This decision pertains to a petition filed with the Water Resources Board ("Board") by the Sunset Cliff Home Owners Association ("Petitioner") seeking 1) a temporary Class Two wetland designation of a wetland owned by the John J. Flynn Estate in the north end of Burlington ("Sunset Cliff Wetland") and; 2) the reclassification from Class Three to Class Two of the same wetland.

As explained below, the Board concludes that the Sunset Cliff Wetland does not meet the criteria in the Vermont Wetland Rules (VWR) for reclassification of a wetland from Class Three to Class Two.

I. PROCEDURAL BACKGROUND

On June 13, 2003, the Petitioner through its President, Roger Dorwart, P.E., filed with the Board a Petition for the Reclassification of the Sunset Cliff Wetland ("Petition") from Class Three to Class Two and a request that the Board issue a temporary Class Two designation for the Sunset Cliff Wetland. The Petition was filed pursuant to 10 V.S.A. § 905(7)-(9) and Section 7, VWR. As an organization in interest with 15 or more members, the Petitioner met the qualifications for filing a petition under Section 7.1, VWR.

On July 7, 2003, a Notice of Petition was sent to those persons required to receive notice, pursuant to Section 7.4(a), VWR. Moreover, a Notice of Petition was published in *Seven Days* on July 9, 2003, as required by Section 7.4(a), VWR. Interested persons were provided 30 days from the date of published notice to file written comments and any requests to participate in the hearing with the Board.

On August 8, 2003 the Department of Fish and Wildlife (Department) filed a comment on the Petition. In sum, the Department indicated that based on its review of the Petition and several visits to the site, it believed that the wetland is significant for
the functions of wildlife and migratory bird habitat (§5.4) and hydrophytic vegetation (§5.5). The Agency characterized the wetland as “important habitat and a haven for wetland dependant and non-wetland dependant wildlife in this increasingly developed area of Burlington.”

On August 19, 2003, the Board Chair, David J. Blythe, issued a Prehearing Conference Report and Order (“Order”) in this matter. The Order established September 9, 2003 as the date that a public hearing and site visit on the Petition and the request for a temporary Class Two wetland designation would be held.

On August 22, 2003, Keystone filed a Motion to Continue and Request for Modification of the Order (“Motion”). Keystone indicated in its Motion that it needed additional time to investigate the comments made by the Department and also additional time to consider other issues pertaining to the Petition and requested that the September 9, 2003 hearing be postponed to a new date and time to be determined by the Board. The Motion also continued Keystone’s objection to the request for a temporary Class Two wetland designation.

On August 28, 2003, in a Memorandum of Decision (“MOD”) the Board granted Keystone’s Motion to postpone the hearing and the Board temporarily reclassified the Sunset Cliff Wetland as Class Two pursuant Section 7.5, VWR, based primarily on the comment received by the Department on August 8, 2003. The MOD also scheduled a site visit to the Sunset Cliff Wetland on September 9, 2003. Following an objection to the temporary designation and request for oral argument filed by Keystone on September 2, 2003, the Board scheduled oral argument on the temporary designation for September 9, 2003. Based on the site visit and oral argument, on September 18, 2003 the Board issued a decision reversing the temporary designation.

Following oral notification by Keystone that it was ready to proceed with a hearing, a public hearing on the request to reclassify the Sunset Cliff Wetland was convened on December 2, 2003 at the Board’s offices in Montpelier, Vermont. Participating at the hearing was Cathy O’Brien, Wetland Consultant for the Petitioner; the Agency of Natural Resources (“ANR”) through Glen Gross, an ANR attorney; Carl Pagel, a wetland ecologist with the Department of Environmental Conservation; John Austin, a wildlife biologist with the Department of Fish and Wildlife; and Eric Sorenson, an Ecologist with the Nongame and Natural Heritage Program of the Department of Fish and Wildlife.

On December 18, 2003 the Board received a Summary of Landowner’s Response to Wetlands Reclassification Petition from Keystone. On December 24, 2003, the Petitioner filed with the Board a Response to Summary of Landowner’s
Response to Wetlands Reclassification Petition from Keystone that included an objection to the filing of the summary by Keystone and a request that the Board not consider Keystone’s filing. The Board considered both Keystone’s and the Petitioner’s filings in its deliberations on this matter.

