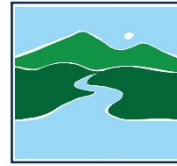


Draft Aquatic Nuisance Control Individual Permit

Under 10 V.S.A. § 1455



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

Permittee(s): Town of Elmore (Decision-maker)
Control Activity: Powered Mechanical Device (Diver Assisted Suction Harvesting)

Permit Number: 2496-ANC
Waterbody: Lake Elmore, Elmore

Based upon the Findings contained in this permit, the Secretary of the Agency of Natural Resources (Secretary) has determined that the proposed aquatic nuisance control activities will comply with 10 V.S.A. § 1455, and is hereby approved under the following conditions and specifications.

a. Specific Conditions

1. Powered Mechanical Device. Control activities approved by this permit shall only be completed by diver assisted suction harvesting (DASH) with the powered mechanical device identified in the Approved Application, or an equivalent approved by the Secretary, within Lake Elmore, Elmore, while this permit is in effect.
2. Annual Review & Approval of Control Locations. DASH shall only occur in locations that have been approved in writing by the Lakes and Ponds Management and Protection Program (Program). Prior to DASH each year, the Permittee shall submit a request to the Program for written approval for proposed DASH locations. Requests may be submitted to the Program over the growing season as needed. A request for proposed DASH locations shall include the following:
 - A. A map identifying the location(s) where DASH is proposed;
 - B. A summary description of Eurasian watermilfoil (EWM), *Myriophyllum spicatum*, densities within each proposed location;
 - C. The proposed date(s) for DASH; and
 - D. The approximate surface area of each proposed location.
3. Target Species. The Permittee shall only target EWM for the control activity.
4. Operation.
 - A. Unless approved in writing by the Secretary, DASH shall occur no earlier than July 1st.
 - B. DASH shall only be conducted by an Operator.
 - C. If determined necessary, a Wetlands Permit or Approval, per 10 V.S.A. § 914, shall be obtained prior to commencement or continuance of the control activity.
 - D. Individuals not involved with project implementation shall not be within the DASH area during operation.
 - E. Rocks, boulders, or woody debris shall not be removed from the lake bottom.
 - F. Prior to DASH, a turbidity curtain, or an equivalent barrier approved by the Secretary, shall be installed around the project work area in either a horseshoe shape or a total enclosure so that turbidity and plant fragments are contained within the work area. The turbidity curtain shall extend to above the surface of the water and be secured to the sediment bottom. 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 turbidity curtain shall not be installed in a way that blocks navigation. The turbidity curtain shall remain in place and be maintained until DASH is complete and observations indicate turbidity within the barrier has decreased to the level of turbidity outside the barrier.

