

Columbia River Salmon and Steelhead Endorsement Recreational Anglers Board
Application for Funding

Applicant: Jeremy Trump, WDFW

Contact: Chris Donley
Regional Fish Program Manager
Wash. Dept. of Fish and Wildlife
2315 North Discovery Place
Spokane Valley, WA 99216-1566
(509) 892-7861

Proposal Title: MONITORING OF PROPOSED LOWER GRANDE RONDE SPRING CHINOOK FISHERIES - **renewal**

Date of submission: December 17, 2015

Effective Period of Funding: May 1- November 31, 2016

Amount of Funding Requested: **\$19,358**

Activity to be funded: Creel monitoring and tag recovery of spring Chinook fisheries near the Oregon border in the Grande Ronde River

Background:

In 2012, the Oregon Department of Fish and Wildlife (ODFW) contacted the Washington Department of Fish and Wildlife (WDFW), Nez Perce Tribe (NPT) and Confederated Tribes of the Umatilla Indian Reservation (CTUIR) to suggest a spring Chinook salmon fishery in the lower Grande Ronde River in the spring of 2012. ODFW estimated that over 7,300 hatchery spring Chinook salmon would be returning to the Grande Ronde River (Table 1). It was expected that all but the Upper Grande Ronde and Lookingglass populations would exceed critical thresholds and the minimum abundance thresholds established by the National Marine Fisheries Service (NMFS). In the past several years, upper river fisheries have not been very successful and ODFW and the tribes have agreed to ODFW handing out excess hatchery fish at the Lookingglass weir to the public to reduce the number of hatchery fish on the spawning grounds. The return of hatchery Chinook salmon in 2012 was expected to be much larger than usual. Therefore, ODFW proposed lower Grande Ronde River fisheries in both Oregon and Washington, consistent with the Grande Ronde Spring Chinook Fishery Management and Evaluation Plan (FMEP) jointly submitted by ODFW and WDFW. All the co-managers agreed to continue discussions to complete planning and coordination with NMFS to implement spring Chinook salmon fisheries in the lower Grande Ronde near the Oregon border (on both sides of the border). WDFW and ODFW each secured funding in 2012 to monitor the adjacent fisheries on each side of the border. Unfortunately, as the season progressed it became apparent that the run was going to be too small in the Grande Ronde to allow the mainstem Grande Ronde River fisheries to be initiated. The late June in-season return estimate and fishery planning concluded

that only 100 hatchery origin spring Chinook salmon per state were available to be harvested, as well as about 100 natural origin spring Chinook salmon that were expected to be handled. ODFW had serious concerns about anticipated angler effort and that the catch rate would likely exceed the ESA impact limit with a proposed three day fishery. The risk to weak stocks returning to the upper Grande Ronde was too high to implement a new, untested fishery when there was little margin for error.

A proposal was submitted in 2013, although it was unlikely that enough fish would be available to offer this fishery in 2013 based on jack counts the previous year. However, the securing of funding takes place before it is known whether the run will be large enough to allow this new fishery to be initiated, and if the opportunity presented itself a fishery monitoring plan and funding was needed in place to activate this fishery. Funding was secured, but low returns prevented this fishery from opening.

In 2014, a proposal was submitted for a potential spring Chinook salmon fishery in late spring and/or early summer of 2014 based on high jack numbers in 2013 and preseason prediction for the upper Columbia Basin/Snake River. On 27 June, 2014 the Grande Ronde River was opened to spring Chinook salmon fishing for the first time in 40 years. The fishery was a pilot fishery in conjunction with ODFW, and creel duties were shared between the two agencies. The original fishery in Washington was from the Highway 129 bridge upstream approximately 12 miles to the farthest upstream Washington/Oregon boundary line. The pilot fishery was setup for four days from 27-30 June. After assessing the first four days of the fishery, it was decided to reopen the area for an additional three days from 5-7 July. Angler effort and harvest were limited in this fishery, but with continued opportunities it may become a very popular fishery.

