

COB

STATE OF VERMONT
WATER RESOURCES BOARD

Re: Dorset Marsh, Town of Dorset
Petition for Reclassification
Docket No. WET-90-03

10 V.S.A. § 905 (7)-(9)
Vermont Wetland Rules

Decision

On the basis of its record in this proceeding the Board at its meeting on January 8, 1992, decided to reclassify Dorset Marsh to a Class I wetland and to establish a 100 foot buffer zone. The basis for this decision is explained below.

Procedural History

On December 27, 1990, the Water Resources Board (Board) was petitioned by the Dorset Citizens for Responsible Growth (petitioners) to reclassify a wetland known as Dorset Marsh from a Class II to a Class I wetland and to expand the buffer zone from 50 feet to 100 feet. This petition was filed under the provisions of Section 7 of the Vermont Wetland Rules (Rules). These rules were adopted February 7, 1990. Class I wetlands are defined in Section 4.1(a) of the Rules as "... wetlands that in and of themselves, based on an evaluation of the functions in Section 5, are exceptional and irreplaceable in their contribution to Vermont's natural heritage..."

The Board gave public notice of this petition on January 11, 1991, providing for a 30-day public comment period. On March 18, 1991, the Board gave notice of a public hearing scheduled for April 3, 1991.

The Board, through hearing referees, conducted a public hearing in the Town of Castleton, Vermont, on April 3, 1991, to consider the merits of the petition. Based on written comment and testimony at the hearing, the Referees issued their Preliminary Findings for public review and comment on June 19, 1991, in accordance with Rule 4 of the Board's Rules of Procedure.

On the basis of comments received in response to the Preliminary Findings, it became apparent to the Board that the petitioners assumed that the requested 100 foot buffer zone would be issued automatically if Dorset Marsh were reclassified to a Class I wetland and, therefore, did not provide supporting evidence that a 100 foot buffer zone was necessary. The Board, however, interprets Sections 4.3 and 7.4(b) of the Rules to provide that a

100 foot buffer zone would be created when a wetland is designated Class I if the Board is convinced that a larger or smaller buffer zone would not sufficiently provide the necessary protection of functions. Accordingly, on July 16, 1991, the Board gave public notice of a second hearing which was conducted on September 11, 1991, to consider further testimony on the issue of whether a 100 foot buffer zone should be created. The public comment period on this issue was extended to September 20, 1991.

Findings of Fact

1. Dorset Marsh has a surface area of approximately 200 acres. There are less than 100 wetlands in Vermont of this size. The Marsh is located between Route 30 and West Road in the Town of Dorset, Vermont.
2. Dorset Marsh is depicted on the Vermont Significant Wetland Inventory (VSWI) map No. 18C and, therefore, under Section 4.2(b) of the Rules, is protected as a Class II wetland.
3. Dorset Marsh provides excellent habitat for nesting and breeding of waterfowl, and has habitat to support migratory waterfowl as evidenced by the prevalence of wood duck, black duck, and mallards. The wetland has the habitat to support nesting marsh wren, pied-bill grebe and least bittern, as well as a multitude of songbirds.
4. Dorset Marsh supports four active beaver lodges, and populations of muskrat, mink and otter.
5. Dorset Marsh provides exceptional wildlife habitat diversity by virtue of its various wetland community types including open water, deep marsh, shallow marsh, shrub swamp, wooded swamp, and fen, of which the wooded swamp is the most dominant. Habitat diversity is directly related to wildlife species richness.
6. Dorset Marsh contains a variety of hydrophytic vegetation community types including those normally found in a deep marsh, shallow marsh, wooded swamp and open marsh.