5. Recordkeeping.
- A. All DASH activity shall be recorded daily on a Powered Mechanical Device Report Form (Report Form), or on an equivalent approved by the Secretary.
 - B. Operators shall keep written records as required in this permit for all DASH activities covered under this permit. These records shall be accurate and complete to demonstrate the Operator's compliance with the conditions of this permit.
6. Annual Reporting. An annual DASH activity report shall be submitted to the Secretary by December 31st of the calendar year in which DASH occurred and shall include at a minimum the following information:
- A. A complete copy of records generated as required under condition a.5. of this permit;
 - B. Dates DASH occurred;
 - C. Approximate volume of harvested material removed per approved harvesting location as identified on the site plan map;
 - D. Disposal method(s) and location(s);
 - E. Total number and type of aquatic animals safely relocated (a.7.C.);
 - F. Any observations of rare, threatened, or endangered species;
 - G. A summary of DASH activity; and
 - H. A description of potential aquatic nuisance control activity for the following year.
7. Nontarget Impact Mitigation Measures.
- A. DASH shall not occur within the *Arrowhead-Mud Rush Assemblage* or *Water Lily Aquatic Community* locations as depicted on *Figure 2. Aquatic Natural Communities of Lake Elmore*, located within the Approved Application under the *Lake Elmore Aquatic Plant Inventory October 31, 2017*, unless authorized in writing by the Secretary. Should the Permittee wish to use DASH within the *Arrowhead-Mud Rush Assemblage* or *Water Lily Aquatic Community*, the Permittee shall conduct a quantitative aquatic plant survey between August 1st and September 30th of the year prior to submitting a request for DASH within those locations in accordance with condition a.2. of this permit. A quantitative aquatic plant survey shall at a minimum contain the population locations and densities of the target species EWM, S1, S2, S2S3, and S3 species.
 - B. Prior to and within the location approved for DASH, a search shall be conducted for the following rare and uncommon aquatic plant species that are known to occur in the waterbody. Any observation of the following species shall be reported on the Report Form. DASH shall avoid and not remove the following species known to occur in the waterbody:
 - i. Nuttall's waterweed (S3), *Elodea nuttallii*;
 - ii. Northern manna grass (S3), *Glyceria borealis*;
 - iii. River bank quillwort (S2), *Isoetes riparia*;
 - iv. Blunt-leaf pondweed (S3), *Potamogeton obtusifolius*;
 - v. Straight-leaf pondweed (S2S3), *Potamogeton strictifolius*;
 - vi. Vasey's pondweed (S2), *Potamogeton vaseyi*;
 - vii. White water-crowfoot (S3), *Ranunculus aquatilis* var. *diffusus*;
 - viii. Lesser bur-reed (S3), *Sparganium fluctuans*; and
 - ix. Small bur-reed (S2), *Sparganium natans*.
 - C. Prior to and within the location approved for DASH, a search shall be conducted for turtles, mussels, fish, and other similar wildlife prior to DASH. DASH shall not injure or kill turtles, mussels, fish, and other similar wildlife. The permittee shall safely relocate all turtles, mussels, fish, and similar wildlife found prior to/during DASH to an area outside of the control activity. This action shall be recorded on the Report Form.

- D. DASH shall not interfere with the eggs, nests, or reproductive behavior of aquatic animals.
- E. Operators shall be able to identify EWM and be able to distinguish it from native aquatic vegetation.
- F. A quantitative aquatic plant survey may be required at the Secretary's request.
- 8. Disposal. All harvested EWM shall be disposed at upland, non-wetland locations, including the 50-foot wetland buffer for Class I & II wetlands, where it cannot return to any waterbody.
- 9. Transport. Vehicles transporting harvest spoils (e.g. vegetation, mud, etc.) to a disposal location shall be covered and shall not lose material during transport.
- 10. Notice of Addition of Permittee. The Permittee(s) shall notify the Secretary of any addition of a decision-maker or operator on a form provided by the Secretary. DASH shall only be conducted by the Permittee(s) of this permit or an entity identified on a form provided by the Secretary.
- 11. Approved Application. The project shall be completed as shown on the application, plans, and support documents as submitted by the Permittee, and approved by this permit.

b. Standard Conditions

- 1. Reporting & Correspondence. All requisite correspondence directed to the Secretary and/or Program pertaining to this permit, including notifications, surveys and reports, shall be submitted via email to ANR.WSMDShoreland@vermont.gov or mailed to the following address:

Lake & Shoreland Permitting
Watershed Management Division
1 National Life Drive, Main 2
Montpelier, VT 05620-3522
- 2. Aquatic Invasive Species Spread Prevention. Prior to any control activity occurring, all equipment, including but not limited to boats, trailers, vehicle, and gear, that has been in or on any other waterbody, shall be decontaminated in accordance with the [Voluntary Guidelines to Prevent the Spread of Aquatic Invasive Species through Recreational Activities](#), Aquatic Nuisance Species Task Force, November 2013, or its replacement.
- 3. Decision-makers & Operators as Permittees. A Permittee is defined to mean any person associated with aquatic nuisance control activities (activity) (1) who performs the activity or who has day-to-day control of the activity; or, (2) any person with control over the decision to perform the activity including the ability to modify those decisions. Permittees identified as (1) are referred to in this permit as Operators while Permittees identified as (2) are referred to in this permit as Decision-makers. More than one Operator may be responsible for complying with this permit. Permittees are defined as a Decision-maker, as an Operator, or as both. When a Permittee is both a Decision-maker and an Operator, the Permittee must comply with all applicable requirements.
- 4. Authorization Modification or Amendment. This permit may be modified or amended upon request by the Permittee or by the Secretary. Any modification under this condition shall be performed in accordance with the [Public Review and Comment Procedures for Aquatic Nuisance Control Permit Applications and General Permits](#), January 30, 2003, or its replacement.
- 5. Rare, Threatened, or Endangered Species. Encounters with any rare, threatened, or endangered species shall be reported to the Secretary immediately. If determined necessary by the Secretary, an Endangered & Threatened Species Taking Permit, per 10 V.S.A. § 5408, shall be obtained prior to commencement or continuance of the control activity.
- 6. Compliance with Other Regulations. This permit does not relieve the Permittee from obtaining all other approvals and permits prior to commencement of activity, or the responsibility to comply with any other applicable federal, state, and local laws or regulations.
- 7. Access to Property. By acceptance of this permit, the Permittee agrees to allow representatives of the state of Vermont access to the property covered by the permit, at reasonable times, for the purpose of ascertaining compliance with Vermont's statutes, regulations, and permit conditions.

