



## Meeting Notes for 13 June 2007 Chelan PUD Auditorium, Wenatchee

**RTT Members Present:** Casey Baldwin, Tracy Hillman, Chuck Peven, Joe Kelly, Keely Murdoch, Kate Terrell, Bob Bugert, Russell Langshaw, Cameron Thomas, Joe Lange, John Arterburn, Tom Kahler, Steve Hays

**Others Present:** Carolyn Pearson, Derek Van Marter, Keith Truscott, Sarah Walker, Steve Kolk, Joy Juelson, Chris Bull, Deana Machin, Rick Alford, Paul Anders, Charlene Beam, Julie Morgan, Barbara Carrillo, Chris Parsons, Becky Gallaher, Allen Schmidt, Mark Cookson, Bob Montgomery, John Soden, Jason Paulson, Chris Fisher, Ryan Benson, Mike Rickel.

Casey called to order at 8:15AM. He asked for a round of introductions and then explained the purpose of the meeting.

There will be a conference call on Monday, June 18 to discuss the project tour agenda. Casey will get the draft notes out to the RTT by Friday morning and will need approval or comments back by Tuesday morning. Casey will then distribute the notes to everyone who came to the meeting before the project tours.

The next RTT meeting is scheduled for July 11, 9-3 at the BLM office. The purpose of that meeting will be to review and comment on Appendix P in the recovery plan. Casey will distribute the Appendix and the revised questions that NOAA asked the RTT to consider during our review. There is also a subcommittee meeting the following day to finalize the comments.

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### Purpose of this Technical Review

The purpose of this meeting is to provide a technical review of the pre-proposals submitted to the Tributary Fund and Salmon Recovery Funding Board. The following recommendations are meant to help project sponsors improve their final applications, but is not meant to be an exhaustive list of technical issues related to each project. For brevity, the notes will only include a summary of the questions, suggestions, and comments made by the RTT and others present, not the corresponding answers or rebuttals by the presenters.

### **Project Review**

#### **1. Knapp-Wham Irrigation System and Habitat Improvements: Presented by Sarah Walker.**

Casey pointed out that the pre-proposal (and the others by CCCD) was a great start that provided the appropriate amount of detail regarding the previous phases, fish use, linkage to limiting factors and planning documents, etc. It is a great start towards a proposal that will give the RTT what they need to evaluate and rank the proposal. Good proposal comments were seconded by many members.

When do you plan on decommissioning HD?

Is there any potential to rehab the ditch for offchannel?

Provide more specificity on the process to save the 2-6 cfs of water and the ultimate disposition of that water, including when it will be realized and if it will be guaranteed (in trust) for fish

Add information on the typical base flow discharge in the river at that site so reviewers can evaluate what 2-6 cfs means in relationship to the river.

2. **Entiat PUD Canal System Conversion Project: Presented by Sarah Walker.**

Is this the lowest irrigation withdrawal in the Entiat? Yes, other than individual withdrawals. This is the lowest, largest withdrawal within the entire subbasin.

Is the PUD going to maintain the canal after this? Yes, the canal will stay functional as habitat and some ongoing farm operations lower down. The actual pipeline will be decommissioned at the water-tight flood gate.

Right now there is 17-19 cfs in the canal and this project will cut that in half and that water savings will add flow to the mainstem Entiat which is a good thing. However, with less water in the canal will it degrade the habitat in the canal for the documented steelhead use in the canal?

Have you considered including in this project the habitat work that was done in the lower part of the subbasin?

Could adjustments be made to the canal to make it even better habitat? Perhaps a phase 2.

To think of this 5-10 years ago was inconceivable, so it is really exciting to see it come together.

3. **Roaring Flow Enhancement/Barrier Removal Project: Presented by Sarah Walker.**

What does the stream look like below these barriers? Do people manage the vegetation right up to the bank? Describe those conditions so the RTT can better assess the potential biological benefit.

Is it all private ownership up to (and for how far above) the diversions? Include a map showing land ownership up to the USFS boundary.

