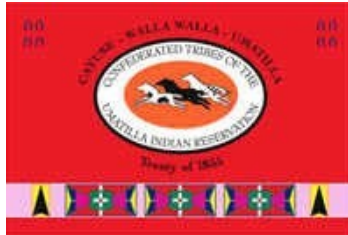


Tucannon Fish Habitat Enhancement Project



Confederated Tribes of the Umatilla Indian Reservation 2015-2016 Annual Progress Report

Prepared For:

**B O N N E V I L L E
P O W E R A D M I N I S T R A T I O N**



Contract Numbers: 67768 & 72049

Prepared By:

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Mission Statement - CTUIR Fish Habitat Enhancement Program

To protect, enhance, and restore functional floodplain, channel, and watershed processes to provide sustainable and healthy habitat for aquatic species of the First Foods order.



Project Leader, Kris Fischer (yellow), and Assistant Project Leader, Zach Seilo (orange), working hard to restore fish habitat in the Tucannon River Basin

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INTRODUCTION

Through the treaty of 1855, the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) have retained the right to harvest their traditional foods, including salmon, within their “usual and accustomed” territory. The Tucannon River Basin is located within the “usual and accustomed” territory of the CTUIR in southeast Washington State. Therefore the CTUIR has a vested interest in establishing and maintaining sustainable populations of salmonids in the Tucannon River.

In 2007, the CTUIR Department of Natural Resources (DNR) established their *First Foods Policy* (Figure 1) as guidance for CTUIR’s natural resource management objectives. The *First Foods* are considered by the CTUIR to constitute the minimum ecological products necessary to sustain CTUIR culture. The CTUIR DNR has a mission to protect *First Foods* and a long-term goal of restoring related foods for the Tribal community. The mission was developed in response to long-standing and continuing community expressions of *First Foods* traditions, and community member requests that all *First Foods* be protected and restored for their respectful use now and in the future.

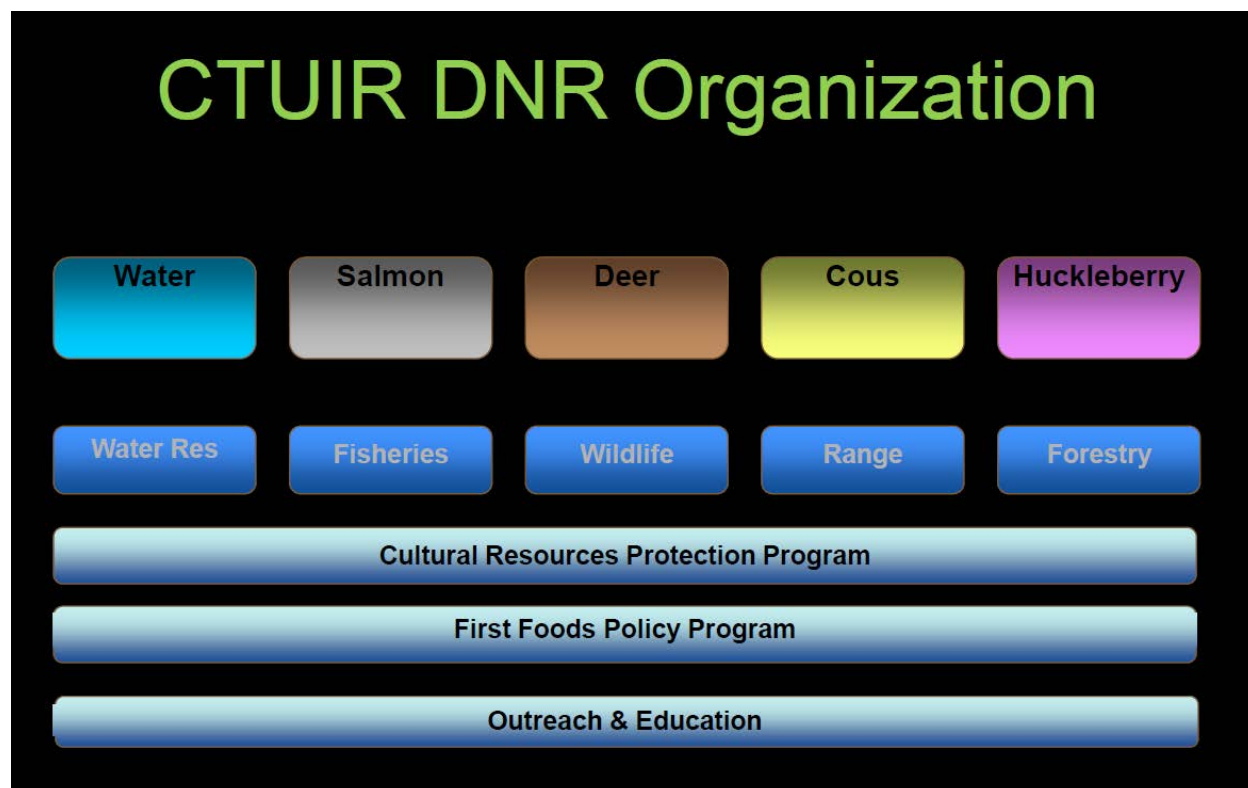


Figure 1: *First Foods Policy* organizes the CTUIR Department of Natural Resources according to five categories of traditional CTUIR subsistence foods. For each of the five categories of *First Foods* a program has been developed within the CTUIR DNR. For example, the CTUIR fisheries program manages aquatic biota (salmonids and other organisms) that are important to CTUIR members.

