

State of Vermont
VERMONT AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation

In re Berlin Pond (Berlin)
City of Montpelier Petition
No. UPW-13-02

MEMORANDUM OF DECISION
(Issued August 14, 2014)

The Department of Environmental Resources (DEC) grants in part and denies in part the City of Montpelier's petition, filed pursuant to 10 V.S.A. § 1424, which requests that DEC issue a rule, pursuant to its authority under 10 V.S.A. § 1424, to prohibit the use or presence of internal combustion motors, petroleum and ice shanties on Berlin Pond in Berlin, Vermont.

For the reasons stated below, DEC denies the Petitioner's request to prohibit the presence of petroleum and ice shanties but will adopt a rule that restricts internal combustion motors.

I. Decision Summary

The Petitioner requests that DEC use its authority under 10 V.S.A. § 1424 and amend the Vermont Use of Public Waters Rules with three additional restrictions specific to Berlin Pond: a prohibition on the use or presence of internal combustion motors, including tools powered by internal combustion motor; a prohibition on the use or presence of petroleum-based fuels; and a prohibition on the use or presence of ice shanties on the pond.

In regards to the Petitioner's request to prohibit internal combustion motors, including tools, DEC grants the Petitioner's request and will begin rulemaking proceedings to add a lake-specific restriction regarding Berlin Pond in the UPW Rules. DEC agrees with the Petitioner's concerns with respect to vehicular use and has concluded that, in addition to the existing prohibition on vessels with internal combustion motors, all vehicles with internal combustion motors should be prohibited on Berlin Pond, including snowmobiles, all-terrain vehicles (ATVs), and automobiles. DEC intends on taking all appropriate steps to ensure that this prohibition takes effect.

In regards to the Petitioner's request to prohibit petroleum-based fuels, DEC denies the Petitioner's request for three reasons: (a) there are already laws that prohibit spills, leaks, discharges, and disposal of petroleum products into Berlin Pond; (b) Discharge or releases of petroleum products are prohibited under other provisions of law and the use of public waters rule regulates surface uses of public waters rather than the presence of particular products; and (c) the Petitioner's request is beyond the scope of the UPW Rules.

In regards to the Petitioner's request to prohibit ice shanties, DEC denies the Petitioner's request because the Petitioner failed to carry its burden to demonstrate that the use of ice shanties is in conflict with the use of the water as a drinking water supply and that the restriction is the least restrictive approach practicable.

II. Background

Berlin Pond is a natural body of water in the Town of Berlin, Vermont, running on a north-south access, west of Interstate 89. Berlin Pond is the sole source of the public water supply for the residents, businesses and guests of the City of Montpelier, and is also the source of the public water supply for certain areas and facilities in the Town of Berlin, including the Central Vermont Medical Center. Berlin Pond has supplied Montpelier with a gravity-fed water supply since 1884, pursuant to an 1872 charter amendment. The Montpelier Water Treatment Facility uses a carbon activated powder treatment unit with state-of-the-art Trident filters capable of removing volatile organic compounds. However, the unit has not been designed with the express purpose of removing petroleum products from the raw water. Despite this fact, the state and federally required monitoring of Montpelier's finished/treated water has never shown a violation of pertinent drinking water standards.

Until May of 2012, the City of Montpelier prohibited all recreational use on the surface of Berlin Pond. Although Berlin Pond is a public water and Montpelier does not own the pond itself, Montpelier owns a majority of the land around the pond and has rights to the water contained therein. *City of Montpelier v. Barnett*, 2012 VT 32 ¶ 3, 191 Vt. 441, 444. In May of 2012, the Supreme Court of Vermont held that the State of Vermont rather than Montpelier has the jurisdiction to limit recreational uses regarding Berlin Pond. *Id.*

Berlin Pond is relatively large and deep as compared to other lakes in Vermont. Berlin Pond is 293 acres in size, the deepest part is 59 feet, and the average depth is 27 feet. It is the fifth largest lake of the lakes 20 acres or larger within 20 miles of Berlin Pond. Of the lakes 20 acres or larger in size statewide, Berlin Pond is the 39th largest, or among the top 13% largest lakes. Out of the 290 lakes 20 acres or larger in size statewide, Berlin Pond is the 46th deepest lake, putting it in the top 16% deep lakes.

