

Project Name: Nason Creek Upper White Pine Reconnection – Chelan PUD Powerline Relocation Alternatives Analysis

Project Number: 2009-06 RI

Sponsor Name: Chelan County Natural Resources Department (CCNRD)

FINAL REPORT

Project Summary

Project Objectives

In 2011, Tributary Committee contracted with CCNRD for \$53,500 to conduct an alternatives analysis to evaluate options to eliminate or minimize the Chelan PUD powerlines as a constraint to restoration alternatives in the Upper White Pine Nason Creek floodplain reconnection project area. The alternatives analysis was completed under budget, so these funds were also utilized to complete 30% design for the powerline re-location.

The powerlines alternatives analysis and re-location design are being completed at the same time as the stream habitat restoration alternatives analysis and design. US Bureau of Reclamation is funding stream habitat restoration design and permitting and they have committed to fund the final design and permitting for the powerline re-location.

The overall restoration project objectives are: 1) to restore natural stream channel and floodplain structure and function to increase floodplain connectivity and promote habitat formation and 2) rehabilitate and restore aquatic habitat to allow for the opportunity and capacity to support diverse life history strategies and increased growth and survival of fish.

Work performed

CCNRD managed the scope, schedule, and budget for the engineering design contractor (HDR). CCNRD also coordinated the stakeholder review process to provide input on the alternatives analysis and select the preferred alternative. Stakeholder coordination involved several meetings with the engineering design contractor, CPUD, and US Forest Service personnel. Potential project funders, such as BPA, also provided comments on the selection of the preferred alternative. A MOU between CCNRD and CPUD documents the support for relocation of the powerlines to White Pine road. The preferred alternative was advanced to 30% design plans with a construction cost estimate. The 30% design plans have been reviewed by CPUD and US Forest Service staff.

Benefits of the Completed project

As a result of this funding, CCNRD successfully worked with CPUD and USFS to come to agreement and support re-location of six powerpoles to facilitate stream habitat restoration on RM 13.3-13.8 on Nason Creek. The 30% design for powerline re-location

is completed and the location of the re-located poles has been surveyed and staked in the field. The next step for powerline re-location is a field review of the 30% design, geotechnical analysis, and advancing to final design.

The preferred alternative concept for stream restoration was supported by RTT as part of the targeted solicitation proposal. This same design concept has been advanced to 30% design and the design team is currently working to incorporate stakeholder review comments prior to proceeding with 60% design.

Challenges

There has been some discussion outside the Upper White Pine Design Team about a “go big” proposal recently suggested by Sean Welch at BPA. The BPA proposal is similar to an earlier TEAMS alternative that was evaluated by the design team but not advanced due to limited, if any, additional biological benefit and substantial engineering and on-the-ground impact. BOR staff modeled this alternative and concluded that while additional stream re-location could increase in-stream complexity, additional floodplain connection is not likely feasible. We would appreciate the opportunity to share with the Trib Committee Rob Richardsons' (USBR) modeling results and the 30% design currently being advanced by the design team.

Currently, we are seeking additional funding for construction and incorporating stakeholder comments to advance the 30% design to 60% design in time for 2015 construction. CCNRD has secured \$800,000 towards construction from Ecology's Integrated Floodplain Management Program contingent upon construction in 2015. CCNRD and USBR anticipated that the remainder of the project would be funded by BPA because this project ranked #1 in the 2013 targeted solicitation review process and it was subsequently placed on the Action Agency provisional funding list. The same conceptual design reviewed by RTT in January 2013 has now been advanced to 30% design.

The initial challenge for this project was gaining support for powerline re-location. The powerline is currently located on an easement through USFS land and USFS was not willing to grant a re-located easement. CPUD and CCNRD have agreed upon terms and conditions to re-locate the powerlines to White Pine Road and add this section of powerlines to the existing USFS permit for the Beverly McKenzie transmission line. This allows the stream habitat enhancement project to proceed with restoration of natural channel processes such as levee removal and introduction of stream channel meanders to allow for future additional stream channel migration.

Suggestions to the Committee

CCNRD appreciates the Committee's willingness to process amendments to allow additional work to be completed under this contract. This work has been key to gaining CPUD support for powerline relocation. CCNRD would appreciate the opportunity to present the proposed design to the Committee. Rob Richardson would present recent modeling results that document that extensive excavation of additional stream meanders west of RM 13.4 do not increase floodplain activation. Following that presentation, CCNRD would like to follow up with a request to Tributary Committee for construction funding.

Final Work Products

This agreement funded the following final work products (provided as a paper copy):

1. Initial alternatives analysis that identified 15 alternatives for removing the CPUD powerlines as a constraint to restoration (March 2012 memo)
2. Solicitation of stakeholder review comments and summary memo on the March 2012 alternatives analysis
3. Final alternatives analysis (July 2012) that describes four alternatives for removing the CPUD powerlines as a constraint to restoration
4. Signed MOU between CPUD and CCNRD that outlines the terms of powerline relocation to Upper White Pine road (April 2014)
5. 30% design and cost estimate for powerline relocation to Upper White Pine road (May 2014)

This web link contains copies of the following stream restoration design documents:

<http://hwsconnect.ekosystem.us/project.aspx?sid=290&id=14463&stat=on>

1. Restoration Plan (alternatives analysis)
2. 30% design and design report
3. Historic aerial photographs
4. Upper White Pine Reach Assessment

Photos

See attached photos of the levee, floodplain to be reconnected and existing powerlines located in the floodplain wetland. **(Photos are included in project file copy only).**