

October 29, 2001

Janis Hoagland, Esq.
DEP Docket # 17-01-08/276
Office of Legal Affairs
NJDEP
PO Box 402
Trenton NJ 08625-0402

RE: Proposed Amendments to the Freshwater Wetlands Protection Act Rules
NJAC 7:7A-4.3, 5.6 and 5.27

Dear Ms. Hoagland:

Thank you for this opportunity to review and comment on the proposed amendments to the Freshwater Wetlands Protection Act Rules. The Stony Brook-Millstone Watershed Association supports the efforts of the New Jersey Department of Environmental Protection (NJDEP) to solicit public input, and in general we support the newly adopted regulations. However, we remain concerned over the State's new mitigation policy, which encourages the small wetland mitigation projects (less than one acre) to use the limited number of mitigation banks in the State. Our Watershed Association is concerned that the beneficial functions of wetlands, including providing flood control, improving water quality, and providing habitat, will be lost in headwater areas and areas where land may be expensive because of the lack of mitigation banks in these areas. We continue to support the position that wetland mitigation, in the form of wetland acquisition or enhancement or recovery, should be directed as close to the area of wetland loss as is possible.

With regard to the current proposed amendments, the Stony Brook-Millstone Watershed Association supports the efforts of the NJDEP to provide further protection of vernal habitats. Based on existing records, the greatest loss of wetlands in New Jersey occurred under General Permit 6, which allowed developers to fill isolated wetlands less than one acre in size, which potentially could have been vernal pool habitats. Vernal habitats are especially valuable for conservation of biodiversity because of their isolated nature and unpredictable flooding selects for species particularly adapted to such rigorous conditions, resulting in an endemic flora and fauna (Baskin, 1994). Some vernal habitats support rare plants, in addition to serving as amphibian breeding sites. Especially in the coastal plain where there may be sandy soils and fluctuating water levels, and where in dry years there is a profusion of plants on the exposed shores (Tiner, 1988). Because of the variable nature of the hydrology of such pools, with the duration of flooding and the length of the dry period, there is a

winnowing down of the number and type of species that are able to survive these conditions. Thus, these sites are more likely to support threatened and endangered species, not only of amphibians and reptiles, but also of arthropods and plants (Colburn, 2001).

We offer the following recommendations to strengthen the proposed amendments and the NJDEP Vernal Pool Protocol:

1. Funding and Program Support

We congratulate the NJDEP for implementing the Vernal Habitat Certification List and the identification of 4,200 vernal pools registered on the NJDEP website through GIS Mapping. However, we share a concern with other environmental groups that the NJDEP current resources may be inadequate to survey potential sites and expand the list of certified sites throughout the State prior to the submission of permit applications, in recognition of the fast pace of development the State has experienced. Under these new regulations, the Department will be further tasked to 1) expand the list of certified vernal pools; 2) evaluate vernal pool applications submitted by developers or interested citizens; and 3) expand the review of an increased number of Individual Permits for sites identified with vernal habitats.

Recommendation: The Department's efforts to identify threatened and endangered species, such as reptiles and amphibians that might require vernal pool habitat, should be supported by a) additional program funding; b) reliance on professional consultants contracted by the state; and/or c) require that consultants hired by property owners and/or developers complete the vernal pool documentation for all delineated isolated wetlands.

2. Certifying Vernal Pools - Use of this Protocol in the Freshwater Wetland Permit Program (at 4-5)

The protocol explains that the restrictions for general permits only apply if sites are identified on a "Certified List of Vernal Habitats." The NJDEP Summary of changes dated September 4, 2001 states, "*if an area is not on the list, the Department will presume that the area is not a vernal habitat.*" This presumption is likely to exclude a substantial majority of actual vernal habitats in New Jersey. This presumption provides no incentive for property owners or developers and their consultants to document vernal pool habitats that could ultimately be economically disadvantageous to them.

Recommendation: NJDEP should reverse the "presumptive basis" of the certification policy, and consider all isolated wetlands as documented by the property owners or their consultants as potential vernal pools. When in the course of delineating wetlands on a site, isolated wetlands are identified, the NJDEP should place the burden on the developers or property owners to complete the vernal pool application and demonstrate that the isolated wetland is not suitable as a vernal pool habitat.

3. Documenting a Vernal Pool Habitat for Certification

The protocol to apply and place sites on the NJDEP "certified list of vernal habitats" includes some of the following provisions:

- Confirmation of the 4 characteristics of vernal pools – including photographs and completion of the Vernal Habitat Data Sheets,
- Metes and bounds descriptions,
- Compass bearings,
- Aerial photographs,
- Professional survey or GPS coordinates, and
- Weekly log book entries to support observations of ponded water for at least two contiguous months between March and September.

These requirements are onerous for volunteers. Currently, public volunteers are involved in the Department’s Herpetile Atlas Project, and while this is valuable from a public education viewpoint, it is inadequate as a regulatory tool for protection of vernal pools. In addition, these interested volunteers may not have access to the sites in question to provide sufficient documentation under the vernal habitat protocol, prior to permit applications.

Recommendation:

These required protocols are designed for implementation by professionally certified wetland ecologists, not volunteers, and can be readily included in the wetland delineation process. Therefore, the NJDEP should require developers or property owners to complete the vernal pool application and demonstrate that delineated isolated wetland are not suitable as a vernal pool habitat. The NJDEP should require that in order to satisfy the protocol, the survey shall only be done within the period from March to September.

4. Appendix 1 (of N.J.A.C. 7:7A) of Obligate or Facultative Species

There are some minor discrepancies that should be clarified between Appendix 1, the list of Obligate or Facultative Species published with the adopted Rules on September 4, 2001, and the Vernal Habitat Data Sheets published on the NDJEP website on September 26, 2001. NJDEP must clarify which is the appropriate reference list.

