Lake Encroachment Individual Permit

Under 29 V.S.A. § 401 et seq.



Permittee(s): Mark Dalzell

Waterbody: Lake Willoughby

Permit Number: 2132-LEP

Project Description: Concrete Retaining Wall Repair

Project SPAN: 729-232-10020

Project Location: 864 Old Route 5A, Westmore

Based upon the findings contained in this permit, it is the decision of the Department of Environmental Conservation (the Department) that the project described herein, as set forth in the following findings and in the application on file with the Department, complies with the criteria of 29 V.S.A. § 405 and is consistent with the public trust doctrine, and is hereby approved under the following conditions and specifications.

a. Specific Conditions

- 1. The project shall be carried out in accordance with the final application received by the Department on June 30, 2016 and in accordance with the additional information received from the applicant on August 9, 2016 (the Approved Application); and the conditions and specifications of this permit.
- 2. Concrete "structural" retaining wall repair project shall be constructed in accordance with the Approved Application, the additional permit terms and conditions contained herein, and the following conditions:
 - A. The retaining wall repair shall be constructed as a cap no greater than six (6) inches in height, width, and length, and no further than six (6) inches lakeward (including footing and other design features if applicable) than the existing wall.
 - B. Existing water depths in front of the replacement wall shall be maintained.
 - C. Reference measurements shall be made and demarcated as necessary in the field using temporary grade stakes and/or lines, or another equivalent method, by the permittee prior to project implementation/construction, to ensure project compliance with permit conditions (a)(2)(A) and (a)(2)(B) above.
 - D. Fluid concrete shall be placed only in tightly sealed and dewatered forms. Caution shall be exercised during construction to prevent concrete spillage.
 - E. Water pumped from concrete forms shall be discharged to an on-shore containment area. No pumped or turbid water shall be discharged directly to the lake. Work shall stop immediately if visible turbidity occurs in the lake as a result of construction activity and shall not recommence until the source of the turbidity is identified and corrected.
 - F. Concrete wash water shall not be discharged directly to the lake, to upland areas, rivers/streams, wetlands, or to stormwater/drainage conveyance. Concrete wash water shall be discharged only to an impermeable on-shore containment area and disposed of properly, in accordance with applicable local, state, and federal regulations. It shall be the responsibility of the permittee to ensure concrete equipment operators are aware of and abide by this permit condition.
 - G. Any sandbags that may be used temporarily during construction shall be removed from the lake. In addition, sandbags shall not be left in the lake, or stored in a location that will result in a discharge of sand to the lake as a result of wind, waves, stormwater runoff, or ice.
 - H. The permittee shall install a turbidity curtain or Department approved equivalent barrier, in the lake around the project work area. The barrier shall extend above the lake's surface and be secured to the bottom of the lake to contain turbidity during the project. If turbidity is observed beyond the work area, work shall be stopped immediately and shall not recommence until the

source of the turbidity is identified and corrected. The barrier shall not be installed in a way that blocks navigation in a channel, if applicable. The barrier shall remain in place and be maintained until the project is complete and observations indicate turbidity within the barrier has decreased to the level of turbidity outside the barrier.

