

# Implementation Schedule Transmittal Report for the 2011 Calendar Year

Upper Columbia Region  
August 22, 2012

## Introduction

The Upper Columbia Implementation Schedule is an annual report to NOAA providing an overview of recovery projects implemented to benefit each of the Endangered Species Act (ESA) listed species covered within the *Upper Columbia Spring Chinook Salmon and Steelhead Recovery Plan (2007)*. The purpose of this report is to provide timely, relevant, and consistent information on the status of recovery efforts in the Upper Columbia region.

NOAA Fisheries formally adopted the Upper Columbia Spring Chinook Salmon and Steelhead Recovery Plan in October 2007. The Upper Columbia Salmon Recovery Board approved, in 2008, a formal process to transmit annual implementation schedule updates to NOAA Fisheries. The attached update and the following summary of the habitat actions completed during the 2011 calendar year reflect the Board's approach to tracking implementation progress.

## 2011 Annual Report of Implementation

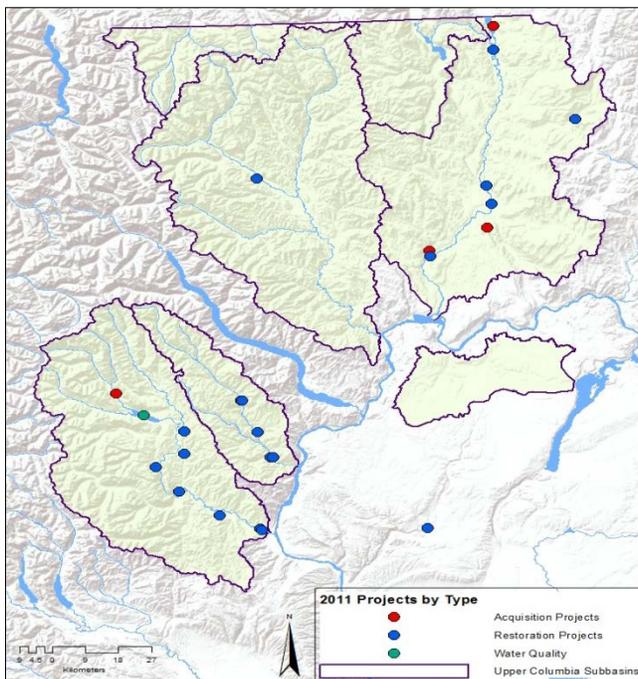


Figure 1: Map of the Upper Columbia Projects

In 2011, partners completed 25 projects across 4 sub-basins in the Upper Columbia region. The projects were started in different years, but were all completed during the 2011 calendar year. Locations of each are shown in Figure 1.

Projects are split into several different project types. Partners completed projects in three categories: water quality, habitat restoration, and acquisition. Water quality projects assess water quality conditions that may affect salmon life stages. Habitat restoration projects restore lost habitat to benefit diversity of salmon life stages. The habitat restoration project type usually involves some amount of contractor work in or near the stream. Finally, acquisition projects involve fee-simple purchase of land or conservation easements on parcels that offer

protection of functioning riparian habitat. Occasionally, land acquisition is tied to future or current restoration work.

Figure 2 shows, by type, projects completed in the Upper Columbia region in 2011. One water quality project, 20 restoration projects, and 4 acquisition projects comprise the total. These projects totaled roughly \$5.45M in federal, state, and local funds.

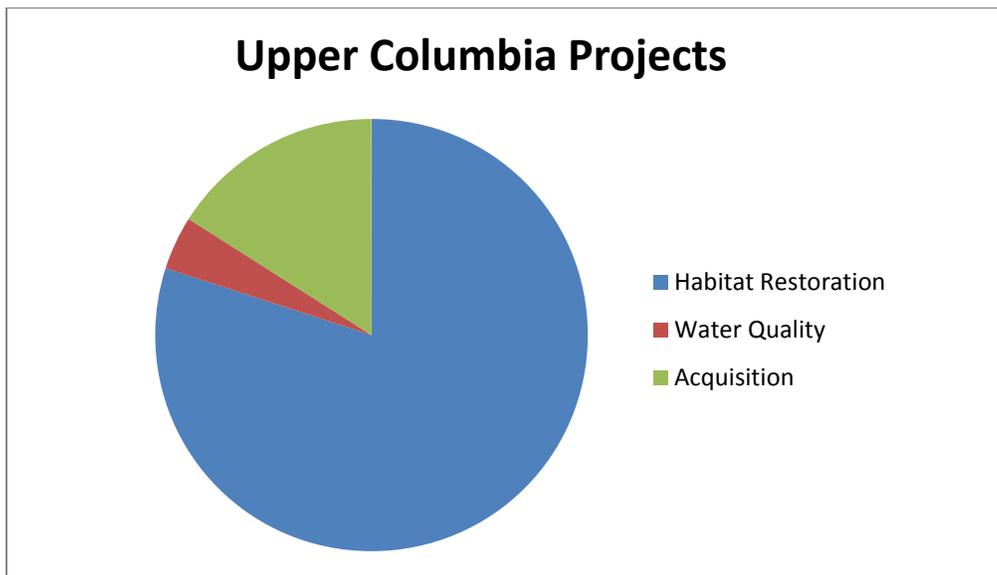


Figure 2: Upper Columbia Projects by Type

## Sub-Basin Reports

### *Okanogan*

The Okanogan sub-basin implemented 8 projects with roughly \$1.43M in funding. Three of these were acquisition projects while the remaining 5 were restoration projects. A project of particular interest is the Loup Loup Creek Culvert Replacement that is featured below.

