GRMW Project site tour for BiOp funding

Site Visit Report

Project: Camp Creek Restoration

Present: GRMW staff: Jeff Oveson, Lyle Kuchenbecker; BPA: Timmie Mandish, Tracy Hauser, Kathy Fisher, Cheryl Woodall; ODFW: Bill Knox, Joel Watts, Chuck Simpson; CTUIR: Allen Childs; NMFS: Renee Coxen; FWS: Gretchen Sausen; Nez Perce Tribe: Rick Christian, Neil Espinosa; TNC: Jeff Fields; Private land lessee: Joe Warnock

Date of site visit: 4/6/10

Background:
Prospectus initial rating by expert panel: medium
Species benefitted: SR Chinook & Steelhead; downstream benefits to bull trout
Habitat metric: 16.4 mi opened to unhindered fish passage, (improved flow and sediment conditions)
Restoration activities: Replacement of diversion structure to include fish passage and irrigation efficiency improvements
Limiting Factors Addressed: Several plans identify excess sediment and passage as limiting factors (Imnaha Subbasin Plan, Imnaha Management Plan, Wallowa County Salmon Plan, draft Snake River Steelhead Recovery Plan)

Funding: $125,000 (preliminary request)

Technical Committee (TC) Comments:

The project proposes to improve fish passage, reduce sediment load entering the stream and improve stream flow within Camp Creek. Camp Creek is listed as spawning and rearing habitat for listed Steelhead and rearing habitat for listed Chinook salmon. In order to accomplish these improvements the project proposes to replace the current push up dam with a permanent diversion structure with a roughened chute fish passage design, and pipe between 1 and 1.5 miles of open irrigation ditch. The landowners are not interested in an instream water lease, but this diversion is the lowest point of diversion on the stream (approximately RM 1), so there are not downstream users that will be able to withdraw the water savings that may occur through this project. Anticipated water savings is between .25 to 0.5 cfs which could be between 15% to 33% of summer base flows.

The planned restoration activities will address the fish passage and sediment limiting factors identified for this stream, however there was much discussion surrounding the design solution

proposed, and the quantifiable benefit that could be achieved for the piping portion of the project- which is a significant amount of project costs.

Prior to moving forward with a proposal the following issues need to be addressed:

- The project is proposing to replace the push up dam structure with a concrete and sheet pile permanent (semi permanent) structure at the approximate location of the current push up dam site. This site is located where the stream channel opens from a confined valley channel form into an alluvial fan where channel location is naturally unstable. There is evidence that the channel location changes on a regular basis and ODFW staff reported that the channel had been in a different location as recently as 2 years ago. Though a permanent fish passage solution is desirable, locking the stream channel into place within this reach of stream is not. There is risk that with changing river conditions/locations the structure will not maintain passage.
    - If you can evaluate the feasibility of moving the diversion structure into a location where the river is more stable or already locked in place, such as at the upstream bridge site (or other solution that addresses the concern over locking a meandering channel form in place), the project would be more compatible with BiOp funding.
    - Looking into a structure that mimics natural channel form more closely (rock weir step pool as an example) and requires less adjustment and maintenance to obtain irrigation water is most preferable for restoration projects. That may not be feasible for this site but please assess the possibility.

- Converting the open ditch to pipe to improve irrigation efficiency and increase instream flow is a significant portion of the project cost. It is estimated that between 0.25 and 0.5 cfs of flow would be saved by piping the irrigation system. Though increased flow is certainly beneficial, the cost for the amount of benefit to fish is difficult to justify with dollars specified for listed species recovery. To make this more viable as a BiOp project:
    - Identify whether Camp Creek has been identified as a flow limited stream system
    - Provide further explanation on how .25-0.5 cfs of flow will improve instream conditions without an instream water right (last POD on stream, does this additional flow provide the ability for fish to get to higher quality habitat?, would it protect redds from dewatering?) There needs to be a direct tie to species benefits.
    - To decrease costs and improve confidence in the ability of the project to increase instream flow, further assess the size requirements of the pipe. To provide adequate water to the irrigators is an 8 inch pipe required? Will all irrigators be in need of water during the same periods and therefore a smaller diameter pipe will not be sufficient?
    - Even with species benefits articulated the cost of the piping portion of the project is likely higher in cost than can be justified for complete funding by BiOp dollars. Look for additional funding partners to offset the cost of this aspect of the project.

Next Steps if you would like to pursue BiOp funding through the GRMW:

1) Address the concerns above, paying particular attention to an assessment of the feasibility of moving the POD upstream to the location of the county bridge (or another site with a stable channel form). BiOp funding may be able to support a fish friendly diversion in this location and assist with the costs of piping from that further upstream location to the currently proposed piping location. Additional funds would need to be obtained to complete the ditch to pipe conversion.
2) Work with the GRMW during feasibility evaluations to understand the likelihood of potential options being viable for BiOp funding. Discuss the design alternatives and funding needs associated with the different solutions to understand limitations and flexibilities prior to finalizing an alternative.