

Mid-Atlantic Stream Restoration Conference 2011
Preconference Workshop
Tuesday, November 15, 2011
8:30 – 12:00 (break at 10:15)

Title: Introduction to Stream Project:
Decision Analysis and Design Guidance for Stream Restoration

Instructors: Dr. Peter Wilcock, Dr. Daniel Baker
Geography and Environmental Engineering
National Center for Earth-surface Dynamics
Johns Hopkins University

Materials that students need to bring: Students should bring a laptop.

Materials student will receive: Readings and spreadsheets will be distributed electronically in advance.

Learning Objectives:

At the completion of this workshop students will be able to:

1. Evaluate project objectives in a framework that links stream restoration objectives, actions, and system response
2. Choose from a range of tools (requiring varying degrees of time, cost, expertise, and supporting information) for the purpose of assessing and designing site conditions to achieve predictable objectives; and
3. Apply decision tools to evaluate trade-offs among project objectives

Workshop Description:

The Stream Project is a collaboration among scientists, engineers, and decision analysts at the National Center for Earth-surface Dynamics (NCED), the Intermountain Center for River Rehabilitation and Restoration (ICRRR) and the US Army Corps of Engineers (USACE). The result of the collaboration is a stream restoration decision analysis and design guidance methodology that defines and implements a rational, objectives-driven approach to evaluating and designing stream restoration projects. Our approach emphasizes a predictive link between restoration objectives, actions, and system response and an explicit coupling between restoration science, engineering, decision analysis, and practice. Within a multi-objective decision analysis framework, achievable objectives are identified given watershed context and site conditions, tools are provided to determine the degree of response possible, and decision analysis organizes analysis of project alternatives.

The workshop will provide an overview of Stream Project logic, a survey of the assessment, design, and decision tools, and hands-on practice applying these tools to case studies. Stream Project is a living methodology and feedback will be solicited from workshop participants for improving the method and its presentation.