The CTUIR *First Foods Policy* led to the creation of the CTUIR *River Vision* guidance document in 2008 (Jones et. al, 2008). *River Vision* (Figure 2) identifies ecological processes and conditions necessary to sustain aquatic *First Foods*. CTUIR fish habitat enhancement staff use *River Vision* to prioritize and inform their fish habitat restoration objectives. *River Vision* also establishes CTUIR’s interest in fish habitat enhancement throughout their “usual and accustomed” territory.

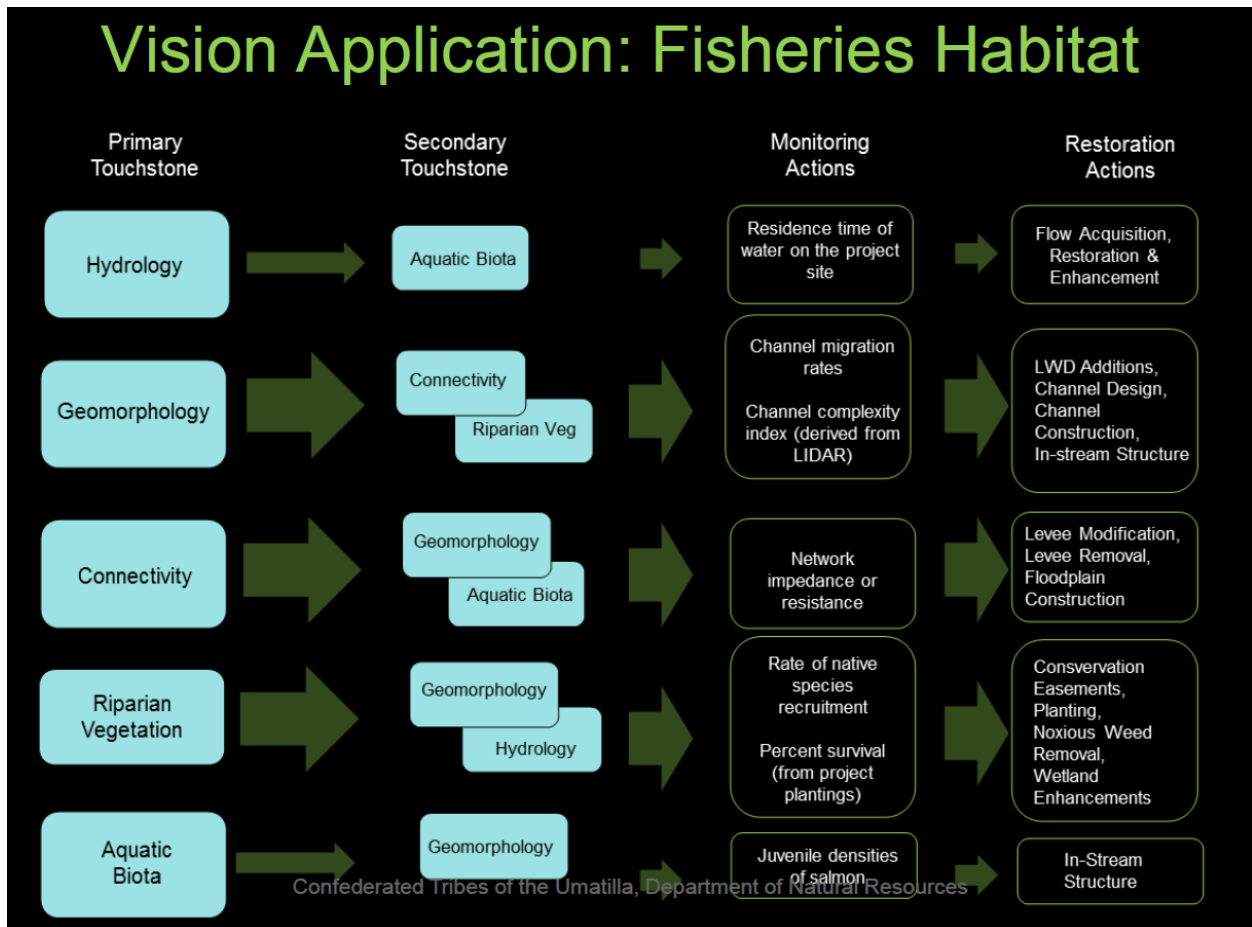


Figure 2: *River Vision* outlines five fundamental components or ecological “touchstones” of rivers that facilitate the sustained production of aquatic *First Foods*. The goal for all CTUIR fish habitat enhancement projects is to completely address all five of the *River Vision* touchstones for a given restoration treatment.

The CTUIR’s Tucannon Fish Habitat Enhancement Project (TFHP) was initiated by BPA and CTUIR in August of 2009. Previous efforts (CTUIR, Washington Department of Fish and Wildlife, Columbia Conservation District and Snake River Salmon Recovery Board) have identified the ecologically-limiting factors (CCD, 2004; SRSRB 2011) associated with the decline of Tucannon River salmonids listed under the Endangered Species Act (ESA). The aforementioned “limiting factors analysis” led to a Conceptual Restoration Plan for the Tucannon Basin (Anchor QEA,

2011 a-c; Anchor QEA, 2012 a-b). The goal of the CTUIR TFHP is to collaborate with federal, state and local agencies on fish habitat restoration projects, using the basin-wide Conceptual Restoration Plan to ameliorate ecologically-limiting factors for ESA-listed salmonids in the Tucannon River. It is expected that improved habitat conditions in the Tucannon River will lead to an increased abundance of ESA-listed salmonid species returning to the Tucannon River.

