

LOW-TECH PROCESS-BASED RESTORATION OF RIVERSCAPES

VIRTUAL WORKSHOP

Module 4 - Design

August 13, 2020



Workshop by:

Utah State University
RESTORATION CONSORTIUM



United States
Department of
Agriculture

Natural Resources Conservation Service

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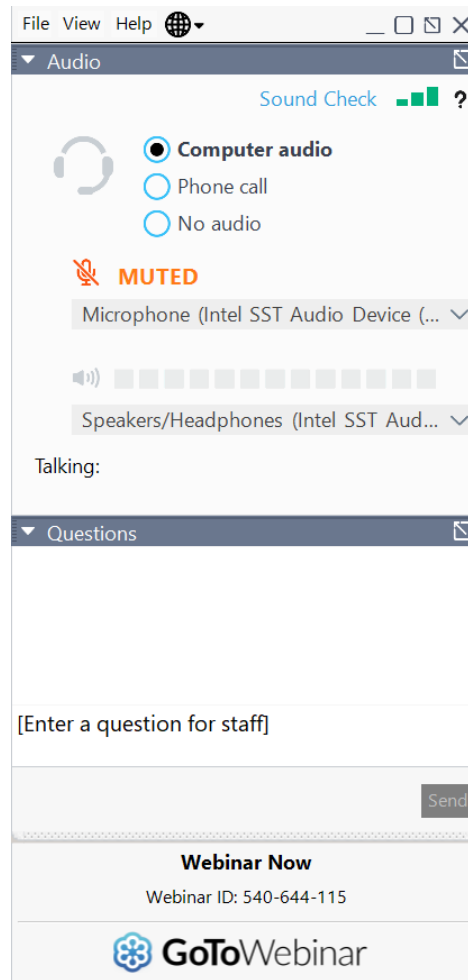
ASWM Moderators for the Virtual Workshop

Welcome to the NRCS-USU Low-Tech Process-based Restoration of Riverscapes Virtual Workshop
hosted by the Association of State Wetland Managers.



Today's Moderator

William Dooley
ASWM Policy Analyst



Reminder... If things go wrong:

- Simply shut down your system and restart; use your Join Webinar link from your email to get back onto webinar
- Can always call in only and look at the slides from the website
- Contact [Laura Burchill](#) at ASWM if you are having technical issues:

Telephone:

207-892-3399

Email:

laura@aswm.org

Module 4: Instruction Team



Joe Wheaton
(USU, Anabranh
Solutions)



Steve Bennett
(USU, Anabranh,
ELR)



Scott Shahverdian
(USU, Anabranh)



Jeremy Maestas
(USDA-NRCS)



Nick Bouwes
(USU, Anabranh
Solutions, Eco
Logical Research)



Nick Weber
(Anabranh,
ELR)

Guest Presenters



Mark Beardsley
(EcoMetrics)



Colin Thorne
(Univ of Nottingham)



Ben Goldfarb
(Environmental
Journalist)

Thanks for Telling us About Yourself

1006 Registered

Do you have any experience in planning or **designing** low-tech PBR?

Extensive	64
Limited	630
None	312
Grand Total	1006

How many years of experience do you have with conservation and/or restoration?

11 - 20 years	261
2 - 5 years	255
6 - 10 years	220
More than 20 years	177
Brand New (first year)	83
Other	10
Grand Total	1006

What **role** best describes your **aspirations** with respect to low-tech process-based restoration?

Involved in planning, design and implementation	569
Just aware of it so I can play a supporting, indirect role	146
Involved in monitoring and evaluating effectiveness	70
Involved in implementation	57
Involved in planning and design	52
Involved in regulatory consultation	46
Other	34
Involved in crafting or implementing policy and/or legislation	32
Grand Total	1006

If you have been involved in any way in low-tech process-base restoration projects, **how many projects?**

1	163
2-5	305
5-10	78
More than 10	68
None (yet)	392
Grand Total	1006

Course Structure - Pick and Choose



Tuesday, Aug. 11 (10 AM – 4 PM MT)

- Module 1: Introduction to Low-Tech Process-Based Restoration (3/4 day)

Wednesday, Aug. 12 (9 AM – 4:30 PM MT)

