



Wells, Rocky Reach, and Rock Island HCP Tributary Committees Notes 9 January 2020

Members Present: Jeremy Cram (WDFW), Chris Fisher (Colville Tribes), Tom Kahler (Douglas PUD), Brandon Rogers (Yakama Nation), Kate Terrell (USFWS), Catherine Willard (Chelan PUD), Justin Yeager (NOAA Fisheries), and Tracy Hillman (Committees Chair).

Others Present: Becky Gallaher (Tributary Project Coordinator) and Lee Carlson (retired Yakama Nation Biologist). Mike Kaputa (Chelan County Natural Resources Department) and Mickey Fleming (Chelan Douglas Land Trust) joined the meeting for the Cottonwood Flats discussion. Cody Gillin (Trout Unlimited) joined the meeting for the Beaver Fever Project discussion.

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans Tributary Committees met at Grant PUD in Wenatchee, Washington, on Thursday, 9 January 2020 from 9:00 am to 12:30 pm.

I. Review and Adopt Agenda

Tracy Hillman welcomed everyone to the meeting and the Committees adopted the proposed agenda with no additions.

II. Review and Approval of Meeting Minutes

The draft November meeting notes were reviewed and approved by Tributary Committees members in December. Because the Tributary Committees did not meet in December (draft November meeting notes were approved via email), there were no draft notes to review in January.

III. Monthly Update on Ongoing Projects

Becky Gallaher gave an update on funded projects. Most are progressing well or had no salient activity in the past month.

- Barkley Irrigation – Under Pressure Project – The sponsor (Trout Unlimited; TU) did not provide an update this month.
- Icicle Boulder Field Project – The sponsor (TU) did not provide an update this month.
- Peshastin Creek RM 10.5 PIT-Tag Detection Site Project – This project is complete. The sponsor (Washington Department of Fish and Wildlife; WDFW) provide the 2019 annual report, which has been uploaded to the Extranet site. Jeremy Cram noted that no tagged adults were detected in 2019; however, three tagged juvenile steelhead were detected (one hatchery-origin steelhead and two natural-origin steelhead). He said the low number of detections may be related to stream flows in 2019.

- Beaver Fever Project – The sponsor (TU) did not provide an update this month.
- Methow Basin Barrier Diversion Assessment Project – The sponsor (Cascade Columbia Fisheries Enhancement Group; CCFEG) did not provide an update this month.
- Derby Creek Fish Passage Project – The sponsor (CCFEG) reported that they finalized the design and are ready to begin the bid process.
- Chiwawa Nutrient Enhancement Project – The sponsor (CCFEG) reported that there is no new activity this month. They continue to work on the report.
- Monitor Side Channel Design Project – This project is complete and the final report has been uploaded to the Extranet site.
- Entiat Fish Passage and Barrier Assessment Project – The sponsor (CCFEG) reported that there is no new activity on this project.
- Twisp River Floodplain Left Bank Spring-fed Alcove Restoration Project – The sponsor (Methow Salmon Recovery Foundation; MSRF) reported that there is no new activity on this project.
- Johnson Creek Habitat Restoration Project – The sponsor (TU) did not provide an update this month. This work will occur later in 2020.
- Cottonwood Flats Floodplain Restoration Project – The sponsor (CCNRD) reported construction will occur during fall 2020. See additional updates below.
- Upper Kahler Stream and Floodplain Project – The sponsor (Yakama Nation; YN) reported construction is complete and they are writing the final report.
- Stormy Area “A: Stream and Floodplain Enhancement Project – The sponsor (YN) reported construction is complete and they are writing the final report.
- Napeequa Side Channel Connection Project – The sponsor (CCFEG) reported that the pedestrian bridge is not an option and therefore submitted a budget amendment/scope change request (see discussion below).
- Restore Chiwaukum Creek Project – The sponsor (CCFEG) reported that there is no new activity on this project. They are planning a kick-off meeting on 24 January. The sponsor asked that Jeremy Cram and Catherine Willard attend the meeting.
- Sugar Levee Groundwater Evaluation – The sponsor (MSRF) reported that they have identified 13 locations for groundwater monitoring (locations for piezometers). They also installed four staff gauges.

IV. Review of Tributary Committees’ Policies and Procedures

Policies and Procedures for Funding Projects

The Committees reviewed their Policies and Procedures document and made no edits or changes to the document.

