

Columbia River Salmon and Steelhead Endorsement Advisory Board

Application for Funding

Applicant: WA Dept. of Fish & Wildlife, Region 3 Fishery Management

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Proposal Title: Renewal (7) “2016-17 Hanford Reach Early Fall Chinook (non-selective) & Steelhead (selective) Fishery Monitoring”

Type of Proposal: Creel to maintain/expand existing fishery

Date of Submission: February 25, 2016

Effective Period of Funding: August 1, 2016 – April 15, 2017

Amount of Direct Budget Funding Requested: \$52,039

Activity to be funded: Fishery monitoring (creel census)

Background: The Hanford Reach (HR) of the Columbia River from the Highway 395 Bridge in Pasco upstream to the old Hanford townsite wooden power line towers is open for steelhead fishing annually from October 1 through April 15 by permanent regulation. For the first three weeks (October 1- 22), the sport fishery is also open to fall chinook and coho salmon. In years when the steelhead return is large, the steelhead fishery has opened in September by emergency regulation concurrent with Region 2 opening the upper Columbia River for steelhead fishing. The HR summer/fall chinook fishery begins on August 1. Staff funded by the CRSSE monitor all species harvested in this area of the HR providing data on harvest, impacts to ESA-listed species, incidental catch, and angler distribution and effort for all species.

Proposed Activity: R3 staff will conduct early summer/fall chinook and steelhead fishery monitoring in the Hanford Reach (HR) through the scheduled closing of the Ringold Bank Fishery on April 15, 2017.

Early Fall/Summer Chinook: In recent years, an early fishery targeting HR and Yakima R. summer chinook, fall chinook, and sockeye has developed at the mouth of the Yakima R. near Bateman Island extending upstream past the I-182 Bridge to the Hanford “300 Area” in Richland. This area is also known as the “**Yakima Confluence Area**” (YCA). This fishery begins in early August and has been monitored with CRSSE funding since 2013. On July 1, 2015 WDFW enacted a rule change creating a new salmon fishery management area (CRC 534)

between the Hwy. 395 Bridge and the I-182 Bridge to encompass the YCA. This was implemented so that more conservative harvest limits could be applied in the YCA to provide some protection for Yakima Basin sockeye and summer chinook that are being reintroduced, while still allowing salmon fishing in this popular six-mile reach. Yakima R. fish often hold for an extended time in the cooler Columbia R. because of a thermal barrier that develops in the lower Yakima. This made Yakima summer chinook and sockeye more vulnerable to harvest until last year's rule change. More liberal salmon daily limits apply in the HR upstream of the YCA. Recovery of coded-wire tags during creel census allows WDFW to determine which area, YCA or upper HR (CRC 535, 536), fish are harvested and their origin.

Steelhead: If a strong return of Upper Columbia River (UCR) steelhead is realized early, as determined by the Region 2 steelhead sampling program at Priest Rapids Dam, Region 3 may open the fishery for hatchery steelhead in September rather than October. If run strength permits, we may also open the upper HR section from the wooden powerline towers at the old Hanford town site upstream to Priest Rapids Dam, which last occurred during the 2014-15 fishery. Opening of this optional area to steelhead fishing requires monitoring of the fishery in both the lower section and the expanded section. If the catch rate on UCR wild/natural (adipose intact) steelhead is higher than anticipated based on creel monitoring, the expanded fishing area in the upper HR could be closed early to prevent exceeding ESA impact limits and prematurely closing other steelhead fisheries above and/or below Priest Rapids Dam.

Assistance Required

An estimated **\$52,039** (direct budget) is needed to fund two technicians to sample the Hanford Reach fall chinook and steelhead fishery from August 1, 2016 through April 15, 2017 (Table 1). The proposed budget includes labor, mileage, equipment, and personnel fees. This proposal allows WDFW to collect angler effort, harvest and coded-wire tag data, and estimate ESA impacts from the Hanford Reach steelhead fishery and the YCA summer/early fall chinook /sockeye fishery. This proposal may expand opportunity by allowing WDFW to open the steelhead fishery by as much as one month earlier than the permanent rule opening date (Oct. 1) and expand the fishery spatially to include the upper HR section.

