



Agency of Natural Resources

103 South Main Street, Center Building
Waterbury, VT 05671-0301
802-241-3600

Endangered & Threatened Species Takings Permit

Statutory Authority: 10 V.S.A. Section 5408

1. Permittee:

US Fish and Wildlife Service
Lake Champlain Fish and Wildlife Resource Offices
11 Lincoln St.
Essex Junction, VT 05452
802.872.0629 x12
dave_tilton@fws.gov

2. Permit Period

Effective Date: 09/04/2014
Expiration Date: 09/03/2015
Authorization #EH-2014-09
Amendment # 0

3. Principal Officer: Dave Tilton

4. Subpermittee(s):

Lake Champlain Fish and Wildlife Management Cooperative Interagency sea lamprey control team (Staff from VT Fish and Wildlife Dept, NY State DEC, and the US Fish and Wildlife Service). Contact: Michael Calloway, 802.872.0629 x18 or 662.361.8656, michael_calloway@fws.gov

5. Authorized Species:

<u>Common Name</u>	<u>Scientific Name</u>
Pocketbook	<i>Lampsilis ovata</i>
Pink heelsplitter	<i>Potamilus alatus</i>
Fluted shell	<i>Lasmigona costata</i>
Fragile papershell	<i>Leptodea fragilis</i>
Giant floater	<i>Pyganodon grandis</i>

6. Authorized Activity:

Application of the lampricide TFM-HP and TFM-Bar for Lewis Creek, VT to control larval sea lamprey (*Petromyzon marinus*).

7. Location Where Authorized Activity May Be Conducted:

Lewis Creek in the Towns of Charlotte and Ferrisburgh from Scott Pond Dam downstream to the mouth.

8. Findings

General

- A. The Permittee is seeking an Endangered and Threatened Species Taking Permit under 10 V.S.A. § 5408 to authorize aquatic pesticide application to the Lewis Creek to control larval sea lamprey (*Petromyzon marinus*). Lewis Creek was previously treated with lampricide in 2010.
- B. The sea lamprey is a fish that parasitizes other fish, scarring or killing its host. A substantial body of information collected by the Permittee and others indicates that the sea lamprey is depressing coldwater and some warm water fisheries in Lake

Champlain. The negative impacts of sea lamprey parasitism have been documented in the Great Lakes where sea lamprey control programs have been in effect for more than 50 years.

- C. The proposed lampricide treatment is part a long-term sea lamprey control program for Lake Champlain initiated by the Permittee, along with the Lake Champlain Fish and Wildlife Management Cooperative, the New York State Department of Environmental Conservation, Vermont Department of Fish and Wildlife, and the U.S. Fish and Wildlife Service in 2002. This program was developed in response to an eight-year experimental sea lamprey control program conducted on Lake Champlain between 1990 and 1997. The experimental program demonstrated the efficacy of the lampricide TFM in effectively reducing numbers of sea lamprey to levels resulting in significant improvement in salmonid survival and fishing quality in Lake Champlain. A primary goal of the long-term sea lamprey control program is to prevent the economic harm from sea lamprey parasitism as well as to enhance the propagation of salmonid and other fisheries in Lake Champlain.
- D. The Lewis Creek system is one of 23 Lake Champlain tributaries in Vermont, New York and Quebec that are a source of sea lamprey production. Using quantitative assessment sampling (QAS) protocols, the U.S. Fish and Wildlife Service estimated a larval sea lamprey population of 170,089 ammocetes in 2013 and 0 transformers in Lewis Creek (See permit application Attachment 1 p.1-6).

Enhancement of the Propagation of Species

- E. The Permittee states that the proposed lampricide treatment is necessary to enhance the propagation and restoration of native lake trout and landlocked Atlantic salmon populations in Lake Champlain and will also benefit other Lake Champlain fish species, including walleye, northern pike and lake sturgeon.
- F. From the conclusion of the experimental sea lamprey control program in 1997 to the initiation of the long term program in 2002, the parasitic-phase sea lamprey population rebounded and lamprey wounding approached and exceeded pre-control levels. Wounding rates on Lake Champlain landlocked Atlantic salmon (*Salmo salar*) and lake trout continued to increase through the first five years of long-term control; however, substantial declines in wounding have been documented since 2007 (see Table 1 of permit application Attachment 1).
- G. Program wounding rate objectives are 15 wounds per 100 salmon and 25 wounds per 100 lake trout (USFWS et al. 2001). The 2013 wounding rate for salmon in the Main Lake was 19 wounds per 100 fish. The 2012 wounding rate for lake trout in the Main Lake was 54 wounds per 100 fish. Walleye (*Sander vitreum*) 2012 wounding rates also continue to remain higher than the objective of 2 wounds per 100 fish at a rate of 3.9 per 100 fish. Within the Missisquoi River, 2013 Walleye wounding rates were below the objective rate at 1.5 wounds per 100 fish (see Table 2 of permit application Attachment 1).

