cutthroat trout minimum size 14 inches.

The Pacific Coastal Area segment of the Hoh River, the upper Hoh River and the upper South Fork Hoh River are within the boundaries of Olympic National Park. The Park regulations can be found at the Park's website, <http://www.nps.gov/olymp/fishing.htm> .

Data sharing timeline

The Hoh Tribe's in-season catch data and WDFW's in-season sport catch data from the creel survey will be exchanged on a regular basis. Weekly phone calls will occur starting in mid-January.

In-season fishery change procedures

Modifications to the pre-season runsize estimates or modifications to fishing schedules will not occur during the 2020-2021 winter steelhead season, except as expressly permitted by this agreement.

Adjustments may be made to the tribal fishing schedule if extreme weather conditions (i.e. river flooding) cause the river to be completely unfishable for at least one day. Such conditions

normally occur several times during the winter fishing season. A day scheduled for fishing will be declared unfishable only if river conditions prevent any nets from being set and no catch is made on that date. Make-up days will be taken in the same week as the days lost and taken immediately following the normally scheduled closure. When river conditions prevent days from being made-up within the same week, then days may be added to the following weeks, provided that:

- the total number of fishing days in any subsequent week does not exceed the normally scheduled days plus one and,
- modeled impacts from the added days must not increase the wild harvest rate above that agreed to pre-season, and no adjustments are allowed after the final week as scheduled pre-season.

The Hoh Tribe will notify WDFW by telephone (contact Jennifer Whitney, (360) 302-3030 ext.322 Jennifer.Whitney@dfw.wa.gov, on the day of a postponed fishery, and at least one working day before a rescheduled make-up day.

Fishery monitoring

Commercial catches and hatchery returns will be sampled for size, sex, and age. Commercial catch sampling will be the responsibility of the Hoh Tribe. The Hoh Tribe and WDFW agree that, for the 2020-2021 season, a creel survey of the winter steelhead sport catch in the Hoh River system beginning in January will occur. Recreational catches will be sampled for size, sex, mark, and age during the creel survey.

The Hoh Tribe and WDFW will continue to evaluate fishery related mortalities associated with tribal (net drop-out and predator removal) and recreational (catch-and-release mortalities) fishing gear. The Hoh Tribe and WDFW will conduct steelhead spawner surveys cooperatively as in recent years, and exchange data.

Resolution of any monitoring issues

The parties will meet upon request of either party, within three working days, during the winter steelhead season to review catch and escapement information collected to date and to determine whether the schedules for any of the fisheries (including all tribal and recreational openings) should be modified in order to assure that management objectives are met. A meeting may be called by either party, but any modifications to this plan will be by agreement of both parties.

Enforcement

Each party to this agreement is obligated to enforce its own regulations and to prosecute violators over which a party exercises regulatory authority. Enforcement agencies will cooperate by reporting observed violations by individuals over which the agency has no authority to the agency having authority over the individual. An agency receiving a violation report from another agency will thoroughly investigate the alleged violation and issue a summons to court if warranted. The officers from the agency observing the violation may be required to appear in the appropriate court as witnesses. Upon request by either party, the parties agree to provide the final dispositions (charges filed, fines, penalties, etc.) of all violation referrals.

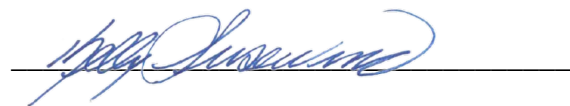
**AGREEMENT BETWEEN
THE HOH TRIBE
and the
WASHINGTON DEPARTMENT OF FISH AND WILDLIFE
on
THE HARVEST MANAGEMENT PLAN FOR WINTER STEELHEAD RETURNING TO
THE HOH RIVER, 2020-2021**

This agreement is the culmination of efforts of the undersigned to design and implement a joint plan for managing winter steelhead returning to the Hoh River in the winter, 2020-2021.

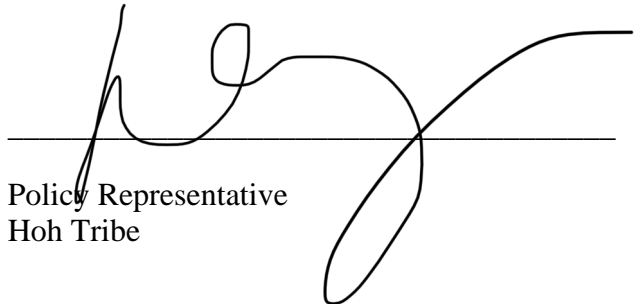
The parties agree to manage by the plan set forth in this document, entitled *Harvest Management Plan for Steelhead Returning to the Hoh River in the Winter of 2020-2021*.

No part of this management plan or the basis thereof shall be construed as a precedent for future years.