The intent, then is to complete the entire diversion decommission? *Answer: Yes, we wouldn't need an HPA for this project because we would just be putting in new wells and piping.* If that is the case then be sure to mention that in the proposal as it could help the project in its "certainty of success" score.

Where is the stream gauge? You could also tie the low flow and flow savings together.

Should include an effort to remove the push up structures? This may add an HPA component. Need to clarify that if it can be done by hand.

You may want to add that this will also benefit juvenile spring Chinook.

There is a statement about the USGS quad saying that it is intermittent; however, another sentence said there was up to 1 cfs of baseflow. This should be resolved. If the point was to suggest the USGS quad was incorrect based on observations or data then that should be mentioned directly.

Under proposed actions, you have spawning survey RM indicated at 05; should it be 0.5? You could use a little different wording for the spatial structure paragraph. Call Casey for help with wordsmithing.

On the limiting factors, first paragraph, says that “poor” temperature is usual for the creek. It actually is pretty good temperature range for a summer maximum; steelhead are known to successfully rear in the temperature range reported in the proposal. Cameron can provide a citation.

Provide clarity on who is paying for the pumps and meters?

#### **4. Keystone Canyon Habitat Restoration Project: Presented by Sarah Walker.**

Might make sense to spend the time and money in an area where there isn't an off-channel option. Perhaps you should spend time and money in other areas where there is no offchannel option and re-visit this one later when the landowner might be willing to let you capture the sidechannels. You should add some context in terms of sequencing and why it makes sense to go forward with instream structures at this location right now.

If the off-channel connection were an option in the future, would these structures be consistent with that? Be clear that this work would not preclude off-channel reconnection later. Perhaps it would lead to a trusting relationship with the landowner and if he sees some success first hand would consider giving access to the sidechannels.

Plan view of the boulders and LWD looks unique, has it been done before? Have these structures been implemented on the Entiat and if so, show that they are likely to be effective. They need to be sure to show and explain why these structures are likely to be successful when they have not been done in the Entiat before.

Has this design been tested elsewhere? It looks like they might create some pretty nasty scour. How solidly are they anchored? Recommend getting some of the monitoring information from the Milne project or other areas where they have been implemented and provide justification for why they are likely to be successful.

The match is a little less than 15%, which the SRFB would likely not approve. BOR match is coming on all the projects that CCCD is submitting.

Why not show the USBR alternatives Evaluation Report as a cost share?

**5. Stillwater Engineering Alternatives Analysis: Presented by Sarah Walker.**

What is going on upstream? What is the channel profile? What does the geomorphic analysis tell us?

Including some information from the ISRP response might answer those questions and make this a better proposal.

**6. Nason Creek Complexity Projects – Phase I Design: Presented by John Soden**

This is similar to programmatic request, very difficult to evaluate because there is not an actual project proposed. Although it might be a tier 1 action in a priority area, the RTT will not know if the sponsor will be doing a very small or very large project, so it leaves a lot of uncertainty in the biological benefit scores. Likewise, it's difficult to rate for certainty of success when no details are provided.

The presentation did a pretty good job of laying out the process by which projects would be selected. That is critical for these programmatic type of applications. Then, at least the reviewers understand how projects will be chosen and can have some confidence that the appropriate actions and locations will be selected.

Does the MCA prioritization process takes into account feasibility and timeline? Details should be given so that reviewers know what aspects and criteria go into the MCA prioritization. Also, specifically how will that MCA prioritization feed into the other reviews by RTT, HSC, etc.

It would also be good to identify the project constraints. The discussions with the railroad should probably start now.

How does discussion with DOT and the Railroad fit into the timeline? Railroad is not likely to be easy to work with.

It will always come back to opportunities, regardless of what your reach assessment determines. If the railroad is not going to be a cooperative player, then some of the biggest opportunities will not be a part of this proposal. We need a process to show why we need to deal with the railroad – if that is actually the case.