Economic Impact

H. The Permittee also states that the sea lamprey control program, of which the proposed lampricide treatment is a part, provides substantial economic and recreational benefits to the Lake Champlain region. According to the documentation provided by Permittee, realization of the full benefits of sea lamprey control is estimated to have an annual economic impact of up to \$42 million in fishing-related expenditures and \$59 million including all water-based recreation expenditures. Thus, ineffective control or no control of sea lamprey will result in substantial economic losses, particularly in businesses significantly dependent on water-based recreation in the Lake Champlain region.

Non-Chemical Alternatives

I. Currently, the only non-chemical control alternatives proven effective in certain situations are construction of barriers to spawning-phase sea lamprey migration and spawning-phase sea lamprey trapping. The *Status Report for the Lake Champlain Sea Lamprey Alternatives Workgroup (USFWS 2006)* summarizes nine studies from between 2002 and 2006 which assess potential alternatives to lampricide. Additional studies have been undertaken since then, but have not resulted in development of additional, feasible alternative control methods.

Proposed Lampricide Treatment

J. The Permittee is proposing an aquatic pesticide treatment in the Lewis Creek to control larval sea lamprey. As shown in Figure 2, the primary application point (AP) on the Lewis Creek is at Scott Pond Dam. The treatment is proposed to occur September 2-December 1, 2014; or 2015 if a 2014 treatment is not conducted.

K. 3-Trifluoromethyl-4-nitrophenol (TFM) is being proposed for use in the Lewis Creek. There are two proposed TFM products, TFM-HP (EPA Reg. No. 6704-45), a liquid formulation, and TFM Bar (EPA Reg. No. 6704-86), a 2 pound water-soluble solid bar formulation. The concentration of active ingredient in TFM-HP is equivalent to 33% TFM by weight, and isopropanol, which is used as the solubilizer, is the primary inert ingredient. The concentration of active ingredient in TFM Bar is equivalent to 23% TFM. TFM-HP and TFM Bar are aquatic pesticides that are registered by the U.S. Environmental Protection Agency to control sea lamprey larvae in tributaries to the Great Lakes, the Finger Lakes, and Lake Champlain.

L. TFM Bars are used in supplemental applications on a limited basis in small tributaries (less than 3 cfs and water velocity of 0.3 to 0.5 feet/second) entering treated streams, to block larval sea lamprey escapement into TFM-free water at tributary mouths. According to the product label, the bars are formulated to dissolve and release the active ingredient at a constant rate in flowing water; bars will dissolve in approximately 8 to 10 hours at 17 °C and 10 to 12 hours at 12 °C in current velocities of 0.09 to 0.12 meters/second. More rapid velocities will cause the bar to dissolve faster.

- M. The Permittee is proposing to apply TFM Bars at three tributaries near their confluences of Lewis Creek (at river miles 3.6, 4.2 and 5.1) concurrent with passage of the mainstream lampricide block at those points to block lampreys' escapement into untreated water from these streams. TFM-HP at one supplemental application at the falls in North Ferrisburgh (river mile 5.6) is proposed to boost the TFM concentration to desired level (Attachment 1, Figure 2)
- N. The Permittee is proposing to apply TFM for 12 to 14 consecutive hours to achieve a target in-stream lampricide concentration at the sampling station immediately downstream of the AP of no greater than 1.3 times the minimum lethal concentration to sea lamprey (1.3 x MLC). MLC is the concentration of lampricide that produces 99.9 percent mortality among sea lamprey larvae during a 9-hour exposure for a given water chemistry. The MLC will be determined by the results of an on-site toxicity test and diurnal stream pH and alkalinity analysis in the days prior to treatment. The MLC may be adjusted during treatment to compensate for shifts in pH or alkalinity that differ from pre-treatment conditions. A possible 14 hour treatment period will provide the Permittee with the opportunity to accommodate changes in flow, pH, and weather conditions to allow for the needed nine hour exposure time at 1.0 x MLC throughout the stream. The treatment concentration and application time may be adjusted to minimize impacts on certain sensitive non-target species and to ensure that dilution and attenuation does not degrade the toxicity of the lampricide block to below the 9-hour minimum lethal level in downstream areas of the treated stream (Adair and Sullivan 2006).
- O. The Permittee will treat at the lowest concentration and/or duration that will be expected to maintain a 9-hr lethal block (1.0 x MLC or greater) in all downstream areas, based on previous treatment experience, and stream flow, water chemistry, and weather conditions at the time of treatment.
- P. TFM-HP and TFM Bars are restricted-use pesticides. Persons applying these pesticides are required to follow the "Standard Operating Procedures for Application of Lampricides in the Great Lakes Fishery Commission's Integrated Management of Sea Lamprey Control Program" (hereinafter "SOP"). Specific application instructions and formulas for application rates are included in the SOP. The toxicity of lampricides varies depending on stream water pH and total alkalinity. Thus, the amount of lampricide applied and application rate is based on stream conditions at the time of treatment, including discharge and water chemistry.

