

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

Applicant: WDFW, Fish Program, Science Division, Hatchery/Wild Interactions Unit
Snake River Lab - Todd Miller and Joe Bumgarner

Contacts:

Todd Miller or Joe Bumgarner	or	Chris Donley
Fish Biologists		Regional Fish Program Manager
WDFW-Snake River Lab		Wash. Dept. of Fish and Wildlife
401 South Cottonwood		2315 North Discovery Place
Dayton, WA 99328		Spokane Valley, WA 99216-1566
509-382-1710 or 509-382-1004		(509) 892-7861

Proposal Title: **MONITORING OF 2016/2017 SUMMER STEELHEAD RUN YEAR AND THE 2016 FALL CHINOOK SALMON FISHERIES IN SOUTHEAST WASHINGTON - renewal**

Type of Proposal: **Fishery monitoring and data collection**

Date of submission: **December 1, 2015**

Effective Period of Funding: **September 1, 2016- March 31, 2017**

Amount of Funding Requested: **\$ 110,884**

Activity to be funded: **Provide additional steelhead and fall Chinook salmon fishery monitoring and coded-wire tag recovery in the Snake and Tucannon rivers.**

Background

The Lower Snake River Compensation Program (LSRCP) funds the Washington Department of Fish and Wildlife (WDFW) steelhead and fall Chinook salmon fishery monitoring in southeast (SE) Washington. Fishery monitoring by LSRCP in the Snake and Tucannon rivers has been reduced due to funding limitations and other agency priorities. From 2010 to the present, the Columbia River Salmon and Steelhead Recreational Angler Board (CRSSRAB) provided funds that allowed additional monitoring of fall Chinook salmon fisheries in the Snake River and steelhead fisheries in the Snake and Tucannon rivers. For several years prior to 2010, the Tucannon River steelhead fishery was not sampled and the Snake River had reduced sampling.

The Tucannon River steelhead fishery is important for WDFW to monitor as the hatchery program eliminated the releases of Lyons Ferry Hatchery stock steelhead and has increased releases of Tucannon River hatchery endemic stock for harvest mitigation. In addition, a criterion within our Fishery Management and Evaluation Plan (FMEP) specifies that the natural steelhead population in the Tucannon River must exceed 280 returning natural-origin adults or the fishery may have to close. Due to the low population status of steelhead in the Tucannon River, the National Oceanic and Atmospheric Administration (NOAA) fisheries requires that fishery monitoring occur in the

Tucannon River. In 2016, as was the case from 2011 to 2015, WDFW expects to have fall Chinook salmon harvest opportunities in the Snake River. Therefore it is important to monitor and evaluate both of these fisheries and their potential effects on Endangered Species Act (ESA) listed naturally produced fall Chinook salmon and steelhead in the Tucannon and Snake rivers.

For 2016 fishery monitoring, WDFW is proposing a small increase in funding compared what was proposed in 2015 due to legislative mandated increases to salary and benefit rates for WDFW employees, as well as for some additional supervisory support in the Snake River fishery near Clarkston. The request has been separated into multiple goals and geographic areas:

- 1) Supplemental sampling of the Tucannon River steelhead fishery is more efficient logistically if we also use the same sampling staff to monitor the steelhead fisheries in the vicinity of the Snake River from Little Goose Dam to near Lyons Ferry Hatchery. This effort then allows some of the existing sampling effort in that area to shift to improve sampling elsewhere in the Snake River. As harvestable, adipose clipped, adults return to the Tucannon River from an endemic stock hatchery program in 2014 and 2015, our intention is to increase monitoring with dedicated Tucannon River/Snake River personnel to conduct a statistical based creel methodology to estimate total harvest within the Tucannon River. This will also allow us to better be able to document the numbers of natural origin steelhead captured and released in the Tucannon River and to determine ESA impact levels. A statistically sound creel method would allow for in-season harvest estimates, which allows for management decisions to occur in-season if necessary. Having viable creel data collected will also give fishery managers the information to make future fishery decisions concerning the Tucannon River. A secondary goal is to recover coded-wire tags from hatchery steelhead, including out-of-basin strays, which are captured and kept in the Tucannon River fishery.
- 2) In the fall of 2016, WDFW is expected to allow harvest of adult and jack fall Chinook salmon in the Snake River from the Snake River mouth upstream to the Grande Ronde River. Based on Snake River fall Chinook salmon fishery monitoring over the past five years, retention of fall Chinook salmon is generally incidental to the steelhead fishery, however there is a growing fishery at the confluence of the Snake and Clearwater rivers, which may require more intense monitoring in the future. Through surveys, we will document the numbers of fall Chinook salmon that are captured, kept, or released to determine ESA impact levels.

Fishery Locations

Fisheries monitoring will occur in two geographic areas. Staff is grouped for the efficiency of monitoring. Listed in order of priority:

- 1) Tucannon River below Marengo and the Snake River in the vicinity of Little Goose Dam to Lyons Ferry Hatchery.
- 2) From Lower Granite Dam upstream to the mouth of the Grande Ronde River. We will coordinate with Idaho Department of Fish and Game to integrate fishery monitoring for both fall Chinook salmon and steelhead in boundary waters of the Snake River to prevent duplication of effort and maximize the efficiency of sampling staff from both agencies.

