

Washington State Wetland Mitigation Bank Service Area Guidance

Service Area

A wetland mitigation bank (bank) service area is the designated geographic area within which the bank can reasonably be expected to provide, and is authorized to provide, appropriate compensatory mitigation for unavoidable impacts to wetlands and other aquatic resources.

As part of the bank development process, a prospectus is submitted to the Interagency Review Team (IRT)¹ by the bank sponsor. The IRT negotiates with the bank sponsor to determine the appropriate service area for a bank.² Negotiations commence after the sponsor proposes a service area in the bank prospectus and after the prospectus goes to public notice and comments are received. During the negotiation process, the IRT refines the service area map and description to ensure the service area is ecologically appropriate and satisfies potential environmental concerns of the appropriate regulatory agencies. The intent of the negotiations is to reach agreement on the service area prior to submittal of the draft mitigation banking instrument (MBI). The final MBI must include a description of the geographic service area, a map of the geographic service area, electronic GIS files, and the rationale that demonstrates the service area is ecologically appropriate.

In Washington, service area boundaries are primarily driven by ecological factors such as watershed boundaries or other types of technical information deemed appropriate by the IRT.

Considerations

Banks should be sited to effectively replace lost aquatic resource functions and services and address key watershed needs within their service areas. A watershed approach must be used to determine a suitable bank location and the appropriate geographic extent of the service area. Banks must effectively compensate for unavoidable impacts to aquatic resources across the entire service area. The Washington State Department of Ecology (Ecology) has published guides that provide specific recommendations on how to apply a watershed approach when selecting mitigation sites in eastern and western Washington. The site selection documents can be found at the following websites:

- U.S. Army Corps of Engineers' (Corps) mitigation webpage:
http://www.nws.usace.army.mil/PublicMenu/Menu.cfm?siteName=REG&pageName=mainpage_mitigation

¹ The IRT typically is Co-Chaired by the U.S. Army Corps of Engineers (Corps) and the Washington State Department of Ecology (Ecology). When Native American Tribes propose a bank, the Co-Chairs typically are the Corps and the U.S. Environmental Protection Agency (EPA).

² More information pertaining to service areas can be found in the Federal Rule: Compensatory Mitigation for Losses of Aquatic Resources, 33 CFR Parts 325 and 332 and Washington State Rule: Wetland Mitigation Banks, Chapter 173-300 WAC.

- Ecology’s publication webpage:
<http://www.ecy.wa.gov/biblio/0906032.html> (western Washington).
<http://www.ecy.wa.gov/biblio/1006007.html> (eastern Washington).

The IRT considers the following elements when determining the appropriate service area size for a proposed bank:³

- The functions provided by the bank and the distance from the bank that the ecological functions can reasonably be expected to compensate for impacts;
- Whether the bank addresses existing watershed-based mitigation planning efforts;
- How far the ecological and hydrological benefits of the bank extend beyond the bank site location;
- The position of the bank within the watershed;
- The degree to which the bank restores processes within the watershed;
- The size and characteristics of the Water Resource Inventory Area (WRIA) in which the bank is located;
- The quality, diversity, and regional significance of the habitats provided;
- Local needs and requirements, such as consistency with land use or watershed management plans;
- Types of impacts that may be compensated through the use of credits from the bank; and
- The degree to which the bank supports priorities found in, but not limited to, watershed management plans, watershed characterizations, wetland mapping or inventories, stormwater management plans, shoreline master programs, salmon recovery plans and comprehensive land use plans.

Delineation of a bank service area must also consider any locally-developed standards and criteria that may be applicable. For example, some local jurisdictions prefer that mitigation occur within the same sub-basin as the impact, unless there are no reasonable mitigation opportunities within the sub-basin that have a high likelihood of success.

Boundary Identification

For western Washington, the WRIA is typically the maximum extent of a service area in which a bank is located. Watershed boundaries may be more difficult to determine in portions of eastern Washington due to the drier climate. For eastern Washington, refer to Ecology’s *Selecting Mitigation Sites Using a Watershed Approach (Eastern Washington)* for a tool to determine boundaries.⁴ Ecoregions are another geographic unit used to delineate service areas in Washington State. Recently, the watershed characterization method has been used to

³ Chapter 173-700-302 WAC.

