



Watershed Approach to Compensatory Mitigation Projects

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What is a watershed approach?

A watershed approach is an analytical process for making compensatory mitigation decisions that support sustainability or improvement of aquatic resources in a watershed (33 CFR 332.2). The ultimate goal of a watershed approach is to maintain and improve the quality and quantity of aquatic resources through strategic selection of compensatory mitigation sites.

Must the siting of compensatory mitigation use the watershed approach?

A watershed approach must be used, to the extent appropriate and practicable, for siting compensatory mitigation projects for Department of the Army permits. The watershed approach applies to all mitigation banks, in-lieu fee programs, and permittee responsible compensatory mitigation.



Is a watershed approach only achieved through a watershed plan?

From the U.S. Army Corps of Engineers' (USACE) perspective, a watershed plan for the purpose of compensatory mitigation is a plan developed by any government or appropriate non-governmental organization for the purpose of aquatic resource restoration, establishment, enhancement, or preservation, in consultation with stakeholders. Not all self-identified watershed plans are suitable for compensatory mitigation site selection. To implement the watershed approach, USACE may use an appropriate watershed plan, if available. If there is no available watershed plan, there is no requirement to develop a watershed plan. Without a watershed plan, other landscape-level information may be used to appropriately select compensatory mitigation sites.

How is a watershed approach implemented?

A watershed approach considers the importance of landscape position and aquatic resource type for the sustainability of aquatic resource functions within the watershed. A watershed approach considers the watershed needs and how location and types of compensatory mitigation projects address those needs. A landscape perspective helps identify the types and locations of compensatory mitigation projects that will benefit the watershed in a changing landscape and offset losses of aquatic resource functions authorized by Department of Army permits.

What are the recommended locations of compensatory mitigation under a watershed approach?

A watershed approach emphasizes watershed or landscape scale locational factors in siting compensatory mitigation sites. Hydrology and surrounding land use may lead to siting of compensatory mitigation for habitat functions off-site in a landscape setting conducive to providing those functions. However, compensatory mitigation to offset impacts to functions supporting water quality, flood risk management, and shoreline protection may be more appropriately sited near the activities authorized by a Department of Army permit. In some instances, a watershed approach would result in a

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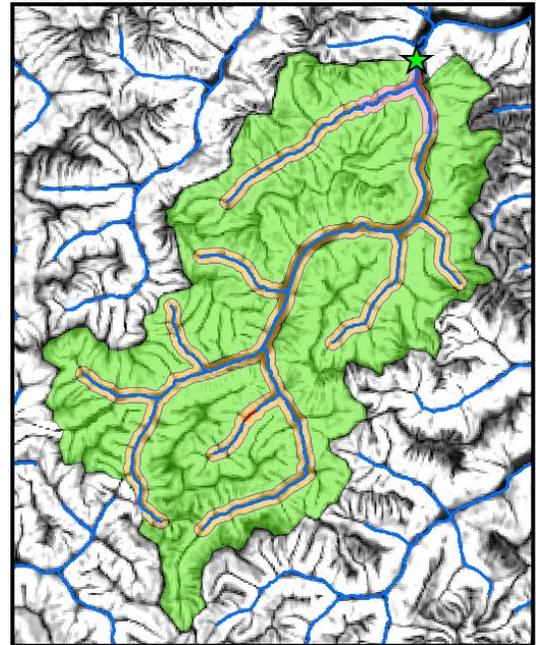
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combination of off-site and on-site compensatory mitigation, including mitigation banks or in-lieu fee programs.

What are important considerations and information that can be used for a watershed approach, including identifying priorities?

- Current trends in habitat loss or conversion
- Sources of watershed impairments
- Cumulative impacts of past development activities
- Current development trends
- Presence and habitat requirements of sensitive species
- Site conditions that favor or hinder the success of compensatory mitigation, including the contribution upland/riparian resources have on aquatic resource functions
- Requirements of regulatory/non-regulatory programs (habitat conservation plans, storm water)
- Chronic environmental problems such as flooding or poor water quality
- Comprehensive treatment of all aquatic resource functions (habitat, water quality, etc.)



What are some good sources of information to support a watershed approach?

- Wetland maps
- National Resources Conservation Service surveys of soils, including hydric soils
- United States Geological Survey topographic and hydrologic maps
- Aerial photographs
- Land use/land cover maps
- Environmental Protection Agency database of impaired waters
- Information on rare, endangered and threatened species and their critical habitat
- Local ecological reports or studies

For a small compensatory mitigation project, does the watershed approach require lengthy analysis and documentation?

The level of information and analysis needed to implement a watershed approach should be commensurate with the scope and scale of the aquatic resource impacts authorized by the Department of Army permit. Projects that impact a small area and magnitude of aquatic resource function would entail a different level of analysis and documentation compared to one with a larger impacts to area and functions.

How does one implement a watershed approach when there is no watershed boundaries?

There are some aquatic ecosystems without watershed boundaries, including oceans and shores. An appropriate scale in such situations should focus on lost functions and services in the same ecological system, such as a coral reef or littoral cell.