Fishery Timing

Steelhead (Snake River) - September 1, 2016 to March 31, 2017.

Steelhead (Tucannon River) - September 1, 2016 to February 28, 2017.
 Fall Chinook (Snake River) - September 1, 2016 to October 31, 2016.

Proposed Activity: Fishery Monitoring

WDFW will provide monitoring of steelhead and fall Chinook salmon fisheries in the areas described above at least five days per week. Efforts will enable WDFW to assess the ESA impacts on fall Chinook salmon and steelhead, recover coded-wire tags and detect Passive Integrated Transponder (PIT) tags, as well as provide in-season catch rate data.

This activity will require three creel clerks for portions of the fishing seasons in the lower Tucannon River and selected areas of the Snake River. We estimate that ~20 temporary technician staff months and two supervisory staff months (biologists) are needed to supplement the current LSRCP creel efforts.

Effort/Assistance Required: WDFW requests funding for creel clerks, supervisors, monitoring supplies, and vehicle operation and maintenance. The funding request shown is for monitoring the maximum possible fishery opportunities expected, but fishery monitoring funding could potentially be lowered if fisheries are curtailed due to other reasons. This request for assistance is an increase from the 2015 request due to legislature mandated increases to salary and benefit rates for WDFW employees and for some additional supervisory support in the Snake River fishery near Clarkston.

Budget Summary:

Salaries and Benefits		\$99,353
Fish Biologists (2.5 total staff months)	\$13,130	
Scientific Technician 2 (17.5 total staff months)	\$53,838	
Benefits	\$32,385	
Goods and Services		\$11,531
Personnel Service Charges and Data Processing	\$674	
Vehicle Lease and Mileage (16 months)	\$9,307	
Sampling Gear (knives, raingear, boots, etc.)	\$250	
CWT or PIT detector repair	\$500	
Guide Snout Program (Fall Chinook @ \$3/snout)	\$800	
Request for 2016 steelhead/fall Chinook monitoring		\$ 110,884

Estimated Cost Share with LSRCP = ~\$95,000

Need for Proposed Activity: Fishery monitoring of ESA impacts is necessary for conducting steelhead or Chinook salmon fisheries as part of our FMEP and hatchery evaluations (see Tucannon Summer Steelhead HGMP). Estimated ESA impacts can be calculated by combining estimated rates of Chinook salmon or unmarked steelhead caught and released per steelhead harvested from WDFW catch record cards.

Benefit of Proposed Activity: The proposed monitoring allows WDFW to maintain steelhead and Chinook salmon fisheries and restore and enhance our monitoring of fisheries in selected locations of the Snake and Tucannon rivers. This monitoring enables WDFW to allow fall

Chinook salmon harvest in 176 miles of the Snake River and evaluate fall Chinook salmon retention and/or catch and release impacts. NOAA Fisheries requires monitoring of the Tucannon steelhead fishery to remain open. WDFW will check for PIT tags and coded-wire tags (CWT) in harvested fish with portable PIT tag and CWT detectors. PIT and CWT tag detections are necessary to provide data that can be used to evaluate the source stock of harvested fish, their timing and movements, and the potential harvest impacts on those stocks of fish. Recovery of CWT and PIT tags from both Chinook salmon and steelhead will be reported to the RMIS CWT or PTAGIS databases once all data is checked and verified for accuracy.

For example, in the Tucannon River for the 2013/2014 season, WDFW interviewed 76 anglers over the course of the entire season that fished a total of 221 hours. From that sample, 11 natural origin steelhead were captured and released, with ten hatchery origin fish captured and kept. However, due to the small number of hatchery fish sampled, no PIT tags were detected, but we recovered three CWTs, one from Pahsimeroi Hatchery in Idaho, one from WDFW Touchet River releases, and one residual (juvenile) Tucannon released fish. Overall, effort in the Tucannon was again down compared to previous years. This was anticipated due to the fact that no Lyons Ferry stock steelhead that were released into the Tucannon would be returning that year. This program was terminated in 2010. Anglers were aware of this and as a result lower angler effort was observed. Angling effort is anticipated to increase again as we expect harvestable fish from the Tucannon endemic hatchery stock program to return.

As another example, in Section 648 (Lower Granite Dam to Clarkston) for the 2013/2014 season, WDFW interviewed 596 anglers that fished a total of 2,812 hours. From that sample, a total of 31 natural origin steelhead were captured and released, with 52 hatchery origin steelhead captured and kept. One PIT tag was detected and seven CWTs were recovered. CWTs recovered indicated fish were released from Idaho (2), Oregon (1), USFWS at Dworshak Hatchery (2), Touchet River (1), and Lyons Ferry Hatchery (1). In addition to the steelhead, 140 unmarked fall Chinook salmon were captured/released and 33 were captured and kept. Twenty-one CWTs were recovered from fall Chinooks salmon with release locations from Lyons Ferry Hatchery (4), and the remaining from locations upstream of Lower Granite Dam.

Additional Considerations: Steelhead fisheries in the Tucannon and Snake rivers of southeast Washington contribute to the economic well-being and quality of life in southeast Washington. Estimated economic impacts for steelhead fishing in southeast Washington range from \$5-10 million annually and help maintain businesses and jobs in the area. Steelhead and fall Chinook salmon fisheries also contribute to meeting tribal and non-tribal mitigation goals.