



COMMONWEALTH of VIRGINIA

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James S. Gilmore, III
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MEMORANDUM

Division of Water Program Coordination
Office of Water Permit Programs

SUBJECT: GUIDANCE MEMORANDUM 00 - 2003
Wetland Compensation Ratios

TO: Regional Directors

FROM: Larry G. Lawson, P.E.

A handwritten signature in black ink, appearing to read "Larry G. Lawson".

DATE: February 1, 2000

COPIES: Regional Permit Managers, Regional Compliance and Enforcement Managers, VWPP Supervisors, Mary Jo Leugers, Martin Ferguson, Richard Ayers, Joe Hassell, Ellen Gilinsky, Tracey Harmon

On October 30, 1997 Governor George Allen signed The Chesapeake Executive Council's Directive No. 97-2 that directed Virginia "to develop strategies to achieve the protection and preservation of the Bay's wetland resources". In his Plan for Action on Virginia's Environment in the 21st Century, Governor James Gilmore made a commitment to establish a wetland program with the objective of "reversing Virginia's long-term loss of wetlands." On the subject of wetland compensation ratios, Secretary of Natural Resource John Paul Woodley's February 3, 1999 memorandum to DEQ Director Dennis Treacy stated that "Higher ratios may be justified when wetlands of high functional quality are destroyed, when impacts occur within the Chesapeake Bay watershed, or when impacts are of substantial significance".

In terms of compensating for wetland impacts, on most projects the Corps uses their Branch Guidance, and we will probably agree with the compensation. The Corps Branch Guidance contains a range of mitigation ratios, but generally requires 2:1 compensatory mitigation for forested wetland impacts; 1.5:1 compensatory mitigation for scrub/shrub wetland impacts; and 1:1 compensatory

mitigation for emergent wetland impacts. According to the Corps guidance, compensatory mitigation is generally in the form of wetland creation or wetland restoration.

This guidance is presented to assist the staff in determining when it is appropriate to require higher ratios, in accordance with the above-stated directives. This guidance is for general applications and does not cover complex situations, such as when mixtures of wetland preservation and enhancement are combined with restoration or creation to form the total compensatory mitigation package. Case by case determinations will still need to be made, using the guidelines presented here as a framework. Please contact Ellen Gilinsky, Virginia Water Protection Permit Program Manager, at 804-698-4375 with any questions about the application of this guidance.

For guidance purposes, it is acceptable to require higher compensatory mitigation ratios than the Corps in the situations listed below:

1) If the Corps does not require compensation for wetland impacts on a project that requires an individual permit.

In this unusual situation we recommend the compensatory mitigation be a minimum of 2:1 for forested impacts, 1.5:1 for scrub/shrub impacts, 1:1 for emergent impacts. This does not mean we will seek out small projects that fall below the notification thresholds, nor does it mean that we will issue permits for projects that receive Nationwide Permits on which DEQ has waived Section 401 Water Quality Certification.

2) When the impact is located in the Chesapeake Bay drainage and the proposed mitigation is outside the Chesapeake Bay drainage.

The Chesapeake Bay watershed is any area in Virginia located in a USGS Hydrologic Unit that begins with 02 (excepting 02080110 and 02060010, the Eastern Shore's Atlantic Ocean drainage). VWPP law prohibits the use or purchase of wetland mitigation bank credits outside of the Chesapeake Bay watershed to mitigate for Bay impacts. An exception to this law applies to linear transportation projects and locality projects for localities whose jurisdiction crosses river watersheds where the impact occurs in HUC Codes 02080108, 02080208 or 03010205. If there is no practical same basin mitigation alternative, the impacts are less than 1 acre, and there is not significant harm to water quality or fish and wildlife resources, mitigation can be provided in those watersheds provided it is in-kind and is as close as possible to the impact. Therefore off-site mitigation could legally occur outside the Bay drainage if not considered part of a wetland mitigation bank.

In order to encourage mitigation to remain within the Bay drainage whenever practicable, we recommend that compensatory mitigation could be as high as 10:1 for forested impacts, 7.5:1 for scrub/shrub impacts and 5:1 for emergent impacts. We have essentially multiplied the branch guidance ratios by a factor of five. The ratios serve as a disincentive to mitigating Bay impacts outside the Bay, which will help Virginia comply with the Chesapeake Executive Council Directive 97-2. If the applicant can demonstrate that no practicable within basin alternative exists, then branch guidance ratios should remain in effect.

3) When the Corps of Engineers accepts upland preservation as compensatory mitigation for wetland impacts without clear justification of water quality benefits.

Upland preservation may be appropriate in certain circumstances, in combination with other forms of mitigation: (1) if the upland buffer protects a unique habitat or high value resource or the water quality of created wetlands; or, (2) if the buffer is adjacent to Waters of the United States and is threatened by disturbance from grading, silvicultural or agricultural activities that would result in a decrease in water quality or integrity of adjacent wetland resources. At times, the Corps may give credit for compensatory mitigation by the preservation of uplands with no clear benefit to water quality. In these cases, DEQ may recommend additional compensation in the form of creation, restoration or preservation to offset the discount that the applicant has received, by virtue of the upland credit, from the traditional Branch Guidance ratios of 2:1, 1.5: 1 and 1:1 for forested, scrub/shrub and emergent wetland impacts, respectively. As an example, suppose the applicant has 1 acre of forested impacts. Normally this would require 2 acres of creation. Suppose the Corps has accepted as mitigation 1 acre of creation and a certain amount of upland preservation. The discount created by the upland preservation from the traditional 2:1 ratio is 1 acre. The DEQ could ask for another acre of creation or restoration to bring the mitigation package up to the traditional 2:1 ratio.