b. Standard Conditions

- 1. <u>Completion of construction</u>. The project authorized by this permit must be completed within 5 years of the effective date of this permit.
- 2. <u>Initiation of construction</u>. Initiation of the project authorized by this permit is restricted until after July 1 of any calendar year unless explicitly approved in writing by the Department, and/or specified in the Approved Application.
- **3.** <u>Permit modification.</u> All permit modifications, shall be treated as a new permit application.
- 4. <u>Nuisance species spread prevention.</u> Prior to placing any equipment (e.g., boat, trailer, vehicle, or gear) that has been in or on any other waterbody into public waters for project implementation/construction, the permittee shall decontaminate the equipment in compliance with the <u>Voluntary Guidelines to Prevent the Spread of Aquatic Invasive Species through Recreational Activities, Aquatic Nuisance Species Task Force, November 2013.</u>
- **Erosion** prevention and sediment control. Erosion prevention and sediment control best management practices shall be utilized and maintained to prevent erosion and control sediment to minimize and prevent adverse impacts to water quality during construction of the authorized project. In addition, the permittee shall comply with the following conditions:
 - A. Areas disturbed by the construction activities shall be protected from erosion through the application of seed and mulch upon completion of construction, and shall be temporarily mulched during construction in advance of precipitation events.
 - B. Work shall stop immediately if visible turbidity occurs in the lake as a result of construction activity and shall not recommence until the source of the turbidity is identified and corrected.
- 6. <u>Heavy equipment operation.</u> Heavy equipment shall work from shore, and shall not work lakeward of mean water level unless explicitly approved in writing by the Department, and/or specified in the Approved Application.
- **7.** <u>Spill prevention.</u> Fuel and lubricants from equipment shall not be discharged into the water. Any spills shall be managed in accordance with all applicable local, state, and federal regulations.
- **Waste management.** Any pieces of concrete, stone, construction debris, or other waste materials deposited into the lake during project implementation/construction shall be removed from the lake and disposed of properly, in accordance with all applicable local, state, and federal regulations.
- 9. <u>Compliance with other regulations.</u> This permit does not relieve the permittee from obtaining all other approvals and permits prior to commencement of activity or from the responsibility to comply with any other applicable federal, state, and local laws or regulations, including but not limited to the Vermont Solid Waste Management Rules, the Vermont Wetland Rules, and the Vermont Shoreland Protection Act.
- 10. <u>Transfer of permit.</u> Prior to transferring ownership over the encroachment authorized by this permit or the portion of property associated with the encroachment authorized by this permit, the permittee shall give the Department notice of the transfer. The notice shall include the name and contact information for the current permittee and prospective permittee, the proposed date of permit transfer, and a

- statement signed by the prospective permittee stating that he/she has read and is familiar with this permit and agrees to comply with and be bound by its terms and conditions.
- 11. <u>Access to property.</u> The permittee shall allow the Commissioner of the Department, or a duly authorized representative, at reasonable times and upon presentation of credentials, to enter upon permittee's property, or to otherwise access the authorized encroachment, if necessary, to inspect the project to determine compliance with this permit.
- Legal responsibilities for damages. The Department, by issuing this individual permit, accepts no legal responsibility for any damage direct or indirect of whatever nature and by whoever suffered arising out of the approved project.
- Rights and Privileges. This permit does not authorize any damage to private property or invasion of private rights or the violation of federal, state, or local laws or regulations. In addition, this permit does not convey any title or interest to the lands lying under public waters or waters affected.
- 14. <u>Duty to comply and enforcement.</u> The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance shall constitute a violation of 29 V.S.A. Chapter 11 and may be cause for an enforcement action and revocation, modification, or suspension of this permit. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit.
- 15. Reopener. If, after granting this permit, the Department determines that there is evidence indicating that an authorized activity does not comply with the requirements of 29 V.S.A. Chapter 11, the Department may reopen and modify this permit to include different limitations and requirements.
- Revocation. This permit is subject to the conditions and specifications herein and may be suspended or revoked at any time for cause including: failure by the permittee to disclose all relevant facts during the application process which were known at that time; misrepresentation of any relevant fact at any time; non-compliance with the conditions and specifications of the permit; or a change in the factors associated with the encroachment's effect on the public trust or public good so that on balance the Department finds that the encroachment adversely affects the public trust or public good.
- 17. <u>Severance.</u> The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

18. Appeals.

A. Renewable Energy Projects – Right to Appeal to Public Service Board. If this decision relates to a renewable energy plant for which a certificate of public good is required under 30 V.S.A. § 248, any appeal of this decision must be filed with the Vermont Public Service Board pursuant to 10 V.S.A. § 8506. This section does not apply to a facility that is subject to 10 V.S.A. § 1004 (dams before the Federal Energy Regulatory Commission), 10 V.S.A. § 1006 (certification of hydroelectric projects), or 10 V.S.A. Chapter 43 (dams). Any appeal under this section must be filed with the Clerk of the Public Service Board within 30 days of the date of this decision; the appellant must file with the Clerk an original and six copies of its appeal. The appellant shall provide notice of the filing of an appeal in accordance with 10 V.S.A. § 8504(c)(2), and shall also serve a copy of the Notice of Appeal on the Vermont Department of Public Service. For further information, see the Rules and General Orders of the Public Service Board, available online at