The Board conducted deliberations on December 2 and 19, 2003 and January 9 and 13, 2004. On January 13, 2004, the Board made final revisions to a decision drafted by staff, officially closed the record in the proceeding, and voted unanimously to issue a decision.¹

II. BOARD’S AUTHORITY AND THE SCOPE OF THE PROCEEDING

Title 10 V.S.A. § 905(7) authorizes the Board to: “Adopt rules for the identification of wetlands which are so significant that they merit protection.” Section 905(7) also provides that:

Any determination that a particular wetland is significant will result from an evaluation of at least the following functions which the wetland serves:

(A) provides temporary water storage for flood water and storm runoff;
(B) contributes to the quality of surface and groundwater through chemical action;
(C) naturally controls the effects of erosion and runoff, filtering silt and organic matter;
(D) contributes to the viability of fisheries by providing spawning, feeding and general habitat for freshwater fish;
(E) provides habitat for breeding, feeding, resting and shelter to both game and nongame species of wildlife;
(F) provides stopover habitat for migratory birds;
(G) provides for hydrophytic vegetation habitat;
(H) provides for threatened and endangered species habitat;
(I) provides valuable resources for education and research in natural sciences;
(J) provides direct and indirect recreational value and substantial economic benefits; and
(K) contributes to the open-space character and overall beauty of the landscape.

¹ Board member Jane Potvin did not participate in the decision.
Title 10 V.S.A. § 905(8) authorizes the Board to “[a]ct on petitions, or on its own motion, to designate specific wetlands as significant, when considered under the criteria established in subdivision (7) of this section.” Title 10 V.S.A. § 905(9) provides, in relevant part, that the Board has authority to “[a]dopt rules protecting wetlands which have been determined under subdivision (7) and (8) of this section to be significant; provided, however, that the rules may only protect the values and functions sought to be preserved by the designation.”

In 1990, the Board adopted the Vermont Wetland Rules implementing its statutory authority to protect significant wetlands. VWR (adopted Feb. 7, 1990; eff. Feb. 23, 1990). Since 10 V.S.A. § 905(7)-(9) contemplated that only significant wetlands would be subject to State jurisdiction and protection, the Board adopted rules to help distinguish between wetlands that are functionally “significant” and those that are not.

The Board created a presumption that all wetlands identified on the National Wetland Inventory (NWI) Maps for the State of Vermont (1978), with certain noted exceptions, would initially be classified as Class Two “significant” wetlands. VWR, Section 4.2(B). However, in recognition of the inherent imperfections in the mapping system, the Board through the VWR established procedures to reclassify wetlands. VWR, Sections 5 and 7.

Under Section 7.1, a person in interest may petition the Board to, among other things: “[d]etermine whether to reclassify a wetland to a higher or lower classification” and “[d]etermine whether the size or configuration of a buffer zone associated with a significant wetland should be modified.” VWR, Sections 4.4 and 7.1(a),(c). This case-by-case approach to deciding a wetland’s functional significance and determining the appropriate protective buffer zone requires a functional analysis under Section 5 of the rules, which incorporates the eleven statutory criteria contained in 10 V.S.A. § 905(7). Accordingly, the Board is required to conduct this functional analysis in deciding whether to grant the petition to reclassify the Sunset Cliff Wetland to Class Two.

III. ISSUES

The Petitioner maintains that the Sunset Cliff Wetland should be reclassified from Class Three to Class Two because it is so significant that it merits protection under the VWR. Specifically, the Petitioner argues that the wetland is significant for the following functions under the VWR: 5.1 (water storage for flood water and storm runoff); 5.2 (surface and groundwater protection); 5.4 (wildlife and migratory bird habitat); 5.5 (hydrophytic vegetation habitat); 5.7 (education and research in natural
sciences); and 5.9 (open space and aesthetics). The Petition requests that the default 50-foot buffer provided in Section 4.3, VWR, be applied to the Sunset Cliff Wetland.