7. Dorset Marsh supports a sedge meadow (fen) and hemlock swamp which contain uncommon hydrophytic vegetation communities. Dorset Marsh is one of five limy hemlock swamps in the state. Moreover, Dorset Marsh is considered to be one of the top 10 fens in Vermont. It is the only known wetland complex in Bennington County that combines shrub swamp, fen and hemlock swamp.
8. Dorset Marsh supports uncommon plant species including: showy yellow lady's slipper (Cypridpedium reginae); and small yellow lady's slipper (Cypridpedium parviflorum); and supports rare plant species including: water sedge (Carex aquatilis); and grass (Alopecures dequalis).
9. Dorset Marsh supports at least 150 acres of hydrophytic vegetation that provides for large wildlife populations, a high degree of successional stages of vegetation, and a relatively secluded, undisturbed inner area of the wetland.
10. Dorset Marsh is the fifth largest wetland in Bennington County. Dorset Marsh provides one of the richest hydrophytic vegetation habitats, and exhibits the best example of open sedge and cattail meadow in the County.
11. Swampacres Sanctuary was established in Dorset Marsh to research orchids. Species from the 20 acre Sanctuary were used to prepare study plates on native Vermont species and are currently used by botanists and students at the University of Vermont. The orchids from this Sanctuary are also the subject of books, articles and lectures.
12. Dorset Marsh is used by the Vermont Institute of Natural Sciences, the Vermont Natural Resources Council, the Dorset Citizens for Responsible Growth, the University of Vermont and local schools for educational purposes.
13. Dorset Marsh is the subject of environmental studies by Jerry Jenkins for the Nature Conservancy, Susan Shea, and H.W. Vogelman for the State of Vermont.
14. Wood ducks generally nest in tree cavities that are located within 200 yards of water. The availability of tree cavities can impact wood duck populations. Open water habitat exists

within 100 feet of the edge of Dorset Marsh and therefore, a 100 foot buffer zone could ensure the protection of those trees providing cavities within the 200 yard range and aid in the protection of wood duck populations within Dorset Marsh.

15. Approximately 87% of all mink dens are located within 150 feet of the high water mark of adjacent water bodies. The availability of suitable den sites may limit the ability of the habitat to support mink. A 100 foot buffer zone could ensure the protection of suitable den sites within the 150 foot range, and therefore aid in the protection of mink populations within Dorset Marsh.
16. Winter food for beaver (mostly tree bark) is critical to the survival of a beaver population. Studies indicate that beaver utilize trees mostly within 98 feet of the wetland edge, but have been known to travel up to 328 feet to find food. A 100 foot buffer zone could ensure protection of beaver feeding habitat within the 328 foot range, and therefore aid in the protection of beaver populations within Dorset Marsh.
17. No credible evidence was presented to indicate that a 100 foot buffer zone was not necessary to protect those functions that make Dorset Marsh a significant wetland.

Conclusions of Law

1. Dorset Marsh is a wetland and therefore the Water Resources Board has jurisdiction in this matter under 10 V.S.A. Section 905 (7)-(9) and the Vermont Wetland Rules.
2. Dorset Marsh, in and of itself, makes an exceptional and irreplaceable contribution to Vermont's natural heritage through its function as wildlife and migratory bird habitat.
3. Dorset Marsh, in and of itself, makes an exceptional and irreplaceable contribution to Vermont's natural heritage by providing important habitat for hydrophytic vegetation consisting of rare plant species and communities of plant species.
4. Dorset Marsh, in and of itself, makes an exceptional and irreplaceable contribution to Vermont's natural heritag by providing valuable resources for education and research ...

natural sciences.

5. The Board concludes that Dorset Marsh is exceptional and irreplaceable in its contribution to Vermont's natural heritage and therefore reclassifies Dorset Marsh from a Class II to a Class I wetland.
6. In accordance with Section 7.4(b) of the Rules, the Board decides on the size of a buffer zone for a significant wetland on the basis of the need to protect the values and functions sought to be preserved by the designation. Section 4.3 of the Rules provides that, absent evidence to the contrary, a 100 foot buffer zone adjacent to the boundary of a Class I wetland is presumed to be necessary to protect the functions and values of a Class I wetland.
7. The Board concludes that a 100 foot buffer zone is necessary to protect the wildlife habitat function of Dorset Marsh.

Dated in Montpelier, Vermont, this 22nd day of April, 1992.

Vermont Water Resources Board

By: Dale A. Rocheleau
Dale A. Rocheleau, Chair

Board Members Concurring:

Dale A. Rocheleau
Elaine B. Little
Stephen Reynes
Mark DesMeules