- <u>www.psb.vermont.gov</u>. The address for the Public Service Board is: 112 State Street, Montpelier, Vermont, 05620-2701; Telephone #: 802-828-2358.
- B. All Other Projects Right to Appeal to Environmental Court. Pursuant to 10 V.S.A. Chapter 220, any appeal of this decision must be filed with the clerk of the Environmental Division of the Superior Court within 30 days of the date of the decision. The Notice of Appeal must specify the parties taking the appeal and the statutory provision under which each party claims party status; must designate the act or decision appealed from; must name the Environmental Division; and must be signed by the appellant or the appellant's attorney. The appeal must give the address or location and description of the property, project, or facility with which the appeal is concerned and the name of the applicant or any permit involved in the appeal. The appellant must also serve a copy of the Notice of Appeal in accordance with Rule 5(b)(4)(B) of the Vermont Rules for Environmental Court Proceedings. For further information, see the Vermont Rules for Environmental Court Proceedings available at www.vermontjudiciary.org. The address for the Environmental Division is: 32 Cherry Street; 2nd Floor, Suite 303; Burlington, VT 05401 Telephone #: 802-951-1740.

c. Findings

- 1. Jurisdiction 29 V.S.A. § 403: Lake Willoughby in Westmore is a public water of the state of Vermont. The project encroaches beyond the shoreline as delineated by the mean water level. Therefore, the Department has jurisdiction under 29 V.S.A. Chapter 11.
- 2. Application Receipt and Review 29 V.S.A. § 404: On June 30, 2016, the Department received an application from Mark Dalzell (permittee), under the provisions of 29 V.S.A. Chapter 11, for authorization to repair an existing concrete retaining wall within the public waters of Lake Willoughby, Westmore.
- 3. Public Notification 29 V.S.A. § 405(a): The Department gave written notice of this application to the municipality in which the proposed encroachment is located, abutting property owners, and others having an interest in this matter and provided an opportunity for interested persons to file written comments or request a public information meeting. The notice period began on July 1, 2016 and closed at 4:30 PM on August 1, 2016. No comments were received. No request for a public information meeting was received.
- **4.** Background; Lake Encroachment Permit History: None.
- 5. Project Description: The existing concrete retaining wall supports a seasonal camp and boat house in existence since 1939. The project includes two sections of stabilization and repair of an existing concrete foundation. Section one of the foundation is approximately 24 inches tall by 30 feet long and is sloped back 6-8 inches from the footing to protect it from wave action. The repair requires approximately 1.5 cubic yards of concrete and reinforcing bar. The cap of new concrete placed over the old concrete will not exceed six (6) inches.
 - Section two is an undermined section approximately 7 feet long by 2 feet deep under the slab. Concrete and rebar will be approximately 0.5 cubic yards.
- 6. Project Purpose: Repair deterioration to the sides and foundation of an existing concrete retaining wall to prevent the seasonal camp and boathouse from falling into the lake.