- a. We commend NJDEP for including invertebrate species that are dependent on vernal pool habitats such as fairy shrimp, as an Obligate Species in the Data sheet. However, these invertebrates were not listed in Appendix 1 of the Adopted Rules.
- b. Appendix 1 lists 19 Facultative Species but the Data Sheet lists 28, including three snake varieties and three invertebrate species.
- c. The NJDEP Amendment Proposal Summary (September 4, 2001 at 3) references *five* endangered species. However, Appendix 1 of the Adopted Rules only identifies *four* endangered species. NJDEP should clarify whether the Jefferson Salamander, is possibly, an endangered species.

5. Vernal Pool Preservation and Transition Areas - Section 7:7A-4.3(b)16

Preserving the ecological integrity of vernal habitats depends not only on keeping intact the immediate vernal pools themselves, but also preserving the surrounding uplands. “Northeastern

vernal pools are typically located in woodlands. These wooded uplands are essential to maintain pool hydrology, temperature, and water chemistry, and the contribute leaves and other detritus to the pool food web. Most importantly, the woodlands provide critical habitat for many species of vernal pool wildlife... The total number of species in an area containing a group of vernal pools is greater than the number of species in even the most diverse single pool.” (Colburn, 2001)

Recommendation: “Conservation of vernal pools and vernal pool wildlife requires a new paradigm that considers these pools as parts of the overall woodland ecosystem, not as isolated aquatic habitats. Conservation must ensure connectivity. To allow species to move among pools and breed.” (Colburn, 2001)

The Association commends NJDEP on the language in Section 7:7A-4.3(b)16 that prohibits the use of any general permit in a vernal pool habitat or in a transition area adjacent to a vernal habitat. However, we suggest that this section be expanded to clarify the width of the transition area adjacent to a vernal pool. These habitats are of exceptional value based on their essential use as breeding sites for endangered and threatened species. In addition, preserving the surrounding woodlands is also essential to maintain the functions and connectivity of the pools, as noted above. Therefore, the transition areas for all vernal pool habitats should be clarified as a 150 feet width.

6. NJAC 7:7A-5.6(b) General Permit 6 – Non-tributary wetlands

The NJDEP summary states that General Permit 6 is the general permit that has historically accounted for the greatest loss of wetland acreage in New Jersey. Therefore, the language for this permit needs to be undeniably clear. The Association recognizes that activities under a General Permit 6 shall not disturb more than one acre, cumulatively, but the proposed language does not make that clear.

The September 4, 2001, proposed language states:

(b) Activities under general permit 6 shall be limited as follows:

1. The activities shall disturb no more than one acre of a freshwater wetland, and /or State open water, which is not a water of the United States as defined by N.J.A.C. 7:7A-1.4;
2. The activities shall disturb no more than one acre of a transition area; and
3. The activities shall disturb no more than one half acre of a freshwater wetland and /or State open water, which is a water of the United States as defined by N.J.A.C. 7:7A-1.4.

Recommendation: The NJDEP summary states that the intent of the proposed amendment is to reduce the acreage of disturbance authorized by General Permit 6 and to ensure compliance with the Federal 404 program. The Association recommends replacing the word “and” with the word “or” at the end of numbered item 2 and adding the word “or” at the end of numbered item 1 to ensure that more than one acre is not disturbed under a General Permit 6 cumulatively.

7. NJAC 7:7A-5.27 (c) General Permit 27 – Redevelopment of previously disturbed areas

The Association recognizes that activities under a General Permit 27 shall not disturb more than one acre, cumulatively, but the proposed language does not make that clear.

The September 4, 2001, proposed language states:

(c) Activities under general permit 27 shall be limited as follows:

1. The activities shall disturb no more than one acre of a freshwater wetland, and /or State open water, which is not a water of the United States as defined by N.J.A.C. 7:7A-1.4;
2. The activities shall disturb no more than one acre of a transition area; and
3. The activities shall disturb no more than one half acre of a freshwater wetland and /or State open water, which is a water of the United States as defined at N.J.A.C. 7:7A-1.4.

Recommendation: The proposed language for the General Permit 27 could be clarified to ensure that more than one acre of wetlands is not disturbed. The Association recommends replacing the word “and” with the word “or” at the end of numbered item 2 and adding the word “or” at the end of numbered item 1 to ensure that more than 1 acre is not disturbed under a General Permit 27 cumulatively.

In conclusion, the National Academy of Sciences has recently announced a National Research Council study on wetlands mitigation. According to the study: “By the 1980's the wetland area in the contiguous United States had decreased to approximately 53% of what it had been in the 1780's... The goal of no net loss of wetlands in not being met for wetland functions by the mitigation program, despite progress in the last 20 years”

We especially agree with two of their findings:

- ✓ “A strong preference for compensation as near the permitted impact site as possible and for the same wetland type and functions.”
- ✓ “Avoidance is strongly recommended for wetlands that are difficult or impossible to restore, such as fens or bogs.”

Vernal habitats fall in the category of wetlands almost impossible to duplicate or replace. Therefore we should do everything possible to keep them undisturbed. Thank you again for this opportunity to comment.

Sincerely,

Dr. Robert Tucker
Director of Research

References:

Baskin, Y., Bioscience 44: 384-388 (1994).

Colburn, B.A., Small Pools Close Up: Examining Vernal Pools of the Northeast, National Wetlands Newsletter 7 (Env. Law Inst. 2001).

National Research Council, National Academy of Sciences.

Tiner, R.W., In Search of Swampland 71 (Rutgers Univ. Press 1998).