There is real unease with the scientists in Denver and Boise coming up with a list of ranked projects that we just go and implement. Instead, they will identify opportunities that might physically be able to be done, but that don't really identify the social factors. A better way to pitch this proposal is to identify projects that can be done in the short-

term but that won't compromise long-term biological benefit that can be addressed later. In terms of the railroad, there is a variety of ways to engage them. The County Commissioners already have a relationship; another option is the UCSRB; and another is through higher level agency officials.

A suggestion was made to recommend to the UCSRB to send a letter to the railroad identifying the anticipation of doing some work beyond their rights of way. *However, this was not an RTT recommendation specifically for this pre-proposal presentation. It was more of a general recommendation that if the larger suite of projects is going to be completed in Nason Creek then dialogue with the railroad needs to occur at the policy level. The recovery region should not leave it up to project sponsors to get the railroad to work cooperatively on a project-by-project basis. It is likely to take a concerted effort by the UCSRB, the State, and the Federal Agencies to make it happen.*

Important to note that the recovery plan does call for this kind of work. Important to coordinate with Grant PUD, because they are looking at habitat assessment work in Nason Creek as well as hatchery acclimation sites.

On the impacted species, include spawning for Chinook and steelhead. Include Coho for all 3.

It was recommended that the proposal should be re-worded so that it reflects that the selection process will be opportunistic and that the top projects may not be selected for social or political reasons. Those that do move forward (probably small) should not preclude later, larger efforts.

## **7. Peshastin Irrigation District Pipeline: Presented by Bob Montgomery**

Is the cost/cfs of this project consistent with other piping projects? If not, what are the unique aspects / requirements of this situation that warrant the higher cost?

If other alternatives were analyzed for cost effectiveness those should be mentioned in the proposal so that reviewer can understand the options and that this is the most cost-effective approach analyzed.

Identify in the proposal the link to putting the water in trust. Be very clear on if that water trust is part of this proposal or if it's just an option. If it is part of this proposal then include the entity/partner that will be working with you on the water trust (i.e. Washington Water Trust or Washington Rivers Conservancy).

Elaborate on how the water savings will be monitored over time.

Is Peshastin Creek adjudicated? Will the benefit be there during drought years as well?

There has been a lot of progress made with this irrigator. Presumably, this project is one portion of a larger effort to get a lot more than 3 cfs in the long-term. It may be helpful to

put in the introduction of the proposal what the long-term goal is in terms of water savings and how this project fits into those other efforts.

How is water diverted from the creek to the pipeline? Be clear about the mechanism by which water is diverted, saved, and either not taken from the creek or returned to the creek.

A comment was made from a non-RTT member that it would be beneficial to have the irrigation district contribute to this project financially. If they are helping to paying for it, they will have more stewardship responsibility of the project. *The final proposal should include details on all the contributing entities to show what everyone's contribution is.*

Include total diverted CFS and flow in the river at typical and extreme low baseflow. Also, include key flow modeling results that would indicate temperature and habitat conditions in lower Peshastin Creek after the water savings. This will allow the RTT to better assess the potential biological benefit of this project.

Are there any permitting issues? If not, be sure to mention that and explain why.

## **8. Harrison Side Channel: Presented by Carolyn Pearsons.**

How many landowners do you have to interact with?

Is this just the dike breaching or some instream structures, too? The proposal will need to be specific about how many structures and where. They will also need to be described as to how they fit into the bigger EWPU vision. See the Keystone Canyon comments relevant to the structure design and justification.

This project is starting to address the long-term issues, so its not clear why short term sticks and stones would be needed, beyond assuring water to the low flow sidechannel.

We would want to bracket the design of the instream structures with the complexity and longevity, as well as potential risks over time.

If structures are put in, they need to be pursued cautiously recognizing the potential risks and potential lack of longevity. The rationale will need to be described in the final proposal.

Include in the final proposal the hydraulic justification for the number and chosen locations for breaching the dikes?

