

Stream Functions Pyramid and Quantification Tool Workshop

Presented By: Stream Mechanics

In-Person Workshop

Agenda

Day One

- 8:00 Welcome and Overview
- 8:15 Overview of the Stream Functions Pyramid Framework
- 9:00 Stream Functions Pyramid Discussion
- 9:15 Overview of the Stream Quantification Tool (SQT)
- 10:00 Break
- 10:15 Set Up SQT Spreadsheets for Classroom Exercises
- 10:45 Hydrology Functions
- 11:45 Lunch Break
- 1:00 Hydrology Exercise for Case Study
- 1:45 Bankfull Identification and Verification
- 2:45 Break
- 3:00 Bankfull Verification Exercise for Case Study
- 3:30 Rosgen Stream Classification System
- 4:30 Stream Classification Game
Determine Rosgen Stream Type for Case Study
- 5:00 Adjourn

Day Two

- 8:00 Hydraulic Functions (Floodplain Connectivity)
- 9:00 Hydraulic Exercise for Case Study (Floodplain Connectivity)
- 9:30 Hydraulic Functions (Flow Dynamics and Side Channels)
- 10:00 Break
- 10:15 Hydraulic Exercise for Case Study (Flow Dynamics)
- 10:45 Geomorphology Functions (Sediment Transport and Large Woody Debris)
- 12:00 Lunch
- 1:00 LWD Exercise for Case Study
- 1:20 Geomorphology Functions (Bedform Diversity)
- 2:15 Bedform Diversity Exercise for Case Study
- 2:45 Break
- 3:00 Geomorphology Functions (Lateral Migration)
- 4:00 Lateral Migration Exercise for Case Study
- 4:30 Geomorphology Functions (Riparian Vegetation)
- 5:00 Adjourn

Day Three

9:00 Meet at Field Site / Start field Exercise
12:00 Lunch Break (bring a bag lunch)
4:00 Leave Field Site

Day 4

8:00 Process Field Data
10:00 Enter Data into a New SQT
10:30 Geomorphology Functions (Bed Material Characterization)
11:00 Physicochemical and Biology Functions
12:00 Lunch
1:15 Channel Evolution
2:00 Restoration Potential
2:45 Break
3:00 Determine Restoration Potential for Project
4:00 Existing, Design, Proposed, and Reference Stream Type Determination
4:30 Determine Design, Proposed, and Reference Stream Types for Project
5:00 Adjourn

Day 5

8:00 Function-Based Goals and Objectives
8:45 Develop Function-Based Goals/Objectives for Project
9:15 Break
9:30 Model Proposed Condition Scenarios with SQT
10:15 Using the SQT to Measure Functional Loss (Debit Calculator)
10:45 Vision for Future SQTs
11:30 Regionalizing SQTs
12:00 Wrap Up/Adjourn