

State of Vermont
WATER RESOURCES BOARD

Re: Snowshed Pond and Mirror Lake
Nos. WET-05-03 and WET-05-04
(Consolidated)

ADMINISTRATIVE DETERMINATION
(Issued May 26, 2005)

A petition to reclassify a snow-making reservoir known as Snowshed Pond from Class Two to Class Three is treated as a petition to determine that Snowshed Pond is in fact not a wetland, and relief is granted on that basis.

A petition to determine that a constructed treated-effluent storage lagoon known as Mirror Lake is not a wetland is considered as a petition to reclassify Mirror Lake from Class Two to Class Three, and relief is granted on that basis.

I. Background

On January 14, 2005, Pioneer Environmental Associates (Pioneer), on behalf of Killington, Ltd. and SP Land Company, LLC, filed a petition (Snowshed Pond Petition) with the Water Resources Board (Board) asking the Board to reclassify an area depicted as a wetland on Vermont Significant Wetland Inventory (VSWI) maps from Class Two to Class Three. The mapped area at issue, known as Snowshed Pond, consists of a constructed pond, used primarily for snow-making, fire protection, and golf-course irrigation. Snowshed Pond is located on real property owned by the petitioners, SP Land Company, LLC and Killington, Ltd., in the Town of Killington in Rutland County, Vermont. The Snowshed Pond Petition includes a detailed description and analysis of Snowshed Pond.

Also on January 14, 2005, Pioneer, on behalf of Killington, Ltd., filed a petition (Mirror Lake Petition) with the Board seeking a determination that an area depicted as a Class Two wetland on VSWI maps is in fact not a wetland. The mapped area at issue, known as Mirror Lake, consists of a constructed treated-effluent storage lagoon located entirely on real property owned by the petitioner, Killington, Ltd., in the Town of Killington in Rutland County, Vermont. The Mirror Lake Petition includes a detailed description and analysis of Mirror Lake.

Pursuant to section 7.4.a of the Vermont Wetland Rules and Board Procedural Rule 22, the Board provided personal notice of both petitions to persons required to be so notified and published notice of these petitions in the *Rutland Herald* on January 24, 2005. As provided by the Board's personal and published notice of the petitions, and in accordance with section 7.4.a of the Vermont Wetland Rules, the deadline for submitting comments or requesting a hearing on these petitions was February 23, 2005. No comments or requests for a hearing were received by the February 23, 2005 deadline, and the Board did not determine on its own initiative that a

hearing would be necessary in these matters. However, following discussions with the Board's counsel, Pioneer filed supplemental information with regard to Snowshed Pond on February 24, 2005.

The Board initially deliberated on the petitions at its April 12, 2005 meeting in Killington, Vermont. At that meeting, the Board heard from Jeff Nelson of Pioneer on behalf of Killington and SP Land Company and District Wetland Ecologist Alan Quackenbush on behalf of the Wetlands Office of the Department of Environmental Conservation in the Vermont Agency of Natural Resources. Messrs. Nelson and Quackenbush agreed that Snowshed Pond is in fact not a wetland, explained the basis for their opinion to the Board, and asked the Board to treat the Snowshed Pond Petition as a request to determine that Snowshed Pond is not in fact a wetland. Pioneer originally filed the Snowshed Pond Petition as a request to reclassify Snowshed Pond from Class Two to Class Three because Killington had applied for and ANR had issued a conditional use determination for Snowshed Pond in 1997 based on the functions and values associated with Snowshed Pond's constructed features.

At the Board's April 12, 2005 meeting, Messrs. Nelson and Quackenbush further agreed that Mirror Lake is in fact a wetland but that it is not a significant wetland and offered their reasons for this conclusion. They asked the Board to treat the Mirror Lake Petition as a request to reclassify Mirror Lake from Class Two to Class Three and to grant relief to Killington on that basis. Mr. Nelson explained that Pioneer originally filed the Mirror Lake Petition as a request to determine that Mirror Lake is not a wetland because Mirror Lake contains treated sewage effluent.

On May 16, 2005, District Wetland Ecologist Alan Quackenbush filed a letter with the Board recommending that the Board determine that Snowshed Pond is a lake rather than a regulated wetland. In his May 16, 2005 letter, Mr. Quackenbush further recommended that the Board reclassify Mirror Lake from Class Two to Class Three. The Board resumed its deliberations in these matters at its May 24, 2005 meeting in Montpelier, Vermont. At that meeting, the Board decided to consolidate these matters for purposes of issuing its written decision. The Board may consolidate cases involving common questions of law or fact if doing so would be fair and efficient. *In re Morehouse Brook*, No. WQ-02-04, Prehearing Conference Report and Order (Sept. 20, 2002), *modified by In re Morehouse Brook*, No. WQ-02-04, Chair's Order (Oct. 18, 2002).

