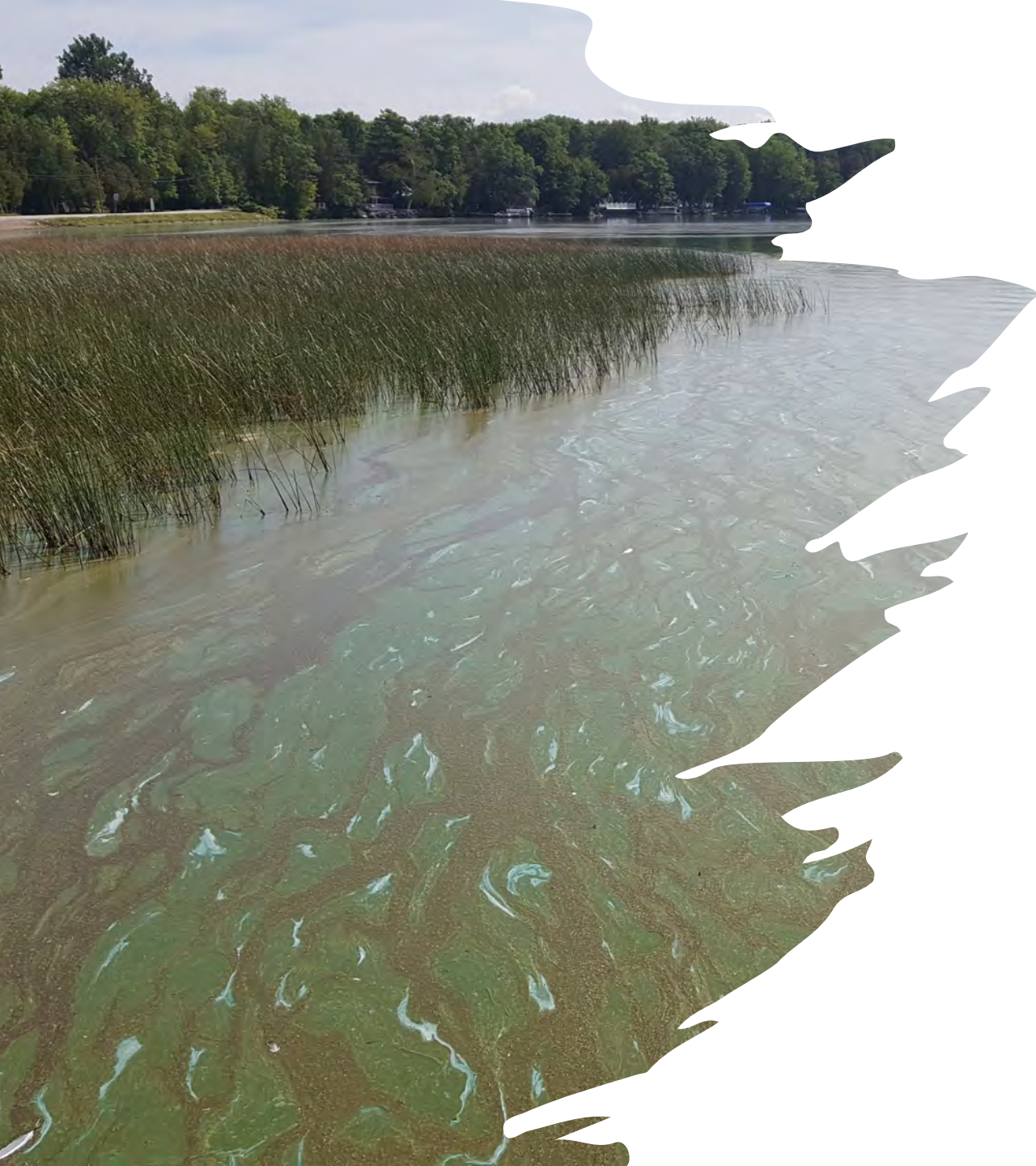


ANC Permitting 101

Application Process and Permit Overview



Introduction

- Regulations exist for reviewing projects proposing to control an aquatic nuisance in waters of the State. This includes most control project types in public and private waters.
 - Removing an aquatic nuisance by hand does not require a permit.
- An *aquatic nuisance* means an undesirable or excessive substance or population that interferes with the recreational potential or aquatic habitat of a body of water, including rooted aquatic plants and animal and algal populations.
- Non-biological entities (e.g., sediment, nutrients) are not considered to be an aquatic nuisance.

