

RIPPLES IN THE GRANDE RONDE



RIVERS UNITING NEIGHBORS · QUARTERLY NEWS FROM THE GRANDE RONDE MODEL WATERSHED

The Wallowa-Whitman Forest Collaborative (WWFC) members pursue a rather straightforward but sometimes daunting mission: they work to improve the social, economic, and ecological resiliency of the Wallowa-Whitman National Forest and its surrounding local communities through the cooperative efforts of a diverse group of stakeholders. The Wallowa-Whitman National Forest is a massive 2.4 million-acre patch of ground containing one National Recreation Area, four Wilderness Areas, and 10 Wild and Scenic Rivers.

Although the WWFC in its current iteration is relatively young, the group has its roots in nearly a decade of prior collaborative work with the U.S. Forest Service (USFS) by a number of its founding members, many of whom reside in areas surrounded on all sides by federal lands. They forged the foundation of what eventually would become today's Collaborative (to which many

On The Ground *with the* WALLOWA-WHITMAN FOREST COLLABORATIVE

by Jeff Costello, WWFC Facilitator

affectionately refer as the "Uppercase-C" of collaboration). Those early adopters of the collaborative process (the "lowercase-c" of collaboration) believed that thriving rural communities need both a genuine commitment to land stewardship and strong economies.

Fast-forward to June 2012, when Baker, Union, and Wallowa Counties, all of which were facing complex ecological and economic challenges, jointly convened a public meeting to propose the creation of a forest-wide Collaborative. The meeting drew 48 participants representing 23 diverse stakeholder groups from across the three-county area.

The participants formally endorsed the formation of the WWFC and discussed the nascent organization's direction, priorities, and structure. Not long after, the WWFC formed an all-volunteer, nine-member Operations Committee, appointed Wallowa Resources as its fiscal agent, and drafted the group's operating principles and mission. The WWFC now meets monthly, with many hours of individual and committee work between meetings, to tackle the multi-faceted issues surrounding the management and restoration of the Wallowa-Whitman National Forest.

Why Use the Collaborative Approach?

During the 1980s and 1990s, federal lands management was characterized by gridlock and public controversy. As work on national forests slowed, the health of our forested landscapes and the vitality of the communities that depend on them suffered. Fortunately, community-based Collaboratives have emerged across Oregon and much of the western U.S. as a way to address the critical need for forest restoration. By creating a platform for citizens to better engage with public lands managers and share in the



Collaborative members viewing an aquatic restoration project along Sheep Creek (courtesy of Jeff Costello).

Continued on page 2, **FOREST COLLAB**

design, implementation, and monitoring of forest restoration projects, Collaboratives are helping the USFS increase the quality, pace, and scale of the work with which it is charged. Starting with a few innovative local partnerships in the 1990s, there are now more than 25 Collaborative groups across Oregon, including at least one for each of our National Forests, all of which are diligently working to improve the health of our forests, rivers, streams, and rangelands. The Collaboratives representing northeastern Oregon, including the WWFC, have emerged in response to the need to address catastrophic wildfire, insects and disease, and economic and social challenges within our region.

Today, the WWFC reaches close to 160 organizations and individuals with a core group of approximately 35 official voting members, who all have ratified and are committed to upholding the organization's operating principles. The stakeholder members of the WWFC represent a broad cross-section of northeastern Oregon communities. In addition to many private landowners and concerned citizens, participants come from local county government and state agencies, environmental and conservation groups, the forest products industry, academic institutions, and the legal field. The vast majority of these individuals volunteer their time and resources to be involved in this critical work.

Collaboration is at its best when diverse stakeholders work together to solve a common problem or achieve a common objective. Although collaboration takes trust and hard work and is not without many challenges and frustrations, WWFC members are committed to collaboration as the best way to achieve our goals. By putting in more time and effort up front, the consensus and social agreement arising from collaboration can produce more durable projects and solutions. Collaboration allows us to learn from one another, achieve better economic and ecological outcomes, increase efficiencies and productivity, and minimize the amount of time spent enmeshed in lawsuits.