Keystone indicated that if the Board was inclined to reclassify the Sunset Cliff Wetland, it disagrees that a 50 foot buffer zone was required to protect the wetland. Keystone also disagrees with the Petitioner’s delineation of the wetland.

Accordingly, the Board must decide:

(1) Whether to reclassify the Sunset Cliff Wetland from Class Three to Class Two, based on an evaluation of its functions;

(2) What buffer zone(s) should be imposed to protect any functions that are significant; and

(3) Whether to delineate the boundaries of the Sunset Cliff Wetland.

IV. FINDINGS OF FACT

Based on the information contained in the record of this proceeding, including the Petition, and all written and oral public comment received, the Board makes the following findings of fact.

A. Description of the Wetland, its Characteristics, and Surroundings

1. The Sunset Cliff Wetland is located entirely within the City of Burlington, Vermont. It is located on a 40 +/- acre portion of land that is bounded on the east by properties on Curtis Ave., on the south by properties on Edinborough Drive, on the west by properties on Muirfield Road and Sunset Cliff Road, and on the north by Sunset Cliff Road.

2. The properties adjacent to the Sunset Cliff Wetland can be characterized as a densely developed residential area. The 40 +/- acre parcel that the wetland is situated on is one of the few parcels that does not contain residential development.

B. Performance of Wetland Function 5.1 (water storage for flood water and storm runoff)

3. During rain and snow melt events, water runs off from the more developed areas surrounding the Sunset Cliff Wetland into the wetland.
4. No information was provided to establish that the wetland makes an important contribution to reducing risks to public safety, reducing damage to public property, reducing downstream erosion, or enhancing the stability of habitat for aquatic life based on the capacity of the Sunset Cliff Wetland to store flood water and storm runoff.

C. Performance of Wetland Function 5.2 (surface and groundwater protection)

5. The Sunset Cliff Wetland contributes to some groundwater recharge and provides some filtration of pollution to surface water.

6. No information was provided to establish that the Sunset Cliff Wetland recharges a well head or aquifer protection area or Class I or Class II ground- or aquifer protection area or Class I or Class II groundwater area, contributes to flows of Class A surface waters or that the wetland is rated for nutrient retention and removal or for sediment trapping using the Wetland Evaluation Technique.

D. Performance of Wetland Function 5.4 (wildlife and migratory bird habitat)

7. Various forms of wildlife use the wetland and upland area on the site including deer, rabbit, fox, coyote, various species of amphibians, reptiles and birds.

8. Pools of water exist in the wooded area that have the potential to provide habitat for amphibians (including wood frogs, spring peepers and spotted salamanders). However, the pockets of water do not last long enough into the summer to have amphibians and reptiles complete their reproductive cycles and migrate from the wetland area.

9. American woodcocks feed in alder-dominated wetlands that have moist soils like those present in the Sunset Cliff wetland. American woodcock is a wetland dependent wildlife species.

10. While potential conditions exist in the Sunset Cliff Wetland to support habitat for American woodcock, American woodcock are unlikely to use any such habitat due to the fact that the surrounding area is densely populated by humans. American woodcock do not have a high tolerance for human activity and tend to abandon habitat that is in close proximity to significant development.

11. No American woodcock have been observed at the site.
12. The Sunset Cliff Wetland exhibits the following conditions that are indicative of habitat diversity as set forth in Section 5.4(e)(1), VWR: 5.4(e)(1)(a) three or more wetland vegetation classes (1/2 acre or greater in size) are present including shallow marsh, shrub swamp, and wooded swamp; 5.4(e)(1)(b) the dominant wetland vegetation class is a wooded swamp; 5.4(e)(1)(d) fifty percent or more of the surrounding habitat types are a combination of forest, old field, or open land; and 5.4(e)(1)(f) the wetland is within ¼ mile of an open water body, Lake Champlain.

E. Performance of Wetland Function 5.5 (hydrophytic vegetation)

13. The southern part of the Sunset Cliff Wetland contains Au Gres soils, which are relatively uncommon. The northern part of the wetland contains Covington soils that are fairly common.

