Practitioner Highlight

Thomas Bulthius, Snohomish Conservation District

In this returning feature, we'll share brief reflections on notable projects, emerging issues, and new ideas taking shape among restoration practitioners. If you'd like to be featured, or want to shine a light on the work of your colleagues or partners, please reach out to **treeline@b-e-f.org**.

Thomas, what kind of riparian projects are you working on over the next year?

Over the next year, we're committing to process-based riparian restoration with emphasis on enhancing wetland habitats overtaken by invasive reed canarygrass. In three tributary systems, our team is installing small instream wood structures and implementing rapid revegetation efforts using fast-growing native plants. These plants not only outcompete invasive vegetation but also jumpstart the recovery of natural hydrologic functions and habitat-forming processes and improve habitat for native wildlife.

We are particularly excited about the integration of process-based restoration techniques. Inspired by beaver habitat and informed by drone and foot surveys, we're utilizing post-assisted log structures (PALS) to address the unique conditions of each project site. By considering factors such as drainage patterns, channel morphology, reed canarygrass root density, and seasonal water flow, we select locations for our installations that encourage beneficial changes to the floodplain. These interventions seek to coexist with beaver populations where beaver can become long-term drivers of floodplain process on each site.

Our designs promote floodplain reconnection, reduce channel incision, and increase sediment and gravel deposition—all of which are crucial for salmon spawning and rearing. Through consistent monitoring of the process response to our PALS installations we will be able to learn and contribute to detailed protocols and design considerations for process-based restoration techniques in Western Washington stream systems.

Thomas Bulthius

Habitat Restoration Program Lead at the Snohomish Conservation District

Thomas is the Habitat Restoration Program Lead at the Snohomish Conservation District, where he brings over eight years of local experience. He holds a B.S. in Environmental Studies and a Master's in Environmental Resource Management. Throughout his career Thomas has focused on restoring and enhancing riparian ecosystems. He is passionate about bridging the needs of watersheds with the values of local communities, striving to create lasting watershed scale habitat improvement in Western Washington.