Berlin Pond's shoreline is approximately five miles and the land around the pond is predominantly undeveloped. Petition from City of Montpelier, Vermont (Petition) at 7, to Leslie Welts, Esq. Staff Attorney, Dept. of Environmental Conservation, Agency of Natural Resources (July 25, 2013) (*available at* http://www.watershedmanagement.vt.gov/rulemaking/docs/petitions/pet_07252013berlinpond.pdf). There is a small parking lot to the north-east just to the west of Interstate 89, but the remaining surrounding area is largely wooded with a small number of residences accessed by the road that circumnavigates the pond. *Id.* The pond is visible from the south-bound corridor of Interstate 89 and traffic may be heard in the sections around the pond without a wooded buffer. However, the majority of the land around the pond provides an attractive, scenic refuge for quiet relaxation, wildlife habitat, and non-motorized recreation. *Id.*

No facilities such as boathouses, storage, bathrooms, or boat ramps exist on the pond. Due to the nature of the land around the pond, it is unlikely that anyone will add such facilities to Berlin Pond. An unpaved class 3 road circumvents the pond. Since the Court's 2012 decision, people use the pond for kayaking, canoeing, fishing, swimming, and wildlife viewing. The water quality (clarity and phosphorus concentration) supports these activities. Its undeveloped shoreline and adjacent wetlands also provide good opportunities for fish and wildlife habitat and wildlife observation, and aesthetic value. Although Interstate I-89 and several town roads are

visible or audible from some areas of the pond, it offers a quiet, natural experience that many users seek.

There are 36 lakes 20 acres or over in size located within 20 miles of Berlin Pond. Of these lakes, approximately 28 have some form of public access, including road access or carry-in boating. These lakes offer a variety of recreational experiences. However, lakes similar to Berlin Pond in size, with little or no shoreland development, and where internal combustion motors are not allowed, are few. Only Kettle Pond in Groton State Forest and Thurman Dix Reservoir in Orange are over 100 acres in size, within 20 miles from Berlin Pond, and prohibit internal combustion motors. Therefore, large lakes with an undeveloped shore offering a quiet, scenic and natural recreational experience are uncommon in the area.

The City of Montpelier (Petitioner) submitted a petition pursuant to 10 V.S.A. § 1424 on July 25, 2013 asking that DEC adopt the following rules regarding Berlin Pond:

- a. The use or presence of internal combustion engines, including tools powered by internal combustion, is prohibited.
- b. The use or presence of petroleum-based fuels is prohibited.
- c. The use or presence of ice shanties is prohibited.

Id. at 3.

The Petitioner states that the Petition's nature and purpose "is to protect the public health and safety of the City's and Town's users of that public water supply, including guests and patients, by protecting the subject water supply from leaking, spilled or discharged gas and oil from internal combustion engines or heaters." *Id.* at 2.

DEC sent notice of the Petition to various persons or organizations with an interest in public waters in Vermont, all abutting property owners, and legislators representing the area in which the affected waters are located on October 1, 2013. DEC held a public meeting to receive comments on the petition on November 7, 2013 at the Berlin Elementary School Library, 372 Paine Turnpike North, Berlin, Vermont from 6:00 p.m. to 8:00 p.m. Approximately twenty-five people attended the public meeting and fourteen people provided comments at the meeting. The deadline for filing written comments on the petition, which could be mailed, faxed, delivered, or e-mailed to DEC, was November 30, 2013. Six written comments were filed. DEC also received comments from the Department of Fish & Wildlife and the Department of Forests, Parks, & Recreation.

The comments received fall under the following general categories: comments in support of the Petition, comments in opposition to the Petition, and comments that supported the Petition in part and opposed the Petition in part. The majority of comments provided at the meeting focused on the Petitioner's proposal to prohibit ice shanties and the overwhelming majority of these comments opposed the proposed prohibition. In particular, commenters in opposition to the proposed prohibition on ice shanties contended such a prohibition would burden ice anglers, who often spend many hours exposed to the cold and wind. Commenters in favor of the ban on ice shanties cited their concern that ice shanties occlude from view the use of kerosene heaters that could potentially spill into the ice and the water.