II. Facts

A. Snowshed Pond

1. Killington, Ltd. and SP Land Company own a constructed reservoir, about 7.2 acres in size, known as Snowshed Pond, in the Town of Killington, Rutland County, Vermont. Snowshed Pond is located at the headwaters of the East Branch on an unnamed tributary

of the Roaring Brook, south of Roaring Brook East Road, directly east of the Killington Resort Snowshed Base Lodge, and roughly 50 feet south of the Killington Resort Grand Summit Hotel.

2. Snowshed Pond is presently identified as a Class Two wetland on VSWI maps for the Town of Killington. National Wetland Inventory maps for the State of Vermont classify Snowshed Pond as POWZ (palustrine, open water, intermittently exposed/permanent). Snowshed Pond and its 50-foot buffer zone are located entirely on real property owned by Killington, Ltd. and SP Land Company.
3. Snowshed Pond was constructed in 1970 to 1971 to store water for snow-making. As originally constructed, Snowshed Pond provided 12 million gallons of storage. In 1986, Snowshed Pond was enlarged by excavating the bottom and perimeter to provide an additional 3 million gallons of storage capacity. In 1988, the storage capacity of Snowshed Pond was increased by 9 million gallons to a total normal storage volume of 24 million gallons, by raising the dam and the principal and emergency spillways.
4. In 1997 and 1998, the shoreline on the northern side of Snowshed Pond was straightened and filled in to accommodate the footprint of the Killington Grand Resort Hotel. This shoreline, approximately 190 feet and dominated by boulders and sparse vegetation, remains noticeably disturbed.
5. The current uses of Snowshed Pond include snow-making, fire protection, and golf-course irrigation.
6. The watershed size of Snowshed Pond is about 0.16 square miles. Surface flows into Snowshed Pond are limited to two small drainage ways. Snowshed Pond receives additional inflow from a culvert and two pipes. The culvert conveys waters diverted from Roaring Brook. One pipe carries water pumped from the Ottauquechee Reservoir and Woodward Reservoir, some four to six miles away. The second pipe conveys stormwater runoff.
7. Snowshed Pond empties into a boulder-lined basin at the toe of the impoundment. This in turn drains via two 18-inch culverts into an unnamed tributary of the East Branch of Roaring Brook. Toe drains fixed throughout the dam catch seepage.
8. A December 1, 1969 Order of the Board authorizing the construction of the original dam impounding Snowshed Pond describes the site of the proposed dam and impoundment as “a wooded swamp” and indicates that the dam would be located on an unnamed brook.
9. Snowshed Pond is presently not contiguous to any wetlands.

10. The hydrology of Snowshed Pond is now the result of an artificial and manipulated system. Water levels of Snowshed Pond fluctuate due to pumping from the reservoir. The maximum allowable drawdown is 12 feet. The actual maximum drawdown for the four years prior to the filing of the Snowshed Pond Petition ranged between 7.6 feet and 8.7 feet.
11. Wetland vegetation in Snowshed Pond is limited to the very edge of the shoreline and the banks.
12. The shallow waters of the northern sections are dominated by clusters of cattails (*Typha* sp.), which extend only a very short distance into the pond. Midslope species consist of goldenrod (*Solidago* sp.) and purple loosestrife (*Lythrum salicaria*). Some quaking aspen (*Populus tremuloides*) seedlings can also be found in this midslope area. Brambles and mowed grasses dominate the upper slopes.
13. To the west and southwest, cattails dominate the shallow water areas, although not as densely as along the northern shoreline. Reed canary grass (*Phalaris arundinaceae*) dominates the midslope areas, with occasional patches of goldenrod and bramble.
14. Most of the southern shore constitutes northern hardwood forest.
15. The dam, which makes up the entire eastern shore, is maintained as mowed grass.
16. Snowshed pond serves a number of wetland functions, namely water storage for flood water and storm runoff (VWR § 5.1), surface and groundwater protection (VWR § 5.2), open space and aesthetics (VWR § 5.9), and erosion control through binding and stabilizing the soil (VWR § 5.10). However, all of these functions are the result of the constructed and regulated characteristics of Snowshed Pond rather than any natural wetland processes.
17. Snowshed Pond would more appropriately be referred to as a lake or a reservoir than a pond. Snowshed Pond is generally deeper than two meters and has a steep shoreline with only a narrow fringe of wetland vegetation in some areas. Steep slopes, along with frequent drawdowns for snow-making with great fluctuations of water levels, do not favor the development of wetland characteristics in Snowshed Pond.
18. Snowshed pond lacks wetland hydrology and significant wetland vegetation.
19. Snowshed Pond is a lake or a reservoir rather than a wetland.