You could include fish survey data (species, life stages, seasons, density) from channel reconnection elsewhere in the Entiat to predict the potential fish use, response, and expected outcomes.

If you can't use bank full width as the measurement you could just use the length of wetted area to expand the expected fish density.

Is the road restoration for the access along the back of the project area? Suggest you look at a walking excavator for the work.

Presenter indicated that some permitting is underway or tied in with other BB Phase 1 projects. That was not in the proposal but should be in the final proposal.

### **9. & 10. Gagnon and Nason Monitoring Projects: Joy Juelson and Keely Murdoch**

Casey explained when these construction projects were originally proposed and rated, the RTT suggested that monitoring should be done to determine if they were successful before proceeding with other similar projects from the CMZ studies. The RTT was approached by CCNRD in March of 2007 to contribute to the development of the monitoring plans. The RTT did make comments on several occasions and the pre-proposals now "represent a sound outline for a study design that should give potential funding entities confidence that the appropriate methods, indicators, and variables will be monitored to assess implementation, Level 1 effectiveness, and Level 2 effectiveness monitoring."

- Nason Ck: 2<sup>nd</sup> P: should include Level 2 monitoring  
3<sup>rd</sup> P says there are seven goals but then lists 9  
#9 is level 3 effectiveness monitoring

There is a statewide SRFB monitoring effort that will include surveys of Gagnon. It was not clear if that survey would be in addition to this one or if there could be some cost savings by having this more detailed study funded.

### **11. Wildhorse Spring Creek Steelhead Habitat Acquisition: presented by John Arterburn**

In the introduction, really stress what you know about the importance of small tributaries to steelhead in the Okanogan. Point out why small tribs are even more important here than in other subbasins. Apply the concept to Wanacut and Loup Loup proposals as well.

Have you taken any H2O quality samples of these sources? Include some basic WQ data in the final proposal.

It might be beneficial to show in the proposal the Tribe purchasing the house, and the Trib/SRFB funds purchasing the property. That might be adequate to show that the salmon recovery money is going towards the land in the riparian area and other money is going towards the house.

Added benefit as a cold water refuge for migrating sockeye and summer Chinook? Although it might not be the primary focus, it's relevant.

Point out that restoration efforts are underway on the property upstream so that its clear that there can and will be more done than just this small piece.

**12. Wanacut Creek Steelhead Habitat Restoration & Education: presented by John Arterburn**

The final proposal should talk about the importance of all the small tribs to Okanogan steelhead population. Build a strong case for the population level importance of having lots of functional small tribs.

This would be a really good NFWF CSF project.

Do you have any streamflow or temperature data yet? Provide some indication of seasonal versus perennial flow.

How far upriver are the falls? Define the total potential once it's restored.

Dumping fees? Potential cost share with the county land fill?

**13. Upper Methow Riparian Protection Project: Presented by Jason Paulson**

What proportion of the property is in the 100 yr floodplain? Is that altered by current dikes? What would be the benefit to salmon of protecting the upland habitat on each of the properties? Be specific, we have to assume that the upland areas offer no benefit to fish unless you make a case for why conserving them does benefit fish.

Final application needs to have a summary of the terms and conditions of the easement.

- On the bottom of page 1, you describe some of the things that would be restricted, but it would be helpful to understand the magnitude of the restrictions.
- What does conservation easement afford in terms of protection above and beyond county, state, and federal regulations?

It should also describe who would be responsible for the maintenance of the conservation easement.

Include signed landowner agreements.

Can the cost be separated out per property? Or do they have to go in pairs?

The pond labeled as a wetland on the upper portion of the Canan property map is a man-made feature used as a fire abatement pond.

How is the fair market value determined? Provide some detail so reviewers know that the cost is appropriate.

**14. Twisp River Riparian Protection Project: Presented by Jason Paulson**

Same comments apply here as to the Upper Methow proposal.

Do you have a sense of the conservation price in relation to the appraised price of the property? Is it 50% of the appraised value? More? Less?