- 7. Effect of Encroachment Whether Excessive for Stated Purpose: The amount of additional fill was minimized to achieve the project purpose. The project is not excessive for the stated purpose.
- **8.** Effect of Encroachment Less Intrusive Feasible Alternatives: The design is considered to be the least intrusive feasible alternative to achieve the stated project purpose.
- 9. Effect of Encroachment Measures to Reduce Impacts on Public Resources: Forms will be constructed to minimize the chance of failure. Forms will be sealed to contain concrete so that the mixture does not enter the water and water does not contaminate the integrity of the concrete, which could cause future premature failure. Vegetable oil or a similar material will be used as the release agent on the wooden forms. A turbidity curtain or Department approved equivalent barrier will be installed in the lake around the existing dock prior to starting the project.
- 10. Placement of Fill: An estimated two (2) cubic yards of fluid concrete and rebar will be used to complete the project as described in the project description. Temporary untreated wooden forms lined with vegetable oil or a similar material will be installed around the retaining wall that allow for a six (6) inch space for the fluid concrete to fill in against the existing dock. This temporary untreated wooden form will be removed after completion of the project. The benefit of stabilizing an eroding concrete retaining wall outweighs adverse impacts associated with the further encroachment and addition of fill.
- 11. Effects on Water Quality 29 V.S.A. § 405(b): Fluid concrete will be placed within tightly sealed and dewatered vegetable oil or a similar material lined wooden forms. Caution will be exercised during construction to prevent concrete spillage. Water pumped from concrete forms will be discharged to an on-shore containment area. No pumped or turbid water will be discharged directly to the lake. Work will stop immediately if visible turbidity occurs in the lake as a result of construction activity and will not recommence until the source of the turbidity is identified and corrected. The project will not adversely impact water quality.
- 12. Effects on Fish and Wildlife Habitat 29 V.S.A. § 405(b): The project is located at an existing concrete retaining wall/foundation. The repaired concrete retaining wall/foundation will have an increased footprint consisting of a new six (6) inch concrete perimeter. The increased footprint by no more than six (6) inches on all sides and the top surface is the least intrusive feasible alternative for repairing the eroding concrete retaining wall. The new concrete will eliminate the deterioration of the existing concrete and will prevent eroding concrete from entering the water. The project will have a temporary and minimal impact to fish and wildlife habitat while the project is under construction, which is outweighed by the reduction of concrete eroding into the lake.
- wall/foundation will have an increased footprint consisting of a new six (6) inch concrete retaining wall/foundation will have an increased footprint consisting of a new six (6) inch concrete perimeter. The increased footprint is the least intrusive feasible alternative for repairing the eroding concrete retaining wall/foundation. The project will have a temporary and minimal impact to aquatic vegetation while the project is under construction, which is outweighed by the reduction of concrete eroding into the lake. The project will have not adversely impact shoreline vegetation.
- 14. Effects on Navigation and Other Recreational and Public Uses, Including Fishing and Swimming 29 V.S.A. § 405(b): The expanded footprint is not expected to have an adverse impact on navigation and other recreational public uses after completion of the project. However, there will be a temporary impacts

limited to the immediate work area to public uses during construction. After completion of the project, public uses will be restored.

- 15. Consistency with the Natural Surroundings 29 V.S.A. § 405(b): The project will repair an existing concrete retaining wall. There will be no removal of shoreline vegetation to complete the project. The project is consistent with the existing natural surroundings.
- 16. Consistency with Municipal Shoreland Zoning Ordinances and Applicable State Plans 29 V.S.A. § 405(b): No adverse comments were received during the investigation from local and state officers and the project is therefore considered to be consistent with municipal shoreland zoning ordinances and applicable state plans.
- 17. Cumulative Impact 29 V.S.A. § 405(b): The repair of the existing retaining wall will result in additional encroachment. However, the improvements to the existing concrete will prevent future erosion into the lake. The minimal additional cumulative encroachment of the project is outweighed by the public benefits of the resulting repaired dock.
- **18.** Public Good Analysis Summary 29 V.S.A. § 405(b): Based upon findings c. 11-17, the project will not adversely affect the public good.
- 19. Public Trust Analysis: The public trust doctrine requires the Department to determine what public trust uses are at issue, to determine if the proposal serves a public purpose, to determine the cumulative effects of the proposal on the public trust uses, and to balance the beneficial and detrimental effects of the proposal. The public trust uses relevant to this proposal are fishing, boating, and swimming. The impacts of the project on public trust uses are minimal, as the project is located in nearshore shallow water and will only temporarily limit access to the nearshore area. The concrete repair provides public benefits in the form of preventing concrete from eroding into the lake. The Department has therefore determined that the project is consistent with the public trust doctrine.

d. Authorization

Based upon the foregoing findings, and in consideration of the Department's Interim Procedures for the Issuance or Denial of Encroachment Permits, dated October 4, 1989, excluding Section 3, which was invalidated by Lamoille County Superior Court, Docket No. S96-91, 9/04/92, it is the decision of the Department that the project described herein, as set forth in the above findings and in the plans on file with the Department, complies with the criteria of 29 V.S.A. § 405, and is consistent with the public trust doctrine.

In accordance with 29 V.S.A. § 401 et seq., the Department hereby issues this decision and permit to Mark Dalzell for the above named project. The Department has approved the project subject to the conditions contained herein.

This permit shall not be effective until 10 days after the Department's notice of action and permit issuance in accordance with 29 V.S.A. § 405(c) and shall expire five (5) years thereafter. If the permittee wishes to modify the encroachment or conduct other jurisdictional activities not authorized by this permit, the permittee must submit a new permit application.

Alyssa B. Schuren, Commissioner
Department of Environmental Conservation
Ву:
Perry Thomas, Program Manager
Lakes & Ponds Management and Protection Program