Tributary Committee Operating Procedures

The Committees reviewed their Operating Procedures and made no edits or changes to the document.

V. Scope Change/Budget Amendment

Napeequa Side Channel Connection Project

The Rocky Reach Tributary Committee received a scope change/budget amendment request from Cascade Columbia Fisheries Enhancement Group (CCFEG) on the Napeequa Side Channel Connection Project. CCFEG reported that because of regulatory issues and high costs, the pedestrian bridge over the Napeequa River is not feasible at this time. Therefore, rather than use the \$25,000 to install a pedestrian bridge, they asked to use the \$25,000 to purchase a vehicle and a water filtration system. After evaluating the request, the **Rocky Reach Tributary Committee concluded that the allocated funds for the pedestrian bridge cannot be used to purchase a vehicle or a water filtration system.** Equipment or assets purchased with Plan Species Account Funds would belong to the Committee. In this case, the Committee does not want to own a vehicle.

VI. Cottonwood Flats Floodplain Restoration Project

Mike Kapute (CCNRD) and Mickey Fleming (CDLT) provided an update on the Cottonwood Flats Floodplain Restoration Project. Mike shared with the Rocky Reach Tributary Committee the most recent modeling results on both the original design (80% design) and the pilot-channel design. He provided handouts showing modeled depths and velocities at 500 cfs and 1,000 cfs for the two designs. Modeling at 1,000 cfs represents the one-year (annual) high flow. Members asked if larger flows were modeled. Mike said no, because they have no money to pay for additional modeling. Members indicated that higher, channel-forming, flows are needed to carve flow paths under the pilot-channel design.

Mike provided handouts showing the line-item budgets for both designs. In sum, construction costs for both designs were similar (\$370,245 for the original design and \$323,782 for the pilot-channel design). However, because of uncertainty associated with the pilot-channel design, he included an adaptive management component to the budget. The cost for adaptive management for the pilot-channel design was \$252,737. He also provided a budget for monitoring the pilot-channel design, which equated to \$232,918. Thus, the total cost to implement and monitor (and adaptively manage) the pilot-channel design is about \$809,437. Members thanked Mike for the cost estimates but noted the estimates do not accurately reflect the pilot-channel design proposed by the Committee. The Committee recommended the construction of the pilot channel with additional efforts to knock-down high spots to improve the development of flow paths across the floodplain. The Committee also voiced their concern with the consultant's resistance to evaluate or consider the Committee's full recommendation.

