



LOW-TECH PROCESS-BASED RESTORATION OF RIVERSCAPES

Field-Based Workshop

Bridgeport, WA - September 29 & 30, 2021

Description

This two-day field-based workshop will take place in the Foster Creek watershed near Bridgeport, WA and is intended to introduce resource managers, land-owners, and conservation groups to 'low-tech' process-based (LTPBR) approaches for restoring streams and their associated riparian areas (riverscapes) to benefit fish, wildlife, and working lands. Participants will learn principles guiding low-tech process-based restoration, become familiar with basic beaver ecology, and different types of low-tech structures, including Beaver Dam Analogues (BDAs) and Post-Assisted Log Structures (PALS). The focus of the workshop will be on the guiding principles, the construction of different low-tech structures, and the impairments the structures can treat. Aspects of low-tech planning, assessment, design, and permitting will not be discussed in detail. A workshop website is provided which will include more in-depth information including links to digital copies of a low-tech process-based restoration manual and pocket guide, and an online lecture series which can be viewed either as videos or pdf documents. We encourage workshop participants to review some of the lecture material before the workshop. We will update the website with pictures and other information after the workshop. Hard copy manuals and pocket guides will also be available at the workshop free of charge.

Foster Workshop Website -

<http://lowtechpbr.restoration.usu.edu/workshops/2021/Anabranh/Foster.html>

How to Sign Up

To register, please contact the Foster Creek Conservation District by phone at (509) 888-6372 or Ryan Lefler by email at rlefler@fostercreekcd.org. For meal planning, please let us know if you have any dietary restrictions or preferences, and whether you will be attending dinner on day 1.

Location

The workshop will be held in the field throughout the Foster Creek drainage and will be meeting at the Willow Flat Recreation Area on the morning of day 1. If weather is miserable, we will conduct the morning session of day 1 at Chief Joseph Dam. See the agenda for specific locations of where we will be meeting and stopping each day. The following links provide workshop meeting and stopping locations in [.kmz](#) and [google map](#) formats. A map can also be found at the end of this agenda along with a QR code.

What to Bring

- Closed toe footwear
- Wading boots or waders
- Water, Sun protection

LTPBR Field-Based Workshop - Agenda

- PPE (ear protection, work gloves, eye protection, hard hat)
 - Some PPE will also be available on-site for work on day 2
- Lawn chair

COVID-19 Precautions

- During the workshop, please follow state, local, and employer guidelines for social distancing and wearing masks.

What Will Be Provided

- LTPBR Manual and Pocket Guide
- Restoration Tools (shovels, buckets, post pounder) and extra safety gear
- Coffee and snacks will be provided by the Foster Creek Conservation District
- Lunch and bottled water will be provided both days by Pheasants Forever
- Dinner on Wednesday night at Willow Creek Recreation Site will be provided by Conservation Northwest

WEDNESDAY – SEPTEMBER 29

Meeting Location/Stop 1 – Willow Flats Recreation Area (Upstream of Chief Joseph Dam on the south side of the Columbia R.)

9:00-9:50: Introductions, Agenda, & Goals of Workshop

- Introductions, Goals, Agenda, and Logistics
 - Introductions
 - Goals/Agenda/Logistics – hand-outs

9:50-10:20: Background and Purpose (Pocket Guide p. 5, Design Manual Ch.1)

- Scope of Problem
 - General degradation
 - Loss and importance of structure (beavers and wood)
 - Define process-based restoration (contrast with traditional)

10:20-10:30: Break

10:30-11:00: Guiding Principles (Pocket Guide p. 1, Design Manual Ch.2)

- Riverscape Principles
- Restoration Principles

11:00-12:00: Low-tech Structures (Pocket Guide p. 23 & 55)

- Low-tech toolbox – introduction to structures
- Build your first Low-tech structure

12:00-1:00: Lunch & Travel to Stop 2

Stop 2 – K Road/Mary Jane Hill Road along Highway 17

1:00-3:00: The Good, the Bad, and the Ugly

- Learning from beaver

LTPBR Field-Based Workshop - Agenda

- Beaver ecology and management
- Example of Low-tech Implementation
 - FCCD goals and design
- Connecting Observations with goals and objectives
 - Uncertainty - Adaptive Management and Expectation Management
 - Things to think about (hydrology, geology, sediment supply, confinement, riparian, other)
 - Reading riverscapes - Valley Bottom, Recovery Potential, Risk Assessment

3:00-3:30: Break & Travel to Stop 3

Stop 3 – Smith Draw (tributary to W. Foster Creek near Bridgeport Hill Road)

3:30-4:30: Put it all into practice; Observations, Goals, Design Options

- Review/discussion upper, mid, and lower (headcut site) portions of property

4:30-5:00 Travel to Willow Flats Recreation Area

Stop 4 – Dinner and a Presentation: Willow Flats Recreation Area

5:00-7:00: Science behind Low-tech process-based restoration

- Case-studies of riparian & beaver management, and low-tech structure projects

THURSDAY – SEPTEMBER 30

Meeting Location/Stop 1 - Bridgeport Chevron (Highway 17 and Foster Creek Ave.)