The comments in favor of the Petitioner's proposed prohibition on internal combustion motors and petroleum-based fuels cited concerns regarding the safety of the drinking water provided by Berlin Pond, the importance of the pond as wildlife habitat and as a wetlands area, the relatively small size of the pond as compared to other drinking water sources such as Lake Champlain and New York City's drinking water source in the Catskills, the Montpelier Water Treatment Facility's design, and the concern that it could take weeks to clean up a petroleum contamination. The comments opposed to the Petition expressed concerns that prohibiting gas augers, propane heaters, propane stoves, and ice shanties limit the accessibility and comfort of ice fishing during the winter for families and handicapped persons. In addition, comments opposed to the Petition argued that there are various other potential sources of contamination to Berlin Pond, including the road and wildlife; that New York has relaxed its hunting and fishing restrictions in the Catskills since 9/11; that the Petition is an overkill reaction to a minimal risk; and that the more responsible people present, the less likely irresponsible behavior will occur.

III. Present Rules

Certain general Vermont Use of Public Waters (UPW) Rules presently apply to Berlin Pond. Vessels powered by motor shall not exceed 5 mph and the use of internal combustion motors is prohibited. *See* UPW Rule 3.2. The use of personal watercraft is also prohibited. *See* UPW Rule 3.3. In addition, aircraft are prohibited from May 1 through November 30. *See* UPW Rule 3.4.

Berlin Pond is presently subject to the following specific rules:

Berlin Pond, Town of Berlin (293)

- a. Vessels powered by motor shall not exceed 5 mph (VUPW Rule 3.2(a))
- b. Use of personal watercraft is prohibited (VUPW Rule 3.3)
- c. Use of aircraft is prohibited May 1 – November 30, except where authorized under 5 V.S.A. Ch. 9 (VUPW Rule 3.4)
- d. Use of internal combustion motors is prohibited (VUPW Rule 3.5).

UPW Rules, Appendix A (providing lake-specific rules regulating the use of particular public waters) (amended Dec. 30, 2011).

IV. Standard of Review

10 V.S.A. Chapter 49 and the UPW Rules guide the DEC's decision. It is the State of Vermont's policy to provide for multiple uses of its navigable waters in a manner that provides for the best interests of the citizens of the State. 10 V.S.A. § 1421. The Secretary must "attempt to manage the public waters so that the various uses may be enjoyed in a reasonable manner, in the best interests of all the citizens of the State," and to provide for all normal uses¹ to the extent possible. 10 V.S.A. § 1424(c). The various provisions of Section 2 of the UPW Rules direct the Secretary to manage public waters so that so users can enjoy various types of uses taking into

¹ The UPW Rules defines "normal use" as "any lawful use of any specific body of public water that occurred on a regular, frequent and consistent basis prior to January 1, 1993." UPW Rule 5.5.

account safety, the best interests of both current and future generations of citizens of the state, and the need to provide an appropriate mix of water-based recreational opportunities on a regional and statewide basis. See UPW Rule 2.2; UPW Rule 2.6. Section 2.7, 2.9, and 2.10 indicate that regulation to resolve use conflicts should not be used unless necessary and such regulation should manage use conflicts “using the least restrictive approach practicable that adequately addresses the conflicts.” UPW Rule 2.7. Finally, it is the Petitioner’s burden to show a prohibition is necessary. UPW Rule 3.7; *In re Echo Lake (Keeler Pond) (Hubbardtown, Sudbury)*, No. UPW 91-05, Decision (Dec. 22, 1992) (placing the burden on petitioners to show that conflicting uses are incompatible).

In addition, the UPW Rules provide that in evaluating petitions and associated public comments, DEC must consider the following factors, at a minimum: “the size and flow of navigable waters, the predominant use of adjacent lands, the depth of the water, the predominant use of the waters prior to regulation, the uses for which the water is adaptable, the availability of fishing, boating, and bathing facilities, and the scenic beauty and recreational uses of the area.” UPW Rule 2.2.

V. Discussion

The Petitioner asserts that internal combustion motors, including tools, the use or presence of petroleum-based fuels, and the use of ice shanties are uses that conflict with Berlin Pond’s use as a public drinking water supply because of the risk such uses pose for contaminating the drinking water supply. *Petition* at 5.