The WWFC's First Projects

For its first "official" undertaking, the WWFC began working on the Lower Joseph Creek Restoration Project in 2012. With a nearly 90,000-acre study area along the northern boundary of the Wallowa-Whitman National Forest in Wallowa County, this project aimed to contribute to local economic and social vitality, reduce the risk of wildfire, restore forest health, enhance fish and wildlife habitat, and improve future forest/range/fire management opportunities. The deep canyon geography contained a complex combination of forest types, from warm/moist forest on the north-facing steep canyon slopes and warm/dry forest on south-facing slopes to cool/dry forest and even pockets of wet moist mixed conifer and subalpine fir forest. Needless to say, these were not the easiest conditions for a young



Historic fire scars are revealed in an old Western Larch Stump (courtesy of Jeff Costello).

Collaborative to take on as a first project. In spite of all the ensuing challenges, WWFC members stuck to their commitment to see the project through. They toured the area multiple times together in order to develop the overall objectives of the project and proposals for on-the-ground treatments. They worked with the Wallowa County Natural Resources Advisory Committee and the USFS to develop a new "Purpose and Need" for the project. They continued to work with the USFS during the scoping and draft Environmental Impact Statement stages. Last winter, four years after initiating the project, the USFS handed down a Record of Decision on the project, which is finally in the initial stages of implementation. A core group of WWFC members will provide monitoring for the project as it continues to ramp up.

Following the Lower Joseph Creek Project, the WWFC was looking for a second project that involved both public and private stakeholders. They found it in the East Face Vegetation Management Project, which encompasses more than 47,000 acres in Union and Baker Counties along the East Face of the Elkhorn Mountains. This project focuses on minimizing wildfire damage to people, homes, wildlife, and the forest; protecting irrigation water for local farmers; improving drinking water quality for La Grande and Baker City residents; and protecting threatened Bull Trout habitat. The East Face Vegetation Management Project is part of a larger strategy to make the communities and forests around the Elkhorn Mountains more resilient against wildfire. The project area borders both state and private lands, where complementary work is magnifying the benefits and results on this site. As a group, the WWFC members drafted a "Purpose and Need" for the project, led field trips to the site, and worked with USFS partners to develop a project plan that met the diverse needs of the local community. They will continue to play a pivotal role in the project by participating in a multi-party monitoring protocol as the work continues to be implemented on the ground.

*Continued on page 8, **FOREST COLLAB***

Getting Our Feet **Wet** in the GRANDE RONDE BASIN

Reflections on a summer internship with the Bureau of Reclamation (BOR)

by Julianne Robinson, Melody Scarborough, and Shiloh Simrell, *Bureau of Reclamation Interns*

The BOR's Columbia Snake Salmon Recovery Office in La Grande has employed student interns each summer since 2011, providing students with a chance to gain new skills and explore career opportunities in biology and engineering. This article offers a glimpse of the work performed by interns during the 2017 field season. One of our tasks over the course of the summer was to conduct weekly flow measurements along the upper Grande Ronde River to monitor streamflow and construct rating curves for the upcoming Bird Track Springs Project. We also assisted a planning team with data collection and site assessment for this project.

Additionally, our summer work involved supporting many partner organizations within the Grande Ronde River Basin,



A BOR intern collects flow measurements on the Grande Ronde River (courtesy of BOR).

including the Confederated Tribes of the Umatilla Indian Reservation, the Union Soil and Water Conservation District, the U.S. Forest Service, the Oregon Department of Fish and Wildlife, and The Freshwater Trust. The varied experiences we gained from working with each organization helped expand our knowledge and practical job skills. In support of the Confederated Tribes of the Umatilla Indian Reservation's Grande Ronde River restoration work, we conducted spawning surveys, monthly fish sampling, and juvenile fish trap checks on Looking Glass Creek. We learned how to identify many native and non-native juvenile fish and participated in multi-agency trainings on mussel identification, snorkel surveys, and spawning ground surveys.

Our work with the U.S. Forest Service involved conducting Multiple Indicator Monitoring (MIM) surveys. MIM surveys were developed to provide information necessary for managers, landowners, and others to adaptively manage riparian resources. The MIM protocol is designed to be effective for monitoring streambanks, stream channels, and streamside riparian vegetation. While working with the Oregon Department of Fish and Wildlife, we learned how to use electrofishing equipment for fish salvage, a process in which fish are removed from the stream to prevent mortality during in-stream construction. We conducted fish salvage on Beaver Creek near the La Grande Reservoir, where a fish ladder is being constructed to enable passage for Chinook and steelhead populations in the previously inaccessible stream channel.