Table 1. Budget detail for 2016-17 Hanford Reach early fall chinook and steelhead fishery monitoring, August 1, 2016 – April 15, 2017.

Budget Item	Quantity	Unit Cost	Total
Creel Technician Salary	8.5 staff-months (Aug. 1 – Apr.15)	\$2,847 per staff-month (Range 36, Step C)	\$24,200
Benefits (including health insurance)	8.5 months	\$1,354/mo	\$11,506
Vehicle Mileage	13,350 miles	\$0.55/mi	\$7,343
Equipment (including personnel fees)	Technician equipment + CWT "T" wands (2)		\$8,990
Direct Budget Total			\$52,039

The estimated cost for the sport monitoring for 2016-17 is roughly 20% higher compared to the 2015-16 fishery monitoring. This is almost entirely due to the inclusion of the purchase of two coded wire tag “T” wands. The WDFW CWT Lab has provided CWT wands for fishery monitoring in prior years, but they no longer have sufficient wands to keep up with the demand statewide. For the past two years it has been necessary to broadcast statewide requests to all WDFW biologists to borrow CWT wands to sample the Hanford Reach and Yakima River fall fisheries. We currently need eight CWT wands to monitor the Hanford Reach/Yakima River fall fisheries; we have six. Borrowing wands from other staff has multiple issues. First being the lack of wand availability because of competing needs at the same time by wand owners. Secondly, the wands that are available are commonly older and may not be in good working condition. This has resulted in the need to return the wands for in-season repair causing additional ill-timed equipment deficits and costs to the project for the repairs and shipping. Finally, if a wand is lost or damaged while on loan, the project using the wand is responsible for replacement costs. With the addition of the CWT tagging of both fall chinook and now steelhead at Ringold Springs Hatchery, it is essential that there are a sufficient number of CWT wands owned by Region 3 to fully support the technician staff monitoring the fishery.

CWT wands are manufactured and sold by Northwest Marine Technology and the cost of each wand is \$4,154 (\$3,825 + sales tax). We are requesting funds of \$8,308 to purchase the two wands for monitoring the Hanford Reach sport fishery. These wands will be provided to the two technicians supported by this proposal. Wands typically last multiple years so this increase will only be included in the 2016-17 proposal. These wands will be available for loan to other fisheries from December through August (e.g. Yakima spring chinook fishery monitoring). The scanning of salmon and steelhead for the presence of CWTs is an essential component of harvest sampling in northwest fisheries. Providing this equipment is vital to WDFW’s ability to monitor current, expanding, or new fisheries.

Need for Proposed Activity

WDFW is obligated to NOAA-Fisheries per provision in the agency’s Section 10 Incidental Take Permit# 1395 to monitor this fishery to estimate and account for impacts to UCR wild/natural steelhead caught and released while anglers harvest excess hatchery fish. We also use real-time effort, catch and harvest estimates from creel census to inform the public about current fishing opportunities and to generate annual estimates of economic benefit to the local economy.

Benefit of Proposed Activity:

In addition to meeting our obligations of managing fisheries that impact ESA Listed species and re-introductions to the Yakima River this fishery generates approximately \$400,000 annually to the local economy (Table 2).

Table 2. Angler effort, angler trips, steelhead harvest and estimated economic benefit of Hanford Reach steelhead sport fishery, Hwy. 395 Bridge to Priest Rapids Dam.

Year	Effort (Angler-Hours)	Angler Trips	Steelhead Harvest (hatchery retention)	Steelhead Harvested per Angler-Trip	Economic Value*
2009-10	40,469	11,418	3,299	0.289	\$662,244
2010-11	35,982	8,653	1,584	0.183	\$501,856

2011-12	30,588	8,739	1,512	0.173	\$506,862
2012-13	17,476	5,163	802	0.155	\$299,454
2013-14	15,304	4,136	814	0.197	\$239,888
2014-15	25,489	7,116	2,107	0.296	\$412,728
Average	27,551	7,538	1,686	0.216	\$437,172

Table 3. Angler effort, angler trips, steelhead harvest and estimated economic benefit of Hanford Reach steelhead sport fishery, Hwy. 395 Bridge to Wooden Powerline Towers).