Introduction

- The DEC's Lakes Program oversees the permitting process for ANC projects.
- The DEC does not actively apply for or carry out permitted ANC projects.
 - However, the DEC and Department of Fish and Wildlife are the only entities eligible to apply for the Rapid Response General Permit (10 V.S.A. § 1456). No projects under this emergency permitting structure have ever been implemented.

Introduction

- Projects are implemented by permittees. DEC works with permittees to ensure compliance with ANC permit conditions.
- Permittees are typically lake associations, municipalities, and property owners.

Introduction

What gets permitted?

- Projects targeting an aquatic invasive species are more likely to be permitted.
 - Invasive species are considered one of the ten major stressors on Vermont's surface waters as identified under the Vermont Surface Water Management Strategy.
- Projects targeting native aquatic plant species are typically not permitted or are limited in scale and scope because the related risk to the non-target environment is often unacceptable.

- **Native aquatic plants can improve water clarity.** Aquatic plants dampen wave energy, which slows shoreline erosion and allows fine particles to settle out of the water column. Rooted aquatic plants help to hold lakebed sediments in place. These actions can both improve water clarity and quality.
- **Native aquatic plants are required by fish and wildlife.** Aquatic plants provide physical structure and habitat. Fish and wildlife use aquatic plants as a place to nest, lay eggs, feed, and hide from predators. Aquatic plant beds make up the nursery grounds of a lake.
- **Native aquatic plants can help prevent algae or cyanobacteria blooms.** Aquatic plants help maintain stable lake ecosystems. Lakes with robust populations of aquatic plants help maintain a clear water stable state by being the primary point of uptake for nutrients. Without the presence of aquatic plants, nutrients can fuel algae or cyanobacteria growth instead.

Introduction

- The most common project types are for controlling:
 - Eurasian watermilfoil. This includes bottom barriers, diver assisted suction harvesting, and herbicide.
 - Water chestnut and dense nuisance aquatic vegetation impacting public good uses (e.g., swimming, navigation). This includes the use of mechanical harvesting vessels.
 - Sea lamprey. This includes chemical and non-chemical control projects.



Pre-Application Work

Messaging, setting expectations, and working with potential applicants


Considerations for planning an aquatic plant control project:

Control projects must balance the purpose of a project (e.g., invasive species control, maintaining areas of high public use) with ensuring that the ecological integrity of the waterbody is maintained and risks to public health are negligible. Lakes and ponds are dynamic natural systems and excessive aquatic plant removal has the potential to negatively impact various aspects of an aquatic ecosystem. Consider the following when planning a project (many of these considerations will need to be identified when applying for an Aquatic Nuisance Control Individual Permit):