Treatment Monitoring

- Q. The Permittee is proposing to use seven water sampling stations on the Lewis Creek, located as shown in Figure 2.
- R. During lampricide application, water samples will be collected and analyzed every ½ hour at the most upstream sampling station below each application point (AP), as well as below supplemental application points (SAP) where TFM-HP is applied to

control the TFM application rate. TFM concentrations will be monitored at least once every 2 hours at all downstream sampling stations, by hand or by deployment of automatic water samplers to assess concentrations and duration of the lampricide block passing each point. Water sampling below TFM bar application points is less frequent since the active ingredient is released at a constant rate. Once the target concentration is achieved with the TFM bar application, a minimum of two additional water samples will be collected over the duration of the dissolution period.

- S. Water chemistry samples will be collected at least once every 2 hours at each station during the periods that the lampricide block passes through each point (Figure 2), as well as immediately below each supplemental application point, if used. Adjustments will be made to the application rate and target concentration to compensate for unexpected variation in pH and/or total alkalinity at the most upstream station (or downstream stations if applicable) during the treatment. Water chemistry will be monitored at stations with automatic water samplers using pH/temperature data recorders; samples will be analyzed for total alkalinity at least at the times of deployment and retrieval of the samplers and data recorders.

Post-Treatment Monitoring

- T. The post-treatment mortality assessment will be conducted in accordance with the SOP and as conditioned in the previously issued, Vermont Department of Environmental Conservation Aquatic Nuisance Control Permit (ANC) #2010-C05. Post-treatment mortality assessment crews will walk systematically, pre-defined sections of each treated stream reach within 36 hours of the lampricide block passage. All visible river-bottom in each section will be inspected and observations of non-target organism mortalities, except lamprey, will be recorded. Non-target assessment sections comprise about 23% of the treated reaches and are defined based on the locations of USFWS sea lamprey QAS transects as follows: In the reach from the mouth to the falls in North Ferrisburgh, the sections between transects 3-4, 8-9, 13-14, 18-19, and 23 to the falls (second application point) will be sampled. In the reach from the falls upstream to Scott Pond Dam, the sections between transects 3-4, 8-9, 13-14, 18-19, and 23 to the Dam (primary application point) will be sampled (Figure 3). Results of non-target mortality surveys will be submitted to the VT ANR by May 1 of the year following the treatment. The post-treatment QAS survey results will be submitted by December 31 of the year following the year of treatment
- U. All dead fish (excluding lamprey), amphibians, mussels and other large invertebrates encountered will be identified and enumerated, if possible. Other organisms not identified in the field will be collected, if possible, and retained for identification. Threatened and Endangered species as well as mudpuppies will be preserved and provided to researchers. Results of non-target mortality surveys will be submitted to the VT ANR by May 1 of the year following the treatment.

Risks to Listed Endangered or Threatened Species and Mitigation Measures

- V. Four state-listed endangered or threatened mussels are known to inhabit the reach of Lewis Creek proposed for lampricide application (see Section 5 above). The

state-threatened giant floater mussel (*Pyganodon grandis*) has been found on the Lewis Creek delta, but is not known to naturally occur in the stream itself. There are no known state-listed endangered or threatened fish within Lewis Creek.