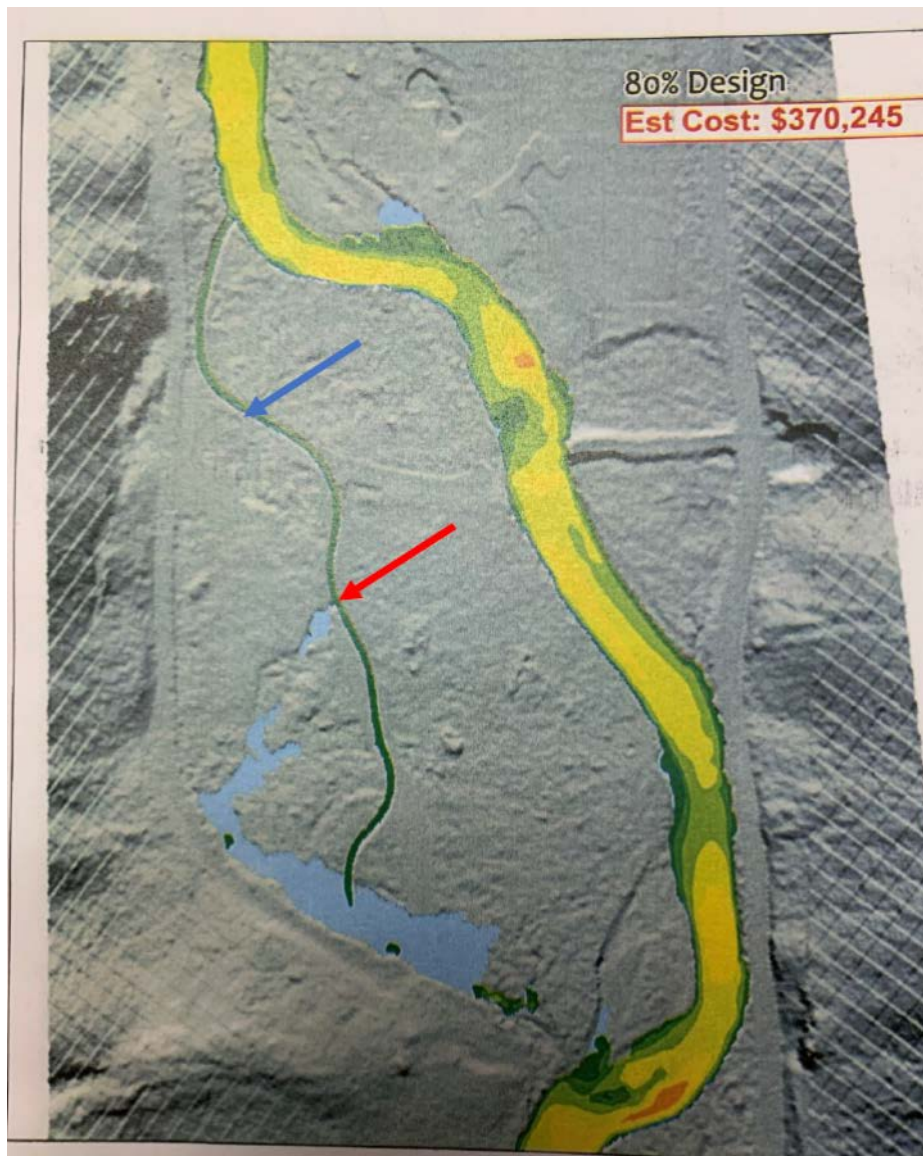
Mickey reported the primary concern of the CDLT is the potential effect of the pilot-channel design on neighboring landowners. She does not want the project to flood or otherwise affect the neighboring landowners. The Committee said the pilot-channel design will not affect adjacent landowners. Mickey said the CDLT is not opposed to the pilot-channel design, they simply want to make sure the project implemented does not negatively affect neighboring landowners.

Mike said the pilot-channel design provides less certainty of success than does the original design. He added that he talked with the Salmon Recovery Funding Board (SRFB) about amending the existing contract to replace the original project with the pilot-channel design (the SRFB is a cost share). He said the SRFB considered the project a significant change in scope and it may require a new application, which would be reviewed by the Upper Columbia Regional Technical Team and Citizen's Advisory Committee.

As a final note, Mike provided a handout describing wetland impacts. In short, if monitoring indicates the pilot-channel design does not work and CCNRD needs to construct a channel similar to the original design, there will be wetland impacts that will need to be mitigated. Mike said this could be expensive and they have no funds to cover the expense. The Committee appreciated the concern but noted the

recommendation by the Committee to help develop flow paths by knocking down high points should reduce the need for constructing a channel through the floodplain.

Following the update from CCNRD and CDLT, the Committee reviewed the information and recommended that CCNRD consider extending the pilot channel downgradient to the point marked with the red arrow on the figure below. The blue arrow notes the terminus of the pilot channel originally proposed by the Committee. The extended pilot channel should connect the channel to low points downgradient on the floodplain. It may be necessary to knock down high points to help develop flow paths downstream from the end of the pilot channel. The Committee believes the extended channel will provide CCNRD with more biological certainty and still allow the river to develop flow paths across the lower floodplain. The Committee also recommends that CCNRD avoid developing large, trapezoidal channels that remove and disturb large tracks of riparian vegetation. To the degree possible, CCNRD should construct channels that protect existing vegetation and they should use the existing vegetation to help define the channel.



VII. Beaver Fever: Restoring Ecosystem Function Project

Cody Gillin with Trout Unlimited (TU) gave a presentation titled, “BDA Project Update” (see Attachment 1). Cody talked about the genesis of the project and described the timeline for the project. He noted the pace of the project slowed because of communication and coordination with the Forest Service. However, in 2019, based on discussions and field visits with the Forest Service and WDFW, TU has identified a final list of about 30 treatment sites on Roaring and Potato creeks in the Entiat River basin, with a focus on lower Potato Creek (downstream from the North Fork Potato Creek confluence). The intent is to use beaver dam analogs (BDA) to enhance floodplain activation, ameliorate incision and erosion, induce meanders and braiding, reduce infrastructure impacts, and mitigate head-cuts. Cody showed photos of sites on Potato and Roaring creeks that would benefit from BDA treatments.