- Module 2: Underlying Science & Case Studies for Low-Tech (morning, ½ day)
- Module 3: Planning Low-Tech Process-Based Restoration (afternoon, ½ day)

Thursday, Aug. 13 (10 AM – 3:30 PM MT)

- **Module 4: Designing Low-Tech Process-Based Restoration (3/4 day)**

Friday, Aug. 14 (9 AM – 12:30 PM MT)

- Module 5: Implementing Low-Tech Process-Based Restoration (morning, ½ day)

Today's Agenda

Module 4: Designing for Low-Tech Process-Based Restoration

Thursday, Aug 13: 10:00 – 15:30 (Mountain Time)



- Logistics
- Design Overview in Context of CPP
- Design Elaborated

- Panel Q & A ~ 10:30 to 10:40



- **Break** ~ 10:40 to 11:00

- Panel Q & A ~ 11:45 to 12:00



- **Break for Lunch** ~ 12:00 to 13:00

- Panel Discussion ~ 15:45 to 15:55



- Field Design & Hypothesized Indicators

- Panel Discussion ~ 13:45 to 14:00



- Panel Discussion ~ 14:45 to 15:00



Today's Agenda (Detail)

Module 4: Designing for Low-Tech Process-Based Restoration

Thursday, Aug 13: 10:00 – 15:30 (Mountain Time)



- A. Logistics/Intro
- B. Overview of Design & CPP- [Jeremy Maestas](#)
- Design Elaborated
 - C. Leading Design with Recovery Potential – [Joe Wheaton](#)
 - D. Design Standards of Practice at Complex Scale – [Scott Shahverdian](#)
 - E. Learning how to Design at Structure Scale – [Joe Wheaton](#)
- F. Putting Design Together in Field – [Nick Weber](#)

LTPBR Website

<http://lowtechpbr.restoration.usu.edu>

The screenshot shows the LTPBR website homepage. At the top, there is a navigation bar with links: RIVERSCAPES, RC TOOLS, RC SCIENCE, RC DATA, and RC HELP. The main header features the title "LOW-TECH PROCESS-BASED RESTORATION OF RIVERSCAPES" and "DESIGN MANUAL, RESOURCES, WORKSHOPS". Below this is the Utah State University Restoration Consortium logo. A yellow callout bubble points to the "Workshops" link in the "SITE CONTENTS" menu, stating: "Click here to get to the workshop pages right away." Another yellow callout bubble points to the "Manual" link in the "Manual" section, stating: "Click here for manual... and pocket guide". A third yellow callout bubble points to the "Register for Virtual LTPBR Workshop - FREE" button, stating: "Click here to get to the workshop pages right away." The "Manual" section contains a paragraph about the purpose of the design manual and a list of hallmarks of the approach. A QR code is located in the bottom right corner of the website screenshot.

LOW-TECH PROCESS-BASED RESTORATION OF RIVERSCAPES DESIGN MANUAL, RESOURCES, WORKSHOPS

Utah State University RESTORATION CONSORTIUM

SITE CONTENTS

- Home
- Design Manual
- PBR Resources
- Low-Tech PBR Workshops

Subscribe to the Low-Tech PBR mailing list

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Manual

The purpose of this **design manual** is to provide restoration practitioners with guidelines for implementing a subset of low-tech process-based restoration (LT-PBR) in riverscapes. While the concept of process-based restoration in riverscapes has been advocated for at least two decades, details and specific examples on how to implement it remain sparse. Here, we describe 'low-tech process-based restoration' (LT-PBR) as a practice of using simple, low unit-cost, structural additions (e.g. wood and beaver dams) to riverscapes to mimic functions and initiate specific processes. Hallmarks of this approach include:

- An explicit focus on the processes that a low-tech restoration intervention is meant to promote
- A conscious effort to use cost-effective, low-tech treatments (e.g. hand-built, natural materials).

