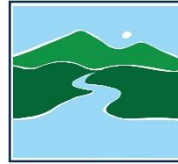


Lake Encroachment Individual Permit

Under 29 V.S.A. § 401 *et seq.*



VERMONT DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
WATERSHED
MANAGEMENT DIVISION
LAKES & PONDS PROGRAM

Permittee(s): Vermont Agency of Transportation Waterbody: Lake Bomoseen Permit Number: 2016-005	Project Description: Shoreline Stabilization Project Location: Mile Marker 4.9 VT Route 30, Castleton
<p>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.</p>	
<p>a. Specific Conditions</p> <ol style="list-style-type: none">1. The project shall be carried out in accordance with the final application received by the Department on March 21, 2016 (the Approved Application); and the conditions and specifications of this permit2. New (i.e., not replacement) stone or other “non-structural” shoreline stabilization projects shall be constructed in accordance with the Approved Application, the additional permit terms and conditions contained herein, and the following special conditions:<ol style="list-style-type: none">A. The shoreline stabilization project shall not reclaim lost land through placement of new fill beyond the location of the existing shoreline or create new land lakeward of the existing shoreline, and shall not convert existing sloped shorelines to a vertical plane, unless explicitly specified in the Approved Application.B. Existing water depths in front of the new shoreline stabilization project 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. 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.	
<p>b. Standard Conditions</p> <ol style="list-style-type: none">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 [Voluntary Guidelines to Prevent the Spread of Aquatic Invasive Species through Recreational Activities, Aquatic Nuisance Species Task Force, November 2013](#).

5. 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. Heavy equipment operation. 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. Spill prevention. 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.
8. 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. Compliance with other regulations. 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. Transfer of permit. 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. Access to property. 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.
12. 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.
13. 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. Duty to comply and enforcement. 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.
16. 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. Severance. 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 www.psb.vermont.gov. 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

c. Findings

1. Jurisdiction - 29 V.S.A. § 403: Lake Bomoseen in Castleton 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 March 21, 2016, the Department received an application from Vermont Agency of Transportation (permittee), under the provisions of 29 V.S.A. Chapter 11, for authorization to complete a shoreline stabilization project within the public waters of Lake Bomoseen, Castleton.
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 March 22, 2016 and closed at 4:30 PM on April 20, 2016. No comments were received. No request for public information was received.
4. Background; Lake Encroachment Permit History: None.
5. Project Description: A culvert failure at mile marker 4.9 along Vermont Route 30 has caused a slope failure in the State of Vermont Agency of Transportation's right of way along the waters of Lake Bomoseen. The project will include replacing the failed culvert above mean water level and shoreline stabilization. The proposed shoreline stabilization project will place riprap comprised of Type III stone (3-48 inches) along 15 feet of shoreline and extend three feet into the lake from mean water level. A total of 5 cubic yards of fill will be placed at or below mean water level. From the water, the riprap will be used to stabilize a 1:6 slope. After coming up four feet, the slope will be graded to 1:1.5 and Type II (2-36 inches) and Type 1 (1-12 inches) stone will be placed on the slope up to the roadbed. Topsoil will be placed on the upper slope and vegetation will be established as part of the stabilization project. The project is expected to be completed in one day. Any mechanical equipment used for this project will be used from the road.
6. Project Purpose: The project's purpose is to protect public infrastructure on a section of Vermont Route 30.
7. Effect of Encroachment – Whether Excessive for Stated Purpose: Stabilization of the shoreline with natural stone is not considered excessive for the stated project purpose.
8. Effect of Encroachment – Less Intrusive Feasible Alternatives: Stabilization of the shoreline with natural stone and vegetation is considered to be a less intrusive feasible alternative to achieve the stated project purpose. No action would cause greater erosion into Lake Bomoseen and potentially lead to the failure of a section of Vermont Route 30.
9. Effect of Encroachment – Measures to Reduce Impacts on Public Resources: A turbidity curtain will be installed in the water around the work area to contain turbidity. Heavy equipment will work from shore.
10. Placement of Fill: Five cubic yards of Type III stone will be placed at or below the mean water level. The

quantity placed is the minimum amount to achieve a 1:6 slope. The adverse impacts of additional fill in the lake will be outweighed by the benefits of long term stabilization of the shoreline and long term protection of the road.

- 11.** Effects on Water Quality - 29 V.S.A. § 405(b): A turbidity curtain will be installed in the water around the work area to contain turbidity. Heavy equipment will work from shore. The project will not have a long term adverse impact on water quality.
- 12.** Effects on Fish and Wildlife Habitat - 29 V.S.A. § 405(b): The shoreline stabilization portion of the project will not involve work prior to July 1 of the calendar year to protect fish spawning habitat. The minimal adverse impacts to fish and wildlife habitat along the immediate shoreline will be outweighed by the benefits of long term stabilization of the shoreline and reestablishing shoreline vegetation on the bank.
- 13.** Effects on Aquatic and Shoreline Vegetation - 29 V.S.A. § 405(b): The project does not propose the removal of aquatic or shoreline vegetation. There will be no adverse impact to aquatic or shoreline vegetation.
- 14.** Effects on Navigation and Other Recreational and Public Uses, Including Fishing and Swimming - 29 V.S.A. § 405(b): The project is located near shore in shallow water and effects to public uses will be temporary and limited to the project work area. The road will be converted to one lane for one day during the project.
- 15.** Consistency with the Natural Surroundings - 29 V.S.A. § 405(b): The project involves stabilization of the shoreline with natural rock and does not involve the removal of shoreline vegetation. The project will be consistent with the 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 encroachment is the minimum necessary to achieve a 1:6 slope that will stabilize the shoreline. The additional cumulative impact will be outweighed by the benefits of long term stabilization of the shoreline and long term protection of shoreline vegetation.
- 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/kayaking, swimming, navigation, and boating-related recreation. The impacts of the project on public trust uses include temporary impacts on navigation and recreational uses such as fishing and swimming which will be limited to the project work area. The shoreline stabilization project provides public benefits in the form of long term protection of the shoreline from erosion due to wave and ice action, reestablishment of shoreline vegetation, and public highway stabilization. The public benefits outweigh the temporary negative impacts on public trust uses. 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 Vermont Agency of Transportation 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 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

By: _____
Perry Thomas, Program Manager
Lakes & Ponds Management and Protection Program