#### STATE OF VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION MANAGEMENT OF LAKES AND PONDS 29 V.S.A. Chapter 11

RE Lake Rescue Association & Town of Ludlow PO Box 372 Ludlow, Vermont 05149

Application No. 2012-025, Lake Rescue, Ludlow, Vermont Project: Remove Accumulated Sediment at Mouth of Black River Project Identification Number: NS12-0124

#### BACKGROUND

On June 11, 2012, an application was received by the Department of Environmental Conservation (Department) from the Lake Rescue Association and Town of Ludlow (applicant) under the provisions of 29 V.S.A. Chapter 11, "Management of Lakes and Ponds," for authorization to remove accumulated sediment from the mouth of the Black River where it empties into the public waters of Lake Rescue, Ludlow. The material was deposited after and as a result of Tropical Storm Irene. The application was considered complete for notice on July 25, 2012.

On July 27, 2012, state and local officials, abutting property owners, and others having an interest in this matter were notified of this application and given the opportunity to file written comments or request a public information meeting. The comment period closed on August 10, 2012. No request for a public information meeting was received. Comments were received from the public that the project is not worth doing because it would only serve a limited number of people that travel to and from the river and the project area is dynamic and likely to change over time without dredging.

The Department has reviewed the application, public comments, and other relevant documents and information, and has found that sufficient information exists with which to determine whether this project will be consistent with the public trust doctrine and whether the project will adversely affect the public good as provided in 29 V.S.A. Section 405(b). In reviewing the application for conformance with 29 V.S.A. Chapter 11 the Department has used its Interim Procedures for the Issuance or Denial of Encroachment Permits dated October 6, 1989. The Department has relied on guidance provided by case law to make a decision regarding the proposed project's consistency with the public trust doctrine.

#### FINDINGS

- 1. **Jurisdiction:** Lake Rescue in Ludlow is a public water of the State of Vermont. The project encroaches beyond the shoreline as delineated by the mean water level of the lake. Therefore, the Department has jurisdiction under 29 V.S.A. Chapter 11.
- 2. **Project Description:** The project is the removal of sediment and material that accumulated after Tropical Storm Irene at and near the mouth of the Black River and is impeding navigation and boating. A silt screen curtain will be installed in the lake around the work area outside the dredge limits. The top of the curtain will be floating or protrude above the surface of the lake and the curtain will extend to the lake bottom and be held there by a chain sewn-in or attached to the curtain. The curtain will remain in place in the lake and maintained until the dredging is complete and turbidity within the curtain has decreased to the level of turbidity outside the curtain. Approximately 1,200 cubic yards of material will be removed from a roughly rectangular area lakeward of the mouth of the Black River (see attached plan). The material will be removed from the lake using a boat mounted unit that will pump the material to a geo-textile filter bag located on shore at the Vermont Department of Fish

and Wildlife's access for dewatering. Silt fencing and hay bales will be installed down slope of the bag to prevent erosion and trap any sediment that comes out of the bag as the material dewaters. Water leaving the filter bag will reenter Lake Rescue. The bag will allow the dredged material to dewater and provide temporary storage until the material can be trucked away and used in an appropriate manner.