- W. New York State Department of Environmental Conservation (NYSDEC) toxicity tests conducted at the Rome, NY State Fish Hatchery and Research Laboratory found the TFM no observed effect concentration (NOEC) for the fluted shell to be 1.6 x MLC. The lowest observed effect concentration (LOEC) is 2.0 x MLC (NYSDEC and VTDFW 2001).
- X. The NOEC and LOEC for the pocketbook was found to be 1.5-1.6 x MLC and 2.0 x MLC (Neuderfer 2001, NYSDEC and VTDFW 2001).
- Y. A 2004 study by Boogaard et al. revealed similar results for the giant floater, fragile papershell and pink heelsplitter. The NOEC's for the giant floater and fragile papershell were 1.6 x MLC and 1.5 x MLC. There were no observed mortalities of the pink heelsplitter at the highest TFM exposure of 1.9 x MLC. The LOEC's for the giant floater and fragile papershell were 2.0 x MLC and 1.8 MLC.

Advice of the Endangered Species Committee

- Z. On July 9, 2014, representatives from the Endangered Species Committee (ESC) and Scientific Advisory Groups (SAG) met to discuss the 2014 application to treat Lewis Creek with TFM-HP and TFM bars. Comments were provided by members present and not present at the meeting. The Committee recommended a permit not be granted.
- AA. The ESC remains concerned with the long term ecosystem effects as the long term effects on mussels are not well known. Concern regarding the proposed concentration of 1.3 x MLC was expressed as it is beginning to approach the upper limits of NOEC for mussels.
- BB. If the permit is granted, the ESC recommends the following conditions be included:
 - 1. That non-target mortality surveys cover as large a portion of the treated rivers as is possible and that any and all dead mudpuppies be collected and stored in such a way as to allow future sexing and genetic analysis.
 - 2. That the applicant (USF&W) perform the needed research to show the current distribution and abundance of Mudpuppies in Vermont and provide the research to show the pre- and post-treatment population sizes of Mudpuppies in treated and untreated rivers in Vermont over a multiyear period.
 - 3. That a certain percentage of the applicant's funding for all future treatments be allocated to determining and elucidating the factors that may be causing increased predation, or increased numbers of sea lamprey.
 - 4. Investigation of long-term habitat improvement projects that might help

salmonids become self-sustaining in Lake Champlain without the need for regular biocide treatments.

CC. Having considered the recommendations of the Endangered Species Committee and the Permittee's responses thereto, the Agency finds:

- a. A lampricide treatment concentration of up to 1.3 x MLC is authorized; however, the treatment concentration and application time may be adjusted to minimize impacts on certain sensitive non-target species and to ensure that dilution and attenuation does not degrade the toxicity of the lampricide block to below the 9-hour minimum lethal level in downstream areas of the treated stream.
- b. While the mudpuppy is not a listed species and is outside the scope of this permit, the mudpuppy is addressed by Aquatic Nuisance Control Permit 2010-C05, which requires: "During post-treatment surveys all dead mudpuppies found shall be collected and tissue samples take and preserved in a manner such that DNA studies of the population are possible."

9. Statutory Determination

- A. 10 V.S.A. § 5408(a) provides: "[A]fter obtaining the advice of the Endangered Species Committee, the Secretary may permit, under such terms and conditions as the Secretary may prescribe by rule any act otherwise prohibited by this chapter done for any of the following purposes: scientific purposes; to enhance the propagation or survival of a species; economic hardship; zoological exhibition, educational purposes; or special purposes consistent with the purposes of the federal Endangered Species Act."
- B. The Permittee has requested an Endangered and Threatened Species Taking Permit for the following purpose: Enhance the Propagation of a Species and Economic Hardship.
- C. The state of Vermont recognizes the value which plants, fish and wildlife in their natural environment have for public enjoyment, ecological balance, and scientific study.
- D. The state of Vermont recognizes the need for protection and preservation of these plants, fish and wildlife in their natural environment.
- E. The General Assembly of Vermont intends that the species of wildlife and wild plants normally occurring within this state which may be found to be threatened or endangered within the state should be accorded protection as necessary to maintain and enhance their numbers.
- F. The General Assembly of Vermont intends that the state should assist in the protection of species of wildlife and wild plants which are determined to be threatened or endangered elsewhere pursuant to the federal Endangered Species Act.
- G. The General Assembly of Vermont intends to allow for the orderly development of Vermont without undue hardship being caused by the protections provided by the Threatened and Endangered Species Act by providing for the issuance of permits.

