

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.

For every authorized discharge, the adverse impacts to wetlands, streams and other aquatic resources must be avoided and minimized to the extent practicable. For unavoidable impacts, **compensatory mitigation** is required to replace the loss of wetland and aquatic resource functions in the watershed. Compensatory mitigation refers to the restoration, establishment, enhancement, or in certain circumstances preservation of wetlands, streams or other aquatic resources for the purpose of offsetting unavoidable adverse impacts.



The Mitigation Sequence

Compensatory mitigation is actually the third step in a sequence of actions that must be followed to offset impacts to aquatic resources. The 1990 Memorandum of Agreement (MOA) between the Environmental Protection Agency (EPA) and the Department of Army establishes a three-part process, known as the mitigation sequence to help guide mitigation decisions and determine the type and level of mitigation required under Clean Water Act Section 404 regulations.

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

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

Step 3. Compensate - Appropriate and practicable **compensatory mitigation** is required for unavoidable adverse impacts which remain. The amount and quality of compensatory mitigation may not substitute for avoiding and minimizing impacts.



Photo by James Valentine

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

Methods of Compensatory Mitigation:

Even after avoiding and minimizing impacts, projects that will cause adverse impacts to wetlands, streams 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. Methods of compensatory mitigation include restoration, establishment, enhancement and preservation.

- **Restoration:** Re-establishment or rehabilitation of a wetland or other aquatic resource 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 or wetland acres, or both.
- **Establishment (Creation):** The development of a wetland or other aquatic resource where a wetland did not previously exist through manipulation of the physical, chemical and/or biological characteristics of the site. Successful establishment results in a net gain in wetland acres and function.
- **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 retention or wildlife habitat. Enhancement results in a gain in wetland function, but does not result in a net gain in wetland acres.
- **Preservation:** The permanent protection of ecologically important wetlands or other aquatic resources 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 or enhancement of the aquatic ecosystem. Preservation does not result in a net gain of wetland acres and may only be used in certain circumstances, including when the resources to be preserved contribute significantly to the ecological sustainability of the watershed.

Source: *Compensatory Mitigation for Losses of Aquatic Resources*, 40 CFR Part 230 Subpart J and 33 CFR Part 332.

Mechanisms for Compensatory Mitigation:

Compensatory mitigation for unavoidable wetland impacts may be accomplished through three distinct mechanisms. With permittee-responsible mitigation, the permittee maintains liability for the construction and long-term success of the site. Mitigation banking and in-lieu fee mitigation are forms of "third party" compensation, where the liability for project success is transferred to the mitigation bank or in-lieu fee sponsor.

- **Permittee-Responsible Mitigation:** Restoration, establishment, enhancement or 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. Permittee-responsible mitigation may occur at the site of the permitted impacts or at an off-site location within the same watershed.
- **Mitigation Banking:** A wetlands mitigation bank is a wetland area that has been restored, established, enhanced or preserved, which is then set aside to compensate for future conversions of wetlands for development activities. Permittees, upon approval of regulatory agencies, can purchase credits from a mitigation bank to meet their requirements for compensatory mitigation. The value of these "credits" is determined by quantifying the wetland functions or acres restored or created. The bank sponsor is ultimately responsible for the success of the project. Mitigation banking is performed "off-site," meaning it is at a location not on or immediately adjacent to the site of impacts, but within the same watershed. Federal regulations establish a flexible preference for using credits from a mitigation bank over the other compensation mechanisms.
- **In-Lieu Fee Mitigation:** Mitigation that occurs when a permittee provides funds to an in-lieu-fee sponsor (a public agency or non-profit organization). Usually, the sponsor collects funds from multiple permittees in order to pool the financial resources necessary to build and maintain the mitigation site. The in-lieu fee sponsor is responsible for the success of the mitigation. Like banking, in-lieu fee mitigation is also "off-site," but unlike mitigation banking, it typically occurs after the permitted impacts.

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Compensatory Mitigation Resources

Federal Wetlands Mitigation Regulations and Guidance

Available at: www.epa.gov/wetlandsmitigation/

Section 404(b)(1) Guidelines. In 1980, EPA finalized regulations that constitute the substantive environmental criteria used in evaluating activities regulated under Section 404 of the Clean Water Act.

Compensatory Mitigation for Losses of Aquatic Resources; Final Rule. In 2008, EPA and the U.S. Army Corps of Engineers, through a joint rulemaking, expanded the Section 404(b)(1) Guidelines to include comprehensive standards for all three mechanisms for providing compensatory mitigation.

1990 Memorandum Of Agreement (MOA) Between The Department of the Army and The Environmental Protection Agency. This MOA 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. (Portions of this MOA that concern the type and location of compensatory mitigation are superseded by the above 2008 rule.)

Recent Evaluations of Wetlands Compensatory Mitigation

The Status and Character of In-Lieu Fee Mitigation in the United States. 2006. Environmental Law Institute, Washington, D.C. Available at www.eli.org

2005 Status Report on Compensatory Mitigation in the United States. 2006. Environmental Law Institute, Washington, D.C. Available at www.eli.org

Corps of Engineers Does Not Have an Effective Oversight Approach to Ensure That Compensatory Mitigation Is Occurring. 2005. U.S. Government Accountability Office Report GAO-05-898, Washington, D.C. Available at www.gao.gov

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. 2001-2006. 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. U.S. General Accounting Office Report GAO-01-325. Washington, D.C. Available at www.gao.gov