In applying 10 V.S.A. § 1424 and the UPW Rules, the Water Resources Panel, formerly the Water Resources Board, first looked to the purpose of the petition and determined whether there exist other possible ways to accomplish the same goal. *In re Somerset Reservoir (Somerset and Stratton)*, No. UPW-05-04 (2005). The purpose of the Petition is “to protect the public health and safety of the City’s and Town’s users of that public water supply, including guests and patients, by protecting the subject water supply from leaking, spilled or discharged gas and oil from internal combustion engines or heaters.” *Petition* at 2. Therefore, DEC will examine whether the Petitioner’s proposed prohibitions best accomplish this purpose.

A. Internal Combustion Motors, Including Tools

The Petitioner seeks a prohibition on all internal combustion motors, including tools powered by internal combustion. *Id.* at 3. Specifically, the Petitioner seeks to ban the use of ice augers powered by internal combustion motors and to ban vehicles powered by internal combustion motors from driving on the ice. As grounds for this ban, the Petitioner cites the threat that “a single gallon of gasoline can contaminate over one million gallons of water such that the water does not meet drinking water standards.” *Id.* at 2. Thus, the purpose of the Petitioner’s proposal to prohibit internal combustion motors is to reduce the risk of gasoline contaminating the drinking water supply provided by Berlin Pond.

1. Vehicular Use

The DEC agrees with the concerns raised by the Petitioner with respect to vehicular use. While a petroleum release may not represent a significant threat to the water supply, when viewing the site specific conditions of Berlin Pond DEC has determined that those uses are in conflict with the use of the water as a drinking water supply. DEC has concluded that, in addition to the existing prohibition on vessels with internal combustion motors, all vehicles with internal combustion motors should be prohibited on Berlin Pond, including snowmobiles, ATVs, and automobiles. DEC intends on taking all appropriate steps to ensure that this prohibition takes effect, including requesting the Secretary of Natural Resources to exercise authority under 23 V.S.A. §§ 3206(b)(3)(6) & 3208(b) and the Snowmobiling Rule (Vt. Admin. Code 16-6-:4) to close Berlin Pond to snowmobile use and under 23 V.S.A. § 3506(b)(4) and the All-Terrain Vehicle Rule- to close Berlin Pond to ATV use.

Minimizing the risks for petroleum contamination of Berlin Pond is a high priority for DEC. Due to the presence of the road circumnavigating Berlin Pond and the proximity of Interstate 89, there is already a risk of some petroleum contaminants reaching the pond. Despite these risks, the state and federally required monitoring of Montpelier's finished/treated water has never indicated any violations of pertinent drinking water standards. However, Berlin Pond is of relatively small size in area and depth as compared to Lake Champlain (a source of drinking water for nearby communities via the Champlain Water District) and the Montpelier Water Treatment Facility was not designed with the express purpose of removing petroleum products from the raw water. Accordingly, minimizing the potential risk to the system's water source from future petroleum contamination is a high priority for DEC.

Few drinking water ponds allow vessels with internal combustion motors. The same is the case prior to this ruling with Berlin Pond. There are approximately 95 bodies of water that the Vermont Water Quality Standards (VWQS) classify as A2 Public Water Supplies. VWQS Ch. 4. Of these bodies of water, 20 are reservoirs, lakes, or ponds with a recorded size. *Id.* The vast majority of these bodies are brooks or unnamed tributaries—bodies of water where boating is impractical or inaccessible. *Id.*; UPW Rules App. A.

In addition, the concern that motor vehicles, snowmobiles, and ATVs may fall through the ice is a serious one. There is a high likelihood that a vehicle that has fallen through the ice will leak petroleum and other contaminants. Based on complaints, DEC estimates that approximately three to six motor vehicles annually fall through the frozen surfaces of lakes. E-mail from Sean McVeigh, Chief Env'tl. Enforcement Officer, DEC Compliance & Enforcement Division to Susan Warren, Section Chief, DEC Lakes & Ponds Program (July 23, 2014) (on file with ANR).