- 3. **Project Purpose:** The purpose of the project is to restore the lake area, recreational access to the lake and the river, and to protect water quality as disturbance of the sediment by boaters and higher velocity flows results in turbidity.
- 4. **Excessiveness for Stated Purpose:** The dredging will remove a portion of the recently accumulated sediment and material from the lake and improve access to and near the Black River. The project will remove only a small fraction of the sediment that accumulated in the lake following Tropical Storm Irene. Comparison of depth measurements taken by the Department in 2010 and in 2011 following the storm, find that depth in some portions of the proposed dredge project area decreased from 3-4 feet deep to 1-2 feet deep. While the sediment deposit area would mostly erode over time, this process of erosion would result in increased turbidity and the material would remain in the lake. The project is not excessive for its stated purpose.
- 5. **Less Intrusive Feasible Alternatives:** The accumulated material impedes boating and swimming. No less intrusive feasible alternative was identified to remove the material.
- 6. **Measures to Reduce Impacts on Public Resources:** A silt screen curtain will be installed in the lake around the work area and maintained during the project to contain turbidity. Equipment will be required to be inspected and cleaned prior to being placed in the water. Erosion control measures will be installed to prevent sediment from discharging back to the lake.
- 7. **Placement of Fill:** The project does not involve the placement of any fill in the lake.
- 8. **Effects on Water Quality:** A silt screen curtain will be installed in the lake to contain turbidity during the project. The curtain will extend above the water surface and be secured to the lake bottom. The dredged material will be pumped through a sealed pipe to filter bag in an upland location for dewatering. Erosion control measures will be installed down slope of the filter bag. Removal of the sediment from the lake will reduce turbidity resulting from recreational use of the area. No undue short or long term water quality problems will result from the proposed project.
- 9. **Effects on Fish and Wildlife Habitat:** The area was completely disturbed by high flows in the Black River during Tropical Storm Irene. The project will not have an adverse impact on fish and wildlife habitat beyond the acceptable disturbance caused during the removal of the sediment and material.
- 10. **Effects on Aquatic and Shoreline Vegetation:** The area was completely disturbed during Tropical Storm Irene. The Department conducted site inspections and found scattered plants of *Myriophyllum farwellii*. (*Myriophyllum humile* was not observed.) The vegetation growth was predominantly up on the flatter shallower areas of the delta, and not in the channel area the dredging is proposed. The project will disturb (uproot) only a few if any of the plants, and the population as a whole will not be adversely impacted. The project will not impact shoreline vegetation. The impact of the project on aquatic and shoreline vegetation will be not be adverse.

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- 11. **Effects on Navigation and Other Recreational and Public Uses, Including Fishing and Swimming:** The Vermont Department of Fish and Wildlife has issued a license to the applicant authorizing use of the public access area by the applicant for the project, including dewatering. The project will have minimal negative impact on navigation, recreation and public uses during the dredging. The completed project, removing the accumulated sediment from the area and restoring water depths, will have a positive impact on navigation, boating and fishing.
- 12. **Consistency with the Natural Surroundings:** Dredging the area will not significantly impact the natural surroundings. Portions of the Black River channel in the lake and the delta formed in the vicinity will be removed, but the majority of the sediment to be removed was recently deposited following Tropical Storm Irene in August 2011. The completed project will be consistent with the natural surroundings.
- 13. **Consistency with Municipal Shoreland Zoning Ordinances and Applicable State Plans:** No adverse comments were received during the investigation from local and state offices and the project is considered to be consistent with municipal shoreland zoning ordinances and applicable state plans.
- 14. **Cumulative Impact:** The removal of sediment from the area will have a positive cumulative impact by restoring water depths for boating and reducing a source of turbidity and further sedimentation in the lake. While the area is dynamic and will most likely change over time, the removal of the material from the lake will not have an adverse cumulative impact.
- 15. **Public Good Analysis:** There will be short-term negative impacts in the work area while dredging activity is taking place. Turbidity will be contained by a silt screen curtain. The completed project will have an overall positive effect by restoring access to the lake and protecting water quality. The project will not have a significant adverse impact on vegetation or habitat, and will not negatively impact the natural surroundings. Overall, the proposed project will have a positive effect on the public good.
- 16. **Public Trust Analysis:** The public trust doctrine requires the Department to determine what public trust uses are at issue, to determine if the proposal provides a public purpose or benefit, 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 recreational and include boating, fishing, and swimming. The completed project will have a positive impact on public trust uses by removing accumulated material that washed into the lake as a result of Tropical Storm Irene and restoring access to the area. The Department in its public trust review also looks at impacts to the public trust resource, in this case Lake Rescue. The negative impacts on the public resource are primarily short-term during the removal. The completed project will restore the lake area that was disrupted by the storm. The public benefits associated with the project outweigh the potential negative impacts on public trust uses and the public trust resource and the Department has therefore determined that the project is consistent with the public trust doctrine

# **DECISION AND PERMIT**

Based upon the foregoing Findings, it is the decision of the Department that the project described herein, as set forth in the above Findings and in the application and plans on file with the Department, complies with the criteria of 29 V.S.A. Section 405, and is consistent with the Public Trust Doctrine.