B. Mirror Lake

1. Killington, Ltd. owns a constructed treated-sewage effluent lagoon, about 3.42 acres in size, known as Mirror Lake, in the Town of Killington, Vermont. Mirror Lake is located roughly 150 feet west of the Killington Resort Wastewater Treatment Facility, to the north of East Mountain Road and south of the Killington Golf Course.
2. Mirror Lake is presently identified as a Class Two wetland on VSWI maps for the Town of Killington. National Wetland Inventory maps for the State of Vermont classify Mirror Lake as POWZ. Mirror Lake and its 50-foot buffer zone are located entirely on real property owned by Killington, Ltd.
3. Mirror Lake was constructed in 1972 for the principal purpose of treated-effluent storage. Mirror Lake was originally impounded by an earth fill dam that was about 278 feet long, 18 feet high, 109 feet wide at the base, and 10 feet wide at the top. The original storage capacity of Mirror lake was about 7.07 million gallons. In 1985 or 1986, Mirror Lake was enlarged by excavating its northwest corner, increasing Mirror Lake's storage capacity by about 3 million gallons. Adjustments to the spillway of the dam for Mirror Lake in 1990 increased the storage volume of Mirror Lake to 11.67 million gallons.
4. Mirror Lake receives a total of 0.42 mgd of treated effluent from three surrounding wastewater treatment facilities.
5. The only outlet from Mirror Lake directs the lagoon's treated effluent to a spray irrigation pump house.
6. Mirror Lake was constructed by placing an earth-fill dam on a Class B unnamed intermittent tributary of the Ottauquechee River. A constructed drainage ditch around the impoundment diverts this unnamed stream and most other surface water around the lagoon, thus feeding a stream below the dam. An October 17, 1972 Order of the Board authorizing the construction of the original dam impounding Mirror Lake describes the site of the proposed dam and impoundment as "a sparsely wooded marshy area." Data from a 1997 Seasonal High Ground Water Study of Mirror Lake prepared for Killington, Ltd. by Marin Environmental, Inc. indicates that groundwater may flow into Mirror Lake.
7. Mirror Lake's watershed extends to only about fifty feet from its shores.
8. Mirror Lake is not contiguous to any wetlands.
9. Mirror Lake supports various species of emergent wetland vegetation. The wetland vegetation in the northeastern and southeastern corners of the lagoon (near the ends of the

dam, which runs along the east side of the lagoon) is dominated by cattails (*Typha* sp.). In the southeastern corner, a cluster of emergent vegetation occupies about 800 square feet of the lagoon. A smaller band of emergent vegetation grows in about 200 square feet of the northeastern corner of the lagoon. The north shoreline and a portion of the west shoreline of Mirror Lake support cattails mixed with clusters of willow (*Salix* sp.) and sensitive fern (*Onoclea sensibilis*). Purple loosestrife (*Lythrum salicaria*), reed canary grass (*Phalaris arundinacea*), and brambles dominate the mid-slopes of these shores. Northern hardwood forest dominates the southwest slope of Mirror Lake beyond a narrow band of emergent vegetation that runs along the southwestern shoreline.

10. Mirror Lake is a shallow, constructed pond with persistent wetland vegetation, hydric soils, and wetland hydrology. Mirror Lake is an open water wetland regulated by the Vermont Wetland Rules.
11. Mirror Lake does not perform any of the wetland functions listed in section 5 of the Vermont Wetland Rules.

III. Analysis

To be regulated as a wetland under the Vermont Wetland Rules, an area must exhibit hydric soils, hydrophytic vegetation, and wetland hydrology. *See* VWR § 3.2.a (describing methodology for identifying and delineating wetlands). *See also* VWR § 2.29 (defining wetlands as characterized by hydric soils, significant vegetation or aquatic life, and wetland hydrology); VWR §§ 2.02, 2.14, 2.15, 2.31 (defining aquatic life, hydric soils, hydrophytic vegetation, and wetland hydrology, respectively). Thus, an area mapped as a wetland but missing one or more defining wetland characteristics is not a regulated wetland and may be removed from the VSWI maps. *See, e.g., In re Morrissey Pond*, No. WET-05-01, Administrative Determination (Mar. 7, 2005). The definition of wetlands specifically includes ponds. *See* VWR § 2.29.

Constructed wetlands are regulated by the Vermont Wetland Rules if they serve significant wetland functions. However, a mapped wetland is not a significant wetland and may be reclassified from Class Two to Class Three if the significant functions of the wetland are due to its constructed design rather than natural wetland processes. *See In re Styles Brook Reservoir*, No. WET-03-02, Administrative Determination (Aug. 7, 2003). *See also In re Luzenac America*, No. WET-95-01, Decision (Nov. 7, 1995) (ruling that talc settling ponds were not wetlands and noting that while these ponds protected surface water (a wetland function), they did so due to their design and construction rather than wetland processes).