LOW-TECH PROCESS-BASED RESTORATION OF RIVERSCAPES DESIGN MANUAL

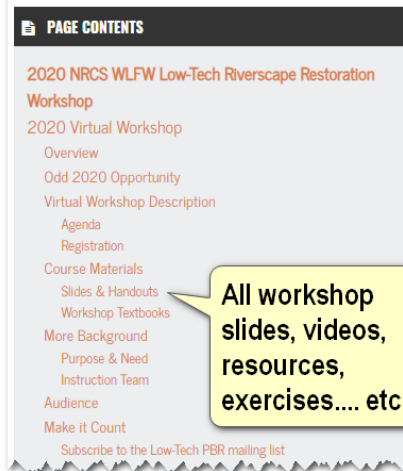
Edited by: Joseph M. Wheaton, Stephen N. Bennett, Nicolaas Bouwes, Jeremy D. Maestas & Scott M. Shahverdian

Find:

- Design Manual
- Pocket Guide
- Other Resources
- Workshop Slides
- Links/Videos/Literature



Navigating the Workshop Pages



2020 Virtual Workshop

August 11-14, 2020 - Anywhere with Internet



Registration for Virtual LTPBR Workshop - FREE! August 11-14, 2020

Overview



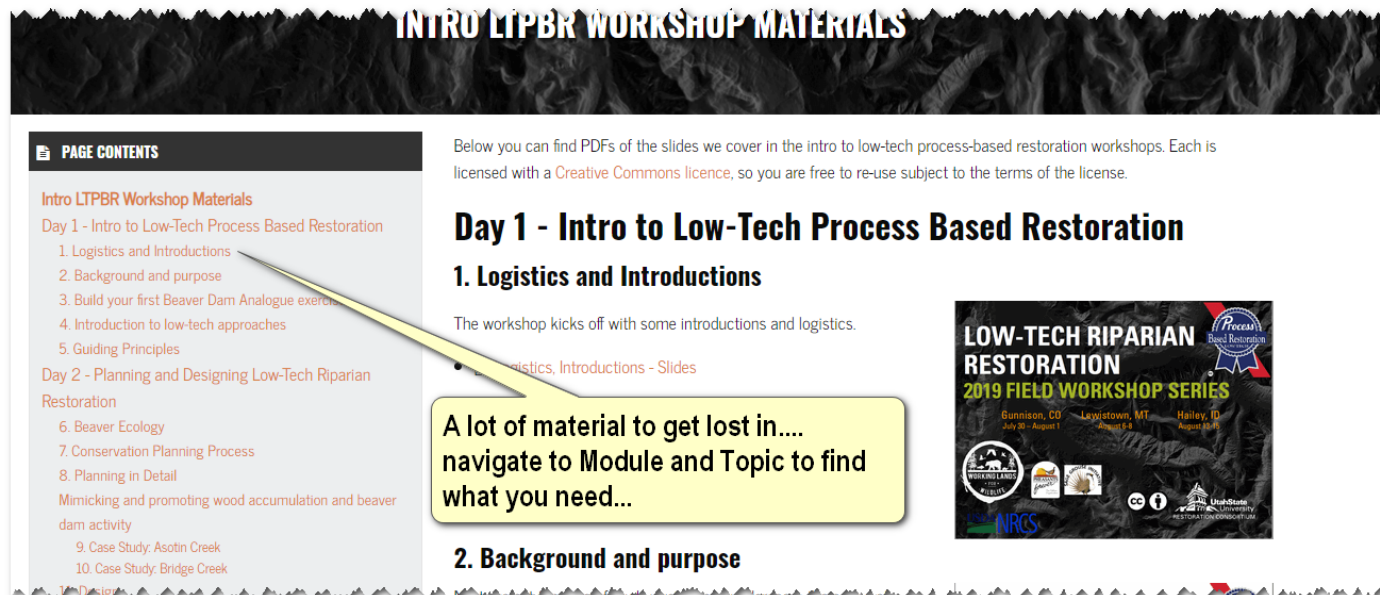
Thanks to the generous support of the Natural Resource Conservation Service's Working Lands for Wildlife, and a grant

Resources:

- During workshop
- & Following workshop
- & to share 

We will post on slides and in chat windows:

- Links to resources we're *currently* using



Low-Tech PBR Design Manual

- Defines standards of practice for LTPBR
- Has what we'll need for reference in class room discussion (diagrams, forms, maps, etc.)

<http://lowtechpbr.restoration.usu.edu>



Available on Amazon or Bookbaby for \$60

Pocket Guide