⁴ <http://www.ecy.wa.gov/biblio/1006007.html>

determine and prioritize appropriate mitigation within watersheds and can be used to help determine ecologically appropriate services areas. Administrative or governmental boundaries may limit a bank service area due to local regulations.

Water Resource Inventory Area

Watersheds represent the land area that drains to a common waterway, such as a stream, lake, or other water body. Watersheds are suitable for spatially organizing ecosystem management or water quality management. Local watershed plans may identify sub-basins within WRIAs and service areas may be further defined by these sub-basins. A list and map of identified WRIAs within the state can be found on Ecology's website.⁵

In some cases, modifications to the service area can occur when considerations are made for the ecosystem units within and adjacent to the WRIA boundary. When the ecological and hydrologic characteristics of an area adjacent to a WRIA boundary are similar to those within a WRIA, extension of the service area beyond the WRIA may be appropriate, as long as the ecological and hydrologic functions and services are equivalent.

WRIA boundaries are used throughout the state for aquatic resource planning; however, if a case can be made for use of another, more ecologically appropriate, geographic delineation unit then the alternative planning unit may be used. In areas where watershed boundaries do not exist, such as marine areas, 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).

Hydrologic Units

In areas where the annual surface runoff is less than 1 inch/year, drainage basins do not provide a good basis for understanding the movement of water in the landscape. The lack of surface runoff generally limits wetlands to locations that intersect the groundwater table. Consequently, in much of the central part of the state, groundwater rather than surface water is the major hydrologic process that controls the distribution and functions of wetlands at the landscape scale. As a result, hydrologic units (HUs) based on aquifers that lie at or near the surface as well as drainage basins should be used for selecting mitigation sites in regions of low runoff (< 1 in/year).⁴

Cataloging units are the smallest element in the hydrologic unit code (HUC) hierarchy and typically are used for water resource planning in Washington State. A list and map of the identified HUs in the state can be found on the U.S. Geological Survey website.⁶ Ecology's *Selecting Mitigation Sites Using a Watershed Approach (Eastern Washington)* can serve as a tool to determine these boundaries.⁴

⁵ <http://www.ecy.wa.gov/apps/watersheds/wriapages/index.html>

⁶ <http://water.usgs.gov/GIS/regions.html>

Ecoregions

Ecoregions denote areas of general similarity in ecosystems and in the type, quality, and quantity of environmental resources. These geographic units are intended to provide a spatial framework for ecosystem assessment, research, inventory, monitoring, and management. They delimit large areas within which local ecosystems reoccur more or less throughout a region in predictable patterns. A list and map of the identified ecoregions within the state can be found on Ecology's website.⁷

Watershed Characterization

Watershed characterization is a method for assessing and understanding watershed processes. Watershed processes are "the delivery, movement, and loss of water, sediment, nutrients, toxins, pathogens, and large woody debris." These processes play a central role in wetland and stream development. Therefore, understanding watershed processes at a broader scale, rather than a site scale, is key to sustaining aquatic resources. The goal of watershed characterization is to develop an understanding of where the important areas are that control watershed processes and the relative degree to which the processes have been altered. This provides a broader context for understanding the problems affecting a specific site. Watershed characterization methods seek to more completely understand project effects, assess the condition of surrounding natural resources, and identify potential mitigation options that have the greatest opportunity for maximizing environmental benefit.

Out of Service Area Impacts

Use of a mitigation bank to compensate for impacts beyond the designated service area must be authorized by the IRT, on a case-by-case basis, where it is determined to be ecologically appropriate and environmentally desirable to other mitigation alternatives. In addition to the IRT, approval from the appropriate agencies with jurisdiction for the permitted impact project and associated mitigation is required. As such, out-of-service-area impacts are only allowed in special circumstances (e.g., projects that span multiple basins such as transportation and utility corridors, pipelines, or settlement of enforcement actions).

⁷ <http://www.ecy.wa.gov/services/gis/maps/state/ecoregns.pdf>