

## Ten-Year Anniversary of the Mitigation Rule: Changing Policies, Perceptions, and the Path Forward

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U.S. Environmental Protection Agency

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## Overview

- Background
- What the 2008Mitigation Rule changed
- Major trends over the last 10 years
- Current focus



Thursday, April 10, 2008

#### Part II

#### Department of Defense

Department of the Army, Corps of Engineers

33 CFR Parts 325 and 332

#### Environmental Protection Agency

40 CFR Part 230 Compensatory Mitigation for Losses of Aquatic Resources; Final Rule

# Background

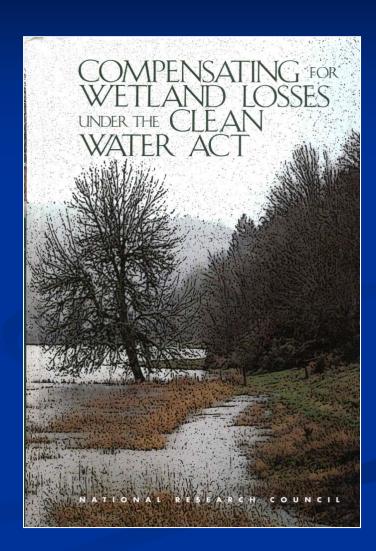
- Clean Water Act of 1972
- Section 404 requires a permit to discharge dredged or fill materials into waters of the US
  - Includes lakes, rivers, streams, wetlands, territorial sea
- Primary agencies involved:
  - U.S. Army Corps of Engineers
  - U.S. Environmental Protection Agency
    - CWA Section 404(b)(1) Guidelines (40 CFR Part 230)
      - Mitigation requirements: avoid, minimize, and compensate

# Compensatory Mitigation

- What is it?
  - The restoration, establishment, enhancement and/or in certain circumstances the preservation of aquatic resources
  - For the purpose of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved (40 CFR 230.92)
- How do you provide it?
  - Mitigation bank credits
  - In-lieu fee program credits
  - Permittee-responsible mitigation

# Major Drivers of 2008 Rule

- Improving effectiveness of compensation projects
  - 2001 National Research Council Report
- Ensuring equivalent standards for all compensation providers
  - 2004 National Defense Authorization Act



What were some of the major changes in the 2008 Mitigation Rule?

# Equivalent and Effective Standards: Level Playing Field for all Providers

### Mitigation Plan Components

- 1. Objectives
- 2. Site protection instrument
- 3. Baseline information
- 4. Work plan
- 5. Maintenance plan
- 6. Performance standards

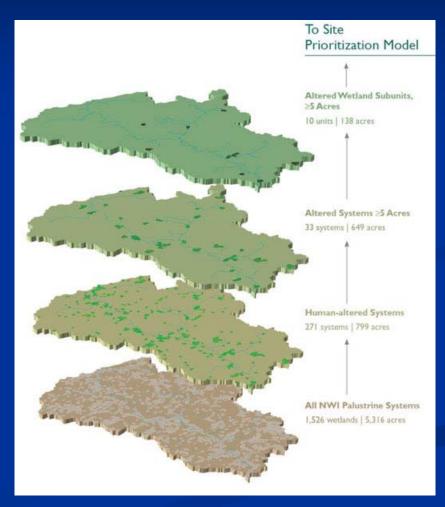
- 7. Monitoring requirements
- 8. Financial assurances
- 9. Site selection factors
- 10. Credit determination
- 11. Long-term management plan
- 12. Adaptive management plan

# Preference Hierarchy for Compensation

- 1. Mitigation bank credits/In-lieu fee released credits
- 2. In-lieu fee advance credits
- 3. Permittee-responsible mitigation
  - Using a watershed approach
  - On-site and/or in-kind
  - Off-site and/or out-of-kind
- Consider what is "environmentally preferable"
- Also consider likelihood of success, risk, uncertainty, and temporal loss

# Watershed/Landscape-Scale Approach

- Framework for compensation decision-making
- Goal: more strategic selection of compensation sites
- Emphasizes using available and relevant plans, information, and data



# Performance Monitoring





- Ecological performance standards
- Monitoring Requirements:
  - Parameters to be monitored
  - Length of monitoring period
  - Party responsible
  - Content of monitoring reports
  - Frequency of report submittal