We assisted The Freshwater Trust with flow measurements for an irrigation ditch seepage study near Union, Oregon. This effort involved conducting water flow measurements on various



Interns conducting fish salvage on Beaver Creek using electrofishing equipment (courtesy of Confederated Tribes of the Umatilla Indian Reservation).

irrigation ditches to determine diversion volumes and identify potential locations where water is being lost. In support of the Union County Soil and Water Conservation District's work on the Grande Ronde River, we planted trees at a restoration site and cared for them over the course of the summer. We also helped an Oregon State University student with a growth rate study on the upper Grande Ronde River. His objective was to evaluate to what degree the addition of adult carcasses influences juvenile Chinook and steelhead growth. We assisted with snorkel herding of fish into seine nets as well as measuring, weighing, and tagging them in preparation for recapture.

Our experiences this summer have helped us to complement knowledge with hands-on experience, and we have seen firsthand how multiple organizations can work together toward the mutual goal of improving fish habitat, optimizing municipal and agricultural water use, and promoting species management and protection. ■

BUSY BEAVERS

Restoration workshop inspired by beaver dam-building activity

by Alex Borgerding,
GRMW Staff
&
Jessica Humphreys,
The Freshwater Trust

In the summer 2016 issue of *Ripples*, we featured an article about beaver-inspired habitat restoration. In the article, titled “The Beaver State: How Salmonids and Beavers Relate,” we introduced ideas about mimicking beaver dam-building activities and their ecological and biological benefits. To jog your memory, man-made beaver dams, also known as beaver dam analogues (BDA), have been constructed throughout the western U.S. using untreated wood posts and willow branches (or other local plant materials), along with whatever substrate is in the stream. These structures are constructed at varying densities throughout a stream reach to accomplish a number of restoration objectives, such as floodplain reconnection, aggradation of incised streams, water storage, groundwater recharge, increases in pool habitat, and recruitment of woody debris. In a decade-long study of Bridge Creek in the John Day River Basin, researchers documented an increased number of steelhead in the stream where BDAs had been built. In October of this year, a few of these pioneering researchers came to our basin to share their knowledge about these concepts and techniques.

Joe Wheaton of Utah State University,



Workshop attendees build a second BDA downstream of the primary dam. Upstream attendees work on building a post-assisted log structure (courtesy GRMW).

Chris Jordan of the National Oceanic and Atmospheric Administration, and Nick Bouwes of EcoLogical Services Inc., traveled to Wallowa County to teach a two-day workshop on implementing beaver-inspired restoration projects. Attendees of the workshop included core habitat restoration partners in the Grande Ronde River Basin who are interested in these new techniques. The Oregon Department of Fish and Wildlife, U.S. Forest Service, Nez Perce Tribe, Union County Soil and Water Conservation District, Bureau of Reclamation, Natural Resources Conservation Service, Trout Unlimited, The Freshwater Trust, and Grande Ronde Model Watershed were all represented at the workshop by one or more employees.

The workshop consisted of some classroom time for discussion, but the main focus was getting restoration professionals out into the field to look at the landscape, determine suitable sites for beaver dam-building activity, and build structures to observe the impacts. The beauty of this type of restoration is that

it can be tailored to fit different geographies and a variety of restoration goals. They are not heavily engineered projects and can be implemented at a relatively low cost compared with other restoration techniques. Structures can be constructed and maintained or be left to evolve with changing conditions, depending on restoration and management objectives. BDAs are relatively low-impact, and if the outcome is not desirable, then they are easy to remove. Similarly, if a BDA breaches, it is not necessarily a problem. What remains of the structure can still encourage the natural process of channel migration by providing a more diverse system, and the materials that float downstream may take on a new structure as they would naturally. By taking this approach, restoration professionals can feed the system the material it needs to kick-start natural processes instead of designing a stagnant system. The key is to build the structures, let the river do the work, and then assess the outcomes.



ABOVE: Nick Bouwes shows the group where the first BDA will be built. This location is ideal because of the potential for floodplain reconnection on river right (courtesy of GRMW).

Although BDAs were the original structure type, implementers have been experimenting with variations of the original, and attendees of the workshop also explored different options. During the workshop, BDAs without posts as reinforcement were built using materials that were already onsite, like old cottonwood trunks and root wads. This strategy can work well in low-gradient streams that are not prone to extreme seasonal fluxes in flow. Another structure type is a post-assisted log structure (PALS). PALS typically are not channel-spanning

BELOW: Participants work to drive posts, and prepare for creating a willow weave (courtesy of GRMW).



and are used to hold woody debris in place and push water in new directions.

