United States
Environmental
Protection Agency

Wetlands Compensatory Mitigation

The objective of the Clean Water Act (CWA) is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Toward achievement of this goal, the CWA prohibits the discharge of dredged or fill material into waters of the United States unless a permit issued by the Army Corps of Engineers or approved State under CWA Section 404 authorizes such a discharge.

When there is a proposed discharge, the impact of the discharge must be avoided and minimized to the extent practicable. For unavoidable impacts, compensatory mitigation is required to replace the loss of wetland functions in the watershed. Compensatory mitigation is defined as, "the restoration, creation, enhancement, or in exceptional cases preservation of wetlands and/or other aquatic resources for the purpose of compensating for unavoidable impacts."

Source: *Federal Guidance for the Establishment, Use and Operation of Mitigation Banks.* 60 Fed. Reg. 228, 58605-58614. 1995

Mitigation Sequencing Guidelines

In 1990, the Environmental Protection Agency (EPA) and the Department of Army entered into a Memorandum of Agreement (MOA) to clarify the type and level of mitigation required under Section 404 regulations. The agencies established a three-part process, known as mitigation sequencing to help guide mitigation decisions:

1. Avoid - Adverse impacts are to be avoided and no discharge shall be permitted if there is a practicable alternative with less adverse impact.

2. Minimize - If impacts cannot be avoided, appropriate and practicable steps to minimze adverse impacts must be taken.

3. Compensate - Appropriate and practicable compensatory mitigation is required for unavoidable adverse impacts which remain.

Photo by James Valentine

The American Crocodiles, a Federal Endangered Species, makes its home in the Everglades Mitigation Bank.

Methods of Compensatory Mitigation:

Proposed projects that will cause adverse impacts to wetlands and other aquatic resources typically require some type of compensatory mitigation. The Army Corps of Engineers (or approved state authority) is responsible for determining the appropriate form and amount of compensatory mitigation required. Some types of mitigation are wetland establishment, restoration, enhancement and protection/maintenance.

- **Establishment (Creation):** The development of a wetland or other aquatic resource through manipulation of the physical, chemical or biological characteristics where a wetland did not previously exist. Successful creation results in a net gain in wetland acres.

- **Restoration:** Re-establishment or rehabililitation of a wetland or other aquatic resouce with the goal of returning natural or historic functions and characteristics to a former or degraded wetland. Restoration may result in a gain in wetland function and/or wetland acres.

- **Enhancement:** Activities conducted within existing wetlands that heighten, intensify, or improve one or more wetland functions. Enhancement is often undertaken for a specific purpose such as to improve water quality, flood water rention or wildlife habitat. Enhancement results in a change in wetland function(s), but does not result in a gain in wetland acres.

- **Protection/Maintenance (Preservation):** The protection of ecologically important wetlands or other aquatic resources into perpetuity through the implementation of appropriate legal and physical mechanisms (i.e. conservation easements, title transfers). Preservation may include protection of upland areas adjacent to wetlands as necessary to ensure protection and/or enhancement of the aquatic ecosystem. Preservation does not result in a net gain of wetland acres and should only be used in exceptional circumstances.

Source: US Army Corps of Engineers Regulatory Guidance Letter No. 02-2, December 24, 2002

Mechanisms for Compensatory Mitigation:

Compensatory mitigation for unavoidable wetland impacts can be located on or adjacent to the development site (on-site mitigation) or when environmentally preferable can be performed at another location (off-site mitigation). Mitigation Banking and In-Lieu Fee Programs are typically off-site mitigation, while project-specific mitigation can be located on- or off-site.

- **Project Specific Mitigation:** Restoration, creation, enhancement and, in exceptional circumstances, preservation of wetlands undertaken by a permittee in order to compensate for wetland impacts resulting from a specific project. The permittee performs the mitigation after the permit is issued and is ultimately responsible for implementation and success of the mitigation.
- **Mitigation Banking:** A wetlands mitigation bank is a wetland area that has been restored, created, enhanced or (in exceptional circumstances) preserved, which is then set aside to compensate for future conversions of wetlands for development activities. The value of a bank is determined by quantifying the wetland functions restored or created in terms of "credits." Permittees, upon approval of regulatory agencies, can acquire these credits to meet their requirements for compensatory mitigation. The bank sponsor is ultimately responsible for success of the project.
- **In-Lieu Fee Mitigation:** Mitigation that occurs where a permittee provides funds to an in-lieu-fee sponsor, generally a public agency or non-profit organization, instead of completing project-specific mitigation or purchasing credits from a mitigation bank. The Fee Adminstrator is responsible for the the success of the mitigation.

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Compensatory Mitigation Resources

Federal Wetlands Mitigation Policy Guidance

Available at: www.epa.gov/owow/wetlands/guidance

Memorandum Of Agreement Between The Department of the Army and The Environmental Protection Agency. 1990. Contains the policy and procedures to be used in determining the type and level of mitigation necessary to demonstrate compliance with the Section 404(b)(1) guidelines.

Federal Guidance for the Establishment, Use and Operation of Mitigation Banks. Interagency guidance issued in 1995 to clarify the use of mitigation banks to compensate for authorized impacts to aquatic resources.

Federal Guidance on the Use of In-Lieu-Fee Arrangements for Compensatory Mitigation under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. Interagency guidance issued in 2000 to clarify the agencies policy on the manner in which in-lieu-fee mitigation may be used to satisfy compensatory mitigation requirements.

National Wetlands Mitigation Action Plan. Interagency guidance issued in 2002 to further achievement of the national goal of achieving no net loss of wetlands. Includes a series of actions to improve the ecological performance and results of wetlands compensatory mitigation under the Clean Water Act and related programs.

Wetlands Mitigation Regulatory Guidance Letter (RGL). Guidance to Corps field staff on Compensatory Mitigation Projects (issued in 2002). This RGL supports the national policy for "no overall net loss" of wetlands, clarifies mitigation requirements for authorized impacts to aquatic resources and reinforces the Corps commitment to protect waters of the United States.

Recent Evaluations of Wetlands Compensatory Mitigation

BANKS AND FEES: The Status of Off-Site Wetland Mitigation in the United States. 2002. Environmental Law Institute, Washington, D.C. Available at www.eli.org

Stakeholder Forum on Federal Wetlands Mitigation. 2001-2003. Environmental Law Institute, Washington, D.C. Available at www.eli.org

National Academy of Sciences. *Compensating for Wetland Losses Under the Clean Water Act.* 2001. National Academy Press, Washington, D.C. Available at www.nap.edu

Wetlands Protection: Assessments Needed to Determine Effectiveness of In-Lieu-Fee Mitigation. 2001. General Accouting Office Report GAO-01-325. Available at www.gao.gov