Following the discussion on treatment sites and restoration actions, Cody spoke briefly about monitoring the effectiveness of the actions (the last time Cody presented to the Rock Island Tributary Committee, the Committee recommended that TU monitor the effectiveness of the project). Cody identified some of the indicators that could be monitored to determine effectiveness including floodplain reconnection, aggradation, water temperature, riparian vegetation, sediment storage, structural complexity, side channel and wetland development, groundwater storage, stream flows, fish passage, and fish response. The Committee showed interest in monitoring temperature, groundwater dynamics, and fish response (e.g., abundance, size, and growth). The Committee also suggested the use of unmanned aerial vehicles for capturing floodplain, riparian, and channel responses. The Committee encouraged Cody to complete an Effectiveness Monitoring Application and suggested he discuss monitoring with Robes Parrish, Jeremy Cram, and Tracy Hillman.

The Rock Island Tributary Committee thanked Cody for the update on the project.

VIII. Information Updates

The following information updates were provided during the meeting.

1. Approved Payment Requests from November, December, and January:

Rock Island Plan Species Account:

- \$50.00 to Clifton Larson Allen for Rock Island financial administration in November 2019.
- \$60.00 to Clifton Larson Allen for Rock Island financial administration in December 2019.
- \$995.25 to Chelan PUD for Rock Island project coordination and administration during the fourth quarter of 2019.
- \$178.24 to Cascade Columbia Fisheries Enhancement Group for the Derby Creek Fish Passage Project.
- \$7,485.93 to Cascade Columbia Fisheries Enhancement Group for the Chiwawa Nutrient Enhancement Project (November work).
- \$2,976.63 to Cascade Columbia Fisheries Enhancement Group for the Chiwawa Nutrient Enhancement Project (December work).
- \$117.65 to Cascade Columbia Fisheries Enhancement Group for the Restore Lower Chiwaukum Creek – Phase 1 Project (November work)
- \$3,264.47 to Cascade Columbia Fisheries Enhancement Group for the Restore Lower Chiwaukum Creek – Phase 1 Project (December work).

- \$2,933.85 to Chelan County Treasurer for the Monitor Side Channel Design Project.

Rocky Reach Plan Species Account:

- \$50.00 to Clifton Larson Allen for Rocky Reach financial administration in November 2019.
- \$60.00 to Clifton Larson Allen for Rocky Reach financial administration in December 2019.
- \$592.56 to Chelan PUD for Rocky Reach project coordination and administration during the fourth quarter of 2019.
- \$784.33 to Cascade Columbia Fisheries Enhancement Group for the Entiat Basin Fish Passage and Screening Assessment Project (November work).
- \$1,835.91 to Cascade Columbia Fisheries Enhancement Group for the Entiat Basin Fish Passage and Screening Assessment Project (December work).

Well Plan Species Account:

- \$294.36 to Chelan PUD for Wells project coordination and administration during the fourth quarter of 2019.

2. Tracy Hillman reviewed the 2020 Salmon Recovery Funding Board/Tributary Committees proposed schedule for 2020. Important dates are noted below:
 - Project Presentations: 11-12 March 2020
 - Draft Applications Due: 17 April 2020
 - Site Visits: 11-13 May 2020
 - Review Draft Applications: 14 May 2020
 - Final Application Due: 29 May 2020
 - Review Final Applications: 11 June 2020
3. Tracy Hillman reported that he and Becky Gallaher completed Section 2.3 (Tributary Committees and Plan Species Accounts) for the Annual Report of Activities under the Anadromous Fish Agreement and Habitat Conservation Plan for each hydroelectric project. Tracy said he sent the draft reports to Anchor QEA, who is compiling the draft annual reports. The draft reports will be sent to the HCP Coordinating Committees for review. The PUDs will submit the final reports to the Federal Energy Regulatory Commission in April.
4. Tracy Hillman reminded the Committees that the Upper Columbia Science Conference is on 22-23 January in Wenatchee.
5. Kate Terrell gave a brief update on the Sugar Levee Project. She noted that the working groups have developed a project schedule, developed an organization chart, identified the area of analysis, compiled a list of goals and objectives, reviewed existing literature and data collected within the reach, evaluated feasibility of restoration actions on river left at the upper and lower ends of the project area, drafted an outreach plan, drafted a social feasibility map (shows level of landowner interest), and continue conversations with landowners in the reach. She said the group has expanded the length of the reach for investigation by about 1,000 feet.
6. Tracy Hillman and Becky Gallaher informed the Rock Island and Rocky Reach Tributary Committees that the Plan Species Accounts are due for an external financial review. Becky said

she will initiate the process of selecting an accounting firm to conduct the review. Funds to pay for the review come from the Rock Island and Rocky Reach Administrative Accounts.

