# Buffalo Flats Floodplain Restoration Project
## Focus Group Meeting #1
6:00-8:30 p.m.; Tuesday, September 28, 2021

**Focus Group Members in Attendance:** Kathy Kirby, Cathy Nowak, Dick Middleton, Andrea Malmberg, Tony Malmberg, Leonard Flint, Doug Wiggins, Susan Hawkins, Donna Beverage, Paul Phillips, Willard Bertrand

**Project Staff in Attendance**: Jim Webster (Union SWCD), Jesse Steele (Grande Ronde Model Watershed), Aaron Bliesner(Union SWCD), Brandon Barrow (US Bureau of Reclamation), Allen Childs (Confederated Tribes of the Umatilla Indian Reservation), Susan Hayman (Ross Strategic), Tess Wendel (Ross Strategic).

**Public observers**: 4

### *Opening and Synopsis of Focus Group Interviews*
The meeting began shortly after 6:00 p.m. with a welcome from Jim Webster, Union Soil and Water Conservation District, followed by overview of the meeting objectives and agenda, and introductions of project staff and focus group members.

Susan Hayman, Ross Strategic, provided a summary of insights from the interviews conducted this summer with focus group members (interview results can be viewed in the linked meeting slides, p.8-20). She then invited focus group members to add any concerns not captured in the summary. Additional concerns noted included persistent concerns about the potential for mosquitoes to increase and spread from the private land due to increases in shallow, standing water perceived to be an outcome of the floodplain restoration activities, and concerns there may be increased spread of weeds onto adjacent lands by water flowing over and from the current landowners' property. Some members also noted their belief that the private lands where the project is proposed was at one time used as a feedlot, though the relevance of this was not clearly established. Project staff noted this historic use was not a factor in project design.

### *Project Update*
Jesse Steele, Grande Ronde Model Watershed (GRMW, a local non-profit organization led by a board of 14 local citizens), provided an update on habitat restoration in the Grande Ronde Basin and funding mechanisms for these types of stream restoration projects. He explained the pathway from electricity bills to Bonneville Power Administration, which is legally required to have environmental mitigation funds for salmon recovery efforts. He explained the GRMW helps distribute these mitigation funds to different projects, using the Board to make decisions about which projects to fund. Jesse then explained the Grande Ronde Basin Restoration Atlas as a collaborative effort amongst all the partners in the Basin to focus work where it can benefit salmon and steelhead populations. He explained the reason conservation partners are focused on the Catherine Creek Watershed, which includes both Catherine Creek and Little Creek, is this area is a high priority watershed due to having a high potential for healthy and functional aquatic habitat conditions and currently has the highest numbers of returning salmonoids in the basin.

There was additional discussion about the importance of prioritizing salmon recovery and stream restoration now to avoid potentially having fish advance from the current threatened listing under the Endangered Species Act (1973) to an endangered species listing with Take prohibitions. Agency staff noted that a determination of "endangered" for a species (and a Take) can result in further regulation from the federal government, which could have a larger, more significant impact on farmers and irrigators—something multiple people acknowledged is something to be avoided.

Jesse responded to a focus group member question about the state of the fish hatcheries, and the desirability of bringing back hatcheries to supplement fish populations. Jesse noted that the current supplementation efforts (adding lots of smolt) are unfortunately not resulting in significant numbers of adult fish returning. Clarification was also provided about the reason the steelhead supplementation program ended, which occurred once steelhead reached their threshold population goals. A focus group member asked whether a significant number of fish are being eaten by other fish, particularly invasive species. Jesse noted that predation was a problem, but not enough data currently exists to fully answer that question.

Jesse was asked about GRMW's involvement in the Buffalo Flats feasibility study. He responded that while GRMW staff have participated in some parts of the planning process, GRMW hasn't yet provided funding to the planning process.

Jim Webster then provided an overview of the project location, including information about the historic reach of Catherine and Little Creeks. He also noted that the earliest air photos of Catherine Creek from 1937 already show changes made to the creek channels by early settlers, rather than natural stream movement. Jim explained that, currently, there is less mixing of shallow ground water within both the Catherine Creek and Little creek channels than originally occurred due to man-made infrastructure (roads, channel straightening, etc.). He noted that a key part of this project is making sure there is better mixing between the main creek channels and ground water because this solves two problems: 1) summer time mixing can keep stream temperatures lower, which is better for water quality and aquatic species and, 2) in the winter this mixing helps keep the water a little warmer which leads to less ice/ice jams/freezing which reduces ice formation and flooding issues.

Jim noted that while parts of Catherine Creek seem quite shaded, there are very few pools for adult salmon—rather it's one long riffle with bedload that is homogenous cobble and small boulders. This project focuses on increasing diversity in stream habitat types, creating a connected floodplain with side channels, stabilizing stream banks and near-stream soils, and improving riparian vegetation to help create better water quality, water quantity, and fish habitat. Jim then described the Buffalo Flats project goals and objectives in detail.

Jim highlighted that the Buffalo Flats project has always been focused on the entire meadow area (or valley floor) of the Buffalo Peak Land & Livestock property and has always included restoration planning for both Catherine Creek and Little Creek. While project assessments and analysis continue to study physical conditions and restoration options for both creeks, the simplicity of Little Creek and the surrounding floodplain has allowed design alternatives to be developed quicker than the more complex Catherine Creek (highway location, waterlines, powerlines). Project design and hydraulic modeling activity is progressing on Little Creek to a 15 percent design level, while the complex issues surrounding Catherine Creek are still being studied.

