

The background image shows a stream restoration project in an urban environment. A concrete-lined stream flows through a landscaped area with green plants and trees. To the left, there is a sidewalk and parked cars. To the right, there is a modern building with large glass windows. The scene is captured in a slightly hazy, artistic style.

Unified Stream Restoration Guidance

Urban Stormwater Workgroup
September 21, 2021

STREAM RESTORATION TIMELINE REFRESHER

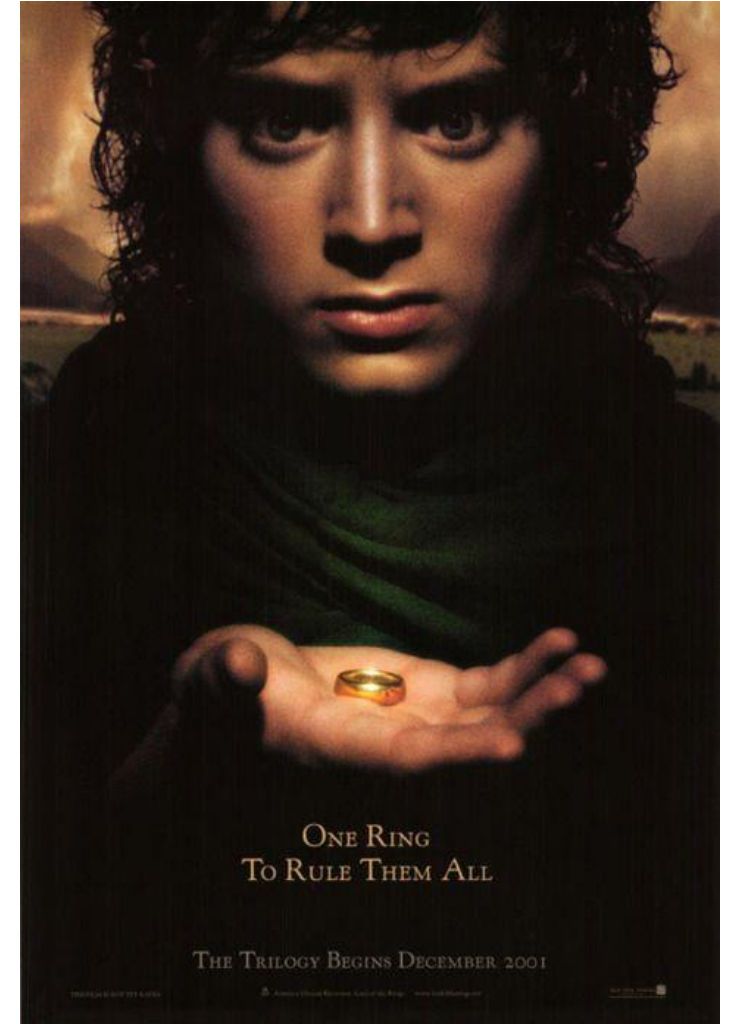
- Expert Panel Report approved in 2013
- Report was revised after a “test-drive” period in 2014
- Changes in how streams and sediment are simulated in Phase 6 watershed model in 2017
- 4 new memos w/ updates approved in 2019-2020



WHAT IS THE “UNIFIED GUIDE”

“One guide to bring them all, and in the darkness bind them”

- CSN Document
- Combines critical information from all new SR reports
- Organized for Bay Managers and Practitioners
- No new no technical information , beyond what was approved in the most recent reports and memos



HUGE THANKS TO:

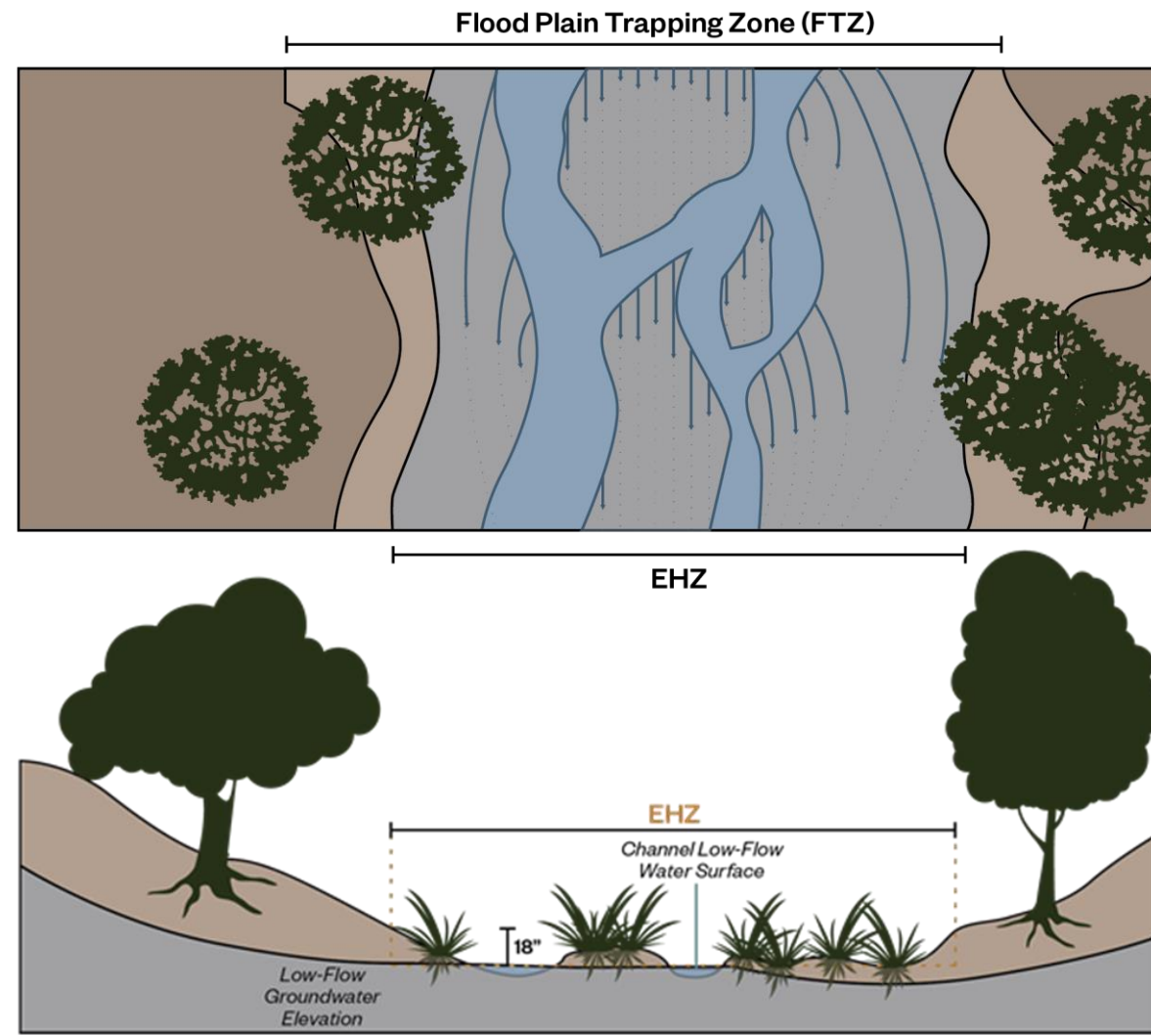
- Bill Stack
- The Original 2014 Expert Panel: Joe Berg, Josh Burch, Deb Cappuccitti, Solange Filoso, Lisa Fraley-McNeal, Dave Goerman, Natalie Hardman, Sujay Kaushal, Dan Medina, Matt Myers, Bob Kerr, Steve Stewart, Bettina Sullivan, Robert Walter and Julie Winters
- The 2018 to 2020 Stream Experts: Rich Starr, Kathy Hoverman, Tim Schueler, Kip Mumaw, Neely Law, Meghan Fellows, Sandra Davis, Jennifer Rauhofer, Josh Burch, Scott Cox, Drew Altland, Jason Coleman, Lisa Fraley-McNeal, Joe Berg, Josh Running, Jeff White, Matt Meyer, Reid Cook, Ralph Spagnolo, Tess Thompson, Joe Sweeney, Ray Bahr, Steven Reiling, Tracey Harmon, Brock Reggi, Karen Coffman, Ryan Cole, Bill Brown, Liz Ottinger, Carrie Traver, Allison Santoro, Ted Brown, Chris Stone, Erik Michelsen, Neil Weinstein, Nick Noss, James Kaiser, Bill Stack, Scott Lowe, John Hottenstein, Jeremy Hanson, Sujay Kaushal, Joel Moore, Jens Geratz, Sean Crawford, Jeff Hartranft, Denise Clearwater, Paul Mayer, Aaron Blair, Durelle Scott, Greg Noe, Chris Becraft, David Wood, Art Parola, Benjamin Ehrhart, Ward Oberholtzer, Kelly Lennon, Megan McCollough, Cory Anderson and Barbara Doll.
- CBPO Staff
- CBPO Partners in the USWG, WTWG, SHWG and WQGIT

GUIDING PRINCIPLES

- Respect the consensus decisions and specific intent of the stream experts who developed the guidance
- Keep it concise, consistent and readable
- Organized by likely audiences
- Easy flow using links, bookmarks and technical resource boxes

SECTION I: BASICS OF STREAM RESTORATION CREDITING

- TMDL Context
- Essential Terminology and “boundaries”
- Review of supporting science
- Design approaches and protocol basics



SECTION 2: PRACTITIONER'S GUIDE

Who is a stream practitioner?

- Collect data, construct and verify projects, calculate pollutant removal, etc.

What's in this section?

- Pre-construction Assessment and Site Monitoring
- Application of the Five Crediting Protocols
- Project Construction and Documentation
- Post-Construction Verification Investigations



SECTION 3: BAY MANAGER'S GUIDE

Who is a Bay Manager?

- Gov staff, project funders, and private sector managers that may not be directly involved in individual project design and construction but need to provide more general advice to those that do.

What's in this section?

- Qualifying Conditions
- Reporting, tracking, stacking and verifying stream restoration
- Permitting considerations
- Stream Restoration and CAST
- State regulatory notes



QUESTIONS?

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WHAT'S NEXT FOR THE USWG



OCTOBER JOINT WORKSHOP

- Co-sponsored by Urban Stormwater WG and Climate Resilience WG
- October 18-19th (times TBD - each day will be about 2-3 hours)
- Meetings are open, but they will focus on CBPO partner feedback (state and local govs)

Goals:

- Get general partner endorsement of the completed work
- Round up some top research recommendations for CRWG
- Receive enough feedback from partners to put together a few priority next steps/recommendations for the MB

OCTOBER DRAFT MEETING OUTLINE

- Virginia Tech Climate Synthesis
- CSN Memo Recommendations
- Resilient Stormwater BMP Design

- Climate-Informed IDF Curves
- Case Studies and Next Steps for Implementing Resilient Design Principles
- Resilient Stream Restoration Design Considerations
- Floodplain Management and Climate Change

ON THE HORIZON

- Winter extended workshop on plastics and trash management
- Survey on workgroup priorities and preferences
 - Meeting format and topics
 - Support priorities – resilience, BMP queue, MS4 management, stream restoration, etc.
 - Revisiting existing BMP reports