8. Legal Responsibilities for Damages. The Secretary, 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 activity.
9. Rights & Privileges. This permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.
10. Duty to Comply & Enforcement. The Permittee shall comply with all terms and conditions of this permit. Any permit noncompliance shall constitute a violation of 10 V.S.A. § 1455 and may be cause for any enforcement action and revocation, modification, or suspension of the 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.
11. Duty to Reapply. If the authorized activity is anticipated to continue after the expiration date of this permit, the Permittee shall reapply for coverage under a new permit sixty (60) days prior to the expiration date of this permit.
12. Twenty-Four Hour Non-compliance Reporting. Unless provided otherwise by this permit, the Permittee shall report any noncompliance which may endanger public health or the environment. Any such information shall be provided within 24 hours from the time the Permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance, its cause; the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; as well as steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
13. Official Duties. This permit shall not restrict law enforcement of emergency operations or the performance of official duties by a government agency.
14. Public Access Area. In accordance with Fish and Wildlife Board Rule 641, pursuant to 10 V.S.A. § 4145(a), Vermont Department of Fish & Wildlife Access Areas shall not be used for this activity without proper authorization from the Secretary.
15. Reopener. If after granting this permit the Secretary determines, at his or her discretion, that there is evidence indicating that an authorized activity does not comply with the requirements of 10 V.S.A. Chapter 50, the Secretary may reopen and modify this permit to include different limitations and requirements.
16. Appeals. 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 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 - 10 V.S.A. § 1455(a). Within waters of the State, no person may use pesticides, chemicals other than pesticides, biological controls, bottom barriers, structural barriers, structural controls, or powered mechanical devices to control nuisance aquatic plants, insects, or other aquatic nuisances, including lamprey, unless that person has been issued a permit by the secretary. The project, as described in Permit Application #2496-ANC, involves the use of a powered mechanical device, diver assisted suction harvesting

(DASH), to control Eurasian watermilfoil (EWM), *Myriophyllum spicatum*, within Lake Elmore in Elmore. Therefore, the Department has jurisdiction under 10 V.S.A. Chapter 50.

2. Application Receipt & Review. A permit application submitted by the Town of Elmore was received on November 21, 2017 for an Aquatic Nuisance Control Individual Permit for the use of DASH in Lake Elmore. It was reviewed in accordance with the Department of Environmental Conservation's *Permit Application Review Procedure*, adopted May 22, 1996.
3. Background; Aquatic Nuisance Control Permit History. Aquatic Nuisance Control Individual Permit #2006-H04, which had permitted DASH to control EWM in Lake Elmore, expired on August 14, 2016. Aquatic Nuisance Control Individual Permit #2496-ANC (current authorization), is a continuation of the previously permitted project.
4. Project Purpose. The purpose of the project is to manage an established population the aquatic invasive species EWM to improve the public good uses of Lake Elmore.
5. 10 V.S.A. § 1455(f)(1) – Nontarget Environment. The use of DASH may negatively impact the nontarget environment in several ways. Immediate impacts include increases in turbidity caused by the disturbance of lake sediments during the harvesting operation as well as the potential removal of nontarget native aquatic organisms. The immediate impact to water quality and the resettling of the suspended particles can pose a threat to fish eggs and aquatic invertebrates by smothering them, which has the potential of having a greater impact to the nontarget environment during the spring spawning period (pre-July 1). To be protective of the spring spawning period, DASH is prohibited to occur prior to July 1st. Additionally, a turbidity barrier will be used in conjunction with DASH to contain turbidity to the project area. Fragments of EWM that may be generated from DASH will also be contained within the turbidity barrier, which prevents EWM from spreading to other locations.