- What is the purpose of the project? Is it a lake-wide effort to control an aquatic invasive species or a targeted effort to maintain a specific area of water to improve public good uses (e.g., maintain an area for boating or swimming)?
- What are the tools available to achieve that purpose? There are many advertised control methods on the market, however some do not align with what is allowed in Vermont (e.g., the use of grass carp) or would be unlikely to be permitted (e.g., chemical control of native aquatic plants). For lake-wide aquatic invasive species management efforts, a combination of different management tools may be required.
- Are there less intrusive feasible alternatives to achieve the purpose of the project?
 - If the purpose is Eurasian watermilfoil control, are there tools that are more selective at controlling the target plant species (e.g., using diver assisted suction harvesting instead of a mechanical harvester to target Eurasian watermilfoil)?
 - If the purpose is to control aquatic plants around a dock, can the dock be extended (while remaining in compliance with [Lake Encroachment Permitting](#)) to a greater depth to avoid aquatic plant removal?
 - Can the project be done with a method that does not require an ANC permit (e.g., pulling aquatic plants by hand/rake only)?
- What can be expected to be achieved by pursuing a control project? The density of aquatic plant growth is largely influenced by the depth and trophic state of the waterbody. With shallower and/or more nutrient rich waterbodies, it should be expected that aquatic plants will be more prevalent. While a project to control a lake-wide infestation of an aquatic invasive species can be a reasonable purpose and therefore a permissible project, **eradication is a highly unlikely result from pursuing a control project.**
- Do you have the right technical information? Depending on the project, an ANC application may require an aquatic plant survey. An aquatic plant survey helps provide an understanding of the species that are present in a waterbody, their location, and density. Aquatic plant surveys help inform and justify how management efforts could proceed.
- How long will a control project last? It should be anticipated that most projects will last in perpetuity to some degree. As mentioned, complete eradication of an invasive species is highly unlikely, and long-term maintenance is often required. Long-term measures that can reduce the frequency of control projects include:
 - Shoreline and watershed management efforts aimed at reducing nutrient inputs. For shoreline property owners, this can be as easy as planting trees along the shoreline (check out the [Lake Wise Program](#) for more information on how you can help improve the resilience of your shoreline as well as the lake). For lake associations or municipalities, this could include watershed management efforts such as stormwater master planning or creating a lake watershed action plan (check out the [Watershed Planning Program](#) for more information on how to improve a lake's watershed).
 - Continual work on small projects to keep a balanced approach at achieving the project purpose. This helps maintain project outcomes over time and minimizes impacts on the ecological integrity of a waterbody.
- For a lake-wide effort to control a well-established population of Eurasian watermilfoil, the Agency of Natural Resources has determined that the combined total surface area for all permitted Aquatic Nuisance Control projects (e.g., bottom barriers, diver assisted suction harvesting, herbicide) may only occur in up to 40% of a waterbody's littoral zone annually. This approach has been adopted by the Agency due to a number of considerations, one of which is to retain structural habitat that can be provided by Eurasian watermilfoil for fish. While Eurasian watermilfoil is an aquatic invasive species, eradication from control efforts is rarely, if ever, likely to succeed. Therefore, concentrating annual control efforts helps reduce adverse impacts on the ecological integrity of the waterbody as impacts on the non-target environment cannot be entirely avoided.

Pesticides October 2022

Application for use of **Pesticides**
under an **Aquatic Nuisance Control Permit**
Per 10 V.S.A. Chapter 50, § 1455



VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

WATERSHED MANAGEMENT DIVISION

LAKES & PONDS PROGRAM

For Aquatic Nuisance Control Permit Program Use Only
Application Number: _____

Submission of this application constitutes notice that the entities listed below intend to use pesticides in waters of the State to control aquatic nuisance plants, insects, or other aquatic life; and that the entities below have demonstrated that (1) there is no reasonable nonchemical alternative available; (2) there is acceptable risk to the nontarget environment; (3) there is negligible risk to public health; (4) a long-range management plan has been developed which incorporates a schedule of pesticide minimization; and (5) there is a public benefit to be achieved from the application of a pesticide or, in the case of a pond located entirely on a landowner's property, no undue adverse effect upon the public good. Submit a permit review fee of \$75 for a private pond or \$500 for all other waterbodies, made payable to the State of Vermont. All information required on this form must be provided, and the requisite fees must be submitted to be deemed complete.

A. Applicant Information			
1. Entity's Name: _____			
2a. Mailing Address: _____			
2b. Municipality: _____	2c. State: _____	2d. Zip: _____	
3. Phone: _____	4. Email: _____		
B. Pesticide Applicator Information (Check box if same as above in Section A: <input type="checkbox"/>)			
1. Entity's Name: _____			
2a. Mailing Address: _____			
2b. Municipality: _____	2c. State: _____	2d. Zip: _____	
3. Phone: _____	4. Email: _____		
C. Application Preparer Information (Check box if same as above: Section A <input type="checkbox"/> and/or B <input type="checkbox"/>)			
1. Preparer's Name: _____			
2a. Mailing Address: _____			
2b. Municipality: _____	2c. State: _____	2d. Zip: _____	
3. Phone: _____	4. Email: _____		
D. Waterbody Information			
1. Name of waterbody: _____		2. Town - County _____	
3. Are there wetlands associated with the waterbody? <input type="checkbox"/> Yes <input type="checkbox"/> No <small>Contact the Vermont Wetland Program: (802) 828-1535 for additional information.</small>			
4. Are there rare, threatened or endangered species associated with the waterbody? <input type="checkbox"/> Yes <input type="checkbox"/> No <small>Contact the Vermont Fish & Wildlife Natural Heritage Inventory: (802) 241-3700 for additional information.</small>			
5a. Is this waterbody a private pond (per 10 V.S.A. 5210)? <input type="checkbox"/> Yes <input type="checkbox"/> No <small>If No, skip to Question D6.</small>			
5b. Is this private pond totally contained on landowner's property? <input type="checkbox"/> Yes <input type="checkbox"/> No			
5c. Does the private pond have an outlet? <input type="checkbox"/> Yes <input type="checkbox"/> No <small>If yes, what is the name of the receiving water from this outlet?</small>			
5d. Is the flow from this outlet controlled? <input type="checkbox"/> Yes <input type="checkbox"/> No <small>If yes, how and for how long?</small>			
6. List the uses of the waterbody – check all that apply: <input type="checkbox"/> Water supply <input type="checkbox"/> Irrigation <input type="checkbox"/> Boating <input type="checkbox"/> Swimming <input type="checkbox"/> Fishing <input type="checkbox"/> Other: _____			