14. The Sunset Cliff Wetland is a hardwood swamp that is acidic and that is associated with deep sandy soils laid down during Vermont’s post glacial period when the area was first a lake and then a salt water area at the mouth of the Winooski River.

15. It is unusual to find wetlands that occur in deep fine sandy soils - the Au Gres soils, such as those that exist in the Sunset Cliff Wetland. However, several other wetlands in the Burlington area also occur in Au Gres soils (for example, wetlands at Malletts Bay State Park, a wetland in an area known as Mt. Calvary Swamp, and a wetland in Colchester north of the drive-in movie theater).

16. The plant species in the Sunset Cliff Wetland are common. For example, red maple, cinnamon fern, skunk cabbage and green ash all exist in the Sunset Cliff Wetland and all are common plants in this area of Vermont. However, the combination of these plants, the Au Gres soils and the hydrology make the plant species community that occurs in the Sunset Cliff Wetland uncommon.

F. Performance of Wetland Function 5.7 (education and research in natural sciences)

17. There is no history of use of the Sunset Cliff Wetland for education or research.

G. Performance of Wetland Function 5.9 (open space and aesthetics)

18. While the Sunset Cliff Wetland is visible from the road, there are no special or unique aesthetic qualities of the wetland. The Sunset Cliff Wetland has been
pastured in the past and is a wooded area. These features blend in with the surrounding area and no feature of the wetland stands out as prominent.

V. CONCLUSIONS OF LAW

A. Classification of the Sunset Cliff Wetland

For a wetland to be reclassified from Class Three to Class Two, the Board must conclude that the wetland possesses at least one of the ten functional criteria outlined in Section 5, VWR. Re: Mt. Mansfield Co., Docket No. WET-02-08 (Feb. 2003). Based on the above findings of fact, the Board concludes that the Sunset Cliff Wetland is not significant for any of the functions set forth in the Vermont Wetland Rules such that it merits protection as a Class Two Wetland. Conclusions of law based on the functions that the Petitioner claims the wetland is significant for are set forth below:

1. Performance of Wetland Function 5.1

The Board finds that the wetland does serve some value for storing water during storm runoff. However, there was no information presented to indicate that the Sunset Cliff Wetland makes an important contribution protecting property, public safety and aquatic habitat from flood damage. Accordingly, the Board concludes that the wetland is not significant for function 5.1.

2. Performance of Wetland Function 5.2

The Board finds that the Sunset Cliff Wetland does provide some groundwater recharge and filtration of pollutants from surface waters. However, no information was provided that the wetland meets the criteria of 5.2 (a) - recharging a well head or aquifer protection area, a Class I or Class II groundwater area; 5.2 (c) - contributes to flows of Class A surface waters; or 5.2 (e) - is rated for nutrient retention and removal or for sediment trapping using the Wetland Evaluation Technique. Moreover, to the extent that the wetland reduces the level of contaminants in surface waters which recharge underlying or adjacent groundwaters (5.2(b)) or enhances or protects water quality through chemical action (5.2(d)), the record does not indicate that the Sunset Cliff Wetland performs these functions at a significant level. Accordingly, the Board concludes that the wetland is not significant for function 5.2.

3. Performance of Wetland Function 5.4

The key issue under function 5.4 is whether the wetland is significant for amphibian habitat under function 5.4(c), the presence of American woodcock as
In previous decisions, the Board has found that wetlands in proximity to human development may be significant for wildlife habitat functions and values and that proximity to human development does not diminish the need to protect or value those functions. See In re: Reclassification of Marble Works Wetland, Docket No. WET-94-03 (Oct. 20, 1995) and In re: Northshore Wetland, WET-02-03 (Sept. 19, 2000). The Board’s decision on the Sunset Cliff Wetland is distinguishable from these prior decisions in that the Board does not find that the Sunset Cliff Wetland is significant under function 5.4(a), VWR, as it did in both the Marble Works and Northshore determinations. Id. In this case, no credible evidence was presented to indicate that the Sunset Cliff Wetland is significant under function 5.4(a). Rather, evidence was presented that American woodcock is a wetland dependent wildlife species under function 5.4(e). Accordingly, the Board analyzed the significance of the wetland under function 5.4(e), which requires that a species of wildlife actually be present in the wetland rather than function 5.4(a)(1)-3, which analyzes whether habitat conditions exist to support migratory waterfowl and specific species of birds that are listed in the VWR under function 5.4(a)(4).