During the period of January 1, 2015 – December 31, 2016 the TFHP underwent a change in project staff, including a new Project Leader and the addition of an Assistant Project Leader position. This report summarizes project activities for the TFHP (Project Number 2008-202-00) during January 1, 2015 – December 31, 2016. Through intergovernmental agreements #67768 and #72049 between the CTUIR and BPA, TFHP staff have conducted ongoing restoration design oversight, environmental compliance and permitting, interagency collaboration, and contractor administration in preparation for river restoration activities on the Tucannon River during the summer of 2017.

PROJECT LOCATION AND LANDSCAPE CONTEXT FOR SALMONIDS AND TRIBES

Although the existing boundary of the CTUIR only covers 245,000 acres in northeast Oregon, the historic territory of the CTUIR member tribes (Umatilla Tribe, Cayuse Tribe, and Walla Walla Tribe) encompassed over 6.4 million acres of land in northeast Oregon and southeast Washington. CTUIR members inhabited areas of several rivers including the Columbia, Umatilla, Walla Walla, Snake, Tucannon, and Grande Ronde. The Tucannon River is located along the northeast margins of the CTUIR's historic territory (Figure 3) in an area that is generally considered to be the historic border region between CTUIR and Nez Perce territories. Today the CTUIR and Nez Perce Tribe are co-managers of the Tucannon River along with federal, state, and local agencies.

The Tucannon River is approximately 62.3 miles long and drains a watershed area that encompasses 502 square miles in Columbia and Garfield Counties in southeast Washington State. The Tucannon River originates in the Blue Mountains, on the Umatilla National Forest, and flows northwest to its confluence with the Snake River near Starbuck, Washington (Figure 4). Elevations in the Tucannon River Basin vary from 6,400 feet above sea level in the headwaters of the Blue Mountains, to 540 feet at the confluence with the Snake River.

The Tucannon River provides important spawning and rearing habitat for four ESA-listed (Threatened) salmonids: Lower Snake River summer steelhead (*Oncorhynchus mykiss*), Lower Snake River spring and fall chinook salmon (*O. tshawytscha*), and Columbia River bull trout (*Salvelinus confluentus*). Steelhead and chinook salmon in the Tucannon River are part of the Lower Snake River Evolutionarily Significant Unit (ESU). Tucannon River Chinook salmon are the most downstream tributary-population of chinook in the Snake River watershed and the Tucannon River is the lowest elevation drainage where Snake River spring Chinook salmon reside.