With information from the 2014 fishery, a plan was developed to open the Grande Ronde fishery again in 2015. ODFW and WDFW opened the river jointly on the 13 June, and it remained open through 5 July. Within Washington, the river was opened from the mouth of Buford Creek (~½ mile downstream of Highway 129) upstream to the Washington/Oregon state line. The fishery was open seven days per week with a daily limit of seven hatchery (adipose fin clipped) Chinook salmon of which no more than two could be adults. Anglers were required to use barbless hooks and stop fishing when the adult portion of the limit was retained. WDFW and ODFW each conducted the creel within their state using the same sampling protocols. ODFW took the lead to summarize the creel data. A total of 685 hours of angler effort were recorded within Washington with no fish harvested or released. Angler effort may be overestimated because of differences in count data collected between Oregon and Washington in the first couple of weeks of the fishery. In comparison, Oregon had 168 hours of effort during the same period.

This proposal is again being submitted for a potential spring Chinook salmon fishery in late spring and/or early summer of 2016. With a current prediction for the upper Columbia Basin/Snake River below the 2015 run size, it is unknown if this fishery will be able to be implemented in 2016. While effort and harvest were low in 2015, there were also very low water conditions within the Grande Ronde and the conversion of passive integrated transponder (PIT) tagged fish in our target groups were lower than expected. This fishery provides an opportunity in southeast Washington that is unique in that WDFW can offer a spring Chinook salmon fishery

along a relatively small flowing river, instead of along a large river that has become a series of reservoirs (i.e. Snake River).

We describe potential fisheries, which are subject to change, pending further co-manager fishery planning and coordination with the National Marine Fisheries Service (NMFS) for Endangered Species Act (ESA) consultation. The Grande Ronde FMEP was accepted by NMFS and an ESA permit was issued jointly for ODFW and WDFW spring Chinook fisheries in the Grande Ronde River near the Oregon border. **The fishery planning for 2012 is presented in Table 1 as a placeholder, and example,** because it is too early in the run prediction and fishery planning process to predict adult returns or the feasibility for this fishery in 2016. We will need to confirm any early season run predictions with PIT tag detections at Columbia and Snake River dams prior to deciding whether to implement this fishery and the requisite fishery monitoring.

Table 1. Proposed natural-origin (N-O) impacts and hatchery harvest in a proposed lower Grande Ronde River fishery, based on 2012 pre-season run projections (from Jeff Yanke, ODFW, personal communications).

Population	Critical Threshold (MAT)	Minimum Abundance Threshold (MAT)	2102 Pre-Season Run Estimate (Adult Only)		Allowable Impact (N-O)	Sport Fishery Catch and Release	Hatchery Adults available for Sport Harvest
			Natural	Hatchery			
Upper Grande Ronde ^a	300	1000	66	876	1	10	13
Catherine Creek ^b	300	1000	1,060	1,337	12	120	151
Lookingglass ^b	150	500	265	1,335	5.3	53	267
Wallowa-Lostine ^c	300	1000	1,607	3,820	30	300	638 ^g
Minam ^d	225	750	1,071	N/A	11	110	N/A
Wenaha ^{d,e}	225	750	1,071	N/A	11	110	N/A
Washington Sport Fishery Quota^f						352	535
Oregon Sport Fishery Quota^f						351	534

^a Expected adult returns to the upper Grande Ronde do not meet critical threshold to establish fishery; however, some impacts must be allowed to target abundant hatchery returns in the Catherine, Lookingglass, and Lostine populations

^b Represents 50% of total N-O impacts for population, allocating the other 50% for tributary fisheries

^c Represent 75% of total N-O impacts for population, allocating the other 25% for tributary fisheries

^d According to FMEP, unsupplemented populations managed for a 1.0% impact rate at returns levels below MAT

^e Impacts for the Wenaha population will only be allocated to catch below the Wenaha River mouth

^f Agreements between OR and WA split allowable impacts below the mouth of the Wallowa River at a 50/50 rate.

^g Under current harvest and weir management scheme, 704 adults still available for out planting or 'other use' ...depending on impacts to N-O adults, there would be interest in using more of this surplus for additional harvest opportunity

Fishery Location: GRANDE RONDE RIVER

The proposed fishery area within Washington may be from the mouth of Buford Creek (~½ mile below Hwy 129 Bridge) upstream a little over 12 miles to the Oregon border, or it may be limited to a smaller section within that area. Regardless, that portion of the Grande Ronde is remote and a round trip to and from the sampling area is approximately four hours of driving time from Dayton, WA. Further discussions will occur with ODFW to coordinate, and possibly share, fishery monitoring duties and staff.