Finally, the Board finds that the Sunset Cliff Wetland meets four of the six criteria for habitat diversity in 5.4(e)(1) of the VWR. However, no credible evidence was provided that indicates this wetland meets the criteria for wildlife significance under any of the other subsections of function 5.4 other than 5.4(e)(1). Accordingly, while the wetland meets the minimum standards for habitat diversity, the Board cannot conclude that this particular wetland provides "important habitat for wildlife and
migratory birds” absent evidence that any other characteristics that indicate the wetland is significant for wildlife exist.

4. Performance of Wetland Function 5.5

The issue presented by function 5.5 is whether the Sunset Cliff Wetland provides “important habitat for hydrophytic vegetation consisting of rare plant species or communities of plant species that make an important contribution to Vermont’s natural heritage.” No evidence was presented that rare plant species exist in the wetland. However, ANR offered testimony that the Sunset Cliff Wetland represents a rare community of plant species. ANR indicated that it is unusual to find wetlands that occur in deep fine sandy soils, Au Gres soils, such as those that exist in the Sunset Cliff Wetland, with the plant species that are associated with such soil conditions.

The VWR, function 5.5, requires that the Board consider four factors in order to determine whether a rare community of plant species exist that makes a wetland significant. Examining the evidence presented against the criteria in function 5.5(a)-(d), the Board concludes that none of the criteria are met.

Under 5.5(a), a wetland must serve as the best example of any one of the following community types documented within a county: deep marsh dominated by rushes, deep marsh dominated by cattails, shallow marsh, shrub swamp, wooded swamp dominated by hardwoods, cedars or spruce/fir/tamaracks. No evidence was submitted that the Sunset Cliff Wetland is the best known example of one of these community types within Chittenden County. Similarly, because there was no evidence presented that this wetland provides habitat for rare species of hydrophytic vegetation (VWR 5.5(b)), or contains one or more species that are at their range limits (VWR 5.5(c)), or contains disjunct plant species (VWR 5.5(d)), the Sunset Cliff Wetland does not meet the criteria for significance in functions 5.5(b) -5.5(d) either.

In sum, the Board finds that the community of plant species identified by ANR is interesting and uncommon. However, because none of the criteria in functions 5.5(a)-(d) are met, the Board concludes that the Sunset Cliff Wetland is not significant for function 5.5.

5. Performance of Wetland Function 5.7

There is simply no evidence that the wetland has ever been used for scientific or educational purposes. Moreover, the wetland does not have any characteristics that potentially make it unique or valuable for education or scientific research.
purposes. Accordingly, the Board concludes that the wetland is not significant for function 5.7.

6. **Performance of Wetland Function 5.9**

   There is no question that the site serves as open space surrounded by existing development. However, to be significant for function 5.9 the wetland, not the merely open site, must possess some unique aesthetic quality or value as open space or have prominence as a distinct feature in the landscape. The Board finds that the Sunset Cliff Wetland does not contain such qualities. Accordingly, the Board concludes that the wetland is not significant for function 5.9.

   **B. Buffer Zone Determination and Delineation**

   Because the Board has decided not to reclassify the wetland from Class Three to Class Two, there is no need to address the issues concerning the wetland buffer zone or delineation.

**VI. ORDER**

   On the basis of its record in this proceeding, the Board has determined that the Sunset Cliff Wetland shall not be reclassified from a Class Three wetland to a Class Two wetland.

Dated at Montpelier, Vermont, on this 23rd day of January, 2004.

   Water Resources Board

   /s/ David J. Blythe

   David J. Blythe, Chair

Concurring:
Lawrence H. Bruce, Jr.
Michael J. Hebert
John D.E. Robert