# Permanence/Durability

- Site protection instrument
  - Goal "permanent protection"
  - Prohibits actions that would degrade site (e.g., conservation easement)
- Long-term management
  - Identify responsible party
  - Describe necessary tasks and funding arrangements

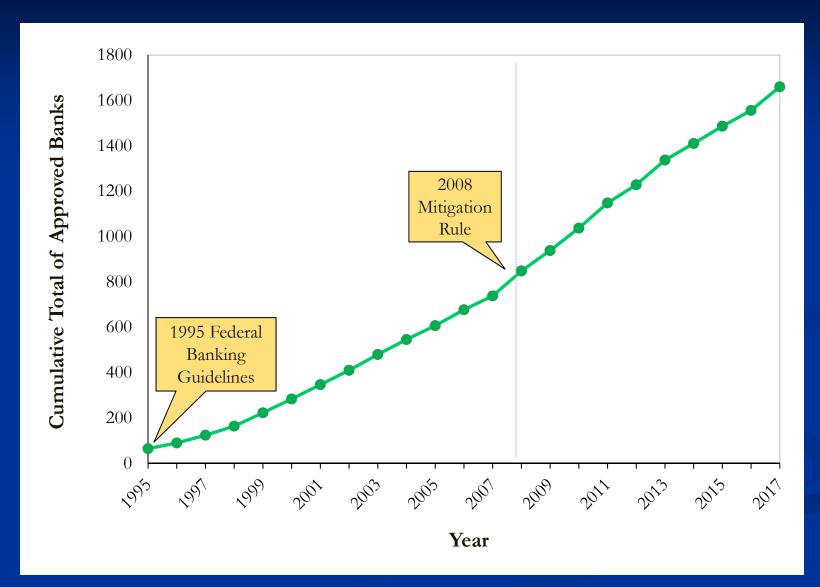
#### Exhibit D-5 LONG TERM MANAGEMENT PLAN

I Introduction
A Purpose of Establishment
B Purpose of this Long Term Management Plan
C Bank Manager and Responsibilities
II Property Description
A Setting and Location 4
C Cultural Resources
D Hydrology and Topography5
E Soils
F Existing Easements and Mineral Rights
G Adjacent Land Uses
III Habitat and Species Descriptions
A Biological Resources Survey of Bank Property
B Summary of Bank
C Endangered and TI
IV Management and Moi
A. Habitat Manageme
Element A.1 Seaso
The state of the s
Element A.2 Giant Element A.3 "Non- WETLAND MITIGATION SITE
THE TOLLOWING ACTIVITIES ARE LANGUED
Element A.5 Mosque PROHIBITED:
B Site Security and P Flamout P. 1. Track  * HERBICIDAL TREATMENT
Element B.1 11ash
C Infrastructure and I
Element C.1 Gates • MOWING
Element C.2 Water CLEARING
D. Agricultural Use Eler DITCHING
E. Outreach and Recr.  Flement E. 1. Hunting the City's Engineering Engineer at 2017-0207
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Element E.2 Educa
F Biological Monitor Chesapeake
Element F.1 Giant
Element F.2 Veget
G. Reporting and Admi
Element G.1 Annua
V Transfer, Replacemen
A Transfer
B Replacement
C Amendments
D Notices
Colusa Basin Mitigation Bank

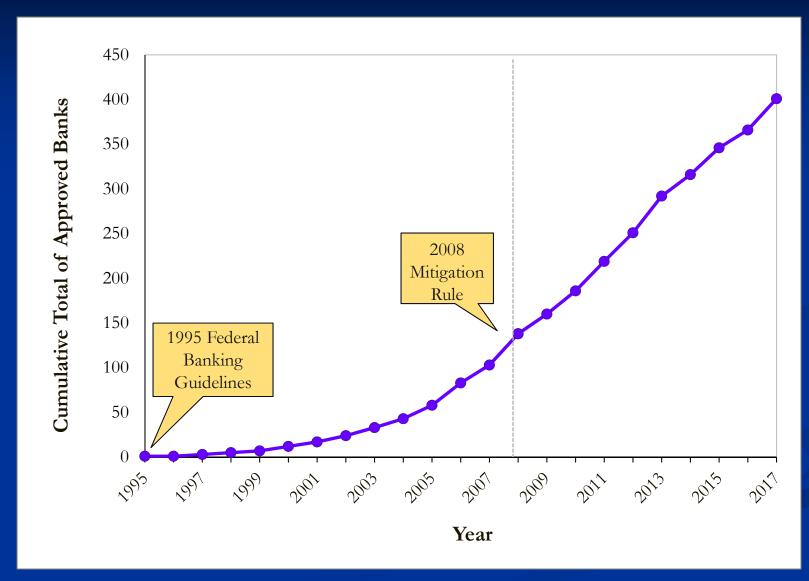
Exhibit D-5 Long Term Management Plan FINAL May16 2014

What are some of the major trends over the last 10 years under the Mitigation Rule?

