

SOCIETY OF ECOLOGICAL RESTORATION
NORTHWEST DESIGN TO DIRT
WORKSHOP NUMBER 4

Streambank Erosion Control Alternatives
(Planning, Evaluation and Design Overview)

Presented at Joint Meeting
SERNW/PNWSWS
Vancouver, WA
May 4, 2006

OUTLINE OF PDF FILES

RECKENDORF'S FILES

<u>FILE#</u>	<u>FILE DESCRIPTION</u>
1	Introduction and Definitions Standard Planning and Restoration Planning Watershed Precursors to Streambank Erosion Example of Landslide-Debris Flow and Debris Torrent (increasing sediment supply) Reach Precursors to Streambank Erosion Example of Channel Straightening Example of Bed Material Removed from a Channel
2	Fluvial Process Causes Mass Failure Causes Overgrazing and Tree Throw Causes Climate Causes
3	Background Verses Accelerated Erosion Determining Erosion Rates Erosion Rating Procedures (see binder) What Fluvial Geomorphic Data Needed (to evaluate streambank erosion problems)

SOUTHERLAND'S FILES

FILE

FILE DESCRIPTION

- 1 Fluvial Geomorphic Conditions Critical to Design
 - Reference Reach Role
 - Flood Plain Attachment
 - Rooting
 - Stratigraphy
 - Bank Height Ratio and Other Bank Characteristics
 - Key Geomorphic Characterizations

- 2 Habitat Conditions Critical to Design
 - Pool-wood Complex
 - Channel Hydraulics and Wood
 - Design Strategies for Deeper Pools
 - Analog Approach
 - Stream Classification Interpretation

- 3 Treatment Strategies Based on Stream Stratification & Examples
 - Landscape Setting
 - Case Studies of Meander Reconstruction
 - Overall Types of Treat. Strategies Based on CEM & Rosgen
 - Examples of Types of Instream Structures

- 4 Monitoring
 - Cross- Sections
 - Bank Profile
 - Bed Scour
 - Plan View by Photographs
 - Bed Particle Size
 - Departure from Reference Reach
 - Structures
 - Aquatic Habitat