4) When the Corps compensatory mitigation package overly relies on wetland preservation.

At the appropriate ratios, wetland preservation is an acceptable form of mitigation. In theory, existing wetlands are protected and preservation is not needed, but with the Tulloch and Wilson cases we know that existing wetlands are not always fully protected and preservation has some ecological value. The recommended standard for including wetland preservation in the compensation package is that preservation should not produce a net loss of wetlands, nor should preservation be too highly valued compared to actual restoration or creation of wetlands. Our general standard for preservation in compensation packages is that 10 acres of preserved wetlands is equivalent to 1 acre of restored or created wetlands.

As an example suppose a permittee impacts 1 acre of forested wetlands. The traditional Corps Branch guidance recommends 2 acres of restoration or creation. The permittee offers 1 acre of restoration and 10 acres of preservation. This would be acceptable. The combination of 1 acre of restoration and 10 acres of preservation meets our general recommendation that preserved wetlands not receive the same amount of credit as created or restored wetlands. This also has the net result of creating and preserving the equivalent of 2 acres of wetland for the 1 acre impact. If the Corps mitigation package does not achieve no net loss, or if the preservation acreage is valued excessively, then permit managers should seek sufficient additional creation or restoration, or additional preservation, so that there is no net loss of wetland acreage.

5) When unique or high value wetlands are being impacted.

There are certain significant wetland types that would fit Secretary Woodley's instruction to seek higher mitigation ratios for wetlands of higher functional value and or when impacts are of substantial significance. Examples of such wetlands or impacts include: vernal pools; non-tidal wetlands with wetter hydrologic regimes, i.e. those designated C (seasonally flooded), E (seasonally flooded saturated) or F (semi-permanently flooded) on the Cowardin Scale; tidal wetlands that are seasonally flooded (designated R on the Cowardin Scale); wetlands within 5 miles upstream of a public water supply intake that provide a buffer to water supply quality (for reference the Health Department does not allow discharges within 5 miles upstream of an intake); wetland swamps with overstories dominated by Atlantic White Cedar, Bald Cypress or Water Tupelo; wetlands that include known habitat for threatened or endangered species; or wetlands adjacent to impaired waters where the impairment was caused or contributed to by the loss of wetlands (such that restoration of wetlands will result in water quality improvements).

The functions performed by these significant wetland types are often difficult or impossible to recreate. Therefore, in these cases we recommend that compensatory mitigation ratios be 3:1 for forested impacts; 2.25:1 for scrub/shrub impacts; and 1.5:1 for emergent impacts (i.e., the Corps Branch Guidance ratios multiplied by a factor of 1.5).

6) When on-site mitigation is practicable and would provide ecological and water quality benefits but the applicant is mitigating off-site for convenience.

Practicable means capable of being done after taking into consideration cost, existing technology and logistics in light of overall project purposes. In general on-site mitigation is often preferable to ensure minimal loss of on-site wetland functions, including habitat and water quality functions. If off-site wetland mitigation is indicated for lack of space, proper soils, or hydrology; or if cost and logistics are prohibitive; or if on-site mitigation provides no ecological or water quality benefits, then the traditional branch guidance ratios are acceptable. Otherwise, if the permittee wishes to go off-site for convenience, then a higher mitigation ratio may be indicated. This requirement is an incentive to keep the wetland functions, particularly the water quality functions, from being removed from the water body that is being directly impacted by the project. In these cases we recommend that compensatory mitigation ratios be 3:1 for forested impacts; 2.25:1 for scrub/shrub impacts; and 1.5:1 for emergent impacts (i.e., the Corps Branch Guidance ratios multiplied by a factor of 1.5).

7) When the permittee intends to use a wetland mitigation bank that relies heavily on preservation of wetlands and/or uplands over creation and restoration of wetlands.

DEQ supports the use of wetland mitigation banks when on-site mitigation is not practicable. However, at times the credit formulas used to establish the bank may not support the goals of compensatory mitigation with regard to the replacement for wetland losses for a particular project. Examples of this could be if the bank credit formula gives excessive credit for upland preservation

or wetland preservation over creation, restoration and enhancement. In general we recommend that 10 acres of preserved wetlands constitute 1 acre of wetland credit and that credit for upland preservation that provides a water quality benefit be at ratios from 15:1 to 20:1 depending upon the benefits derived.

The determination of how many credits to ask for in these cases would vary depending on the bank's credit formula and the percentage of bank credits derived from creation and restoration versus preservation. The idea of an adjustment would be to bring mitigation up to traditional Branch Guidance ratios to achieve no net loss of wetlands by eliminating whatever credit had been gained from over-valuing preservation or crediting upland preservation in the credit formula.

8) When higher mitigation ratios are required by the State Water Control Board as a result of public hearing and case decision on a draft permit.

The SWCB will determine the appropriate ratio in these cases.

9) When additional mitigation is required to settle an enforcement action.

This is a case by case decision but in general at a minimum we would seek mitigation commensurate with the Branch Guidance ratios, i.e. 2 acres for an acre of forested impacts, 1.5 acres for an acre of scrub/shrub impacts and 1 acre for an acre of emergent impacts.

DISCLAIMER

This document provides procedural guidance to the permit staff. This document is guidance only. It does not establish or affect legal rights or obligations. It does not establish a binding norm and is not finally determinative of the issues addressed. Agency decisions in any particular case will be made by applying the State Water Control Law and the implementation regulations on the basis of the site specific facts when permits are issued.