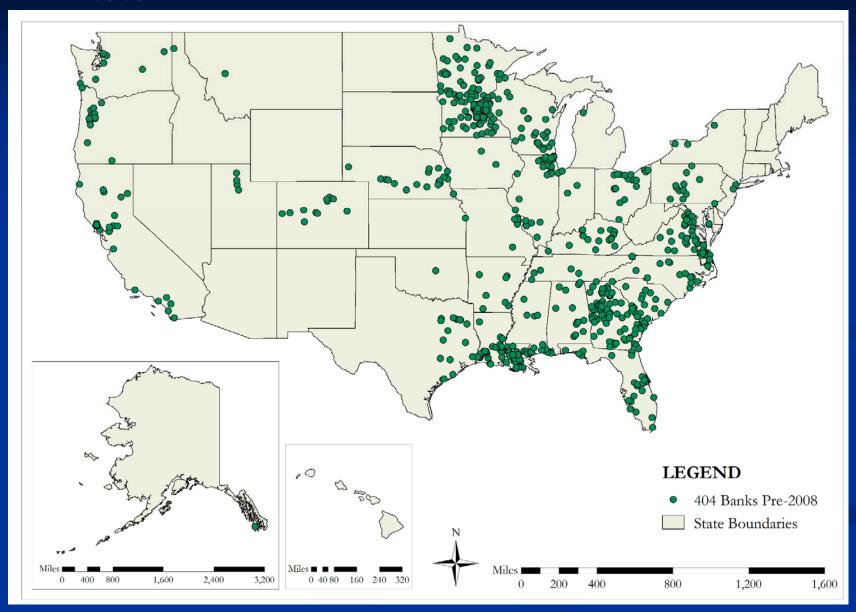
### Bank Establishment Over Time



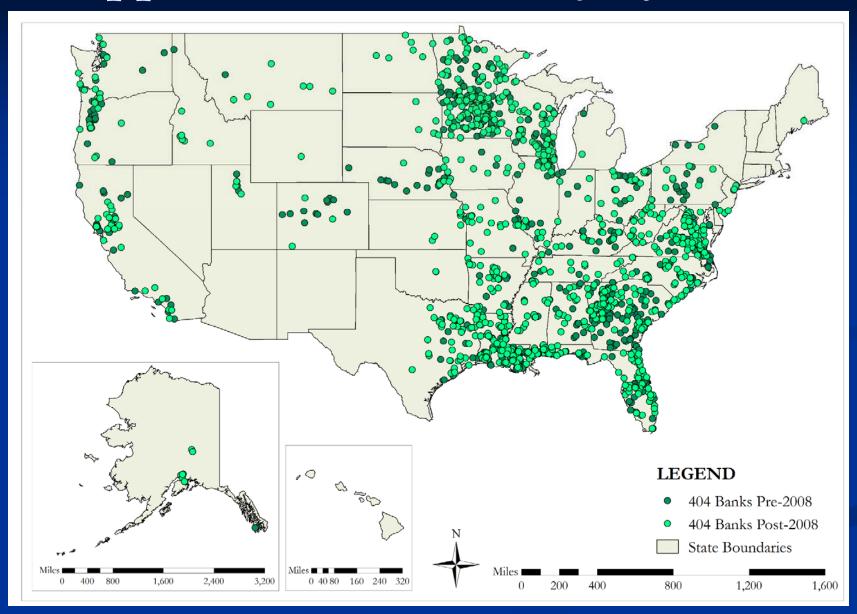
### Stream Bank Establishment Over Time



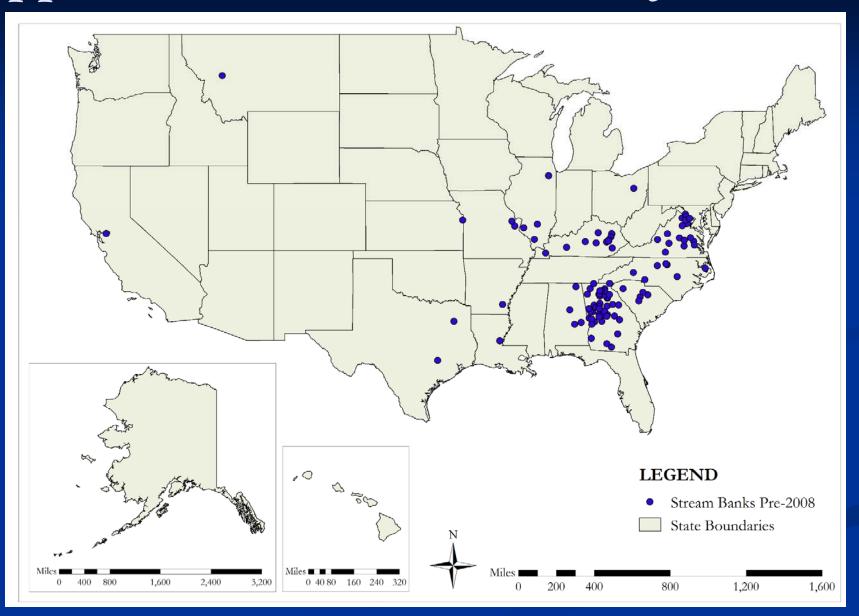
# Approved Banks as of June 2008



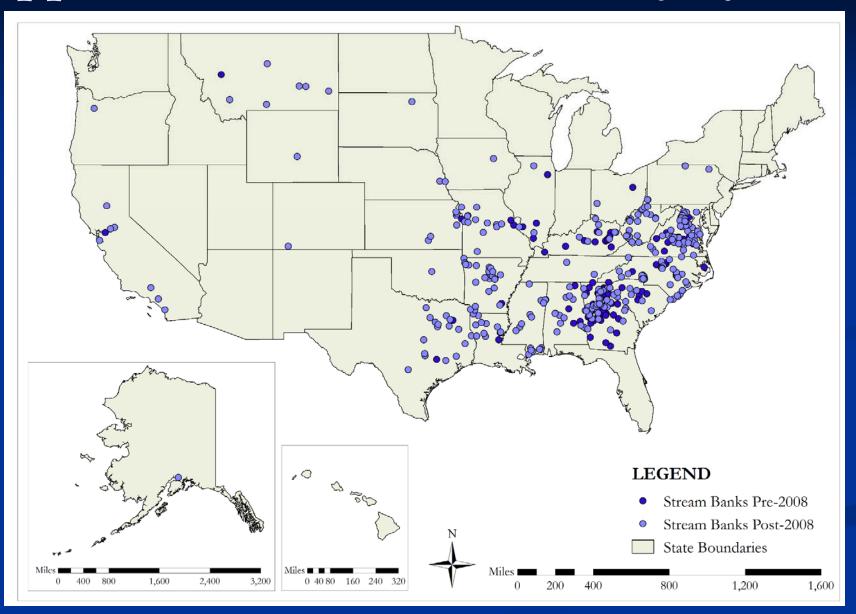
# Approved Banks as of July 2018



# Approved Stream Banks as of June 2008



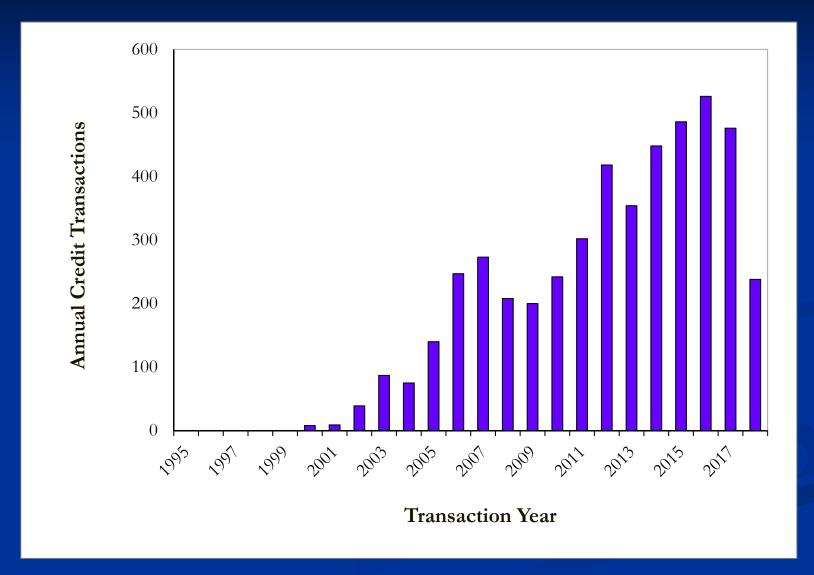
# Approved Stream Banks as of July 2018



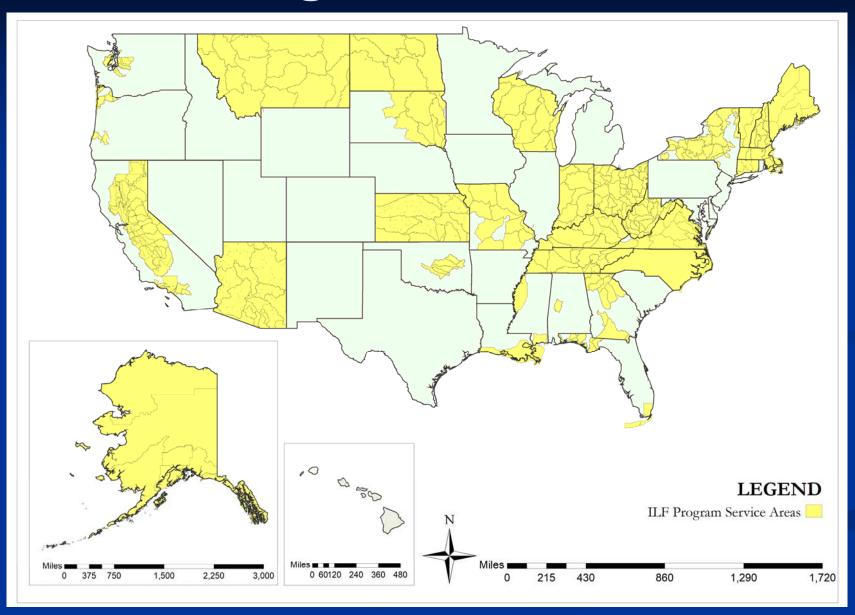
## Credit Withdrawals Over Time



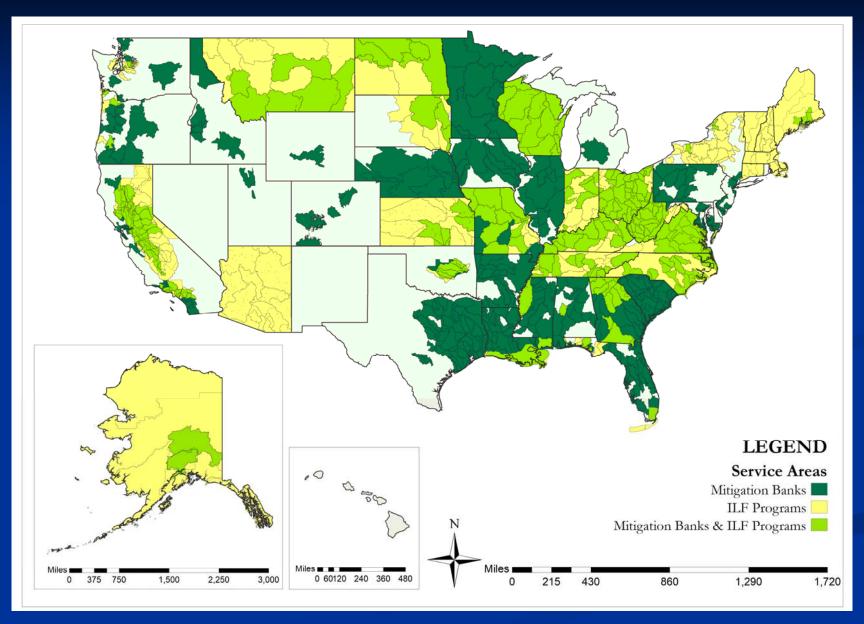