Participants had the opportunity to experiment with building all three structure types on Prairie Creek in Wallowa County. After building one BDA, they started to see water rise behind the dam; soon, the water levels were about two feet deeper than pre-dam construction. Seeing immediate results from techniques that require only minimal ground disturbance and manual labor and that use readily available materials was refreshing for many of the participants. Although these techniques are not appropriate in all situations, the practitioners were excited to add a tool to their restoration toolboxes and collaborate with researchers and basin partners to learn how these concepts can be used to maximize the impact of restoration in the Grande Ronde River Basin.

*Continued on page 8, **BUSY BEAVERS***



After BDA installation: ponded water has lifted the logs that were embedded in the stream bottom. This log was later used upstream in a post-assisted log structure (courtesy of GRMW).

Designing with Nature

by Christine Johnson, *previously with the Oregon Department of Forestry*

Aswinter storms and cold temperatures settle in, residents of the Grande Ronde Valley are preparing themselves for another unpredictable winter. For some area leaders, a key element of that preparation is shifting approaches to planning and development. The opportunity to talk about these shifts was the main goal of a workshop titled “Green Infrastructure Practices for Cold Weather Climates” held on October 13, 2017, in La Grande.

Hosted in collaboration with Oregon State University (OSU) and the Oregon Department of Forestry (ODF), the City of La Grande brought together local and regional leaders to discuss green infrastructure practices and their functionality in cold-weather climates like the Grande Ronde Valley. The morning consisted of presentations by the Oregon Department of Environmental Quality, ODF, the Oregon Department of Transportation, the Oregon Office of Emergency Management, the City of Bend, and the Grande Ronde Model Watershed (GRMW). In the afternoon, participants took site tours around the city (Figure 1).

Defining and introducing the concept of green infrastructure was the overall purpose of the workshop. Green infrastructure

is a sustainable approach to development and planning that replaces conventional grey infrastructure systems (e.g., pipes, culverts, pavement) with soil, vegetation, and engineered mediums while offering additional benefits, such as improved health and safety. Trees, rain gardens, swales, and green roofs all function as green infrastructure because they intercept and infiltrate precipitation as well as provide shade, clean air, and clean water.

The term “green infrastructure” typically is applied in urban environment contexts, but as GRMW Executive Director Jeff Oveson shared with workshop participants, green infrastructure principles also can be incorporated at the watershed level. Successful restoration efforts on Catherine Creek proved insightful, as participants learned that localized flooding was mitigated only one year after project implementation. Nature had its own infrastructure in place at one time, and restoring or mimicking that infrastructure is the underlying purpose of all green infrastructure facilities. Encouraging collaborative partnerships was another important topic of discussion at the workshop. As is evident in the diverse backgrounds of workshop presenters, green infrastructure requires interdisciplinary collaboration. Engineers, planners, natural resource professionals, and many others are



Figure 1. Workshop participants on a site tour at George S. Birnie Park. Green infrastructure shown on this site includes a water quality conveyance swale, vegetated filter strip, and tree planting (courtesy of Christine Johnson).

tasked with working together to make a green infrastructure facility functional and aesthetically pleasing. Participants were able to hear about communication strategies from nearly all workshop presenters. “Everyone is there to make the project successful,” said Norm Paullus, City of La Grande Public Works Director. Presenters echoed this sentiment throughout the day as they shared case studies and gave demonstrations.

Fittingly, workshop participants were able to see green infrastructure and cold-weather work in tandem while visiting several sites across the city. At George S. Birnie Park, participants saw and heard firsthand from city staff how the addition of a green infrastructure facility improved site functionality, beautified the landscape, and connected a nearby neighborhood with park amenities. Nature play also was incorporated into the site, an important feature that Parks and Recreation Director Stu Spence added by using boulders and downed logs in the design. Participants also went on site tours on 20th Street and in downtown La Grande.



Figure 2. City of La Grande Parks and Recreation Director describes park connectivity and nature play to workshop participants at George S. Birnie Park (courtesy of Christine Johnson).



Figure 3. City of La Grande Environmental Superintendent Kyle Carpenter fields questions about the Adams Streetscape from workshop participants (courtesy of Christine Johnson).

