

APPENDIX A

**NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
CORRESPONDENCE**



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Division of Land Use Regulation
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BOB MARTIN
Commissioner

November 17, 2014

Ms. Ann Marie DiLorenzo
Department of the Army
New York District Corps of Engineers
Jacob K. Javits Federal Building
New York, NY 01278-0090

Dear Ms. DiLorenzo:

This letter is intended to explain the method that the State of New Jersey has been using to determine the appropriate amount of mitigation required when wetlands are filled, or otherwise permanently altered by any project. For your information, our methodology is accepted by, and also used by our Federal partners (the Army Corps of Engineers Regulatory Branch, U.S. Fish and Wildlife Service, EPA, and National Marine Fisheries Service) when we undertake combined State/Federal mitigation projects.

I re-examined the Habitat Evaluation Procedures (HEP) to determine how, or if, it could be applied for the purposes of determining appropriate wetland mitigation. Although the U.S. Fish and Wildlife Service mentions that it could be used for determining "compensation" it focuses on wildlife species habitat and the replacement of "habitat units." While wetlands provide wildlife habitat, they provide many other functions and values that are not addressed or incorporated into the HEP evaluation process which is why it is not appropriate for use in this context.

You stated that you are required to make a functional assessment to determine how much mitigation is required. This is consistent with both State and Federal rules. However, after extensive field evaluation of several different functional assessment models, the Department and its Federal partners have determined that these models rely heavily on personal experience, even when properly applied (by a group and not an individual). Because we could not find a functional assessment model that provided consistent results, New Jersey moved to a ratio approach for determine adequate mitigation quantity as a surrogate for functional assessment.

The ratio method assumes that the loss of a wetland always merits at least one to one replacement, regardless of whether it is of "high" or "low" functional value. Additional mitigation, beyond the one to one, is almost always required and the additional amount depends upon the wetland mitigation method proposed, as described below:

Creation is defined as taking an area that never was a wetland, and creating wetlands. The Department requires mitigation at a 1:1 ratio for creating coastal wetlands and at a 2:1 ratio for freshwater wetlands. The difference relates to hydrology which is easier to achieve in a tidal system then in a freshwater system. Also, where creation has been attempted for freshwater wetlands, it is usually less than 50% successful. Thus we require twice the amount of mitigation assuming that at a minimum the project will replace the lost wetland resource.

Restoration (also known as re-establishment) means taking an area that does not currently meet the definition of a wetland, but that once did, and restoring it to wetland conditions. The Department requires mitigation at a 1:1 ratio for restoring tidal wetlands and at a 2:1 ratio for freshwater wetlands. Again, the

difference is that hydrology is the key to restoring these areas, and as discussed above under “creation” it is often easier to successfully reintroduce to an area tidal hydrology than freshwater hydrology.

Enhancement (also known as rehabilitation) is defined as taking an area of existing wetlands that is not fully functional and of “low” ecological value, and enhancing it to make it more functional and to raise the overall ecological value. Because wetlands may vary greatly on the need for enhancement, the credit given depends upon the amount of ecological improvement that is proposed for a specific wetland system. If you begin with a mostly functional wetland and proposed minor improvements (for example, hand removal of invasive species with supplemental planting), the required ratio may be 10:1 (that is, you will be required to enhance 10 acres for each acre of wetland impact). If you begin with a mostly dysfunctional wetland, and must alter hydrology, enrich soils and do extensive replanting in order to make it functional, the required ratio is 3:1. We have also given credit ratios between those two for activities that fall somewhere in between. The reason for ratios in excess of 1:1 is that filling completely removes a wetland from the ecosystem while enhancement improves an existing wetland but does not contribute to “no net loss” of wetlands.

Preservation means taking a wetland of high ecological value that is under imminent threat and preserving it by placing a permanent conservation restriction on it. The Department requires that 27 acres of wetlands be preserved for every acre of wetland impacts (27:1). The reason for this high ratio is that filling completely removes a wetland from the system, while preserving an existing wetland, regardless of how high value, does not contribute to “no net loss” of wetlands.

I hope this helps you to better understand the method that we have been using to determine how much mitigation is sufficient to replace wetlands lost to legal permitting, and why the Department is not satisfied with the use of HEP or with a proposed mitigation ratio for the South River project of less than 2:1. The State’s method represents several years of experience and evaluation of how to make mitigation requirements consistent, predictable, and ecologically relevant.

Please note that you may also consult with the local Army Corps of Engineers - Regulatory Branch for further guidance on acceptable means of calculating the amount of mitigation necessary in order to satisfy the Department’s specific mitigation requirements. If you have any additional questions, feel free to contact me at Susan.Lockwood@dep.nj.gov or at (609)984-0580.

Sincerely,



Susan D. Lockwood
Environmental Specialist 4