8:00-8:15: Day 2 agenda and Carpool to Construction Site

Stop 2 – Peaceful Valley (4 miles south of Bridgeport on Highway 17)

8:30-12:00: Design and Construction (Pocket Guide p. 23-48, Design Manual Ch. 6)

- Review existing structures and safety and equipment operation demo
- Design and hands-on construction of various structures

12:00-1:00: Lunch and Travel to Stop 3

Stop 3 – Terry Hayes Road (12 miles south of Bridgeport on Highway 17)

1:00-3:45: Design and Construction (Pocket Guide p. 23-48, Design Manual Ch. 6)

- Design and hands-on construction of various structures

3:45-4:30: Workshop Synthesis

- Workshop recap
- Permits, resources, materials/logistics, costs, questions

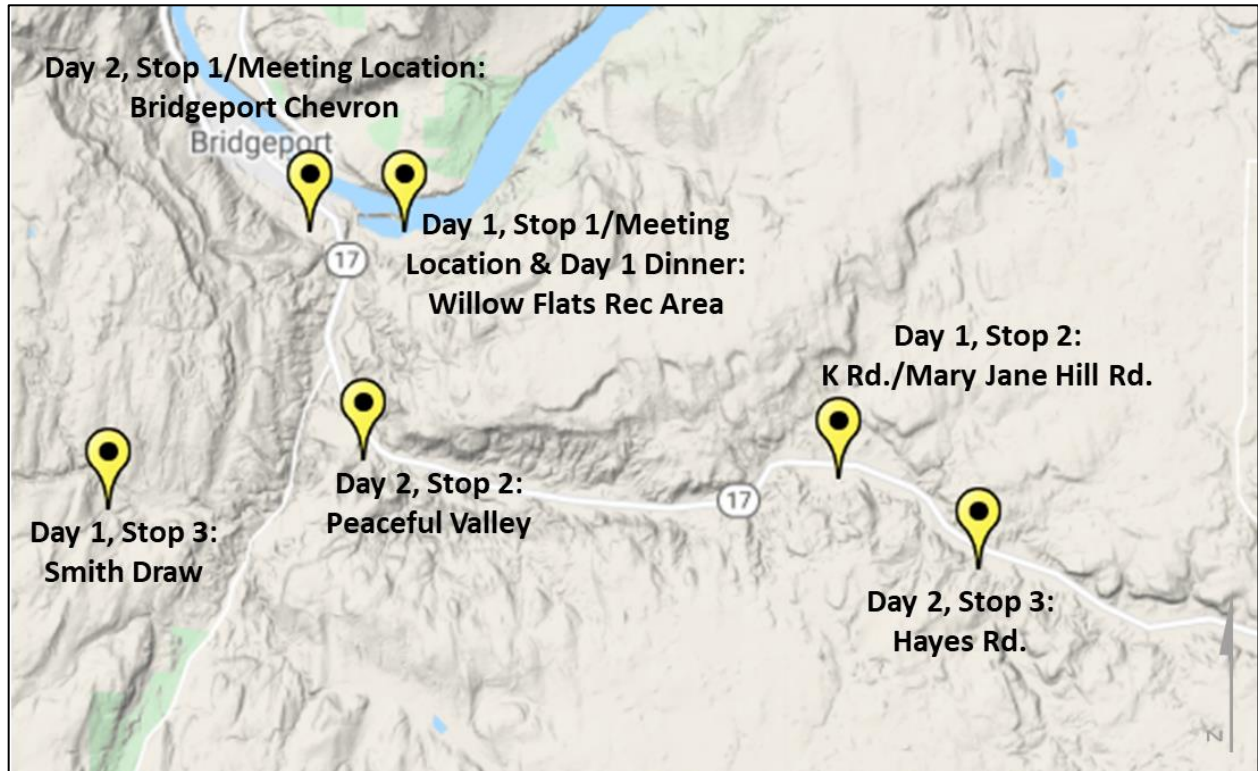


Figure 1. Location of workshop stops each day.

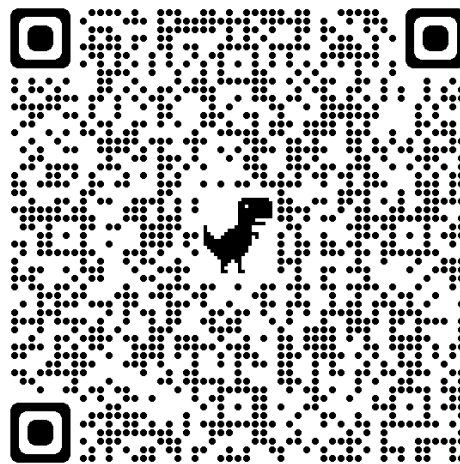


Figure 2. QR code linked to google map of all workshop stops.