AGREED TO THIS 21 DAY OF December, 2020



Policy Representative
Washington Department of
Fish and Wildlife



Policy Representative
Hoh Tribe

2020-2021

Hoh River Steelhead Harvest Management Model w/ Non-harvest Mortality

4 Yr. Means One Day Rates		Week	Monday Date	Schedule (Days)	Wild		Origin Hatchery		Total Expected Steelhead Catch
Wild	Hatchery				Scheduled Rate	Expected Catch	Scheduled Rate	Expected Catch	
0.0029	0.0354	45-48	-----	0	0.0000	0	0.0000	0	0
0.0002	0.0143	49	11/30/20	0	0.0000	0	0.0000	0	0
0.0024	0.0281	50	12/07/20	2	0.0047	14	0.0563	58	72
0.0009	0.0176	51	12/14/20	2	0.0018	5	0.0353	36	42
0.0009	0.0209	52	12/21/20	1	0.0009	3	0.0209	22	24
0.0044	0.0267	53-01	12/28/20	1	0.0044	13	0.0267	28	40
0.0043	0.0168	2	01/04/21	1	0.0043	12	0.0168	17	30
0.0066	0.0143	3	01/11/21	1	0.0066	19	0.0143	15	34
0.0055	0.0145	4	01/18/21	1	0.0055	16	0.0145	15	31
0.0065	0.0075	5	01/25/21	1	0.0065	19	0.0075	8	27
0.0114	0.0101	6	02/01/21	1	0.0114	33	0.0101	10	43
0.0116	0.0050	7	02/08/21	1	0.0116	34	0.0050	5	39
0.0106	0.0052	8	02/15/21	1	0.0106	31	0.0052	5	36
0.0136	0.0045	9	02/22/21	0	0.0000	0	0.0000	0	0
0.0111	0.0024	10	03/01/21	0	0.0000	0	0.0000	0	0
0.0108	0.0005	11	03/08/21	0	0.0000	0	0.0000	0	0
0.0181	0.0004	12	03/15/21	0	0.0000	0	0.0000	0	0
0.0235	0.0005	13	03/22/21	0	0.0000	0	0.0000	0	0
0.0232	0.0004	14	03/29/21	0	0.0000	0	0.0000	0	0
0.0232	0.0000	15	04/05/21	0	0.0000	0	0.0000	0	0
0.0055	0.0000	16	04/12/21	0	0.0000	0	0.0000	0	0
0.0049	0.0000	17	04/19/21	1	0.0049	14	0.0000	0	14
0.0061	0.0000	18	04/26/21	1	0.0061	18	0.0000	0	18
0.2082	0.2251								
Scheduled Treaty Harvest:		Commercial:	15	0.0793	230	0.2125	219		
		C&S:		0.0034	10	0.0291	30		
		Total:		0.0828	240	0.2416	249		
Exploitation Rates:		Hoh Tribe Total Mortality:		0.0828	240	0.2416	249		
		State Sport Harvest Total Incl. NHM: Thru Apr. 15		0.0612	178	0.2270	234		
		Total ER:		0.1440		0.4686			
Estimated Escapement:					2,485				
Forecasts:					2,903		1,031		

449
wild shares
251.5

2020-2021 Hoh Tribe Winter Fishing Schedule 1/ Hoh River CLOSED to commercial fishing

Week no.	Week of:	Days Open	Mesh size	Opening Date/Time 10:00 AM	Closing Date/Time 10:00 AM
50	December 07	2	6 inch	Monday December 07	Wednesday December 09
51	December 14	2	6 inch	Monday December 14	Wednesday December 16
52	December 21	1	6 inch	Monday December 21	Tuesday December 22

53-01	December 28	1	6 inch	Monday December 28	Tuesday December 29
2	January 04	1	6 inch	Monday January 04	Tuesday January 05
3	January 11	1	6 inch	Monday January 11	Tuesday January 12
4	January 18	1	6 inch	Monday January 18	Tuesday January 19
5	January 25	1	6 inch	Monday January 25	Tuesday January 26
6	February 01	1	6 inch	Monday February 01	Tuesday February 02
7	February 08	1	6 inch	Monday February 08	Tuesday February 09
8	February 15	1	6 inch	Monday February 15	Tuesday February 16
9	February 22	0	6 inch	1/	1/
10	March 01	0	6 inch	1/	1/
11	March 08	0	6 inch	1/	1/
12	March 15	0	6 inch	1/	1/
13	March 22	0	6 inch	1/	1/
14	March 29	0	6 inch	1/	1/
15	April 05	0	6 inch	1/	1/
16	April 12	0	6 inch	1/	1/
17	April 19	1	8 inch	Monday April 19	Tuesday April 20
18	April 26	1	8 inch	Monday April 26	Tuesday April 27