Timing/Daily Limits:

This fishery is likely to begin in late June or early July. At this time we expect fisheries would be set to close no later than July 30, unless the run prediction remains strong through the season and the ESA impacts are low. Fisheries may close earlier, as influenced by in-season forecast adjustments, water temperatures and discharge conditions, harvest rate, and/or wild fish encounters. The daily limits are anticipated to be 3-7 hatchery Chinook salmon per day, of which only 1-2 can be adults, but the jack limit may be reduced based on further discussions with co-managers and NMFS. Daily limits and other specifics of the proposed fisheries will be finalized sometime in May or June for public notification through emergency regulations and news releases to open these fisheries.

Proposed Activity: CREEL MONITORING

The WDFW is required to conduct creel monitoring of spring Chinook salmon fisheries implemented in the Grande Ronde River to determine harvest and impacts of recreational fishing on ESA listed spring Chinook salmon populations. WDFW will monitor the fisheries one to three weekdays (20-60% sample rate) and one or two weekend days (50 -100%) each week. Sampling dates will be randomly selected utilizing standard statistical sampling protocols. Creel staff will work 10-12 hour schedules each survey day, and will use a randomly selected early or late start for conducting counts with systematic counts throughout the sample day, to estimate angling pressure and harvest over the approximately 15 hour angling day. Staff will make at least two angler counts on each survey day, and will conduct as many angler interviews as possible between the angler counts. This sampling effort will be closely coordinated with ODFW and tribal co-managers.

Fish Management staff at WDFW will provide partial cost share for monitoring design, compilation and distribution of creel survey summaries approximately weekly (or jointly with ODFW). It is anticipated that two staff months of Scientific Technician 2 time may be needed to effectively monitor this fishery through the anticipated July 30 termination date, plus some Fish and Wildlife Biologist 2 staff time to plan and analyze the data and write the annual report. Additional time for a Scientific Technician 4 was added to the proposal to assist with creel, data entry or data summarization as needed.

Assistance Required:

WDFW requests funding for creel staff, sampling materials, as well as vehicle lease/mileage and/or maintenance costs, depending on vehicle ownership. Funding will be needed for a Fish

and Wildlife Biologist 2 or Scientific Technician 4 to enter and validate the field sampling data in a computer spreadsheet, and he/she may conduct the creel surveys as necessary to fill in when technicians are unavailable, and/or to field test the sampling design, or to train technicians. Because of the remote location and distance from our field office, a small amount of travel funding is requested to cover per diem in case it becomes necessary because of long work days or emergencies. Travel funding was increased slightly for this proposal based on the use of these funds in previous fisheries. The funding request is anticipated to be the maximum required if the fishery is allowed.

Budget Estimate for Grande Ronde Fishery, 2016:

Table 2. Requested Funds for Fishery Monitoring Costs *

Salaries	
FW Biologist 2 (0.5 month @ \$4,562/mo)	\$ 2,281
Scientific Technician 4 (0.5 months @ \$3,934/mo)	\$ 1,967
Scientific Technician 2 (2 months @ \$3,229/mo)	\$ 6,458
Benefits	
FW Biologist 2 (0.5 month @ \$1,848/mo)	\$ 924
Scientific Technician 2 (2 months @ \$1,730/mo)	\$ 865
Scientific Technician 2 (2 months @ \$1,597/mo)	\$ 3,194
Subtotal	\$15,689
Goods and Services	
Vehicle Mileage/lease	\$2,506
Misc. sampling materials	\$ 300
Sub total	\$1,400
Travel (Travel (10 days at \$76/day)	\$760
Capital Equipment (none)	\$ 0
Total Budget Amount Requested*	\$19,358

*CRSSEAB Request for 2015 spring Chinook fishery monitoring is shown, but much of the fishery planning, harvest calculations, and report compilation is provided as cost share using WDFW funding.