Page 1 of 2

Application Process

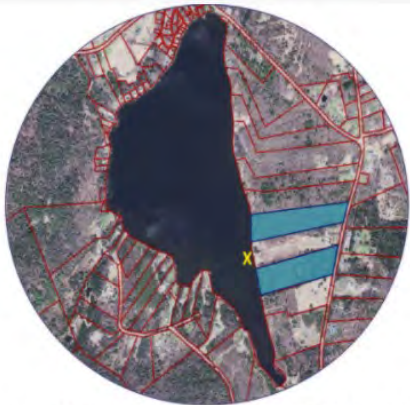
- Anyone may submit an ANC application.
- The application process is directed by statute (10 V.S.A. Chapter 170 – effective January 1, 2018).
- This is a different piece of statute compared to the ANC permitting statute.

Application Process



- ANC applications follow Type 3 Procedures. This process includes:
 - Posting application materials, draft decisions, and the final decision on the [Environmental Notice Bulletin](#) (ENB).
 - Holding a minimum 30-day public comment period for the draft decision.
 - Holding a public meeting on the draft decision whenever anyone requests one or if the Lakes Program decides to proactively schedule one.
 - Responding to public comments received during the public comment period.
- 

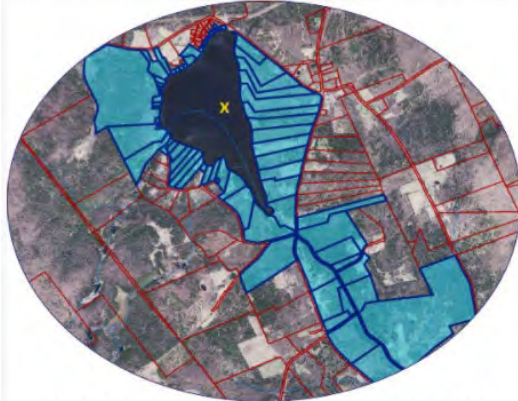
Application Process



Aquatic Nuisance Control – nonchemical, stationary location (e.g. bottom barriers)



Aquatic Nuisance Control – nonchemical, lake section (e.g. mechanical harvesting)




Aquatic Nuisance Control – pesticides or other chemicals

Aquatic Nuisance Control Permits	Adjoining Property Owners to be Notified
Non-chemical lake or lake section-wide control project (e.g. suction harvesting, mechanical harvesting, etc.)	Any property owner that abuts that lake, lake section, or surface water where the proposed activity may occur.
Non-chemical control project proposed to be in a specific location (e.g. bottom barriers at a public access area)	Any property owners that may potentially be affected by a decision on the application, including but not limited to the terrestrial boundaries nearest to the proposed project.
Pesticide or chemicals other than pesticides	Any property owner that abuts that lake, lake section, or surface water where the proposed activity may occur. In addition, property owners that abut the surface water receiving effluent that may potentially be affected by a decision on the application.

- Type 3 Procedures **do not require** Adjoining Property Owners to be notified of an application.
- However, the Lakes Program has utilized a specific section of 10 V.S.A. Chapter 170 to require applicants to notify Adjoining Property Owners.
- This notification is a self certification.

Pesticides October 2022

Application for use of **Pesticides**
under an **Aquatic Nuisance Control Permit**
Per 10 V.S.A. Chapter 50, § 1455



VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

WATERSHED MANAGEMENT DIVISION

LAKES & PONDS PROGRAM

Application Number: _____

Submission of this application constitutes notice that the entities listed below intend to use pesticides in waters of the State to control aquatic nuisance plants, insects, or other aquatic life; and that the entities below have demonstrated that (1) there is no reasonable nonchemical alternative available; (2) there is acceptable risk to the nontarget environment; (3) there is negligible risk to public health; (4) a long-range management plan has been developed which incorporates a schedule of pesticide minimization; and (5) there is a public benefit to be achieved from the application of a pesticide or, in the case of a pond located entirely on a landowner's property, no undue adverse effect upon the public good. Submit a permit review fee of \$75 for a private pond or \$500 for all other waterbodies, made payable to the State of Vermont. All information required on this form must be provided, and the requisite fees must be submitted to be deemed complete.