In accordance with 29 V.S.A. Sections 403 and 408, permission is hereby granted to the Lake Rescue Association and the Town of Ludlow (permittee) to carry out the project in accordance with the following conditions:

- 1. The project shall be carried out in strict accordance with the application received on June 11, 2012; the above Findings; the conditions of this permit; the attached plan, and such minor modifications as may be approved in writing by the Department.
- 2. The contractor(s) working on the approved project shall contact the Department and request co-permittee status using the form found in Attachment A. The contractor(s) shall not conduct work under this authorization without first obtaining co-permittee status.
- 3. A preconstruction conference shall be held in order for the permittee, co-permittees and the Department to review the conditions of this permit and discuss methods, silt curtain location and location for dewatering. The conference shall be held prior to conducting any work lakeward of the shoreline. The permittee shall supply a work schedule to Steven Hanna of the Lakes and Ponds Section, by email (<u>Steven.Hanna@state.vt.us</u>) prior to the preconstruction conference.
- 4. Prior to placing any equipment in Lake Rescue, the permittee shall inspect and clean all equipment. This shall include removing all visible vegetation and debris, all water from bilges, etc. on all project equipment (boats, motors, etc.) shall be drained; all project equipment shall be rinsed with water at a temperature at or above 140° F for a minimum of one minute and/or washed with an appropriate disinfectant and all absorbent items that have come into contact with water (e.g. felt-bottom wading boots) shall be soaked in an appropriate disinfectant for a minimum of 30 minutes to ensure complete decontamination. As an alternative, the project equipment may be thoroughly dried and kept dry for at least five (5) days before and after being placed in the lake as a means of preventing the introduction of non-native species into or out of the lake.
- 5. The permittee shall install an impermeable silt screen curtain, floating on the lake surface, extending to the lake bottom, and fully enclosing the work area, prior to any dredging activity in the water. If turbidity is observed outside of the curtained area, work shall be stopped until corrective measures can be taken. The silt screen curtain shall remain in place and be maintained until the dredging is complete and turbidity within the curtain has decreased to the level of turbidity outside the curtain.
- 6. The silt screen shall be installed so the flow from the Black River can easily pass around the curtained-off area without causing instability of the curtain and possible failure. The curtained off project area shall extend onto the shallower portions of the delta as little as possible in order to reduce impact to the aquatic and wetland vegetation.
- 7. The dredged material shall be pumped through a sealed pipe to filter bag located at the Fish and Wildlife boating access. Silt fencing shall be used for erosion control due to the flow of water from the filter bag. The silt fence shall be properly installed so that the filtered water does not leak around or under the silt fence. Turbid water shall not be discharged to the lake.
- 8. The dewatered material shall be transported from the storage site without causing a nuisance on public roads or property of others or a discharge to waters of the state. The removal shall occur before winter. The material shall be utilized or disposed of in compliance with all applicable federal, state and local regulations.
- 9. Fuel and lubricants shall not be discharged into the water. Once work commences, it shall be accomplished as quickly as possible to avoid prolonged disturbance to the area.

- 10. Disturbed upland areas and the area where the filter bag is located shall be seeded and mulched and protected from erosion once the dredging is completed.
- 11. All debris and refuse shall be removed from the shorefront and disposed of properly.
- 12. Dredging shall only occur once during the life of this permit. If the permittee determines that additional dredging is needed a separate approval must be applied for and obtained prior to conducting the work.
- 13. This permit shall expire 10 years from the date of this permit.
- 14. This permit and conditions are binding upon the permittee. It may not be transferred without the prior written approval of the Department.
- 15. 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 and inspect the permitted property and the project to determine compliance with this permit.
- 16. This permit is issued subject to the terms herein and may be suspended or revoked at any time for: failure by the applicant 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 terms and conditions 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. This permit does not convey any title or interest to the lands lying under public waters or waters affected, nor does it deprive the Department of the right to order the removal of the project and restoration of the area affected.
- 18. This permit does not grant any exclusive rights or privileges that would impair any rights possessed by other riparian or littoral owners of the State of Vermont. It does not grant any right, title or easement to or over any land not owned in fee by the applicants, nor does it authorize any damage to private property or invasion of private rights or the violation of federal, state or local laws or regulations.
- 19. This permit does not relieve the permittee of the responsibility to comply with any other applicable federal, state and local laws, regulations and permits.
- 20. The Department, by issuance of this permit, accepts no legal responsibility for any damage direct or indirect of whatever nature and by whoever suffered arising out of the project described.
- 21. 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.
- 22. This action shall become effective in 10 days unless an appeal is filed with the Vermont Environmental Court.

