

Cheap and Cheerful Stream Restoration Workshop: “Let the Water Do the Work” in Action

Where: Dayton, Washington (Best Western Hotel) 507 E Main St, Dayton, WA 99328

Phone: (509) 382-4790

When: September 18-19*, 2017

What to bring: wading boots and/or waders, outdoors gear (hat, jacket, gloves), hardhat, safety glasses (safety gear will be provided for those that do not have their own)

Purpose: Explore the philosophy and practice of implementing low cost, process-based stream restoration, correctly identifying stream impairments, causes of impairments, and selecting the appropriate actions to apply (treat the cause not the symptom).

Concepts to be covered:

- Principles of Cheap and Cheerful restoration
- Planning and design
- Hands on construction implementation
- Maximizing cost-benefit

* A tour of the Asotin Creek Intensively Monitored Watershed where over 650 Cheap and Cheerful LWD structures have been built will be offered on the Sept 20th by request; contact Stephen Bennett @ 435-757 5669 or bennett.ecological@gmail.com.

Day 1 - Lecture/Discussion (morning); Trip to Pataha Creek (afternoon)

Time	Presenter	Location/Activity
0800- 0815 (15 mins)	John Foltz, Snake River Salmon Recovery Board & Stephen Bennett, Utah State University Eco Logical Research, Inc.	Introduction <ul style="list-style-type: none"> - Welcome and Introductions (Foltz) - Outline agenda and goals of workshop (Bennett) <ul style="list-style-type: none"> o Where are we coming from (River Styles and IMWs) o Caution ... applying methods o Format of workshop
0815-0845 (30 mins)	Joe Wheaton, Utah State University	Principles of Cheap and Cheerful Restoration <ul style="list-style-type: none"> - Geomorphology & River Science ... behind the curtain - What is “traditional” restoration missing - Why do we need C&C; What is C&C - Who should implement C&C - Planning tools and methods
0845-0910 (25 mins)	Stephen Bennett - Moderator	Open Discussion <ul style="list-style-type: none"> - Opportunity to clarify Wheaton lecture - Focus on principles and geomorphology underpinnings
0910- 0930 (20 mins)	Steve Bennett	Beavers and Beaver Dam Analogs: what have we learned? <ul style="list-style-type: none"> - Why beavers ... history of extermination - Review the BDA method and design - Lessons learned and extrapolation
0930-0950 (20 mins)	Reid Camp	Getting Wood Back in the Stream: High Density LWD and Post-assisted Log Structures (HD LWD, PALS) <ul style="list-style-type: none"> - Why large woody debris ... history of removal - Review of PALS method and design - Asotin Intensively Monitored Watershed and lessons learned - Little Tucannon tomorrow as local example
0950-1020 (30 mins)		Coffee Break <ul style="list-style-type: none"> - meet and greet
1020-1050 (30 mins)	Scott Nicolai	Getting Wood Back in the Stream: Timber! <ul style="list-style-type: none"> - Review of Falling and Grip-hoist methods and design - Review case studies - Lessons learned
1050-1120 (30 mins)	Wheaton - Moderator	Open Discussion/ Assignment <ul style="list-style-type: none"> - Opportunity to clarify Camp, Bennett, and Nicolai lectures

1120-1200 (40 mins)	Wheaton, WDFW, USFS	Permitting, Agency Hoops, Risk – Panel Discussion - Discuss issues related to permitting
1200-1300		Lunch/Travel - Build your own sandwich and make way to Pataha Creek (Site 1)
1300-1345 (45 mins)	Bennett	- Description of Pataha Project – Visit DeRuwe (Site 1) - Not in Kansas anymore - How to extrapolate success to new situations
1345-1415		Travel to Pataha Treatment (Site 2)
1415-1500 (60 mins)	Bennett, Camp, Wheaton	Split into 3 Design groups - Intro/Recap project goals - Review overall design principles - Review basic construction principles
1500-1600	Bennett, Camp, Wheaton	Use same 3 Groups for Construction - Construction safety talk - Design - Build some structures
1600-1630	Wheaton	Review, decompress - Talk about the day

DAY 1 – Diner at Fire House Brew Pub (148 E Main St, Dayton, WA 99328) ~ 6 pm

Day 2 - Recap Day 1 and site visits in the Tucannon Mainstem and Little Tucannon River

Time	Presenter/Lead	Location/Activity
0800-0900 (60 mins)	Wheaton, Bennett, Camp	Recap Day 1 - Presentation/discussion of Day 1 presentations and field trip
0900-0930 (30 mins)		Travel to Site 1 - Tucannon PA10
0930-1000 (30 mins)	Scott Nicolai	Introduction to Grip-Hoist/Tree falling and other fun stuff - Principals and practice
1000-1200 (120 mins)	Scott Nicolai, Stephen Bennett, Joe Wheaton	Design and Implementation of Grip-hoist/Tree falling & PALS - 3 Groups rotate through stations - Design and build grip-hoist LWD jams - Design LWD “bundles” - Forestry thinning demo - **Potentially PALS and falling
1200-1330 (90 mins)	Bruce Heiner, Joe Wheaton	Lunch and Mainstem Tucannon River PA10 - Project goals - Design and implementation - Post-restoration review
1330-1345 (15 mins)		Travel (Site 2) - Little Tucannon
1345-1400	Andrew Hill/Reid Camp/Justin Pearson	Little Tucannon Post-Assisted Log Structures (PALS) - Project goals - Design and implementation
1400-1530 (120 mins)	Andrew Hill/Reid Camp/Justin Pearson	Little Tucannon Post-Assisted Log Structures (PALS) - Review Implementation (what “worked”) - Review Implementation (what “didn’t work”)
1530-1630 (60 mins)	Joe Wheaton	Recap of Workshop - What have we all learned?
1630-1700 (30 mins)		Return to Dayton

Other Resources

<http://snakeriverboard.org/wpi/> - homepage of Snake River Salmon Recovery Board
<http://www.joewheaton.org> – home page of Dr. Joe Wheaton at Utah State University
<https://www.pnamp.org/project/3133> - homepage of Intensively Monitored Watersheds
<https://www.eco-logical-research.com> – home page of Eco Logical Research, Inc.