A. Applicant Information			
1. Entity's Name: _____			
2a. Mailing Address: _____			
2b. Municipality: _____	2c. State: _____	2d. Zip: _____	
3. Phone: _____	4. Email: _____		
B. Pesticide Applicator Information (Check box if same as above in Section A: <input type="checkbox"/>)			
1. Entity's Name: _____			
2a. Mailing Address: _____			
2b. Municipality: _____	2c. State: _____	2d. Zip: _____	
3. Phone: _____	4. Email: _____		
C. Application Preparer Information (Check box if same as above: Section A <input type="checkbox"/> and/or B <input type="checkbox"/>)			
1. Preparer's Name: _____			
2a. Mailing Address: _____			
2b. Municipality: _____	2c. State: _____	2d. Zip: _____	
3. Phone: _____	4. Email: _____		
D. Waterbody Information			
1. Name of waterbody: _____	2. Town - County: _____		
3. Are there wetlands associated with the waterbody? <input type="checkbox"/> Yes <input type="checkbox"/> No Contact the Vermont Wetland Program: (802) 828-1535 for additional information.			
4. Are there rare, threatened or endangered species associated with the waterbody? <input type="checkbox"/> Yes <input type="checkbox"/> No Contact the Vermont Fish & Wildlife Natural Heritage Inventory: (802) 241-3700 for additional information.			
5a. Is this waterbody a private pond (per 10 V.S.A. 5210)? <input type="checkbox"/> Yes <input type="checkbox"/> No If No, skip to Question D6.			
5b. Is this private pond totally contained on landowner's property? <input type="checkbox"/> Yes <input type="checkbox"/> No			
5c. Does the private pond have an outlet? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, what is the name of the receiving water from this outlet?			
5d. Is the flow from this outlet controlled? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, how and for how long?			
6. List the uses of the waterbody – check all that apply: <input type="checkbox"/> Water supply <input type="checkbox"/> Irrigation <input type="checkbox"/> Boating <input type="checkbox"/> Swimming <input type="checkbox"/> Fishing <input type="checkbox"/> Other: _____			

Page 1 of 2

Application Process

- Receive application
- Administrative review
 - Once an application is deemed administratively complete, it's posted to the ENB.
- Technical review
- Draft decision
- Public notice period
- Final decision
- Appeal period

Technical Review Process for Pesticide

Review criteria for pesticide applications ([10 V.S.A. § 1455\(d\)](#)):

1. there is no reasonable nonchemical alternative available;
2. there is acceptable risk to the nontarget environment;
3. there is negligible risk to public health;
4. a long-range management plan has been developed which incorporates a schedule of pesticide minimization; and
5. there is a public benefit to be achieved from the application of a pesticide or, in the case of a pond located entirely on a landowner's property, no undue adverse effect upon the public good.

Technical Review Process for Pesticide

ANC Internal Review Procedure:

- The Lakes Program solicits comments from various experts within the State to review an application.
- The intent of the procedure is to:
 - Get State experts to review an application through the lens of their expertise.
 - Clarify to these experts how they can participate with the review process.
 - Help ensure a decision is not in conflict with other regulations or the goals and missions of other Departments.
 - Be transparent to applicants and the public how applications are reviewed.

Technical Review Process for Pesticide

ANC Internal Review Procedure:

Section C. Process for Reviewing a Permittee's Annual Control Location Request

ANC Individual Permits may have a specific condition that requires the permittee to submit an annual request for specific aquatic nuisance control locations (e.g., a request for the targeted use of herbicide). The following process shall occur when Lakes receives this annual request:

1. Lakes will technically review the request in consideration of the conditions and findings in the permit.
2. Should the request be within the specific conditions and findings of the permit, no additional technical review beyond Lakes is required. If the request is approved, the final approval will be forwarded to the ANC Internal Technical Expert(s) involved under Section b.
3. Should the request exceed a specific condition of the permit where additional technical review is required (e.g., the permittee is requesting to begin the control project before the conditioned start date, which may impact the fish and wildlife of the waterbody or wetlands) or the requested control location overlaps with a known or suspected area inhabited by a Threatened or Endangered species or a previously unknown rare species (e.g., a rare species that was not a part of the original review of the permit), Lakes shall send the request to the ANC Internal Technical Expert associated with the permit condition in question. Due to the potentially time sensitive nature of a request, the ANC Internal Technical Expert should submit technical feedback on the request within 14 calendar days beginning the day of Lakes' notification to the ANC Internal Technical Expert(s), unless specified otherwise. Lakes will work with the ANC Internal Technical Expert on determining whether the request should be approved, denied, or revised, based on the findings of the permit and the conditions of the waterbody under review. Lakes is the final authority on approving or denying this request.

Technical Review Process for Pesticide

ANC Internal Review Procedure:

Almost there!

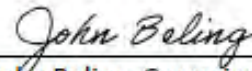
Section D. Adoption and Effective Date

This procedure is hereby adopted for the internal review of Aquatic Nuisance Control Individual Permit or major amendment applications under 10 V.S.A. § 1455. This procedure is effective as of the latest date signed below.



Christopher Herrick, Commissioner
Vermont Fish and Wildlife Department

3/14/2023
Date



John Beling, Commissioner
Vermont Department of Environmental Conservation

3/14/2023
Date

Mark Levine MD, Commissioner
Vermont Department of Health

Date

Technical Review Process for Pesticide

Upon completion of the technical review of the application, the Lakes Program drafts a decision either approving or denying the application.



The draft decision is posted to the ENB for public comment.



If comments are received, the Lakes Program responds to each comment in a response summary document.

- Depending on the technical nature of a comment, the final decision may be amended as a means of responding to a comment.



The final decision and response summary is posted to the ENB.

Example #1 of the Process

Application #3038-ANC-C for ProcellaCOR in Lake Iroquois

- Application received March 3, 2020
- Internal review occurred over March 2020
- Internal review included:
 - Department of Health
 - Department of Fish & Wildlife
 - Regional fisheries biologist
 - Non-game experts on rare, threatened, or endangered aquatic plants and animals
 - Vermont Department of Environmental Conservation
 - Drinking Water Groundwater Protection Division
 - Watershed Management Division
 - Wetlands Program
 - Monitoring and Assessment Program (aquatic toxicology review)

Example #1 of the Process

Application #3038-ANC-C for ProcellaCOR in Lake Iroquois

Comments from internal experts were incorporated into a draft permit:

Comment:

Regional DFW fisheries biologist: “With the LIA proposing to treat 40% or less of the littoral zone, we do not have any major concerns.”

Corresponding permit condition:

a.5. Annual Control Area. The total control area authorized by this permit and any additional authorizations shall not exceed 40% of the littoral zone of Lake Iroquois over the course of one calendar year, unless approved in writing by the Secretary.

Example #1 of the Process

Application #3038-ANC-C for ProcellaCOR in Lake Iroquois

Comments from internal experts were incorporated into a draft permit:

Comment:

Department of Health: “Public notification of property owners and residents of the treated water body area as well as commercial camps and parents whose children are attending camps which use the treated water body and/or waters within one contiguous watermile of the treated water body will occur 30 days prior to application. Water body access areas as well as any nearby campgrounds should be posted for public awareness.”

Corresponding permit condition:

a.7. Public Informational Notification. A public informational notification (notification) shall be posted and provided to the public at least 30 days in advance of the scheduled treatment date.

a.7.B. The notification shall be provided to the Secretary, the municipal offices of Hinesburg, Richmond, and Williston, all property owners (including commercial camps) that abut Lake Iroquois, and all property owners that abut the waters receiving effluent up to one mile downstream of Lake Iroquois’s outlet by a method that provides proof of notification.

Example #1 of the Process

Application #3038-ANC-C for ProcellaCOR in Lake Iroquois

- Comments from internal experts were incorporated into a draft permit.
- The public comment period began May 1, 2020.
- A public meeting was held on May 27, 2020.
- The public notice period ended on June 3, 2020.
- Public comments were received, and a response summary was drafted.