Have you applied for funding through IAC and other sources?

Where is the other money coming from? Be specific, if possible on the cost share partners.

Are there any water rights claims or trusts that would become part of the proposal? Those would be good to highlight in the application if they are included.

**15. Fire Restoration Strategies for Methow Sub-basin; presented by Cameron Thomas**

Has this ecological model been tested before in the East Cascades, or is this the Beta test?

What is the direct connection in the modeling to salmon habitat?

Is the money to be used for populating the model with data that you already have?

What role does Forest Sciences Lab have related to this work?

The scoring criteria are fish-centric, so it would benefit the proposal to identify the linkages to fish and where it has worked in the past.

Task 1.2 . How do you translate the 15 items into a strategy that benefits fish? Why is the cost associated with doing that so low? The small dollar amount implies that little effort will go towards tasks 1.2 and 1.3; however, those are the tasks that will have the direct benefit in guiding activities that might benefit salmon.

This model will generate a large quantity of layers and data and presumably a bunch of USFS decisions will be made from that information. How will salmon scientists, managers, and policy makers from the Upper Columbia Region be included in the process of selecting strategies from this model for the USFS to implement?

Doesn't the Okan/Wen NF already know where the most intensely burned areas are? If so, what will be added to those priorities based on task 1.3.

Does the USFS have the rehabilitation funding to implement actions that are generated from these analyses?

Need to link it more directly to fish and fish habitat and give examples of where and how it has worked.

**16. Okanogan River Restoration Initiative – Construction (Phase IV) :**  
**presented by Chris Bull**

The proposal would benefit from the bigger context. What are the long-term plans for fixing the channelization?

The vision for the whole reach (From Lake Osoyoos to Vaseux Lake) should be briefly described to address the following questions....

- Is this part of a bigger reach based approach? If yes, how do we know this project will be effective within the reach-based approach?
- How many km upstream and downstream are channelized?
- How effective will it be if it's an isolated patch?
- How well will it be connected to functioning reaches?

What role does the floodplain have in the existing design?

Is it possible to couple this design with the option to get this flow into the historic channel?

Laying out all the previous work that has gone into the proposal so far would really bolster the final proposal.

Include in the proposal the slide with the list of alternatives so that the decision-makers can be faced with potential options.

Was one of the options just the removal of the dike?

What regulations exist in land use for future activities to continue this effort?

Several places in the proposal state that the project will connect the river to its historic floodplain. In reality, the project will only connect the river to a tiny fraction of its historic floodplain. Be careful not to generalize too broadly.

The proposal was targeted towards the Subbasin Planning documents and would benefit by developing linkage and consistency with the Revised Biological Strategy as well (<http://ucsrb.com/resources.asp>).

**17. Fish Passage Provisions at McIntyre Dam: Presented by Ryan Benson**

The fish screen should probably be separated out as a unique proposal or given a lot more detail to justify the cost (40%). It's barely mentioned in the pre-proposal.

Overshot gates still require a jump that would still be considered a fish passage barrier by WA state standards.

Why not put in a bypass ladder?

Why not just lift the gates all the way open? How is that any different than decommissioning?

How is the habitat above the dam for sockeye? Describe the potential biological benefits in terms of quantity and quality of spawning and rearing areas.

The proposal was targeted towards the Subbasin Planning documents and would benefit by developing linkage and consistency with the Revised Biological Strategy as well (<http://ucsrb.com/resources.asp>).

### **18. Reestablish Steelhead in Loup Loup Creek : Presented by Chris Fisher**

The final proposal should talk about the importance of all the small tribs to Okanogan steelhead population. Build a strong case for the population level importance of having lots of functional small tribs.

Temperature and flow data above the diversion should be presented / if available, so that we can evaluate the potential for summer rearing. Include the fish survey info as proof of adequate flow and temperature for juvenile survival.

List the cfs that is expected to stay in the creek for fish. (800 acre/ft ?), may not translate to year round flow.