The Water Resources Panel has banned vessels with internal combustion motors on ponds due to health concerns over fuel contamination of ponds used as sole sources of drinking water. *In re: Silver Lake (Barnard)*, No. UPW-05-03, Decision (Oct. 25, 2005) at 5 (describing the decisions to ban internal combustion motors on May Pond in Barton, Vermont and Black Pond in Hubbardton, Vermont due to concerns over fuel contamination of the ponds). Although the Water Resources Board denied petitions to restrict vehicular use on the surface of a frozen pond in the past “because it was not shown that such a restriction would be in the public interest”

(Letter from William A. Bartlett, Executive Secretary, Water Resources Board, to the Friends of Fern Lake (Oct. 14, 1980) (on file with ANR) at 1), the Petitioner demonstrates that Berlin Pond is unique due to its use as the sole source of drinking water for the State of Vermont's capital city. Additionally, Berlin Pond is of relatively small size for a drinking water supply, a small amount of petroleum can contaminate a large quantity of water, and the Montpelier Water Treatment Facility was not designed with the express purpose of removing petroleum products from the raw water.

DEC has determined that vehicular use is prohibited on Berlin Pond, because Berlin Pond is not a public highway nor is it connected to a public highway.² There is no evidence that motor vehicles have historically driven on the ice at Berlin Pond, even though motor vehicles are often used on the frozen surfaces of other ponds in connection with ice fishing as a matter of convenience in transporting ice shanties across the ice. Because motor vehicles have not historically traveled across the frozen surface of Berlin Pond, restricting them from driving on Berlin Pond would not conflict with the UPW Rules' directive that use conflicts be managed in a manner that provides for all normal uses to the greatest extent possible. UPW Rule 2.6. Therefore, DEC finds that a prohibition on vehicles is the least restrictive approach practicable to achieve the purpose of the Petition while still providing for all normal uses.

2. Motorized Ice Augers

Internal combustion motors are already prohibited on Berlin Pond. UPW Rule 3.5. However, this prohibition is limited to vessels and does not currently apply to tools powered by internal combustion motors, such as motorized ice augers.

Motorized ice augers hold a small quantity of petroleum. However, the Petitioner presents evidence that "a single gallon of gasoline can contaminate over one million gallons of water." *Petition* at 2 (citing the Affidavit of Robert Duresne, P.E., of Dufresne & Associates). DEC notes there are several types of ice augers available to ice anglers that do not rely on internal combustion motors. In addition to manual augers, electric augers are available for ice anglers unable to effectively drill into the ice by hand. Because the Petitioner seeks a ban on tools powered by internal combustion motors and not an outright prohibition on ice augers, DEC finds the prohibition is the least restrictive approach practicable to achieve the purpose of the Petition while still providing for all normal uses.

² The Supreme Court of Vermont has found that frozen surfaces of lakes and ponds are considered "public highways" for the purpose of 23 V.S.A. § 4(13) when those surfaces are open temporarily or permanently to the public and the general circulation of vehicles. *State v. Hallock*, 114 Vt. 292, 296 (1945) (finding that the frozen surface of Lake Champlain is a "public highway" in the context of a conviction for driving with a suspended license); *Bourgon v. Farm Bureau Mut. Ins. Co.*, 128 Vt. 593, 593 (1970) (finding that the frozen surface of Lake Dunmore is a "public highway" in the context of an insurance claim). The Court did not offer any analysis backing its findings in *Bourgon*, but it considered the following factors in reaching its conclusion that the frozen surface of Lake Champlain is a public highway in *Hallock*: the ice was thick enough to support fishing shanties and motor vehicles, motor vehicles were used on it in connection with fishing and to cross from Shoreham to the New York shore as recently as the day before the alleged offense, there were no "defined, marked, or used roads, routes or paths on the lake," and "the frozen surface of the lake was not obstructed and was free to be visited and used by motor vehicles generally...". *Id.* Berlin Pond is not typically used by motor vehicles for travel and there are obstructions to the surface almost entirely around the pond. Berlin Pond is largely surrounded by a thick buffer of hardwood trees and other environmental obstructions, including fallen trees, vegetation, and uneven terrain.

B. Petroleum-based Fuels

The Petitioner seeks a prohibition on the use or presence of petroleum-based fuels. *Petition* at 3. This ban is also proposed to achieve the purpose of protection against the threat of drinking water contamination. *Id.* at 2.

