

**A TRAINING COURSE FOR
MITIGATION BANKING AND IN-LIEU FEE PROGRAM
INTERAGENCY REVIEW TEAMS**



**Reference Document:
Stream Credit Determination**

A. Federal Stream Credit Determination Policy

2008 Compensatory Mitigation for Losses of Aquatic Resources

§332.2 Definitions

Credit

Condition Functional capacity

Functions

§332.3 General compensatory mitigation requirements

(h) Preservation.

(i) Buffers.

(j) Relationship to other federal, tribal, state, and local programs.

§332.4 Planning and documentation

(c) Mitigation Plan. [The mitigation plan must include:]

(6) Determination of credits.

§332.8 Mitigation Banks

(o) Determining credits.

(1) Units of measure.

(2) Assessment.

(3) Credit production.

(4) Credit value. ...

(6) Credits provided by preservation.

(7) Credits provided by riparian areas, buffers, and uplands.

B. Stream Credit Determination Methods

2004 Stream Mitigation Compendium

- A review of 51 stream assessment protocols from throughout the U.S. The report highlights examples of existing stream assessment/mitigation protocols that may serve as models for other regions of the country.
- Somerville, D.E. and B.A. Pruitt. September 2004. *Physical Stream Assessment: A Review of Selected Protocols for Use in the Clean Water Act Section 404 Program*. Prepared for the U.S. Environmental Protection Agency, Office of Wetlands, Oceans, and Watersheds, Wetlands Division (Order No. 3W-0503-NATX). Washington, D.C. 213 pp.

2010 Stream Mitigation Protocol Compendium

- A review of 32 stream assessment protocols and mitigation guidance documents in use by various federal and state government agencies nationwide. It identifies stream functions or conditions assessed, parameters or attributes measured, assessment results obtained, intensity of effort and training needed, use and source of reference condition information, and other factors potentially instructive to parties seeking to review, initiate, or modify stream assessment programs.

Charleston District, U.S. Army Corps of Engineers

- The Charleston district's 2002 Compensatory Mitigation SOP includes detailed information and formulas for calculating both wetland and stream impacts and credits.

Fort Worth District, U.S. Army Corps of Engineers

- Texas Rapid Assessment Method (TXRAM) has wetland and stream data and scoring sheets

Little Rock, U.S. Army Corps of Engineers

- Little Rock, U.S. Army Corps of Engineers. Little Rock Stream Mitigation Functional Assessment Document.

Mobile District, U.S. Army Corps of Engineers: 2012 Compensatory Stream Mitigation Standard Operation Procedures and Guidelines

Mobile District, U.S. Army Corps of Engineers: Stream Mitigation Credits

- The Mobile district has developed guidance for stream mitigation, including information about stream credit generation. The 2009 and 2012 "Stream Mitigation Guidance" covers various types of stream restoration and

enhancement activities, as well as information about riparian buffer restoration and enhancement and credit determination procedures

Norfolk District, U.S. Army Corps of Engineers: 2007 Unified Stream Methodology

- The Norfolk District of the U.S. Army Corps of Engineers and the Virginia Department of Environmental Quality developed a Unified Stream Assessment Methodology (USM) for evaluating impacts to streams and assessing compensatory mitigation offered for stream impacts.

Savannah District, U.S. Army Corps of Engineers: 2004 Standard Operating Procedures for Compensatory Mitigation

USDA Natural Resources Conservation Service: Stream Restoration Design

- U.S. Department of Agriculture, Natural Resources Conservation Service. August 2007. "Stream Restoration Design." Part 654 National Engineering Handbook. <http://directives.sc.egov.usda.gov/viewerFS.aspx?id=3491>

Wilmington District, U.S. Army Corps of Engineers

- U.S. Army Corps of Engineers, Wilmington District, North Carolina Division of Water Quality, U.S. Environmental Protection Agency, Region IV, Natural Resources Conservation Service, and the North Carolina Wildlife Resources Commission. April 2003. "Stream Mitigation Guidelines."
- Guidelines on stream restoration in the coastal plains of North Carolina prepared by U.S. Army Corps of Engineers, Wilmington District and North Carolina Department of Environment and Natural Resources.
- U.S. Army Corps of Engineers, Wilmington District and North Carolina Department of Environment and Natural Resources. April 4, 2007. "Information Regarding Stream Restoration with Emphasis on the Coastal Plain."