- H. Pursuant to 10 V.S.A. § 5408(a), the ANR Secretary hereby determines, based upon the findings detailed above and after receiving advice from the Endangered Species Committee, that the proposed activity is consistent the purposes of the 10 V.S.A. Chapter 123. An Endangered and Threatened Species Takings Permit is authorized as conditioned below.

10. General Permit Conditions

- A. The general conditions set out in 10 V.S.A. Chapter 123 are hereby incorporated into this permit. All activities authorized by this permit shall be carried out in accordance with, and for the purposes described in, the application. The continued validity of this permit is subject to the complete and timely compliance with all applicable conditions and the filing of all required information.
- B. The validity of this permit is expressly conditioned upon compliance with all applicable federal, state and local laws, regulations, and permits.
- C. By acceptance of this permit, the Permittee and its heirs, successors and assigns agree to provide the Agency with unrestricted access, at reasonable times, to the property covered by this permit for the purposes of monitoring and managing the populations of state-listed species, and otherwise ensuring compliance with this permit and with the Endangered and Threatened Species Law.
- D. The permit is valid for use by the named Permittee and Subpermittee only. Transfer of the permit shall require prior written authorization of the Secretary.
- E. The Agency maintains continuing jurisdiction over this project and may at any time modify, suspend, revoke, or terminate this permit upon a finding of good cause, or order the Permittee to undertake remedial measures if necessary to ensure the protection and conservation of endangered or threatened species at the location of the permitted activity.

11. Specific Permit Conditions

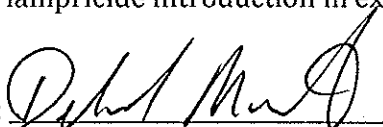
- A. The Permittee is authorized to use TFM-HP (EPA Reg. No. 6704-45) and TFM-Bar (EPA Reg. No. 6704-86) Sea Lamprey Larvicide, in one concurrent treatment of Lewis Creek in the Towns of Ferrisburgh and Charlotte, downstream of Scott Pond Dam. The treatment shall only occur after Labor Day (September 2nd) and prior to December 1st of 2014 or between the same dates in 2015 if the treatment is not performed in 2014.
- B. The specific products used, TFM-HP and TFM-Bar, must be registered with the U.S. Environmental Protection Agency and the Vermont Agency of Agriculture, Food, and Markets for use in Vermont at the time of the treatment. All products shall be handled, applied, and disposed of in full conformance with all label requirements and state and federal regulations in effect at the time of the treatment.

- C. The Permittee will be allowed a primary application of TFM at Scott Pond Dam and a supplemental introduction of TFM at the falls in North Ferrisburgh to boost the TFM concentration to desired levels.
- D. The Permittee may conduct applications using TFM-Bar (solid formulation) in up to 3 small tributaries to Lewis Creek. Locations of application points on the stream are shown in attachment 1. Applications shall be conducted in strict accordance with procedures in the permit application and *Standard operating procedures for Application of Lampricides in the Great Lakes Fisheries Commission's Integrated Management of Sea Lamprey (Petromyzon marinus) Program* (Adair and Sullivan 2006).
- E. No treatment shall occur in Lewis Creek unless the surface elevation of Lake Champlain on the day of treatment is at or below 98 feet NGVD as measured at the permanent U.S.G.S. gauging station located at Burlington, Vermont.
- F. Treatment shall only occur in Lewis Creek when the measured flow rate on the day of treatment is below 95 cfs.
- G. The Permittee shall apply the lampricide in accordance with the following:
 - a. Standard Operating Procedures for Application of Lampricides in the Great Lakes Fishery Commission Integrated Management of Sea Lamprey (*Petromyzon marinus*) Control Program, Marquette Michigan. Control Report 92-001.4 (Adair and Sullivan 2006); and,
 - b. Contingency Plan for Accidental Spillage of Lampricides during Lake Champlain Sea Lamprey Control Operations (Smith 2011).
- H. As determined by an on-site toxicity test conducted on or after September 1 of the year of the treatment, the Permittee shall apply lampricide to maintain a 9-hr lethal concentration (1.0 x MLC or greater) in all downstream areas from the primary application point.
- I. Lampricide applied at the Primary Application Point, Maintenance Boost Application Point, and Supplemental Application Points at a rate that shall not exceed 1.3 x MLC to sea lamprey measured at the most upstream sampling station below each application point.
- J. The Permittee shall monitor and adjust application concentrations for changes in pH and alkalinity in order to maintain the authorized TFM concentration.
- K. The Permittee shall not apply TFM into the Lewis Creek for longer than 14 consecutive hours.
- L. The Permittee shall collect and analyze water samples from sampling stations in accordance with the sampling station locations, parameters, methods and sampling frequencies outlined in the In-stream TFM Monitoring section of Attachment 1 of the Endangered and Threatened Species Takings Permit Application.
- M. Except for samples collected for water use advisory purposes, the Permittee shall determine TFM concentrations with analytical instruments accurate to within 0.1 parts per million.