## Stream Credit Withdrawals Over Time



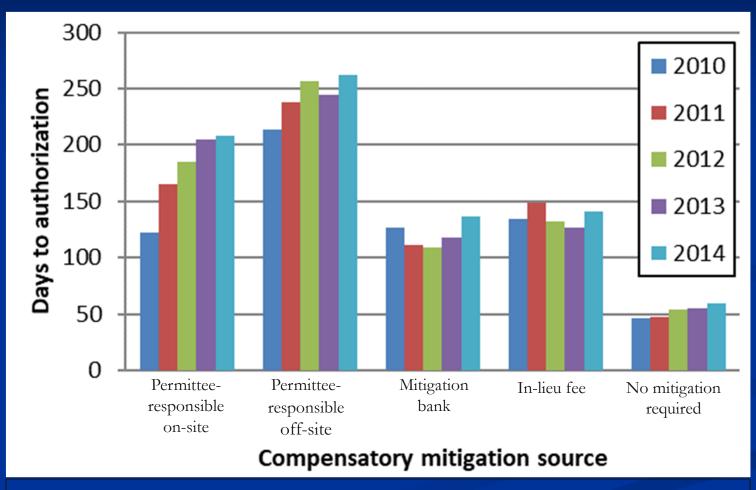
# ILF Program Service Areas



# Bank & ILF Service Areas

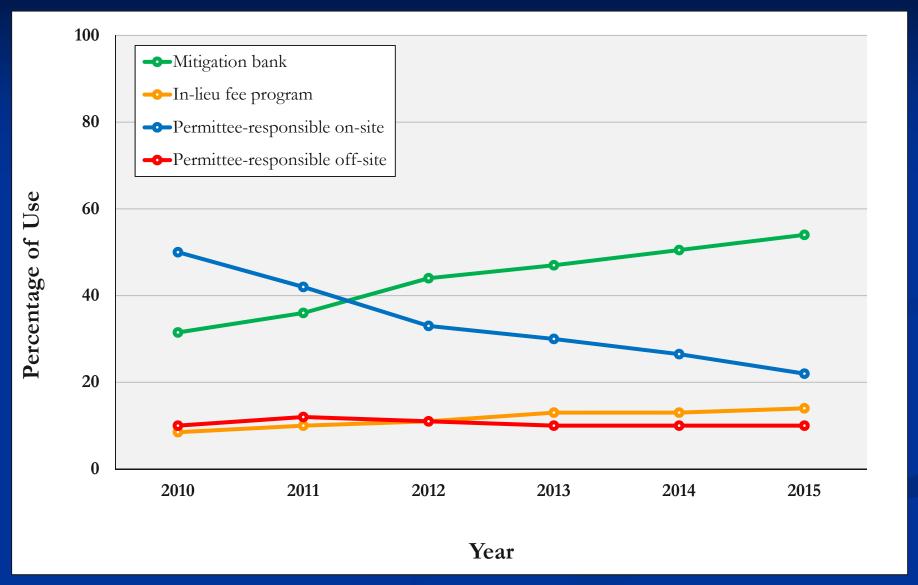


# Bank and ILF Options Save Time for Permittees



Average processing times for permit authorizations, by compensatory mitigation source, for 2010-2014.

# More Permittees Using Banks/ILF



What are we currently focused on?

# **Issue: Has Compensation** Performance Improved?

- Reviewed evaluations from 2000-2015
  - Frequency of evaluations on the decline
    - Particularly since 2008 Rule
  - Large gaps exist in evaluation for certain:
    - Geographic areas (southeast, midwest, southwest)
    - Resource types (streams)
  - When evaluations are done lack of consistency in how performance is defined

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#### Compensatory Mitigation Performance: The State of the Science

Evaluating the ecological and administrative performance of compensatory mitigation programs under §404 of the Clean Water Act is essential to ensuring that wetland functions are restored and protected. In this review of studies done in the last 15 years, trends show an overall decline in evaluations. The authors propose a process for stakeholders to develop a long-term approach to evaluating compensation performance.

By Joseph A. Morgan and Palmer Hough

influence the effectiveness of compensatory mitigation. The authors also envision how a long-term approach to evaluating compensation performance might be designed and implemented at a state or regional scale.