Need for Proposed Activity:

Creel monitoring is required by NMFS (ESA permit based on ODFW/WDFW FMEP) and *US v OR* agreements for spring Chinook salmon fisheries implemented in the Snake River Basin. The primary objective of the creel monitoring is to determine ESA impacts to listed populations, including estimated number of naturally produced salmon caught and released, and to estimate harvest of adult hatchery Chinook salmon. Ancillary to monitoring ESA impact will be estimates of angler effort and jack salmon catch and harvest in addition to recovery of coded-wire tags (CWT), and PIT tags, which will identify hatchery origins and provide recovery data for those hatchery programs contributing to the fishery opportunity.

Benefit of Proposed Activity:

The proposed monitoring allows WDFW to implement spring Chinook salmon fisheries within the joint ODFW and WDFW FMEP framework, which was approved by NMFS for Grande Ronde Basin spring Chinook salmon fisheries. The proposed monitoring will enable WDFW to adequately sample the anticipated fisheries throughout the maximum anticipated fishery season and open area within the Washington portion of the fishery. The proposed monitoring effort should be adequate to check for CWTs or PIT tags in harvested fish, thereby enabling WDFW to account for contributing sources of harvested spring Chinook salmon and the potential impacts of fisheries on those stocks of fish.

In 2015, a spring Chinook salmon fishery was opened for the second year in a row which was previously closed for 40 years. The Fishery was opened for a total of 23 days. WDFW worked with ODFW on fishery planning and implementation and the creel surveys were shared between the agencies. ODFW took the lead on summarizing creel data from the Washington and Oregon sections of the river. Angler effort was limited in this fishery and we did not see any harvest (Table 3), but with continued opportunities this may become a very popular fishery. We calculated an average angler day of 4.17 hours, from data collected by WDFW staff (may include Oregon and Washington anglers and should be considered preliminary). While this number may not be an accurate reflection of the total fishery we applied it to the areas to give an estimate of total angler trips and economic benefits (Table 3). The economic values in the right column in the table below are based on 2006 dollars. They could be increased by 2.5-3% per year to approximate the economic value in 2015 dollars, plus NMFS used \$86 per angler day in their 2013 Environment Assessment of the Columbia Basin hatchery programs.

Table 3. Preliminary results from the 2015 Grande Ronde Spring Chinook Fishery.

Grande Ronde Summary	Angler Effort (hours)^a	Wild Adults Released	Hatchery Adults Harvested	Angler Trips^b (days)	Economic Value (At x \$58 per day)^c
Washington Total	685.0	0	0	164	\$9,512
Oregon Total	167.8	0	0	40	\$2,320
Fishery Total	852.8	0	0	204	\$11,832

^a Washington angler effort may be over-estimated, because of a difference in collecting count data at the beginning of the season

^b Angler trips were based off of data collected only by WDFW

^c \$58/day is an estimate from Wegge (2008)

A smaller 2016 preseason estimate of salmon entering the upper Columbia River may not make implementation of this fishery feasible, but predictions for the Grande Ronde Basin are not yet available. This fishery could be helpful in removing hatchery Chinook salmon, which would reduce the proportion of hatchery fish on the spawning grounds, consistent with the Hatchery Scientific Review Group (HSRG) recommendations and WDFW Commission policy to implement HSRG recommendations. We are uncertain at this time what the pre-season prediction might be for the Grande Ronde Basin but we wish to be prepared to implement this

fishery and the associated monitoring should the run be of sufficient size to allow the fishery to proceed. Implementation of this fishery is a rare opportunity that we must be prepared to take advantage of if returns to the Grande Ronde are adequate.

Additional Considerations:

Non-tribal (sport/recreational) spring Chinook salmon fisheries in the Snake River Basin contribute considerably to the economic well-being and quality of life for residents and small communities in southeast Washington. Localized fisheries can provide significant benefits to small businesses in small rural communities which have limited opportunity for attracting outside income. The proportion of total economic benefits provided by these fisheries is often much higher in these small rural communities than in larger communities with more diversified and larger economies. Additionally, Chinook salmon fisheries also contribute to achieving tribal and non-tribal mitigation and recovery goals. The ability to provide adequate monitoring of these fisheries allows fisheries resource managers to open the fisheries and meet ESA requirements.