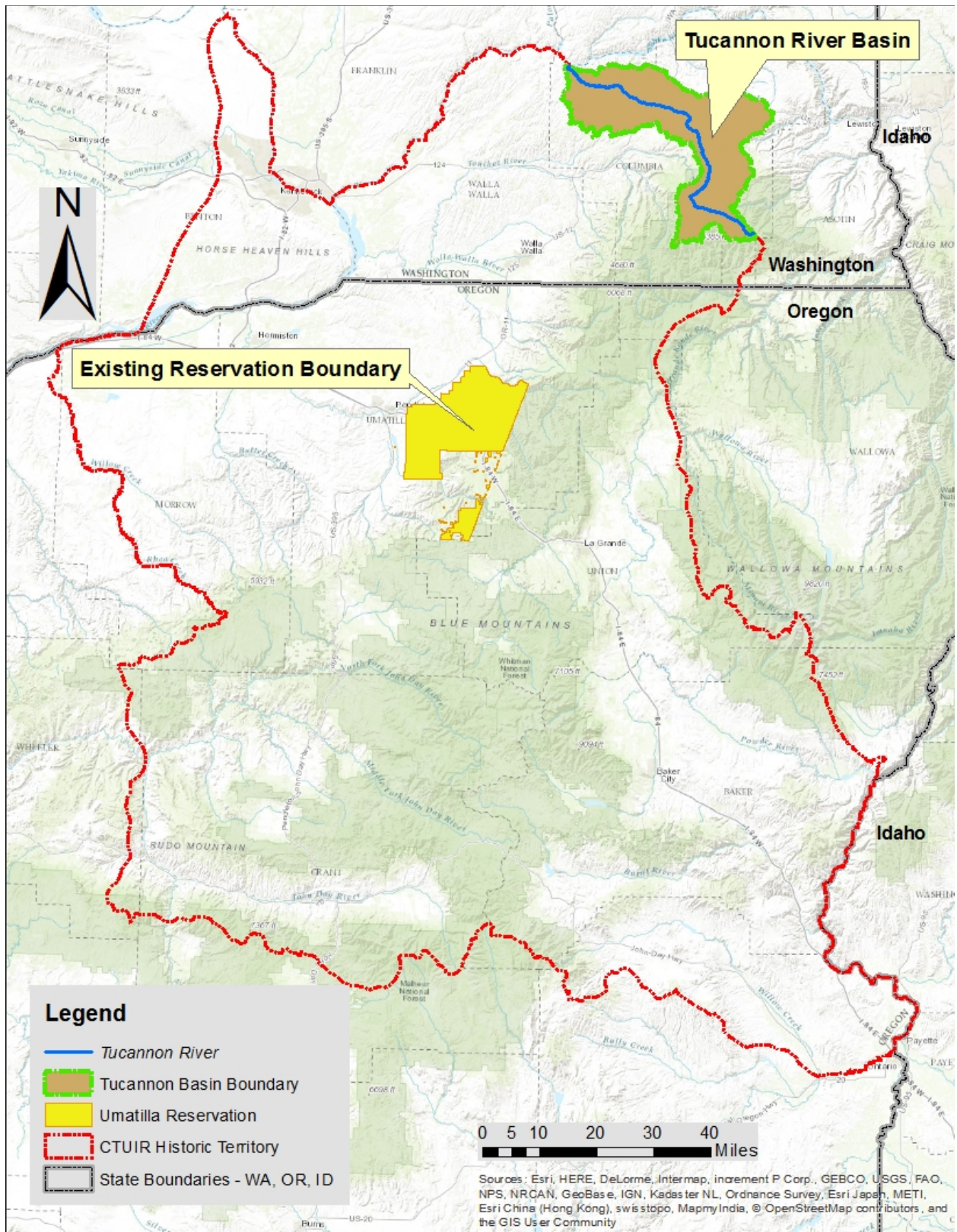
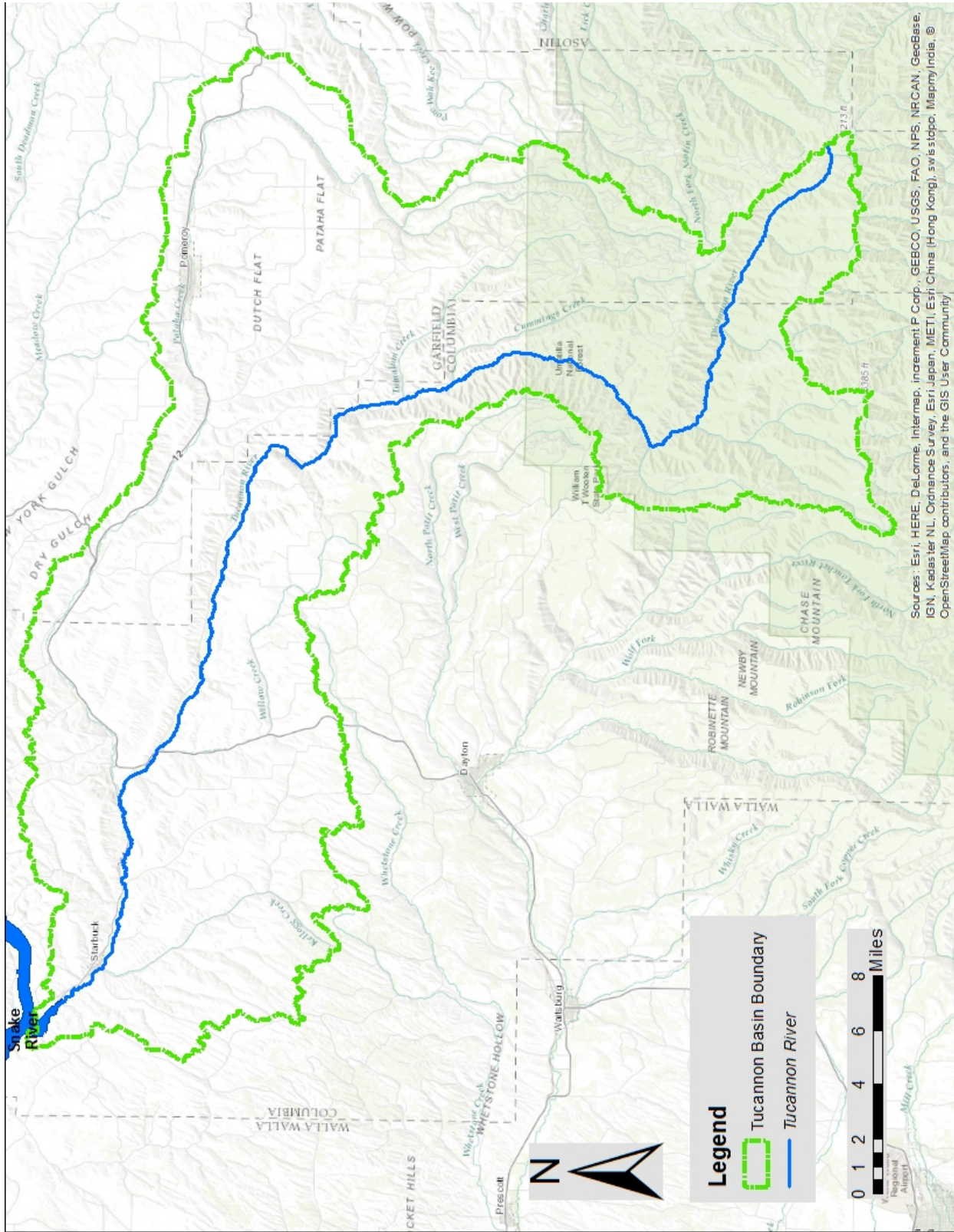


Figure 3: Map depicting the historic territory of the CTUIR in OR and WA with the Tucannon River Basin along the northeast territorial boundary.



Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swis stopp, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Figure 4: Map of the Tucannon River Basin. The Tucannon River flows from the southeast in the Blue Mountains to the northwest where it flows into the Snake River.

BPA PISCES WORK ELEMENTS FOR CONTRACT NUMBERS: 67768 and 72049

119. Management of Tucannon Watershed Habitat Improvement Projects and Contract Administration

CTUIR TFHP staff completed and submitted on-time all of the necessary paperwork to fulfill BPA's programmatic and contractual requirements such as financial reporting (accruals), and development of contract renewal packages including new SOW's, budgets, and property inventory.

The previous Project Leader for the TFHP, Eric Hoverson, transitioned to a different position within the CTUIR Fish Habitat Enhancement Program in March 2015. During the period of January 2016 – March 2016, Eric Hoverson worked to maintain continuity on the TFHP by helping to hire his replacement, Kris Fischer, and he worked with Tucannon Basin partner agencies to develop a draft restoration concept for the Hartsock Restoration Project (Project Areas 17-18) on the Tucannon River.

Kris Fischer, the current TFHP Project Leader started working for CTUIR in July 2015. A new Assistant Project Leader position was created for the TFHP in 2015 and it was filled by Zach Seilo in January 2016.

