


MEMORANDUM

**COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Water Division**

Subject: GUIDANCE MEMORANDUM 02-2012
Determination of Service Areas for Compensatory Mitigation Banks

To: Regional Directors

From: Larry G. Lawson, P.E., Director 

Date: July 12, 2002

Copies: Regional Permit Managers, Regional Compliance and Enforcement Managers,
Regional VWPP Supervisors, Mary Jo Leugers, Martin Ferguson, Ellen Gilinsky

Summary:

When a Virginia Water Protection Permit is conditioned upon compensatory mitigation for unavoidable impacts to surface waters, including wetlands, the applicant may be permitted to satisfy all or part of such mitigation requirements by the purchase or use of credits from a wetlands mitigation bank that has been approved and is operating in accordance with applicable federal and state guidance, laws or regulations. This guidance clarifies how DEQ reviews and determines the service areas for proposed compensatory mitigation banks pursuant to statutory requirements and the Virginia Water Protection Permit (VWPP) regulation. In addition, the guidance addresses how DEQ reviews a compensatory mitigation proposal for permitted wetland impacts to determine if use of a mitigation bank is appropriate.

Contact information:

Please contact Ellen Gilinsky, Virginia Water Protection Permit Program Manager, at 804-698-4375 with any questions about the application of this guidance.

Disclaimer:

This document is provided as guidance and, as such, sets forth standard operating procedures for the agency. However, It does not mandate any particular method nor does it prohibit any particular method for the analysis of data, establishment of a wasteload allocation, or establishment of a permit limit. If alternative proposals are made, such proposals should be reviewed and accepted or denied based on their technical adequacy and compliance with appropriate laws and regulations.

DETERMINATION OF SERVICE AREA FOR COMPENSATORY MITIGATION BANKS

PURPOSE

The purpose of this guidance is: (1) to clarify how DEQ reviews the service areas for proposed compensatory mitigation banks pursuant to statutory requirements and the Virginia Water Protection Permit (VWPP) regulation; and (2) to clarify how particular mitigation banks are determined to satisfactorily compensate for permitted wetland impacts.

BACKGROUND

The *National Wetland Mitigation Banking Study* (U.S. Army Corps of Engineers, IWR Report 94-WMB-6, 1994) defines wetland mitigation banking as “a system in which the restoration, creation, enhancement, or preservation of wetlands is recognized by a regulatory agency as generating credits that may be used to compensate for multiple wetland impacts occurring generally within the same watershed as the banked wetlands.” The national study further states that “the wisest approach to *ad hoc* approvals of banks is a hydrologically based or habitat based approach to the service area.”

In recent years, wetland and stream mitigation banking has become an increasingly popular enterprise, in Virginia and in other states, because banks often provide greater ecological benefits than smaller, on-site compensatory mitigation and there are potential economies of scale for development of the mitigation bank. While not intended to completely replace on-site compensatory wetland and stream mitigation, mitigation banking is an alternative approach to compensate for the loss of wetland and stream acreage and function that in many circumstances may be more practicable and ecologically preferable to other alternative means of compensation.

Both Federal regulations and guidance (*Federal Guidance for the Establishment, Use, and Operation of Mitigation Banks*; Federal Register, Vol. 60, No. 228, pages 58605-58614) and Virginia law (Section 62.1-44.15:5 Code of Virginia) outline criteria for the determination of the geographical service areas for wetland mitigation banks. Of relevance to the VWPP program are the requirements of the Code of Virginia, Section 62.1-44.15:5 E, as follows:

When a Virginia Water Protection Permit is conditioned upon compensatory mitigation for adverse impacts to wetlands, the applicant may be permitted to satisfy all or part of such mitigation requirements by the purchase or use of credits from any wetlands mitigation bank, including any banks owned by the permit applicant, that has been approved and is operating in accordance with applicable federal and state guidance, laws or regulations for the establishment, use and operation of mitigation banks as long as: (1) the bank is in the same U.S.G.S. cataloging unit, as defined by the Hydrologic Unit Map of the United States (U.S.G.S. 1980), or an adjacent cataloging unit within the same river watershed, as the impacted site, or it meets all the conditions found in

clauses (i) through (iv) and either clause (v) or (vi) of this subsection; (2) the bank is ecologically preferable to practicable on-site and off-site individual mitigation options, as defined by federal wetland regulations; and (3) the banking instrument, if approved after July 1, 1996, has been approved by a process that included public review and comment. When the bank is not located in the same cataloging unit or adjacent cataloging unit within the same river watershed as the impacted site, the purchase or use of credits shall not be allowed unless the applicant demonstrates to the satisfaction of the Department of Environmental Quality that (i) the impacts will occur as a result of a Virginia Department of Transportation linear project or as the result of a locality project for a locality whose jurisdiction crosses multiple river watersheds; (ii) there is no practical same river watershed mitigation alternative; (iii) the impacts are less than one acre in a single and complete project within a cataloging unit; (iv) there is no significant harm to water quality or fish and wildlife resources within the river watershed of the impacted site; and either (v) impacts within the Chesapeake Bay watershed are mitigated within the Chesapeake Bay watershed as close as possible to the impacted site or (vi) impacts within U.S.G.S. cataloging units 02080108, 02080208, and 03010205, as defined by the Hydrologic Unit Map of the United States (U.S.G.S. 1980), are mitigated in-kind within those hydrologic cataloging units, as close as possible to the impacted site. After July 1, 2002, the provisions of clause (vi) shall apply only to impacts within subdivisions of the listed cataloging units where overlapping watersheds exist, as determined by the Department of Environmental Quality, provided the Department has made such a determination by that date. The Department of Environmental Quality is authorized to serve as a signatory to agreements governing the operation of wetlands mitigation banks. The Commonwealth, its officials, agencies, and employees shall not be liable for any action taken under any agreement developed pursuant to such authority. State agencies are authorized to purchase credits from wetland mitigation banks.

DETERMINATION OF SERVICE AREAS

Section 62.1-44.15:5D of the Code of Virginia defines the maximum allowable service area as being the same or adjacent hydrologic unit code (HUC) within the same river watershed, as defined by the Hydrologic Unit Map of the United States (U.S.G.S. 1980). This limitation on the potential service area also follows the intent of a watershed approach outlined in the Federal guidance (Federal Register, Vol. 60, No. 228, pages 58605-58614). DEQ further refines the service area for each proposed wetland mitigation bank based on similarity of habitat, physiographic province, and ecoregion. These criteria should also logically apply to mitigation banks for streams. As with most aspects of mitigation banks, DEQ works closely with the entire Mitigation Banking Review Team (MBRT), with the DEQ, Corps, U.S. Fish and Wildlife Service, EPA, and the Department of Game & Inland Fisheries as the primary team members, to determine a service area that is mutually acceptable and conforms to each agency's regulations and guidance. The service area of any given mitigation bank may coincide with the maximum allowable service area defined by Virginia statute, or the service area may be more restrictive than the maximum allowable service area based on the above factors. If a proposed mitigation bank covers more

than one river watershed, then the service area of the bank can span both watersheds; however projects can only use the bank within the parameters of the state statute listed above.

The statute provides for an exception to the service area limitations for Virginia Department of Transportation linear projects and for local government projects for localities spanning multiple watersheds, provided that: (1) the projects impact less than 1 acre of wetlands; (2) there is no practicable same river watershed mitigation alternative; (3) there is no significant adverse impact to water quality or fish and wildlife resources within the watershed of the project; and (4) either impacts within the Chesapeake Bay watershed are mitigated within that watershed as close as possible to the impact site or, as stated in clause (vi), impacts within HUCs 02080108, 02080208, and 03010205 are mitigated within those same HUCs as close as possible to the impact site.