Interested in learning more about green infrastructure?

Check out OSU's FREE Professional and Continuing Education Course

Green Infrastructure Solutions Across the Urban to Rural Continuum

pace.oregonstate.edu

... continued from page 5, **BUSY BEAVERS**

These beaver-inspired techniques are not new, but they are a relatively recent addition to the repertoire of approaches available to restoration professionals in the Grande Ronde River Basin. Local practitioners are enthusiastic about the chance to significantly improve stream ecosystems with minimal expense and environmental disturbance.■

... continued from page 2, **FOREST COLLAB**

Current WWFC Initiatives

WWFC's current endeavor, on which WWFC members are working alongside the USFS, is the Sheep Creek Project encompassing approximately 30,000 acres of USFS and Bureau of Land Management lands in the headwaters area of the Grande Ronde Watershed. In addition, there is potential for work on nearly 6,000 acres of private lands adjoining the project study area. The Sheep Creek drainage covers approximately 24,600 acres, and the adjacent Chicken Creek drainage covers approximately 11,380 acres. Both drainages feed the Upper Grande Ronde River.

This project is especially significant to the WWFC because it is the first project with which they will be involved from the very beginning. Helping to craft and shape the project from its inception fosters a greater sense of ownership, responsibility, and pride among the stakeholders. They are certainly in new territory (literally and figuratively), which comes with a genuine sense of both empowerment and challenge. WWFC is committed to helping craft an overall forest plan that addresses issues of wildlife, fisheries, aquatics, soils/geology, vegetation, economics, recreation, and fuels

for the entire area. The headwaters of the Upper Grande Ronde River are critical habitat areas for Endangered Species Act-listed Bull Trout as well as Chinook and steelhead. Due to changes in natural disturbance regimes and decades of management activities, the Sheep/Chicken Creek Project area also contains many acres of forest that have significantly changed from their historical ranges of variability.

Since deciding to take on the Sheep Creek Project, WWFC members have spent the past year (including an entire summer season of field study tours) collecting as much background information, historical context, and data as possible, which will help them establish concrete zones of agreement around the tangible aspects of the project. The Sheep Creek Project undoubtedly will be a multi-year effort, and the health of the entire Grande Ronde Watershed will be impacted by it, at some level. Therefore, the general sentiment among WWFC members is that they should work closely with other similarly minded and well-respected organizations, such as the Grande Ronde Model Watershed, to move the project forward as effectively and efficiently as possible. So, with that, it's back to work, and we hope to see you all in the forest!■

For more information on WWFC visit our website: wallowawhitmancollaborative.org or contact Jeff Costello at Wallowa Resources: (541) 426-8053 ext. #30

Grande Ronde Model Watershed UPCOMING BOARD MEETINGS

**Tuesday, January 23th, 2018
5:00 p.m.**

*Wallowa Community Center
204 E 2nd St.
Wallowa OR 97885*

*The public is welcome to attend.
Meeting dates are subject to
change.*

Please call (541) 663 - 0570 to confirm. Thank you!

Grande Ronde Model Watershed

1114 J Avenue | La Grande OR 97850
Ph. 541-663-0570 | Fax 541-962-1585

WWW.GRMW.ORG

Board of Directors

Susan Roberts, Chairwoman
Public Interest Representative

Donna Beverage, Vice Chairman
Public Interest Representative

Dave Yost
Public Interest Representative

Allen Childs
Confederated Tribes of the Umatilla Indian
Reservation

Norm Cimon
Conservationist Representative

Larry Cribbs
Economic Development & Industry Representative

Nick Myatt
Fish and Wildlife Representative

Jed Hassinger
Private Landowner Representative

Joe McCormack
Nez Perce Tribe

Jim Webster
Union Soil and Water Conservation District

Larry Nall
Private Forest and Landowners

Staff Members

Jeff Oveson
Executive Director

Mary Estes
Office and Fiscal Manager

Coby Menton
Wallowa County Project Coordinator

Jesse Steele
Union County Project Coordinator

Alex Borgerding
GIS Specialist/Outreach Coordinator

Connar Stone
IT & Database Manager

Margaret McGladrey | **Ripples Editor**
grmw.ripples.editor@gmail.com

SUBSCRIBE!
Sign up for our E-edition
of *Ripples* NOW! at:
GRMW.org

