

## **Supporting Geomorphic Processes across the Riverscape in Stream Restoration Design –The Use of Wood in Rural and Urban Stream Restoration Projects**

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Best practices in stream restoration call for the practitioner to work with natural geomorphic processes to design channels that maximize function and support ecological services across the riverscape. Armed with guidance from multiple restoration schools of thought, the designer has several options at their disposal to craft designs that satisfy the goals and objectives of the project. Among the decisions the designer must consider is the application and extent of use of wood throughout the project. In the early 2000s when stream restoration was still in its infancy as a practice, many designers shied away from using wood in favor of rock due to the perceived lack of stability associated with wood as a structural element; fortunately, the paradigm of stream restoration is shifting from stability as a singular goal to an approach that incorporates riverine processes and recognizes the important role wood plays across the riverscape for improving and/or restoring in- and near-channel ecological services. This presentation discusses uncertainties, real or perceived, associated with using wood in stream restoration in both rural and urban projects; the benefits of using wood in stream restoration projects; guidance for design of several applications of wood; and examples of several types of wood-centric stream restoration projects. Our expectation is attendees will appreciate the importance of using wood in stream restoration projects focused on working with natural geomorphic processes across a wide range and size of ecosystem types.

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