An RFP for design of the Hartsock Restoration Project was solicited by CTUIR in October 2015 and R2 Resource Consultants was selected from that process. As of December 2016 the design phase of the Hartsock Restoration Project had advanced to the 90% draft design (Figure 5).

CTUIR TFHP staff also attended several river restoration process trainings. Project Leader, Kris Fischer, attended the River Restoration Northwest symposium in Stevenson, WA and a Large Wood Habitat Design Course hosted by the U.S. Army Corps of Engineers and Natural Systems Design, Inc. Assistant Project Leader, Zach Seilo, attended trainings on BPA's Columbia Habitat Monitoring Protocol (CHaMP) and the Action Effectiveness Monitoring protocol as well as a week-long river restoration course hosted by world-renowned fluvial geomorphologist, Matt Kondolf (UC Berkley), in Truckee, CA.

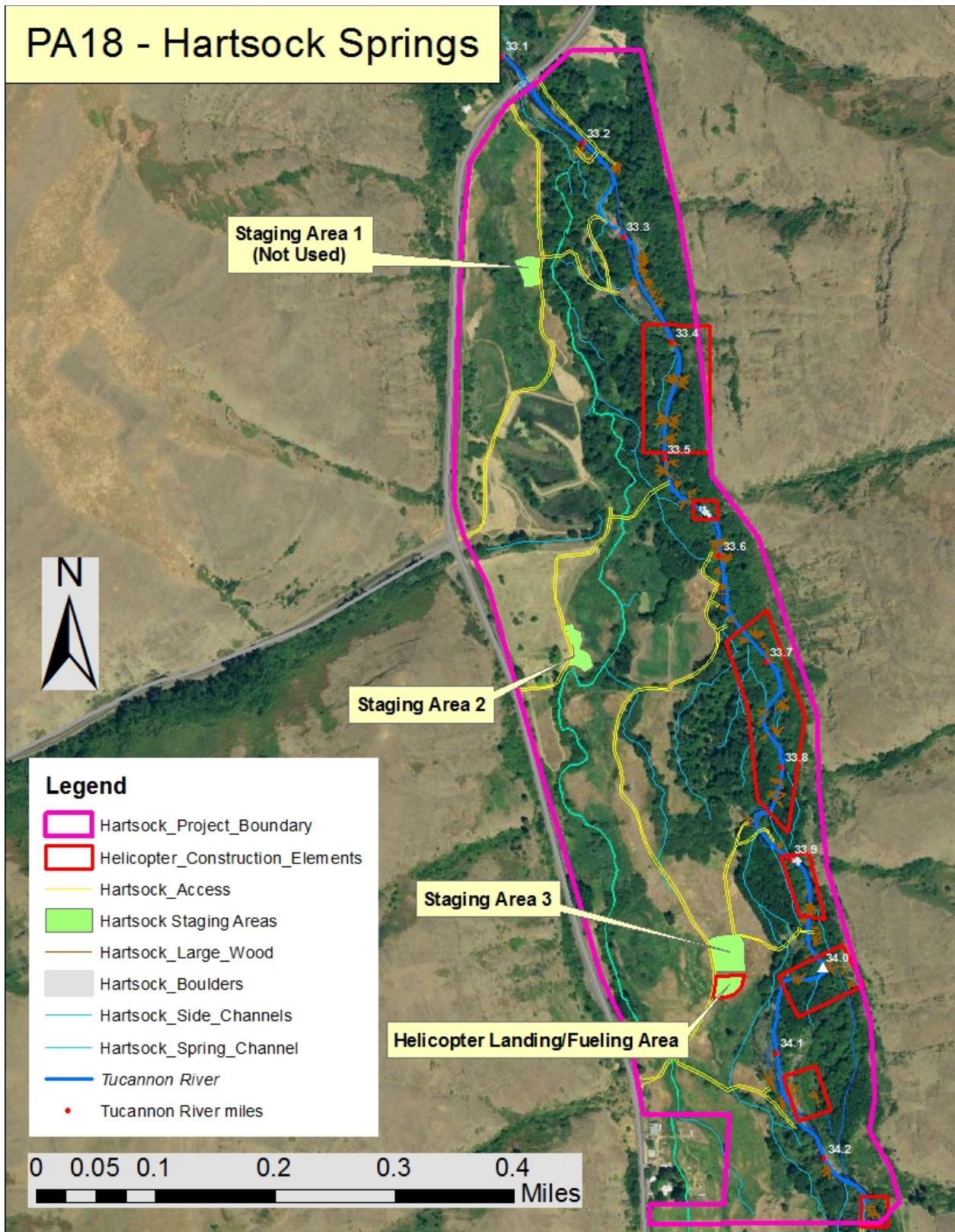


Figure 5: Map depicting the 60% draft of the Hartsock Restoration Project site plan.



Figure 6: Present day conditions at the Hartsock Restoration Project site.

165. Environmental Compliance Clearance for ecological restoration & habitat enhancement projects

CTUIR TFHP staff attended BPA's Environmental Compliance training in March 2016. Currently all milestones for fulfillment of BPA's environmental compliance process have been completed on time. TFHP staff have created a flow chart to help guide CTUIR staff through the environmental compliance process for fish habitat enhancement in Washington State (Figure 6).

An initial cultural resource reconnaissance of the Hartsock Restoration Project site was conducted by CTUIR archaeologists in November 2015. CTUIR Historic Preservation staff policy dictates that cultural resource surveys cannot be conducted until completion of the 60% draft design for a given restoration project. The 60 % draft of the Hartsock Restoration Project Design and a proposal to conduct a full cultural resource survey were completed in September 2016. Completion of the cultural resource survey and reporting is anticipated for early 2017.

