Watershed approach to compensatory mitigation (33 CFR 332.3(c)/40 CFR 230.93(c))

The district engineer (DE) must use a watershed approach to establish compensatory mitigation requirements in DA permits to the extent appropriate and practicable.

- In cases where the DE determines that an appropriate watershed plan is available the watershed approach should be based on that plan.
- When an appropriate watershed plan is not available, the watershed approach should be based on information provided by the project sponsor or available from other sources.

The goal of a watershed approach is to maintain and improve the quality and quantity of aquatic resources in a watershed through strategic selection of mitigation sites.

Considerations

A watershed approach to mitigation considers the importance of landscape position and resource type of mitigation projects for the sustainability of aquatic resource functions within the watershed. It considers how the types and locations of compensatory mitigation projects will provide the desired aquatic resource functions, and function over time in a changing landscape. Considerations include:

- Habitat requirements of important species
- Habitat loss or conversion trends
- Sources of watershed impairment
- Current development trends
- Requirements of other regulatory and non-regulatory programs that affect the watershed, such as storm water management or habitat conservation programs.

A watershed approach includes the protection and maintenance of terrestrial resources, such as riparian areas and uplands, when those resources contribute to the overall ecological functioning of aquatic resources in the watershed.

Mitigation requirements determined through the watershed approach should not focus on specific functions (e.g., water quality or habitat for certain species), but provide, where practicable, the suite of functions typically provided by the affected aquatic resource.

Locational factors (e.g., hydrology, surrounding land use) are important to the success of mitigation for impacted habitat functions and may lead to siting mitigation projects away from the impact site. Consideration should be given to functions and services (e.g., water quality, flood control, shoreline protection) that will likely need to be addressed at or near the permitted impacts.

A watershed approach may include on-site mitigation, off-site mitigation (including mitigation banks or in-lieu fee programs), or a combination of on-site and off-site mitigation.

A watershed approach to mitigation should include, to the extent practicable:

- Inventories of historic and existing aquatic resources, including identification of degraded aquatic resources;
- Identification of immediate and long-term aquatic resource needs within watersheds that can be met through permittee responsible mitigation, mitigation banks, or in-lieu fee programs.
- Identification and prioritization of aquatic resource restoration, establishment, and enhancement activities, and preservation of existing aquatic resources that are important for maintaining or improving ecological functions of the watershed.
- Identification and prioritization of resource needs should be as specific as possible, to facilitate determination of mitigation requirements.

A watershed approach is not appropriate where watershed boundaries do not exist, such as marine areas. In such cases, an appropriate spatial scale should be used to replace lost functions and services within the same ecological system (e.g., reef complex, littoral drift cell).

Information Needs

Without an appropriate watershed plan, the DE will use a watershed approach based on analysis of information regarding watershed conditions and needs, including potential sites for aquatic resource restoration activities and priorities for aquatic resource conservation. Such information includes:

- Current trends in habitat loss or conversion;
- Cumulative impacts of past development activities,
- Current development trends;
- The presence and needs of sensitive species;
- Site conditions that favor or hinder the success of mitigation projects; and
- Chronic environmental problems such as flooding or poor water quality.

Information sources: wetland maps; soil surveys; U.S. Geological Survey topographic and hydrologic maps; aerial photographs; information on rare, endangered and threatened species and critical habitat; local ecological reports or studies; and other sources that could be used to identify locations for suitable compensatory mitigation projects in the watershed.

The level of information and analysis needed must be commensurate with the scope and scale of the proposed impacts requiring a DA permit, as well as the functions lost as a result of those impacts.

Watershed scale

The watershed size selected should not be larger than is appropriate to ensure that the aquatic resources provided will effectively compensate for impacts resulting from activities authorized by DA permits. The DE should consider relevant environmental factors and appropriate locally developed standards and criteria when determining the appropriate watershed scale for compensation activities.