

Assessment Methodology

Stream Guidebook Overview

United States Army Corps of
Engineers, ERDC



US Army Corps of Engineers
BUILDING STRONG[®]



Objectives

- Become familiar with guidebook
- Discover where to find pertinent information



- Insert photo of high gradient guidebook here



Layout

- Abstract
- Table of Contents
- Preface (acknowledgments)



Characterization (Chapter 1)

- Locates where in the world guidebook can be used (Reference domain)
 - ▶ Physiography and Geology
 - ▶ Climate
 - ▶ Anthropogenic alterations
- Explains Subclasses: Headwater and Perennial streams
 - ▶ Geomorphic Setting
 - ▶ Hydrologic Regimes
 - ▶ Soils
 - ▶ Flora
 - ▶ Fauna



Assessment Variables and Functions (Chapter 2)

- Explains each Variable for each Function
- Explains each Function
- Explains assessment equation for each Function



Assessment Protocol (Chapter 3)

- Most Important
 - ▶ Should be able to use this section and apply assessment



Assessment Protocol (cont.)

- Define Assessment Objectives
- Characterize project site
- Screen for red flags
- Define stream assessment reach
- Collect data
- Analyze data
- Apply assessment results



Layout (cont.)

- References
- Appendix A – Glossary
- Appendix B – Additional info on measuring variables
- Appendix C – photos of tree species used in headwater stream assessments



Appendix B

- Supplementary Information (pg. B1)
 - ▶ Helpful information to measure variables.
 - List of variables and which functions they apply to
 - Comparison charts for visual estimates of cover ($V_{CCANOPY}$, $V_{DETRITUS}$, V_{HERB})
 - Measuring Embeddedness and Substrate
 - C-values for tree species
 - List of common non-native species
 - Measuring Watershed land use
 - Identifying bankfull



Questions?