The statute notes that after July 1, 2002, the provisions of clause (vi) shall apply only to impacts within subdivisions of the listed cataloging units where overlapping watersheds exist, as determined by the Department of Environmental Quality, provided the Department has made such a determination by that date. Accordingly, DEQ was tasked with conducting a study on hydrologic interaction in cataloging units 02080108, 02080208 and 03010205, all of which are in the Tidewater area. The DEQ contracted with the U.S.G.S. to evaluate the flow of surface waters in these areas. The U.S.G.S. conducted fieldwork at key flow interaction points and evaluated existing data and reports on flow between these HUCs. Based upon this work, the U.S.G.S. and DEQ determined that the two river watersheds encompassed by these HUCs (James River and Chowan River basins) have a high potential to, and in many instances do, interact due to tidal influences, wind and other weather conditions, and alterations in direction of flow as a result of U.S. Army Corps of Engineers' manipulations of the Dismal Swamp Canal. These interactions are, however, limited to the areas located south of the James River. Accordingly, after July 1, 2002, for Virginia Department of Transportation linear projects and for local government projects for localities spanning multiple watersheds only, the use of a wetland mitigation bank within the same or adjacent HUC, regardless of river-watershed, will be allowed for impacts of less than one acre located within those portions of HUCs 02080108, 02080208 and 03010205 that are south of the James River.

APPROVAL OF BANK USE FOR COMPENSATORY MITIGATION FOR UNAVOIDABLE PROJECT IMPACTS

The first step in reviewing compensatory mitigation is to determine that the applicant has avoided and minimized surface water impacts to the extent practicable, pursuant to 9 VAC 25-210-155A. Next, the applicant must evaluate the type of compensatory mitigation appropriate for the unavoidable impacts. The appropriate compensatory mitigation option for project impacts is evaluated on a case-by-case basis, in terms of replacement of wetland or stream acreage and function (see 9 VAC 25-210-80 B 4 g and 9 VAC 25-210-115). An alternatives analysis is required to justify that off-site or out-of-kind compensatory mitigation is more practicable and ecologically preferable than on-site compensation. Off-site mitigation can include: (1) creation or restoration of wetlands, potentially accompanied by wetland preservation, by the project proponent at a site different than the impact site; (2) purchase or use of mitigation bank credits; or (3) contribution to an in-lieu fee fund. The alternatives analysis must compare the ability of each compensatory mitigation option to replace lost acreage and function, and should include a comparison of criteria such as: water quality benefits, acreage, distance from impacts, hydrology, functions and values, vegetation and soils, constructibility, timing, property acquisition, and cost.

According to 9 VAC 25-210-115 F, the use of a mitigation bank is deemed appropriate for compensating project impacts if: (1) the bank meets the criteria and conditions found in Section 62.1-44.15.5E of the Code of Virginia; (2) the bank is ecologically preferable to practicable on-site and off-site individual compensatory mitigation options; (3) the banking instrument was approved by a process that involved public review and comment in accordance with federal guidelines (after July 1, 1996); and (4) the applicant provides verification to DEQ of purchase of the required amount of credits. Once it is determined that a mitigation bank is an appropriate alternative, DEQ must then determine if the proposed project is located within same or adjacent HUC within the same river watershed as the mitigation bank and that the project is within the approved service area for the mitigation bank proposed for use. The purchase of credits from a bank meeting these criteria can then be allowed as a condition of the VWP permit.

The only exceptions to the statutorily defined service area parameters are for VDOT and locality projects that are linear in nature and impact less than one acre of wetlands (Section 62.1-44.15:5E). Based upon the U.S.G.S. summary of existing data to date, it appears that there is some degree of intermixing of surface-water flow between HUCs 03010205 (Dismal Swamp Basin), 02080108 (lower Chesapeake Bay/Hampton Roads), and 02080208 (Nansemond River/Elizabeth River Basin). Given the potential existence for overlapping watersheds in the Tidewater area, those portions of HUCs 02080108 and 02080208 south of the James River will be considered to overlap with 03010205 for purposes of mitigating VDOT and locality projects of less than one acre, as discussed above. The purchase of credits from a bank meeting these criteria can then be allowed as a condition of the VWP permit.