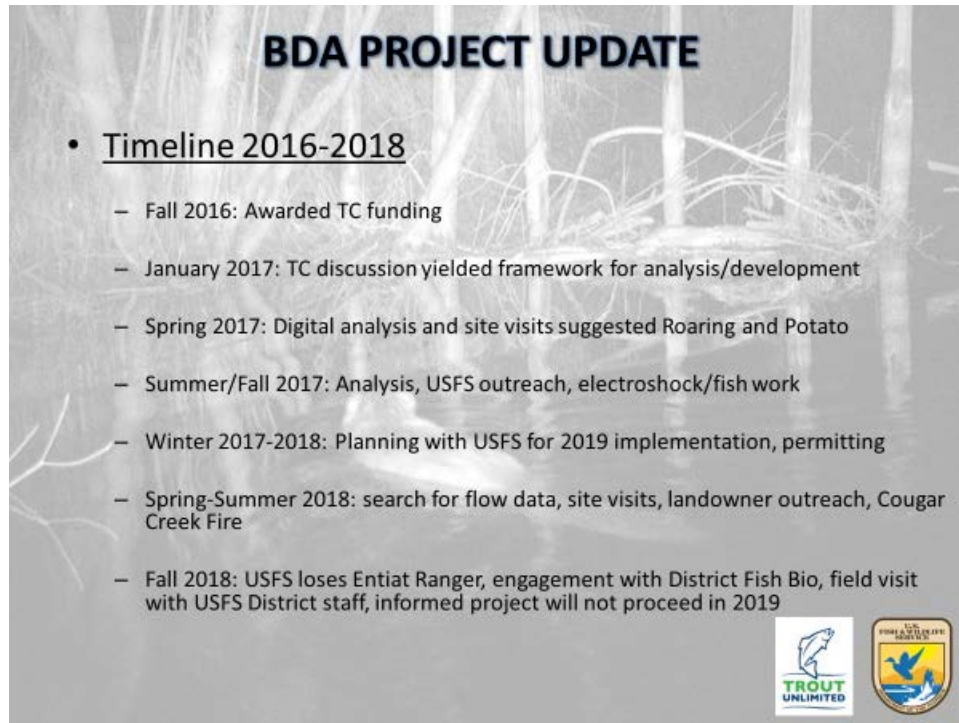
IX. Next Steps

There is no planned meeting for the Tributary Committees in February. Tributary Committees members will attend project presentations with the Regional Technical Team on 11-12 March.

Meeting notes submitted by Tracy Hillman (tracy.hillman@bioanalysts.net).