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23. Any person aggrieved by this decision may file an appeal pursuant to 10 V.S.A. Chapter 220 §8504. Any appeal of this decision must be filed with the Clerk of the Environmental Court within 30 days of the date of this decision. The filing of such an appeal stays the effectiveness of this decision. The appellant must attach to the Notice of Appeal the entry fee of \$250.00, payable to the State of Vermont. The address for the Environmental Court is 2418 Airport Road, Suite 1, Barre, Vermont 05641 (Telephone: 802-828-1660). For further information, see the Vermont Rules for Environmental Court Proceedings, available on-line at www.vermontjudiciary.org. 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 Court; and must be signed by the appellant or their attorney. In addition, 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 permittee 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** 

State of Vermont Agency of Natural Resources

David K. Mears, Commissioner Department of Environmental Conservation

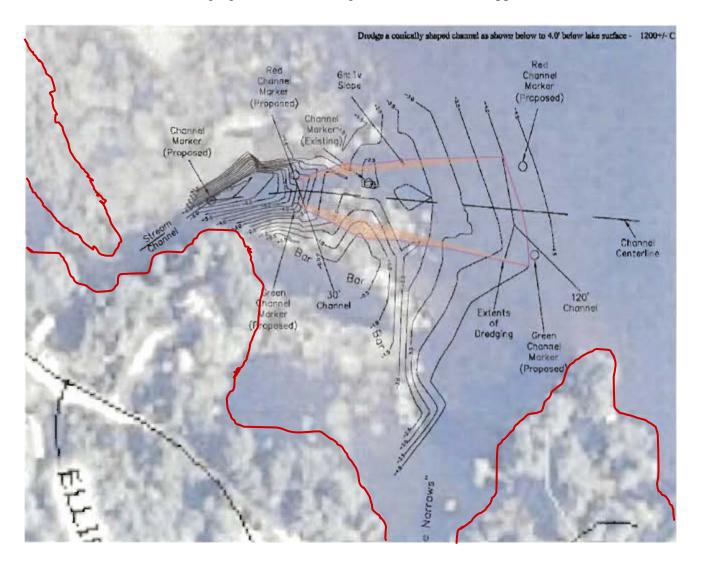
BY:

Peter LaFlamme, Director Watershed Management Division

LakeRescueAssoc-dredge-2012-025-permit.docx

### SITE PLAN NOT TO SCALE

Extent of dredging indicated in orange. Red line indicates approximate shoreline.



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# SITE 1 PROJECT LOCATION NOT TO SCALE



# Attachment A

### **REQUEST FOR CO-PERMITTEE STATUS**

# Title 29 VSA Chapter 11 Management Of Lakes And Ponds

Contractor Request for Co-Permittee Status

I hereby request co-permittee status for myself as an individual or on behalf of my business to conduct work authorized by Title 29 VSA Chapter 11 Management of Lakes and Ponds Permit Number 2012-023. In requesting co-permittee status, I hereby certify under the penalty of law that I have read and am familiar with the terms and conditions of the permit and that all activities related to this authorization request will be done in accordance with the issued permit.

Signature:	_ Date:	
Name (please print):		
Title:		
Contracting Individual, Partnership, Association, or Corporation:		
Address:		
Business Phone/FAX: ()/ (	_)	
Job Site Contact and Phone:		
Project Name:		
Anticipated Construction Start Date		
Anticipated Construction Completion Date		

SUBMIT ORIGINAL, COMPLETED FORM TO:

# WATERSHED MANAGEMENT DIVISION

1 National Life Drive Main Building Floor 2 Montpelier, VT 05620-3522

# ATTACHMENT B REQUEST TO TERMINATE CO-PERMITTEE STATUS

Title 29 VSA Chapter 11 Management of Lakes and Ponds

# **Contractor Request for Termination of Co-Permittee Status**

I hereby request termination of co-permittee status for myself as an individual or on behalf of my business to conduct work authorized by Title 29 VSA Chapter 11 Management of Lakes and Ponds Permit Number \_\_\_\_\_\_. I certify that for the construction activity that was authorized is complete and permanent stabilization has been accomplished on all disturbed areas on the site. The permittee(s) remains responsible for compliance with all conditions of the permit.

Signature:	Date:
Name (please print):	
Title:	
Contracting Individual, Partnership, Association, or Corp	
Address:	
Business Phone/FAX: ()/ (	
Job Site Contact and Phone:	
Project Name:	
Construction Completion Date	

WATERSHED MANAGEMENT DIVISION 1 National Life Drive Main Building Floor 2 Montpelier, VT 05620-3522