The Loup Loup Creek Culvert Replacement project is located within the community of Mallot in Okanogan County, Washington. The project replaced two perched and undersized culverts along Loup Loup Creek that were limiting passage of steelhead. Steelhead passage through the culverts and spawning above the obstructions has occurred intermittently as flow conditions have permitted, with the last reported event occurring in 2010. One culvert was located below Old WA 97 at about river mile 0.2, and the second was located below Burdett Street at about river mile 0.1. The Burdett Street site consisted of an undersized perched culvert that created a barrier to upstream habitat under most flow conditions. The culvert at Old WA 97 was also undersized and high water flows through the culvert created a velocity barrier through which fish could not move. Replacement of the two culverts enhanced access to 2.2 miles of spawning habitat for migrating steelhead.



Figure 3: Upper Loup Loup Culvert pre and post construction respectively

### ***Methow***

The Methow sub-basin implemented 1 project with \$450,000 in funding. The restoration project is described below.

The Hancock Springs Restoration project restored approximately 0.5 miles of critical rearing and spawning habitat in Hancock Springs located in the upper Methow River sub-basin. The restoration activities completed at the site included planting native vegetation to reform and restore the degraded banks, and building log structures in the creek to stabilize the banks. All of this work was completed by hand to minimize further impact to the project area. Since the restoration project, ESA listed spring Chinook and steelhead have been spawning and rearing in Hancock Springs.

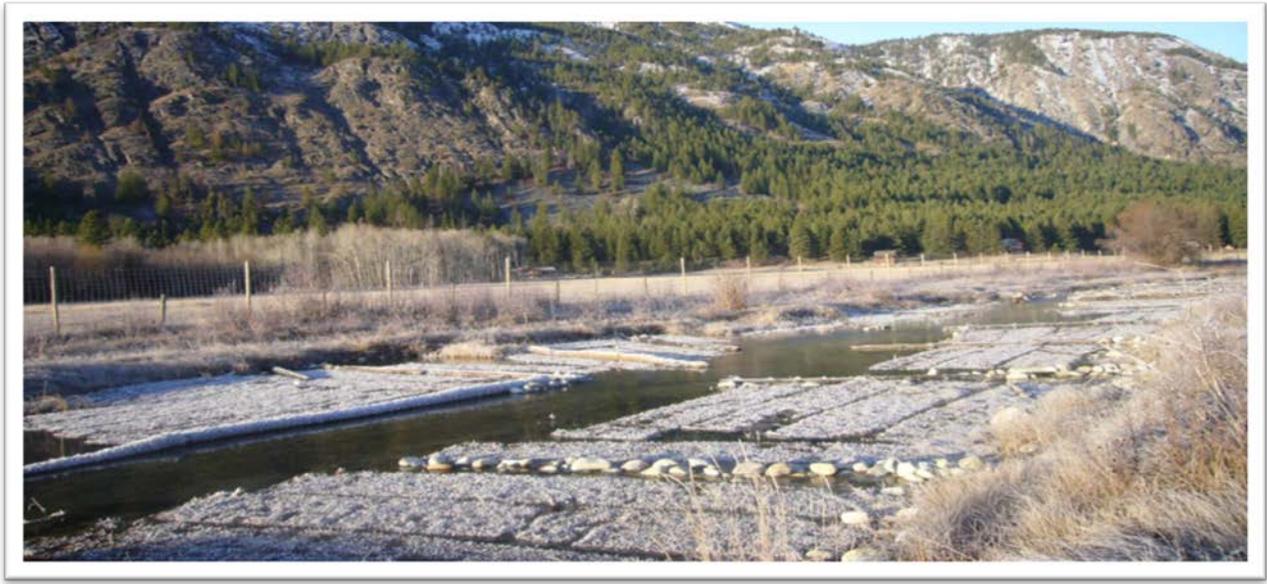


Figure 4: Hancock Springs during restoration construction

### *Entiat*

The Entiat sub-basin implemented 5 projects with roughly \$1.25M in funding. All 5 of these were habitat restoration projects. The Entiat River Planting project is described below.

The Cascadia Conservation District Entiat River Planting project is an effort to reestablish the riparian buffer along the right bank of the Entiat River between River Mile (RM) 11.8 to 13.2 located northwest of the City of Entiat in Chelan County, Washington. The project involved planting a riparian buffer width of 20 to 35 feet through five different properties. The bank has experienced clearing from residential development and agricultural use. Some riparian vegetation along the bank was not removed allowing the use of plantings to fill areas with sparse cover or within areas of removed invasive weed growth. Other portions of the site entailed the planting of almost the entire buffer width. The purpose of the plantings is to increase cover to reduce water temperatures, increase runoff filtration and future large wood recruitment, increase plant species diversity, and reduce invasive weed competition. Livestock exclusion fencing was installed on the southernmost property area along the 35 foot buffer to limit grazing in the riparian area.