A *medium* risk determination was assigned to the Hartsock Restoration Project design in January 2016. Drafts of the Hartsock Restoration Project design were submitted to the BPA EC lead upon completion of the 15%, 30%, 60%, and 90% drafts of the project design. BPA's Restoration Review Team (RRT) approved the Hartsock Restoration Project design proposal in October 2016. Completion of the final draft of the Hartsock Restoration Project design is anticipated for early 2017. On March 8, 2017 a completed and signed Project Notification Form (PNF) for the TFHP 2017 restoration project was issued by BPA's EC Lead, Dan Gambetta.

The Joint Aquatic Resource Permit Application (JARPA) was submitted in early 2017. As of March 2017, all relevant permit applications were under review for the TFHP's 2017 restoration project in Project Area 18 (Hartsock Restoration Project) of the Tucannon River. It is anticipated that all necessary permits will be obtained for the Hartsock Restoration Project prior to the 2017 summer construction season.

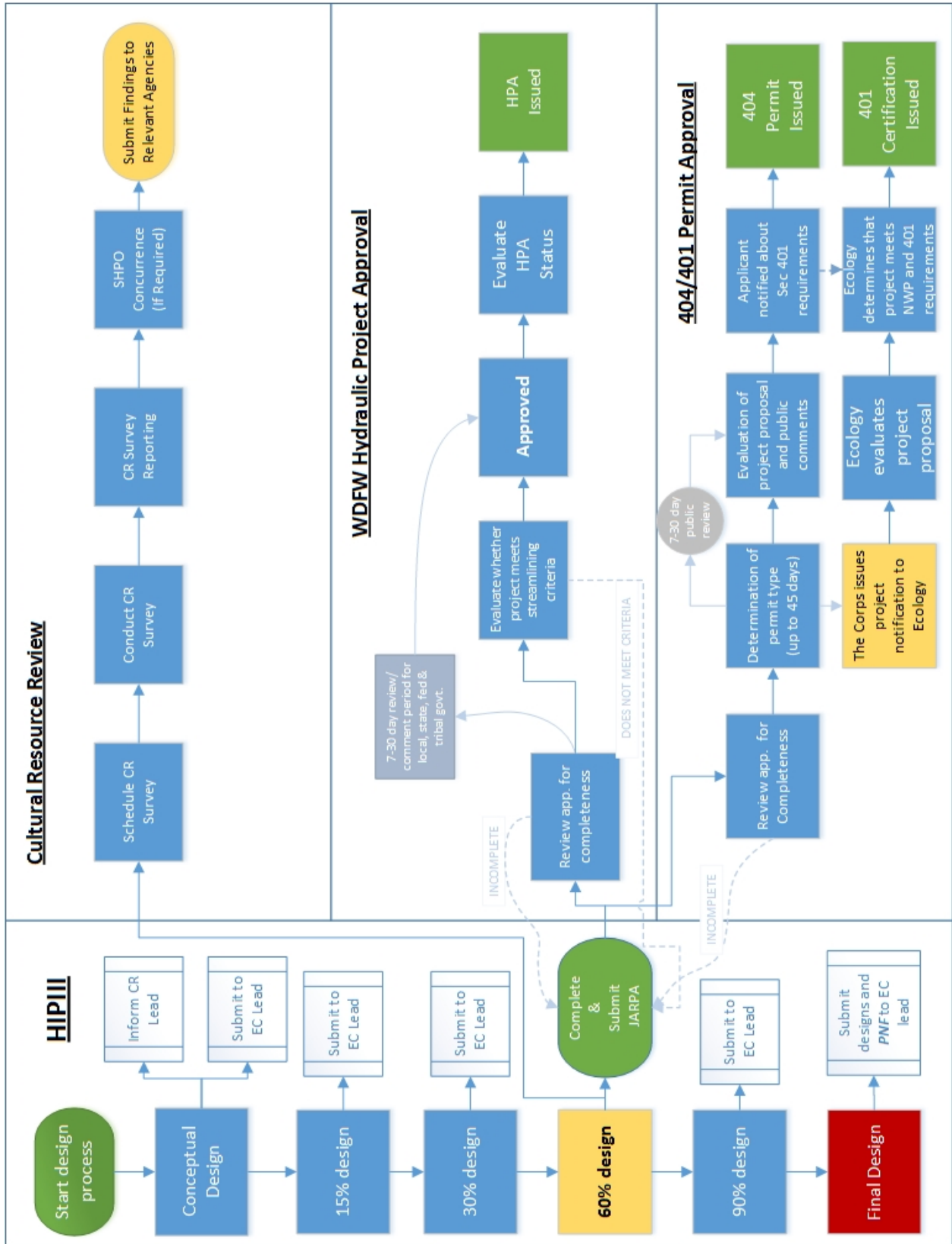


Figure 7: Flow chart developed by TFHP staff to help clarify the environmental compliance and permitting process for fish habitat restoration projects in Washington State.

47. Supplemental planting of native vegetation in Wooten to Panjab Restoration Reach (PA 1-3)

Restoration activities at Project Areas 1-3 were conducted with the aid of a helicopter and ground disturbing activity in these areas was minimized. Project Areas 1-3 were surveyed during the Spring of 2016 and areas of previous ground disturbance were revegetating with native plants.

47. Project Area 17-18: Establish Riparian and Floodplain Plant Community

TFHP staff provided CTUIR native plant nursery staff a tour of the Hartsock Restoration Project site during the Spring of 2016 in order to develop a list of native on-site seed sources. A list of native plants has been developed for grow-out at the CTUIR native plant nursery. CTUIR native plant nursery staff have acquired Tucannon-origin Ponderosa Pine (*Pinus ponderosa*) seed for grow-out by October 2018. Ponderosa saplings will be planted during fall/winter 2018.