Year	Effort (Angler Hours)	Angler Trips	Steelhead Harvest (hatchery retention)	Harvest per Angler Trip	Economic Value
2009-10	36,757	10,802	3,106	0.288	\$626,516
2010-11	26,806	7,159	1,330	0.186	\$415,236
2011-12	30,588	8,739	1,512	0.173	\$506,862
2012-13	17,476	5,163	874	0.155	\$299,454
2013-14	15,304	4,136	814	0.197	\$239,888
2014-15	24,562	6,849	2,028	0.296	\$397,242
Average	25,097	7,141	1,611	0.216	\$414,200

Table 4. Angler effort, angler trips, steelhead harvest and estimated economic benefit of Hanford Reach steelhead sport fishery, wooden powerline towers to Priest Rapids Dam.

Year	Effort (Angler Hours)	Angler Trips	Steelhead Harvest (hatchery retention)	Harvest per Angler-Trip	Economic Value
2009-10	3,712	616	193	0.313	\$35,728
2010-11	9,176	1,493	254	0.170	\$86,620
2011-12	Not Open for Steelhead				
2012-13	Not Open for Steelhead				
2013-14	Not Open for Steelhead				
2014-15*	927	267	79	0.296	\$15,486
Average	4,605	792	175	0.260	\$45,945

* Upper Reach open from wooden power line towers to Vernita Bridge, Oct. 8 – 22; from Vernita Bridge to Priest Rapids Dam, Oct. 8 – 22 and Nov. 27, 2014 – Mar. 31, 2015.

Additional Considerations

The HR steelhead fishery is popular with anglers in the Tri-cities, Moses Lake, Spokane, and Yakima areas because of the close proximity to these cities and the long duration of the fishery providing continuous fishing opportunity from early fall to the spring (April 15). Tri-cities anglers have some opportunity to fish for steelhead above McNary Dam and in the Snake River through the winter, however, the Yakima River does not have a hatchery steelhead program and has not been open to steelhead fishing since 1993 when a small steelhead smolt rearing program utilizing Skamania stock was discontinued. The closest steelhead opportunities for Yakima Basin steelhead anglers are the Ringold/Hanford Reach and Klickitat River. The section of the HR from Vernita Bridge to Priest Rapids Dam is the shortest drive for Yakima and Kittitas county steelhead fishermen and presents a terrific opportunity to those anglers when the fishery can be opened in this area.

The Hanford Reach is home to one of the largest, naturally-spawning populations of fall chinook salmon in the Northwest. The HR fall chinook fishery draws thousands of anglers to fish for salmon, including anglers who have discovered the late summer fishery for summer/fall chinook (and now Yakima Basin sockeye) in the Yakima Confluence Area (YCA). An early opening and spatial expansion of the steelhead fishery to PRD, if feasible because of an early and/or large return to the upper C.R., would allow salmon anglers the opportunity to harvest hatchery steelhead in their catch, as well as attracting dedicated steelhead anglers. Prior to 2009, all hatchery steelhead caught incidentally during the salmon fishery above the Hanford wooden powerline towers had to be released, a source of significant angler frustration. Robust UCR steelhead returns during the 2009-10 and 2010-11 seasons, combined with CRSSE funding for expansion of the steelhead fishery upstream to PRD in 2010-11, provided a welcome remedy for that frustration. A strong steelhead return in 2014 allowed WDFW to once again open the upper HR to steelhead fishing from Oct. 8 – 22 and Nov. 27 to March 31, 2015. Unfortunately, a smaller run in 2015 did not allow for the geographic expansion of the current fishery in 2015-16. However, WDFW would like to provide that opportunity again in 2016-17 if the UCR run size is sufficient to allow it.