Figure 5: Entiat River Planting Project after riparian planting

## *Wenatchee*

The Wenatchee sub-basin implemented 10 projects with roughly \$1.87M in funding. Those included 1 acquisition project, 1 water quality project, and 8 habitat restoration projects. One of particular interest is the Lower Wenatchee River CMZ 20 Boat Launch project, which is described below.

The Lower Wenatchee River Leavenworth Boat Launch project was implemented to increase habitat complexity, floodplain connectivity, off channel refuge, and rearing habitat for juvenile steelhead and Spring Chinook on the lower Wenatchee River. This project established a connection between a .25 acre pond and the Wenatchee River by removing roughly 30 linear feet of an earthen berm to establish a high-flow inlet and an outlet channel connecting the pond year-round. This project is located at RM 24.2 and builds on habitat and riparian restoration efforts that have already been completed in this stretch of the Wenatchee River.



Figure 6: Lower Wenatchee River Boat Launch Project directly after construction

### *Columbia River Mainstem Tributaries*

The Foster Creek/Moses Coulee area implemented one restoration project in 2011 with \$42,500 in funding. The project is described below.

The Lower Moses Coulee Recharge Basin project consisted of constructing a 0.5 acre recharge basin capable of absorbing 250 – 500 cubic feet per second to recharge the groundwater table.

In the Lower Moses Coulee, water is in short supply during the summer months while peak spring stream flow events can cause extensive flooding. Water storage is has multiple benefits for the Lower Moses Coulee. Storage of high stream flows using an infiltration recharge basin during spring months reduces flooding and recharges the groundwater table. During high flow years, the project has a high benefit by providing additional stream flows during the later summer dry months to maintain critical in-stream flows for fish habitat and enhance irrigation supplies. Stored water in the Lower Moses Coulee may also provide additional water to the Columbia River during the low flow months of July and August. Action 19 of the WRIA 44/50 Watershed Management Plan is to pursue potential water storage projects in the watershed for in-channel and off-channel sediment and erosion control, aquifer storage, bank storage, groundwater recharge, flood control, and habitat restoration or enhancement.



Figure 7: Construction of the Lower Moses Coulee Recharge Basin

## Implementation Schedule Development

The annual implementation schedule was generated directly from the Habitat Work Schedule online database. Summarized below are the steps the Upper Columbia region takes to build science, best available information, and public input into the implementation schedule updates. The process is based on guidance from NOAA Fisheries (*Interim Endangered and Threatened Species Recovery Planning Guidance*, July 2006) that outlines the following three types of Recovery Plan revisions, and required public process:

- “Updates” – do not require formal public process. A memo to NOAA Fisheries outlining the updates will complete the record.
- “Revisions” – require a formal *Federal Register Notice*. These have an associated comment period.
- “Addendum” – are communicated by attaching information updates as an addendum in a memo to NOAA Fisheries. This process may require formal public input.

### Upper Columbia Process for Implementation Schedule Updates

Using NOAA Fisheries guidance, the UCSRB approved the following process for annual updates to the *Upper Columbia Spring Chinook Salmon and Steelhead Recovery Plan*.

**Step 1** – In the fall (October/November) the Implementation Team Leader will assemble all updates in reporting terminology. The sources for reporting codes are derived from PNAMP, PCSRF and the HWS.<sup>1</sup> The IT Leader will engage the Regional Technical Team in a review of those terms.

**Step 2** – The table of terms will be presented at the winter Implementation Team meeting for discussion and revision. The Implementation Team will also confirm the process for engaging the Watershed Action Teams in updating the Implementation Schedule.

**Step 3** – The Implementation Team Leader will work with the 5 Watershed Action Teams to update the Implementation Schedule with (a) any revised reporting codes; and (b) all relevant information regarding actions implemented and actions planned for the future. The Watershed Action Teams will work with their constituents and respective stakeholders to engage them in the update process, which may include additional public meetings.

**Step 4** – The Implementation Team Leader will consolidate all updates into the Upper Columbia Spring Chinook Salmon and Steelhead Recovery Plan Implementation Schedule. The IT Leader will also use this information to update the 3-5 year work plan for implementation.

**Step 5** – The updated Implementation Schedule will be presented to the Board for discussion. Following the presentation of the updated Implementation Schedule, the Board will hold a formal public comment period during one of its regularly scheduled meetings. Upon approval by the Board, the updated Implementation Schedule will be sent as an attachment to a memo to NOAA Fisheries advising the agency of the updates.

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<sup>1</sup> The Pacific Northwest Aquatic Monitoring Partnership (PNAMP), Pacific Coastal Salmon Recovery Fund (PCSRF), and Habitat Work Schedule (HWS) all use similar terminology for reporting and implementation tracking.