Jim explained potential restoration activities planned for Little Creek that include:

- Reactivating and creating side and flood channels
- Modifications to the existing Little Creek channel to promote flow into new meander bends (increasing belt width of the channel)
- Blocking some parts of existing channel where it has been straightened in the past, and dig out some new areas to promote meander development in the future
- Adding wood and rock structures in the primary channel to improve stability and maintain deeper pools for fish
- Planting native riparian plant species to promote a diverse vegetation community and stabilize floodplain surfaces
- Reducing barriers to fish passage[1]

Some focus group members expressed considerable surprise at the news that the Little Creek design was progressing faster than a design for Catherine Creek. There was discussion about how this information had been shared with the community, how some members were aware that Little Creek was always included in the project, and how some members were quite unaware of this change in focus. There were questions and discussion around the project goals, and how the focus on Little Creek seemed, to some, to make little contribution to the stated goals of fisheries habitat. Project staff responded to focus group members that certain features of Little Creek are in poor condition and fish habitat is limited. Channel conditions and fish habitat can be measurably improved through planned floodplain restoration activities.

Jim then reviewed project area maps (slides, pages 29 and 30) depicting a two-year recurrence flood inundation with modeled existing and proposed water depths (current condition vs. proposed project condition). Jim pointed out that more water is spread within the project property under the proposed activities, effectively using the floodplain to intermittently store water. There was a question about the project goals, specifically asking why the language about not increasing risk of flood damage (no harm to neighboring properties) and maintaining utility of existing infrastructure was moved from the goals into the overarching project sideboards. Project staff clarified that the Union SWCD and the U.S. Bureau of Reclamation are legally bound to not increase flooding (FEMA requirement) or disrupt the utility of existing infrastructure on all stream restoration projects. This issue is considered a project requirement for any action, rather than a specific goal for this project.

A focus group member asked whether project staff could produce examples of other stream restoration projects done in such proximity to cities, such as this project would be to the City of Union. Aaron Bliesner provided several examples and noted the City Council and requesting focus group members received a packet of information outlining 15-20 similar projects that have been completed near small, mid, and large size towns, and that have successfully reduced peak flows and created better salmon habitat. There was an additional question and request about getting copies of historical maps for focus group members to review.

[1] Not in the original list shared on the slides, but added as this activity emerged during the discussion of fish passage barriers.

A focus group member asked about the analysis work being done by the project's engineering firm to determine how much water can be absorbed by the floodplain (the "sponge effect"). Project staff noted these studies are still ongoing and are being conducted by the project planning team and consulting engineering team. A clarifying question about whether there would be any changes to who controls the water to irrigation ditches and project staff confirmed again that no changes would be made to who is controlling the water. It was also noted that the time of year where residents may see changes in creek levels and where it flows will happen in the spring and late summer. The sponge effect is intended to reduce the peak of high flows and increase the amount and length of time water flows out of the floodplain later in the summer when irrigators are carefully monitoring water.

A focus group member mentioned that Little Creek flows often go from a flood to a trickle and asked whether these stream restoration changes will help reduce that variability. Staff responded that these project activities should reduce this variability and provide a flow buffer in the system.

There was an additional question about what project staff are doing to address existing dams/barriers on Little Creek, since those would highly impact the ability for salmon to return. Project staff noted that there are six barriers on Little Creek, of which the first and fourth barrier have had projects in the past to improve passage. The Union SWCD is currently working with an engineering firm to design fish passage around the fifth and sixth barriers (Israel-Ames and Weaver ditches), which includes coordinating with the Oregon Department of Fish and Wildlife to install fish screens. The design for the Israel-Ames structure may allow for lowering the channel bed when backwater is not needed for irrigation diversion, thereby increasing channel capacity during high spring flows and reducing flood risk. Staff noted that barrier modifications to the Israel-Ames and Weaver diversion should be ready for construction in 2023. The Union SWCD is also scoping future improvements to the second and third barriers (Miller and Godley Road) where additional modifications can be made. The Union SWCD will begin discussing design options with the landowners and water users associated with the Miller and Godley Road diversions in 2022.

There was an additional question about whether there are daily or ongoing measures of water flow, stream height, oxygen levels, temperature, and turbidity. Staff described that they have multiple flow gauges and meters collecting information on both Catherine and Little Creek. They encouraged members to reach out to the district if they want to access that data.

Staff outlined the timeline of the project (slides, page 31) and noted that several permits need to be approved for the project to move forward. At each project milestone, the agencies and landowners decide whether to continue to the next step of the process. Project staff anticipate seeking project funding in 2023. The next project milestone (30% design phase) is expected in late winter/early spring 2022, which is when the next focus group meeting would likely take place.

Some frustration was expressed by focus group members critical of the project, as well as by project staff and the landowners, who encouraged focus group members with concerns to come to them directly with their questions. Additional closing remarks were provided by Andrea Malmberg, Jim Webster, Aaron Bliesner, and Brandon Barrow.

Susan thanked everyone for their participation. Ross Strategic will coordinate with the District to post the slides from tonight's meeting, followed by distribution of the meeting summary. The meeting adjourned at 8:30pm.