The Board has reclassified constructed wetlands from Class Two to Class Three on numerous occasions. *See, e.g., In re Johnson State College*, No. WET-03-04, Administrative Determination (Sept. 26, 2003) (reclassifying wetland constructed on stream from Class Two to

Class Three); *In re Kwiniaska Golf Course*, No. WET-02-06, Administrative Determination (Jan. 7, 2003) (reclassifying constructed golf-course hazards from Class Two to Class Three); *In re The Orvis Company*, No. WET-01-06, Administrative Determination (Nov. 21, 2001) (determining that constructed casting ponds constituted wetlands but reclassifying these wetlands from Class Two to Class Three); *In re Golf Course Pond*, No. WET-00-04, Order (Aug. 31, 2000) (reclassifying constructed golf course pond and constructed snow making pond from Class Two to Class Three); *In re January Stearns' Wetland*, No. WET-00-01, Order (Apr. 5, 2000) (reclassifying constructed farm pond from Class Two to Class Three); *In re Champlain Water District*, No. WET-98-01DR, Decision (July 22, 1998) (finding that settling lagoon for water filtering backwash constituted wetland and reclassifying lagoon from Class Two to Class Three); *In re Franklin Fire Pond*, No. WET-92-01, Decision (Mar. 25, 1992) (reclassifying constructed fire pond from Class Two to Class Three). As these decisions make clear, constructed wetlands are not exempt from the definition of wetlands under the Vermont Wetland Rules.

Based on the facts contained in the Petition and the information provided by Pioneer on behalf of Killington Ltd. and SP Land company and ANR District Wetland Ecologist Alan Quackenbush, the Board concludes, pursuant to sections 4.4.e and 7.1.e of the Vermont Wetland Rules, that a constructed pond on the real property of Killington, Ltd. and SP Land Company in the Town of Killington, Vermont, known as Snowshed Pond, currently depicted as a wetland on VSWI maps, does not exhibit wetland hydrology or significant wetland vegetation and is therefore not a wetland. The Board accordingly treats the petition to reclassify Snowshed Pond from Class Two to Class Three as a petition to determine that Snowshed Pond is not a wetland. The Board grants the Snowshed Pond Petition on that basis.

The Board further concludes that a constructed pond on the real property of Killington, Ltd. in the Town of Killington, Vermont, known as Mirror Lake, currently depicted as a wetland on VSWI maps, is characterized by hydric soils, wetland hydrology, and significant hydrophytic vegetation and is therefore a wetland. However, the Board concludes, based on the opinions of the foregoing experts and the Board's review of the Petition and its supporting materials, that Mirror Lake does not perform any significant wetland functions as a result of natural wetland processes. Accordingly, the Board considers the petition to determine that Mirror Lake is not a wetland as a petition to reclassify Mirror Lake from Class Two to Class Three. The Board grants the Mirror Lake Petition on that basis.

IV. Order

It is hereby Ordered:

A. Snowshed Pond

1. A petition to reclassify Snowshed Pond in Killington, Vermont from Class Two to Class Three is treated as a petition to determine that Snowshed Pond is not in fact a wetland.
2. The Petition filed on behalf of Killington, Ltd. and SP Land Company to determine that Snowshed Pond is not in fact a wetland is granted.
3. Snowshed Pond, a constructed reservoir used primarily for snow-making and located on real property owned by Killington, Ltd. and SP Land Company in Killington, Vermont is determined not to be a wetland under the Vermont Wetland Rules.
4. ANR's Wetlands Office shall re-label the subject reservoir on the VSWI maps for the Town of Killington, Vermont from a wetland to a lake.

B. Mirror Lake

1. A petition to determine that Mirror Lake in Killington, Vermont is not a wetland is considered as a petition to reclassify Mirror Lake from Class Two to Class Three.
2. Killington, Ltd.'s petition to reclassify Mirror Lake from Class Two to Class Three is granted.
3. Mirror Lake, a constructed treated-effluent storage lagoon located entirely on real property owned by Killington, Ltd. in Killington, Vermont, currently classified as a Class Two wetland, is reclassified to Class Three.
4. ANR's Wetlands Office shall remove the subject wetland from the VSWI maps for the Town of Killington, Vermont.

Dated at Montpelier, Vermont, this 26th day of May, 2005.

WATER RESOURCES BOARD

/s/ John F. Nicholls

John F. Nicholls, Chair

Concurring:

Lawrence H. Bruce, Jr. Member
Michael J. Hebert, Member
John D. E. Roberts, Vice-Chair