As of December 2016 CTUIR native plant nursery staff were searching for Tucannon-origin seeds for the remaining plants in the Hartsock Restoration Project planting plan. Additional plant species required for the planting plan include Grand Fir (*Abies grandis*) and Douglas Fir (*Pseudotsuga menziesii*) seed.

Revegetation of the restoration project site will not occur until ground disturbing activities associated with restoration construction have been completed. In general, TFHP prefers to implement planting schedules outside the growing season in order to minimize stress and optimize restoration plant survival. Restoration plantings at the Hartsock Restoration site will most likely occur after October 2018 – the planting plan will be conducted in phases with Ponderosa pine planted in 2018 and Grand Fir/Douglas Fir planted during a second phase in 2019.

132. Submit 2-year Progress Report for 2015 and 2016 (01/01/2015 - 12/31/2016)

This report is intended to fulfill the annual progress report (2015-2016) and it has been submitted to BPA.

191. Coordination of habitat restoration with other entities

Starting in early 2015, Eric Hoverson (former TFHP project leader) worked with WDWF staff to develop a conceptual design for the Hartsock Restoration Project. Using the conceptual design, TFHP staff worked with WDWF, SRSRB, CCD and Nez Perce Tribe to complete the RFP for the Hartsock Restoration Project final design. Since hiring R2 Resource Consultants to create the restoration design, TFHP has conducted four meetings with the other Tucannon Basin Implementers (WDFW, CCD, SRSRB, Nez Perce Tribe) so that project partners can provide input on the multiple drafts of the Hartsock Restoration Project design.

In October 2016 CTUIR TFHP staff, along with WDFW, SRSRB, and Columbia Conservation District (CCD) personnel, hosted a tour of proposed restoration actions in the Tucannon River for permit reviewers from the U.S. Army Corps of Engineers. Subsequent to that tour, an initial draft of the JARPA for the Hartsock Restoration Project was submitted for review by the other Tucannon fish habitat restoration agencies. Acquiring input on permit application language incorporates collective experience from all implementers in the Tucannon Basin which contributes to efficiencies in the permit application review process.

Since September 2016 the TFHP has been working cooperatively with WDFW to complete a helicopter contract for two restoration project sites in 2017, including the Hartsock Restoration Project (Figure 8). Cooperation between the two agencies will save mobilization dollars and create efficiencies. As of March 2017, the RFP for cooperative helicopter construction was being advertised.

TFHP staff regularly attends Tucannon Basin Implementer meetings which are scheduled and hosted by SRSRB. Implementer meetings are opportunities for all of the cooperating agencies in the Tucannon Basin to share information about project budgets, restoration accomplishments, and plans for future restoration projects in the Tucannon Basin.