Attachment 1

Presentation by Cody Gillin on the Beaver Fever Project





BDA PROJECT UPDATE

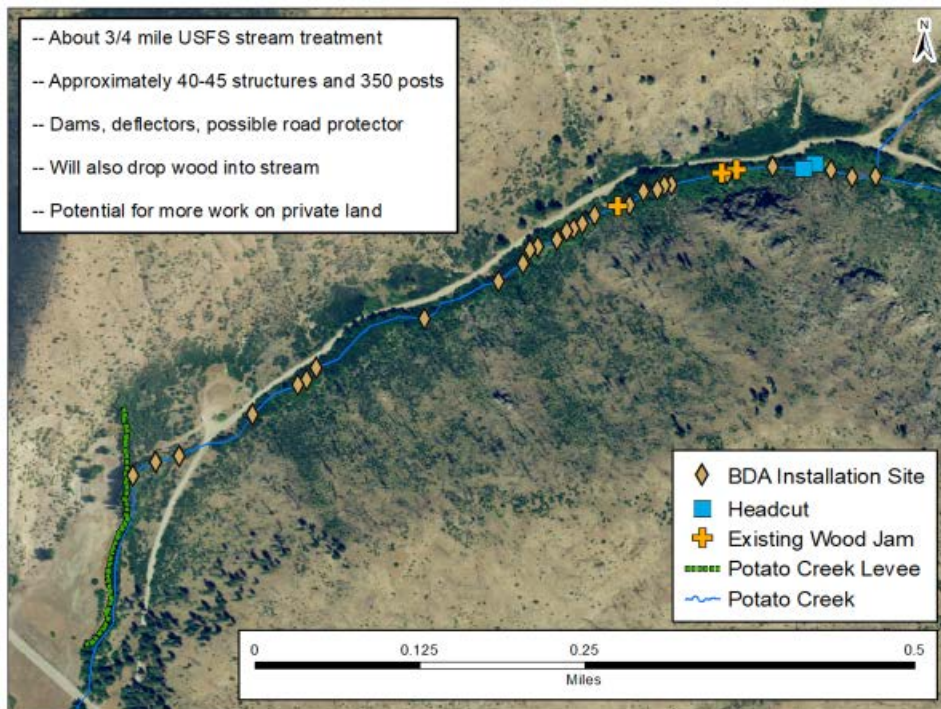
- Timeline 2016-2018
 - Fall 2016: Awarded TC funding
 - January 2017: TC discussion yielded framework for analysis/development
 - Spring 2017: Digital analysis and site visits suggested Roaring and Potato
 - Summer/Fall 2017: Analysis, USFS outreach, electroshock/fish work
 - Winter 2017-2018: Planning with USFS for 2019 implementation, permitting
 - Spring-Summer 2018: search for flow data, site visits, landowner outreach, Cougar Creek Fire
 - Fall 2018: USFS loses Entiat Ranger, engagement with District Fish Bio, field visit with USFS District staff, informed project will not proceed in 2019

BDA PROJECT UPDATE

- Timeline 2019-2020
 - Winter-Spring 2019: Project added to 2020 USFS program of work, TU submits proposed work areas for USFS consideration
 - Spring 2019: head cuts and severe incision following rapid runoff
 - Summer 2019: beaver recolonization, initial BDA site planning
 - Early Fall 2019: Field visit with USFS (fish bio, hydro, archeologist) and WDFW (habitat bio), project approved by IDT below NF Potato, Roaring lower priority (except head cut)
 - Fall 2019-Winter 2020: Final site selection, SPA development, budget planning, implementation timeline planning (Summer 2020)



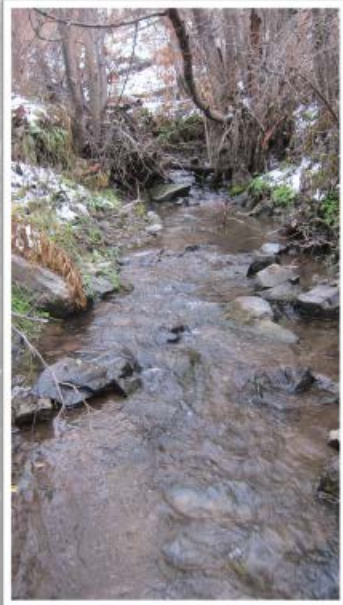
Enhance Floodplain Activation



Ameliorate Incision/Erosion



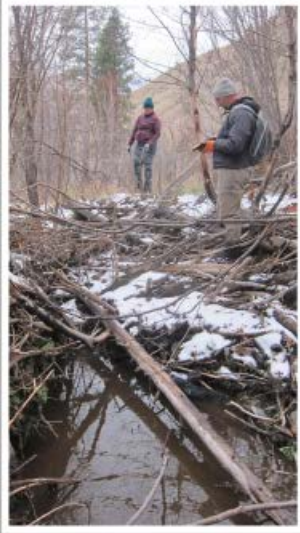
Induce Meanders/Braiding



Place Wood and Drop Elevated Spanners



Emulate Effectiveness of Existing Jams



Reduce Infrastructure Impacts?





MONITORING IN ROARING AND POTATO

- Floodplain reconnection: wetted perimeter, wetted width at install sites
- Aggradation: raising bed level of incised reaches
- Stream temperature above, within, and below project area
- Riparian vegetation: expansion, density, species
- Sediment storage/aggradation
- LWD and structural complexity
- Floodplain interaction
- Side channel and wetland development
- Groundwater storage: better estimate using wells/piezometers?
- Intermittent to ephemeral conversion?
- Passage barriers?
- Fish response?