Additional impacts to the nontarget environment from DASH are from the physical habitat alteration of the area to be controlled and potential loss of native aquatic plant species resulting from the targeted removal of EWM. To reduce this potential impact, all DASH operators are required to be able to distinguish EWM from native aquatic plants as well as not removing rocks, boulders, or woody debris from the lake bottom. The physical alteration of the aquatic habitat and species composition may impact the population dynamics of other aquatic species. However, the removal of EWM helps promote native plant biodiversity, which improves the biological integrity of the lake over time.

The Secretary has required that all proposed harvest locations be identified annually prior to commencing DASH as a means to reduce impacts to the nontarget environment. While the Secretary recognizes that other, native organisms may be adversely impacted using DASH, it is not anticipated that undue adverse impacts to the nontarget environment will occur if this control activity is conducted in accordance with this permit.

Rare macrophyte species have been recorded in Lake Elmore. Species observed include Nuttall's waterweed (S3), *Elodea nuttallii*; Northern manna grass (S3), *Glyceria borealis*; River bank quillwort (S2), *Isoetes riparia*; Blunt-leaf pondweed (S3), *Potamogeton obtusifolius*; Straight-leaf pondweed (S2S3), *Potamogeton strictifolius*; Vasey's pondweed (S2), *Potamogeton vaseyi*; White water-crowfoot (S3), *Ranunculus aquatilis* var. *diffusus*; Lesser bur-reed (S3), *Sparganium fluctuans*; and Small bur-reed (S2), *Sparganium natans*. Within the Approved Application under the *Lake Elmore Aquatic Plant Inventory October 31, 2017*, River bank quillwort (S2) and Vasey's pondweed (S2) were observed within the *Arrowhead-Mud Rush Assemblage* or *Water Lily Aquatic Community*. As a result, DASH shall not be used in those locations unless an additional quantitative aquatic plant survey is conducted to specify population locations and densities of EWM, S1, S2, S2S3, and S3 species. The Permittee will report any observation of rare, threatened, or endangered species in accordance with this permit and DASH will not remove those populations. The Permittee may consult with the Secretary to confirm speciation.

The Permittee will report any observation of rare, threatened, or endangered species in accordance with this permit.

To mitigate the risk of introduction or transport of non-native aquatic invasive species, spread prevention measures must be taken. Prior to any control activity occurring, all equipment (such as a boat, trailer, vehicle, and gear) that has been in or on any other waterbody, will be decontaminated in accordance with the [Voluntary Guidelines to Prevent the Spread of Aquatic Invasive Species through Recreational Activities, Aquatic Nuisance Species Task Force, November 2013](#), or its replacement.

The Secretary has determined that there is acceptable risk to the nontarget environment.

6. [10 V.S.A. § 1455\(f\)\(2\) – Public Health](#). The control activity should result in negligible risk to public health provided precautions are taken to ensure that individuals not involved with project implementation are not within the harvesting area during operation and all equipment is properly maintained. The Secretary has determined that there is negligible risk to public health.
7. [10 V.S.A. § 1455\(f\)\(3\) – Public Good](#). Based upon the findings above, the Secretary has determined that there is no undue adverse effect upon the public good from the use of a powered mechanical device when operated in accordance with this permit and the Approved Application.
8. [10 V.S.A. § 1455\(h\) – Public Notification](#). An opportunity for the public to review and comment on this application was provided in accordance with the Department of Environmental Conservation’s [Public Review and Comment Procedures for Aquatic Nuisance Control Permit Applications and General Permits, adopted per 3 V.S.A. Chapter 25, on January 30, 2003](#).

d. Authorization

By delegation from the Secretary, the Vermont Department of Environmental Conservation has made a determination that the above activity qualifies for an individual aquatic nuisance control permit. The Permittees are authorized per 10 V.S.A. § 1455(i) subject to the conditions herein specified.

This permit shall be effective on the day of signing, and expire ten years thereafter.

Emily Boedecker, Commissioner
Department of Environmental Conservation

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