- N. During the first two scheduled sampling times, the Permittee shall take samples at the upstream-most sampling station below the primary application and below the supplementary boost application from one-quarter, one-half and three-quarters of the distance across the treated section of each river. If sample analyses demonstrate that TFM concentrations are uniform across the river (the near-shore measurements are within 0.1 parts per million TFM of the midstream measurement), the Permittee may collect future samples from one location only. If TFM concentrations are not uniform, the Permittee shall continue to take three samples across the river at future scheduled sampling times until the results indicate that the concentrations are uniform.
- O. If during the permitted treatment, the TFM concentration from a single river sample at the most upstream sampling station exceeds the authorized target TFM concentration (defined in condition G. above) by a factor of 0.1x MLC (i.e. 1.4 x MLC or greater) or more, the Permittee shall adjust the TFM feed rate until the in-stream TFM concentration no longer exceeds the authorized target concentration.
- P. If the authorized treatment in Lewis Creek is delayed until 2015, the Permittee shall submit any new research findings or other factual information not previously available pertaining to effects of lampricides on any of the species covered by this permit as soon as possible but no later than 30 days prior to treatment in 2015.
- Q. The Permittee shall conduct a post-treatment survey in the treated reaches of Lewis Creek to estimate abundance of sea lamprey and other lamprey species using the standard Quantitative Assessment Sampling (QAS) methodology within one year after treatment. The results of the survey shall be submitted to the Agency within six months of completion of the survey.
- R. A post-treatment mortality assessment will be conducted in accordance with the SOP and as defined in the ANC 2010-C05 permit. Post-treatment mortality assessment crews will walk systematically pre-defined sections of each treated stream reach within 36 hours of the lampricide block passage. All visible river-bottom in each section will be inspected and observations of non-target organism mortalities, except lampreys, will be recorded. Non-target assessment sections comprise about 23% of the treated reaches and are defined based on the locations of USFWS sea lamprey QAS transects as follows: In the reach from the mouth to the falls in North Ferrisburgh, the sections between transects 3-4, 8-9, 13-14, 18-19, and 23 to the falls (second application point) will be sampled. In the reach from the falls upstream to Scott Pond Dam, the sections between transects 3-4, 8-9, 13-14, 18-19, and 23 to the Dam will be sampled. Results of non-target mortality surveys will be submitted to the VT ANR by May 1 of the year following the treatment. The post-treatment QAS survey results will be submitted by December 31 of the year following the year of treatment.
- S. In the event of observed mortalities, the USFWS will preserve specimens of listed species according to the protocol worked out with the following scientists during 2012:
- Mussels – Mark Ferguson
- T. The Permittee shall submit a final lampricide treatment report to the Agency by May 1 of the year following treatment. The report shall include at a minimum: (1) batch numbers and quantity used of TFM-HP, TFM-Bar (if used); (2) the results from the on-

site toxicity test and MLC determination; (3) the treatment duration; (4) summary of the raw data from pre-, during and post-treatment water chemistry monitoring; (5) river discharge records; (6) non-target, non-lamprey post-treatment mortality counts; and (7) a summary of the day-of-treatment activities; (8) a discussion, interpretations, and conclusions section regarding the above non-target, non-lamprey post-treatment mortality counts. In the event that conditions warrant introduction of lampricide for a period of time exceeding 12 consecutive hours but not longer than 14 consecutive hours, the Permittee shall also include in the report documentation justifying the need for lampricide introduction in excess of 12 consecutive hours.

Issued by:



Date:

9-4-14

Deb Markowitz, Secretary
Agency of Natural Resources

Appeal

If you wish to appeal this determination, please contact the Vermont Environmental Court. Appeals to that Court must be filed within 30 days of the date of an appealable decision. The appellant must attach to the Notice of Appeal the entry fee of \$225.00, payable to the State of Vermont. 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 its 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 more information, see the Vermont Rules for Environmental Court Proceedings, available online at www.vermontjudiciary.org. The address for the Court is 2418 Airport Road, Suite 1, Barre, Vermont 05641 (Tel. 802-828-1660).