



Integrated Ecological restoration of Rivers and Streams, Including, Design of Native Vegetation for Water Quality, in Floodplains, Riparian Zones and Waterways (EHSER #299)
with John W. Munro

September 26 to October 2010
(classroom and field days 27 September to 1 October)

This seminar/workshop is designed to dig deeply into the concepts of waterway restoration from the broader ecological context and in the mode of Ecological Restoration. The focus on vegetation and native plant community issues as they relate to waterway corridors, rather than on strictly mechanistic and engineering oriented channel design, makes this seminar unusual and better suited to well-defined restoration as a part of the ecological system. Participants in this five-day course will learn; the vital relationships between the watershed land cover, vegetation, stormwater and the waterway, and how to design plans for the ecological restoration of the waterway corridor, to design ecological restoration strategies and plans for; riparian areas, pollution reduction, stream corridors, and bank stabilization, the ecological dynamics of a river or stream system, to merge disciplines and diverse management strategies to achieve a more ecologically balanced plan. While some Biostructural design concepts will be included in the seminar contents, they are not the sole focus of the session. Field trips and field installations are planned. This hands-on practical course intended to allow the participants to begin applying their knowledge in design. Methods, techniques, materials and tools will be discussed and examples from selected existing projects will be presented. A stream table and other physical modeling tools will be used by the seminar participants. For this seminar in Maine the local issues that will be infused throughout the seminar are:

- Large woody debris presence and management in Maine waterways
- Dam removals, planning and consequences
- Existing hard infrastructure (bridges, outfalls, etc.)
- Restoring logging-scoured rivers and streams
- Re-designing waterway cross sections
- Restoration of Atlantic salmon
- Salmon habitat restoration
- Headwaters issues



Information is available on . . .

- other natural history science seminars
- graduate and undergraduate university credits
- continuing education units/recertification credits
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