Will there be guarantees that it will stay in the creek? Describe how the DOE water right claim process works here.

Is it adjudicated? If so, will this change allow for Jr. water rights holders to take and erase the benefit?

Text says redds were upstream of the diversion but the map shows them downstream.

Not clear if they are asking for a 12 yr commitment at 40k per year. If so, that is \$480k, not \$650 k ; Presenter said it is an annual request. Some concern over paying them in perpetuity for running their pump.

- Should show the formula for how costs were allocated to this Salmon Recovery funding source. All of the O&M should not be paid for by Salmon Recovery \$

More detail on monitoring (which performance measures / habitat indicators will be monitored by OBMEP)

What is the base flow? Is it 5cfs, 20cfs? Helensdale doesn't have enough water year round to meet their demand.

Did you investigate doing a water lease or water banking? My concern is that you are looking at \$32,000/annually. Chris suggests going to them to put forward a contract for a specified time period and then evaluate it.

The secondary water right upstream of this diversion is irrigating 1900 acres and diverts water into Leader Lake. No details are known on that operation or how it does or in the future would affect the benefits of this project.

### **19. Remove Impediment in Loup Loup Creek: Presented by Chris Fisher**

Is the road too wide to implement a modular bridge? They thought it was too expensive. They are looking at a bottomless arch culvert.

If you had some temperature data, it would help make the case that the habitat could support fish.

What are the two roads that access the area? Burdett St and Old Hwy 7.

Is the success of this project dependent upon getting the water from the other Loup Loup Project? If so, that needs to be explained in this proposal. It needs to be properly sequenced because the presenter showed dead fish that had been stranded. Without water, the barrier might be beneficial to keep fish from going into an area where they or their progeny cannot survive.

### **20. Confluence Habitat Restoration and Bank Stabilization: presented by Keely Murdoch**

Several concerns were raised about trying to stop natural processes in a highly active area and it would likely be futile. It was recommended that an acquisition might be the preferred alternative.

Chiwawa clearly is moving towards a new confluence, its natural, so why try to stop it with a band-aid approach?

- A counter argument was made that if it's not stopped in a fish friendly manor then it might get fixed during an emergency in a fish unfriendly manor. The alternative might be an emergency HPA that uses rock that is less beneficial to fish and pushes the problem downstream.

- Figure 3 indicates a very unnatural riparian area, so ELJ are a short-intermediate term solution to stop the avulsion while the riparian enhancement can return it to a natural rate. However, the forces of these 2 rivers in this location appear unstoppable with wood so it is risky and are the short-term gains worth it?

If they decide to continue, a geomorphic analysis should be conducted.

## **21. Methow Ecological and Salmonid Restoration Program: presented by Paul Anders**

The pre-proposal was confusing and unfocused and it was impossible to tell the relationship between the objectives, tasks, and budget. It appeared to be both an assessment and a restoration proposal but the *proposed action* was a 4 step Adaptive Management template.

- The specific actions were not clear, is the “previously developed multi-trophic level biomonitoring and analysis plan” part of this proposal? If so then much more detail needs to be provided on what that actually is and how it gets developed?
- Shouldn’t #2 go first so that you know what else might need to be collected?

The presentation was not consistent with the pre-proposal and provided a more clear picture of what was being proposed. This is an assessment only.

Why not start with the existing data from WDOE and USGS sites? That might tell you enough to get started and refine a study from there.

- Need to refine objectives to justify the budget, biomass of inverts may be enough and would not need more detailed info.

A smaller subset of areas could be chosen to reduce the cost.

Where are the funding sources coming from?

How do you determine the “predefined conditions”?

Would the target levels change with variable fish escapements? Are you targeting a reduction in density dependent mortality by specific life stages?

### **Meeting adjourned 16:40**

Meeting notes by Derek Van Marter and Casey Baldwin

Approved by, or comments received from: Cameron Thomas, John Arterburn, Tom Kahler, Kate Terrell, Tracy Hillman