#### **Compensatory Mitigation Primer**

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#### Clean Water Act of 1977

► Objective is to: "...restore and maintain the chemical, physical, and biological integrity of the Nation's waters..."

#### Section 404 regulates:

▶ Discharge of dredged or fill material into waters of the United States, including wetlands







# Corps Regulatory Roles and Responsibilities

To protect the Nation's aquatic resources, while allowing reasonable development through fair and balanced decisions.

- The §404 Program is guided by the goal of achieving "no overall net loss" of wetland acreage **and** functions
- The Corps can only permit the "Least Environmentally Damaging Practicable Alternative" (LEDPA)
- Before the Corps may issue a permit it must follow a 3part mitigation sequence



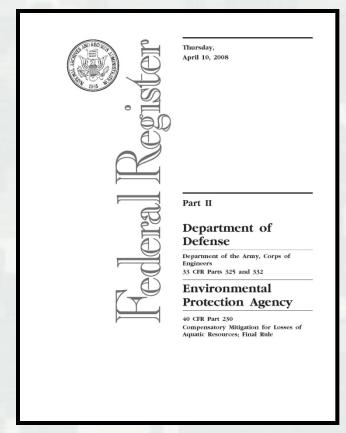
#### Proposed losses must first be:

- Avoided "to the maximum extent practicable"
  - Minimized to the extent "appropriate and practicable"
    - "Appropriate and practicable compensatory mitigation" is required for the remaining unavoidable adverse impacts

This compensatory mitigation is often referred to simply as "mitigation"

# 2008 Corps-EPA mitigation rule

- Establishes requirements for mitigation for impacts to aquatic resources
- "Where" and "how" mitigation is conducted
- Governs all forms of mitigation
- Equivalent standards for all forms
- Preference for 3<sup>rd</sup> party mitigation





#### **General Considerations**

- Objectives
  - ▶ Offset impacts
  - ► Practicable
  - ► Environmentally preferable
- Mitigation methods
- Commensurate with impacts





### General Mitigation Requirements

- Mitigation type
  - ► In-kind preferred
  - ► On-site/off-site or both
  - ▶ Difficult to replace resources (e.g. bogs, fens, streams)
- Timing
- Amount of compensation





### Type & Location of Mitigation

Within same watershed as impact AND where most likely to replace lost functions

- Consider:
  - ► Habitat diversity
  - ▶ Connectivity
  - ► Land use trends
  - Compatibility with adjacent uses
- Mitigation may be sited on public or private lands





### Permittee-Responsible Mitigation

#### Permittee:

- > Proposes
- > Revises
- > Implements
- > Monitors
- > Remediates
- > Manages
- > Protects





# Third-Party Mitigation

- 1 or more sites where resources are restored, established, enhanced, and/or preserved to offset permitted impacts
- Permittees acquire mitigation credits
- Sponsor assumes responsibility for the mitigation
- Operation & use are governed by an instrument





## Third-Party Mitigation

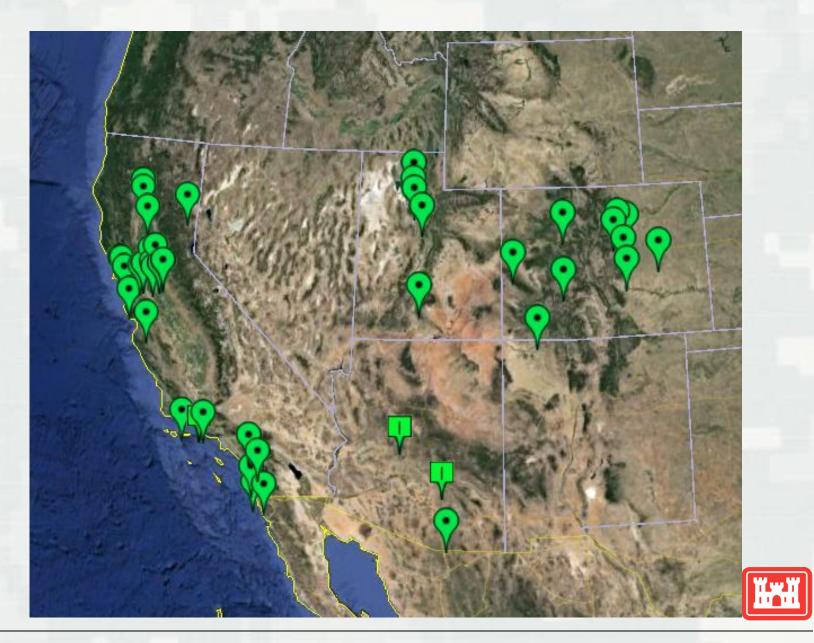
#### Mitigation Banks:

- Initiated in advance of impacts
  - > Credit release tied to performance
- Most sponsored by entrepreneurs
- 1208 operational sites/277 pending (Sept 2013)

#### In-Lieu Fee programs:

- Initiated after impacts
- Sponsored by government or non-profits
- 32 approved, 20 pending (Sept 2013)



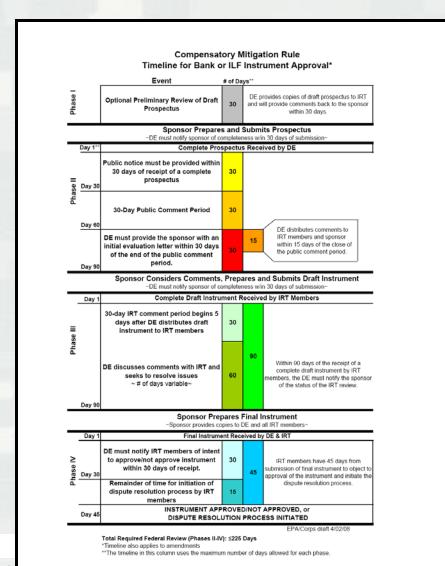




#### Third-Party Instrument Development

- Draft prospectus
- Prospectus
- Draft instrument

Final instrument



### Preference Hierarchy for Mitigation

- 1. Mitigation bank credits
- 2. In-lieu fee program credits
- Permittee-responsible mitigation under a watershed approach
- 4. On-site and/or in-kind permittee-responsible mitigation
- 5. Off-site and/or out-of-kind permitteeresponsible mitigation



# Preservation as Mitigation

#### Requirements

- Provides important functions
- Contributes to watershed sustainability
- 3. Appropriate & practicable
- 4. Permanently protected
- 5. Under threat of destruction or adverse modification





### Mitigation and other programs

#### Other F/S/T/L Regulatory programs

- ► Must fully offset 404 impacts
- ► No "double dipping"
- ► Can be used for ESA offsets



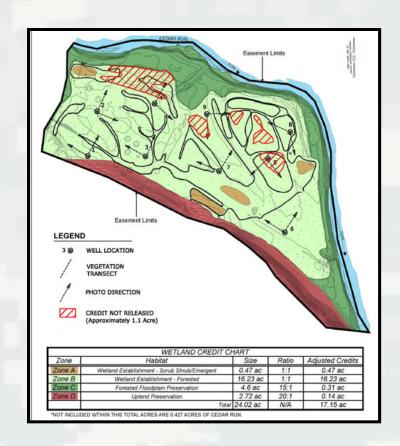
# Federally funded projects (e.g., NRCS WRP, USFWS Partners for Fish and Wildlife)

- 1. May NOT generate compensation credits
- 2. May be undertaken in conjunction *BUT*supplemental to federal funded conservation



### 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





#### Site Protection

"...mitigation project must be provided long-term protection through real estate instruments or other available mechanisms, as appropriate."





# Work plan

Detailed description of work to be conducted

- Project boundaries
- Construction methods, timing, and sequence
- Source(s) of water
- Methods for establishing desired plant community
- Plans to control invasive plant species
- Proposed grading plan
- Soil management
- Erosion control measures



#### Performance Standards

- Ecological
- Objective and verifiable
- Assess whether the project is meeting its objectives
- Based on <u>best available</u>
   <u>science</u> assessed in a practicable manner
- Enforceable





### Monitoring

 To determine if project is meeting performance standards



#### Mitigation plan must include:

- Parameters to be monitored
- Length of monitoring period
- Party responsible
- Content of monitoring reports
- Frequency of submittal



#### Financial Assurances

"...(Corps) shall require <u>sufficient</u> financial assurances to ensure a <u>high level of</u> <u>confidence</u> that the mitigation <u>project</u> will be <u>successfully completed</u>, in accordance with applicable performance standards."



### Management of Mitigation Projects

Maintenance Plan

Long-term management plan identifies:

► Responsible party(ies)

- Management requirements
- **▶** Costs
- ► Funding





# More Management

- Adaptive Management Plan
  - ▶ Plan
  - **▶** Construction
  - ▶ Performance standards
  - ► Monitoring
  - ► Management
  - activities







# Questions?