Compensatory mitigation is defined as offsetting unavoidable impacts to wetlands, streams, and other aquatic resources via restoration, establishment, enhancement, and/or preservation. The U.S. Army Corps of Engineers (the Corps) and U.S. Environmental Protection Agency (EPA) have made it an important component of the Clean Water Act (CWA) §404 permitting program since the program's inception in the 1970s (LaRoe 1986). Permittees can satisfy compensatory mitigation requirements through a third party by purchasing credits
from an approved mitigation bank or in-lieu fee program, or
ecologically effective replacement of lost aquatic resource func-

examination of compensatory mitigation policy and science, respectively. Numerous governmental and academic organi-following numerous state and federal studies published in zations have investigated the administrative and ecological the 1980s and 1990s (largely focused on permittee-responsible mitigation) that suggested that compensation projects mendations from these studies have been used to refine policy often failed or were not even attempted. This NRC study, and improve performance standards in the interest of creating published in 2001, suggested that although losses of wet-land acreage were theoretically being replaced via compen-reviewed studies published between 1999 and 2007 to infer satory mitigation, a number of factors including poor site broad trends in the success of wetland compensation, findselection and planning, noncompliance with permit condiing issues continued to plague compensation programs: moni-

t has been nearly 15 years since the National Research

tions, and a lack of adequate performance standards were
Council (NRC) took a hard look at the effectiveness of
contributing to the failure of compensatory mitigation to empensatory mitigation in the Clean Water Act §404 effectively offset authorized wetland losses (NRC 2001). In program. A review of studies published since that time high- 2005, the U.S. Government Accountability Office (GAO) lights the state of the science of compensation performance evaluated the Corps' oversight of compensatory mitigation, evaluation, indicating key trends and identifying critical finding that insufficient monitoring requirements and comknowledge gaps in our understanding of the factors that pliance checks were leading to inadequate administration of compensatory mitigation requirements (GAO 2005).

> "To perform successfully, compensation programs must both ensure compliance with permit conditions and result in ecologically effective replacement of lost aquatic resource functions. . . .

r completing a permittee-responsible mitigation project.

In 1999, EPA requested from the NRC a comprehensive administrative performance and ecological performance,

NOVEMBER-DECEMBER 2015

Morgan and Hough, 2015

# Response: Technical Publication on Long-Term Approach

- Section 1 Study design
  - Information on appropriate compensatory mitigation study design, including study design examples and considerations for each example
- Section 2 Data management
  - Information regarding compensatory mitigation project data management, including recommendations and best practices for managing compensation-related data and making that data accessible
- Section 3 Implementation
  - Information on conducting baseline evaluations as well as subsequent evaluations at regular intervals, including recommendations on potential funding sources and partnership opportunities

## Issue: Can We Improve Efficiency?

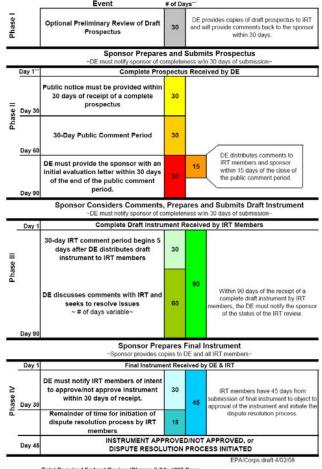
1) Draft Prospectus (30)

2) Prospectus (90)

3) Draft Instrument (90)

4) Final Instrument (45)

#### **Compensatory Mitigation Rule** Timeline for Bank or ILF Instrument Approval\*



Total Required Federal Review (Phases II-IV): ≤225 Days

<sup>\*</sup>Timeline also applies to amendments
\*\*The timeline in this column uses the maximum number of days allowed for each phase

# Response: Recommendations for Improving Efficiency

- Ecological Restoration Business Association, 6-4-18 letter to Corps HQ:
  - Establish GPRA performance metrics based on timelines in 2008 Rule
  - Invest in project management training
  - Adopt, at District-level:
    - Crediting/debiting and service area methodologies
    - SOPs for procedural aspects of bank review
    - Templates for bank instruments, site protection instruments, financial assurances, and long-term management plans
- Do not require opening the 2008 Rule

## It's Still All About Implementation

"It could be the best of all worlds...or it could be the same old same old...It's all in the implementation."

■ Dr. Joy Zedler, Chair 2001 NRC Compensatory Mitigation Study Committee – EM.com, 4-27-08

# Questions

- Palmer Hough
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- Rachel Harrington
  - harrington.rachel@epa.gov
- EPA CompensatoryMitigation Webpage:
  - https://www.epa.gov/cwa-404/compensatorymitigation