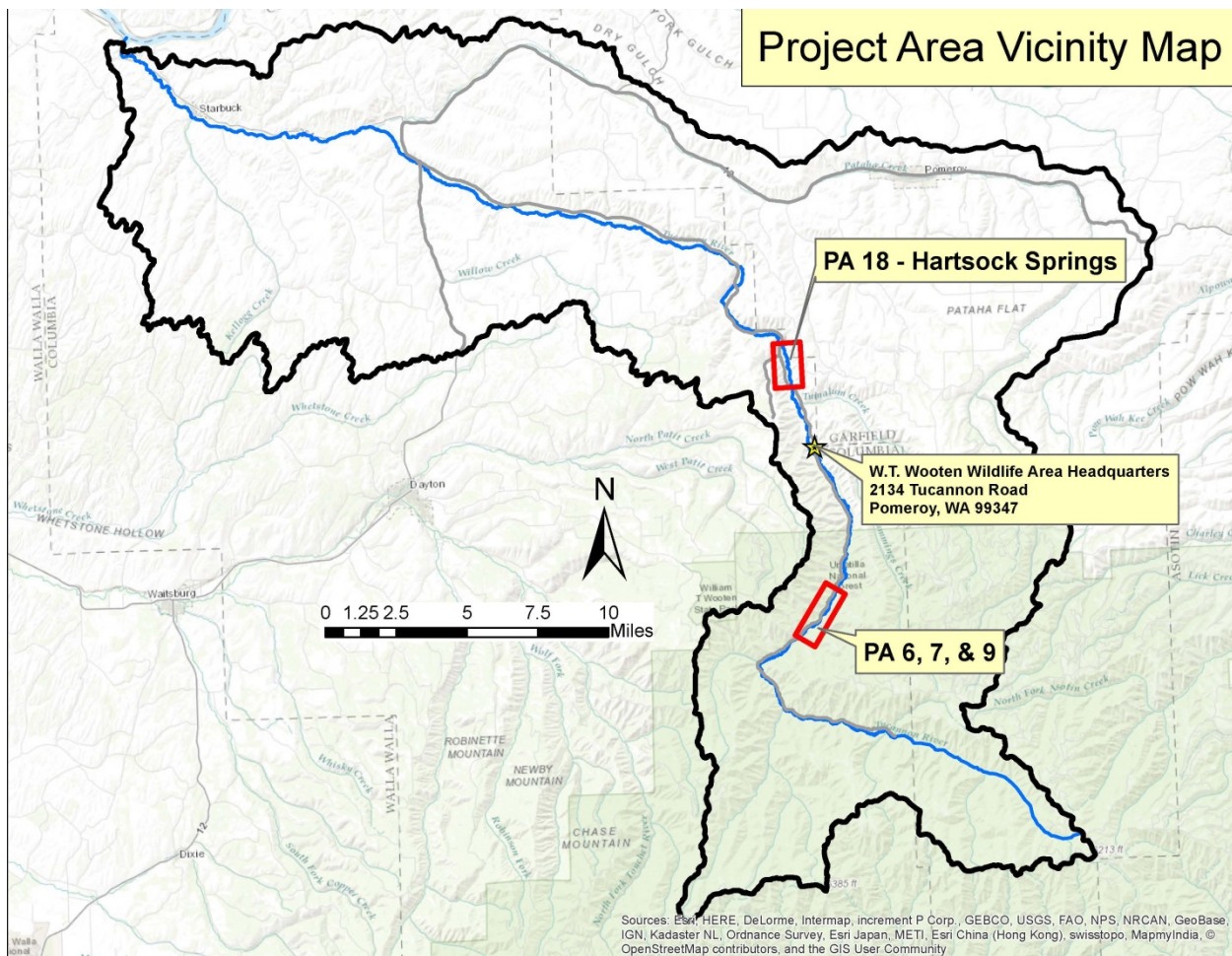


Figure 8: Map generated for cooperative RFP between TFHP and WDFW. The purpose of the RFP was to secure a helicopter contractor for simultaneous placement of trees at two restoration treatment sites on the Tucannon River.

114. Identify, prioritize and select projects for habitat improvement

Fish habitat restoration priorities in the Tucannon Basin are informed by several watershed analyses that have identified ecologically-limiting factors (CCD, 2004; SRSRB 2011) and prioritized actions for addressing ecologically-limiting factors in the Tucannon Basin (Anchor QEA, 2011 a-c; Anchor QEA, 2012 a-b). Coordination and adaptive management of restoration priorities is an ongoing process between TFHP and the other Tucannon Basin implementers. TFHP has worked with Snake River Salmon Recovery Board to develop a prioritized list of future projects for the TFHP. Currently TFHP is helping personnel from the US Forest Service to complete the NEPA process for restoration work that is planned to occur on Project Area 5 (USFS property) of the Tucannon River.

99. Refine and expand video representation of Wooten to Panjab Restoration project

Eric Hoverson, former project leader of the TFHP, successfully commissioned and completed multiple versions of a video presentation highlighting the Wooten to Panjab Restoration Project. Mr. Hoverson has presented the video in multiple venues.

99. Tucannon River RM 32.5-34.5 (Hartsock), PA 17-19, Outreach to Private Landowners

In June 2016 TFHP coordinated the first-ever meeting between private landowners in the Tucannon Basin and the agencies involved in fish habitat restoration on the Tucannon River. The meeting was held at the US Forest Service Guard Station in the Tucannon Basin. Agencies represented at the meeting included, CTUIR, Nez Perce Tribe, BPA, SRSRB, WDFW, CCD, and USFS. Out of the 49 meeting attendees, 27 were private landowners in the Tucannon Basin. It is expected that attendance by Tucannon Basin private landowners will increase at future meetings.



Figure 9: Tucannon Basin private land owner outreach meeting.

175. Design Specifications and Engineering: Salmonid Habitat Complexity Improvement Project [PA 17-18]

A *medium* risk determination was assigned to the Hartsock Restoration Project design in January 2016 based on the conceptual plan. TFHP has hosted meetings with the Tucannon Basin Implementers in order to review the conceptual design, 15% draft, 30% draft, and the 60% draft. As of November 2016, the 60% draft was being revised based on input provided by Bruce Heiner, a licensed professional engineer for WDFW. Each draft of the Hartsock Restoration design has been submitted to the BPA EC lead upon completion and the RRT approved the Hartsock Restoration design in October 2016 based on the 60% draft. Completion of the final design is anticipated for early 2017.

Private landowner outreach for the Hartsock Restoration Project is ongoing. A few of the private landowners near the Hartsock Restoration Project site have been successfully contacted and some of them are willing to participate in the next design phase. Landowner outreach for those living in Project Area 17, upstream of the Hartsock Restoration Project site, is ongoing.

BPA PISCES WORK ELEMENTS FOR CONTRACT NUMBER: 72049

100. Site Preparation, Materials Management, Field Engineering, Quality Assurance, Construction Oversight

As of March 2017 four separate RFP's for helicopters, construction, materials, and as-built surveys are being advertised. Deliverables for this work element and the construction contracts associated with it will not be completed until the Hartsock Restoration Project is implemented. The Hartsock Restoration Project is scheduled to occur during the in-water construction window during July-August 2017.

CITATIONS

Anchor QEA, 2011a. Tucannon River Geomorphic Assessment and Habitat Restoration Study. Prepared for Columbia Conservation District.

Anchor QEA, 2011b. Conceptual Restoration Plan, Reaches 6 to 10. Tucannon River Phase II. Prepared for Columbia Conservation District.

Anchor QEA, 2011c. Design Restoration Feature Prioritization, Tucannon River Reach 2. Memorandum prepared for the Columbia Conservation District.

Anchor QEA, 2012a. Draft Conceptual Restoration Plan, Reach 5 Tucannon River RM 4.5 to RM 13.4.

Anchor QEA, 2012b. Draft Conceptual Restoration Plan, Reaches 3 and 4 Tucannon River RM 4.5to RM 13.4.

CCD (Columbia Conservation District), 2004. Tucannon Subbasin Plan. Prepared for Northwest Power and Conservation Council.

Jones, K.L., G.C. Poole, E.J. Quaempts, S.J. O'Daniel, T. Beechie. 2008. Umatilla River Vision. Confederated Tribes of the Umatilla Indian Reservation, Department of Natural Resources.

SRSRB (Snake River Salmon Recovery Board), 2011. Snake River Recovery Plan for SE Washington. Prepared for Washington Governor's Salmon Recovery Office.