The Petition does not clarify the reach of the proposal nor does it even list examples of what the proposed rule is meant to target. As a result, DEC interprets the Petitioner's proposal to ban all petroleum-based fuels as a catch-all provision designed to prevent any sources of petroleum beyond internal combustion motors from being discharged into Berlin Pond. DEC has authority under 10 V.S.A. § 1424 and the UPW Rules to restrict *surface water uses* rather than specific products. 10 V.S.A. § 1424(a)(1) ("The Secretary may establish rules to implement the provisions of this chapter, including: Rules to regulate the use of public waters of the State..."). As a result, DEC finds the Petitioner's request is beyond the scope of the UPW Rules.

In addition, the law prohibits the discharge of petroleum-based fuels into Berlin Pond without a permit. 10 V.S.A. § 1259(a); 10 V.S.A. § 6616. Proper enforcement of existing law is the preferred way to resolve use conflicts. See *In re Star Lake (Mt. Holly)*, No. UPW 98-05, Decision (Oct. 29, 1998); *In re Echo Lake (Charleston)*, No. UPW 05-02, at 3 (2005).

DEC must manage use conflicts using the least restrictive approach practicable. UPW Rule 2.6, 2.7, 2.9. Because there is already law that protects against petroleum contamination in place and the internal combustion motor prohibition captures the vast majority of potential petroleum threats to Berlin Pond, DEC finds that a prohibition on the use or presence of petroleum-based fuels is not the least restrictive approach practicable to achieve the Petition's purpose.

C. Ice Shanties

The Petitioner seeks a prohibition on the use or presence of ice shanties. *Petition* at 3. As grounds for this ban, the Petitioner cites "the potential for hidden deliberate or inadvertent contamination of the public water supply of Vermont's capital city and the Central Vermont Medical Center." *Id.* at 2. The Petitioner opines, "[t]he reality is we live in a time when terrorists and others look for new shocking ways to disrupt and kill in unsuspecting locations. [...] The fact that Montpelier is the seat of the executive, legislative and judicial branches of State government with a Federal office building should not be ignored." *Petition* at 2-3. Accordingly, the purpose of the proposed prohibition is to protect against the threat of drinking water contamination.

DEC is charged with attempting to manage public waters so that the various uses may be enjoyed in a reasonable manner and to provide for all normal uses to the extent possible. 10 V.S.A. § 1424(c). The uses explicitly mentioned in the UPW Rules include: "fishing, swimming, boating, water skiing, fish and wildlife habitat, wildlife observation, the enjoyment of aesthetic values, quiet solitude of the water body, and other water based activities." UPW Rules 2.3.

Ice shanties are a traditional feature of Vermont winters because they provide shelter from the elements for those who wish to enjoy ice fishing. These structures improve accessibility and comfort during the winter for individuals and particularly for families who wish to fish together. Fishing is a use DEC must consider and any restrictions to this use shall be managed using the least restrictive approach practicable that adequately addresses the conflicts. UPW Rule 2.7.

DEC acknowledges that the nature of ice shanties is such that the activities inside are not visible to an observer outside of the shanty. The Petitioner speculates that it would be possible for terrorist activities to take place in ice shanties, but did not cite any examples or provide evidence demonstrating the connection between ice shanties and terrorism. In addition, prohibitions on certain activities may provide security from terrorist activity during the winter, but they do not prevent other similar activities from occurring during other seasons.

There are several kinds of ice shanties and it is not always necessary for ice anglers to drive on the ice to install these temporary structures. Accordingly, the DEC's adoption of a rule restricting internal combustion motors driving over the frozen surface of Berlin Pond will achieve the petition's purpose of reducing the risk of contamination to drinking water without unnecessarily restricting conflicting uses.

VI. Conclusion

DEC hereby grants in part and denies in part the City of Montpelier's petition in re Berlin Pond. DEC will begin rulemaking proceedings under its authority granted by 10 V.S.A. Ch. 49 to amend the UPW Rules' lake-specific rule regarding Berlin Pond to add the following sentence:

The use or presence of internal combustion motors, including tools powered by internal combustion, is prohibited.

In addition, DEC recommends that the Secretary of Natural Resources take appropriate actions to prohibit the use of snowmobiles or ATVs on Berlin Pond.

Dated at Montpelier, Vermont this 14th day of August, 2014.

VERMONT AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation



David K. Mears, Commissioner