Example #1 of the Process

Response to a public comment that resulted in additional permit conditions:

Response D-1: The Secretary must find that the applicant has a long-range management plan that incorporates a schedule of pesticide minimization. Currently, the permittee has Aquatic Nuisance Control permits for the use of bottom barriers and diver assisted suction harvesting, both of which, if implemented, would minimize the use of herbicide. These efforts would be considered pesticide minimization measures as well as additional efforts that would reduce the likelihood of Eurasian watermilfoil populations from developing, such as the efforts identified in the comment. As a part of implementing the long-range management plan and pesticide minimization measures, the permittee should review the recommended pesticide minimization measures and work with the Secretary on how to potentially pursue a pesticide minimization measure in order to be in compliance with the permit.

In response to this comment, the Secretary has determined that for the permittee to be in compliance with this finding throughout the effective period of this permit, the permittee must implement pesticide minimization measures annually and to report to the Secretary on those efforts. As such, the following conditions and findings have been added to the permit:

Condition a.14. Pesticide Minimization Measures. Beginning the first calendar year of a treatment until expiration of this permit, the permittee shall implement pesticide minimization measures annually. Pesticide minimization measures shall include one or a combination of Eurasian watermilfoil non-chemical control projects and/or efforts that reduce the likelihood of Eurasian watermilfoil populations from developing. Should pesticide minimization measures not be completed over a calendar year or the Secretary has determined that pesticide minimization measures were insufficient at achieving the purpose of pesticide minimization, the permittee shall submit a pesticide minimization compliance plan to be approved by the Secretary prior to any additional proposed use of pesticide under this permit.

Condition a.15. Pesticide Minimization Annual Report. Beginning the first calendar year of a treatment until expiration of this permit, the permittee shall submit an annual pesticide minimization report to the Secretary by December 31st and shall include:


- A. A summary of pesticide minimization measures completed during the current calendar year.
- B. A summary of proposed pesticide minimization measures to be completed over the following calendar year.

Finding c.8. As a means to ensure that the permittee is actively implementing their long-range management plan that incorporates a schedule of pesticide minimization, the permittee will need to implement pesticide minimization measures annually and report to the Secretary on those effort. Pesticide minimization measures must include one or a combination of Eurasian watermilfoil non-chemical control projects and/or efforts that reduce the likelihood of Eurasian watermilfoil populations from developing.



Example #1 of the Process

Application #3038-ANC-C for ProcellaCOR in Lake Iroquois

- The final permit and response to comments document was issued and posted to the ENB on February 8, 2021.
- 

Example #2 of the Process

Application #3051-ANC-C for lampricide in the Lamoille River

- Application received March 10, 2020
- Internal review occurred over May 2020
- Internal review included:
 - Department of Health
 - Department of Fish & Wildlife
 - Regional fisheries biologist
 - Non-game experts on rare, threatened, or endangered aquatic plants and animals
 - Vermont Department of Environmental Conservation
 - Drinking Water Groundwater Protection Division
 - Watershed Management Division
 - Wetlands Program
 - Monitoring and Assessment Program (aquatic toxicology review)

Example #2 of the Process

Application #3051-ANC-C for lampricide in the Lamoille River

Comments from internal experts were incorporated into a draft permit:

Comment:

DEC's Monitoring and Assessment Program – aquatic toxicologist: “I would not be able to communicate that the risk to mudpuppies is acceptable without “long-term monitoring” in place to provide reliable data that will be used to detect changes in mudpuppy population structure and abundance.”

Corresponding *draft* permit condition:

a.14. Mudpuppy Population Assessment Study. The permittee shall develop and implement a mudpuppy population assessment study (e.g., mark-recapture method) in the Lamoille River downstream of the Peterson Dam. The draft parameters and methodologies of the mudpuppy population assessment study shall be submitted to the Secretary for approval by January 31, 2021, unless identified otherwise by the Secretary. In accordance with the plan approved by the Secretary, surveying for mudpuppies shall occur annually until expiration of this permit. A final report of the findings of the study shall be submitted to the Secretary by December 31, 2025, unless identified otherwise by the Secretary.

Example #2 of the Process

Application #3051-ANC-C for lampricide in the Lamoille River

- Comments from internal experts were incorporated into a draft permit.
- The public comment period began August 31, 2020.
- A public meeting was held on September 17, 2020.
- The public notice period ended on September 30, 2020.
- Public comments were received, and a response summary was drafted.

Example #2 of the Process

Response to a public comment that resulted in the removal of a permit condition:

1. Response: The Secretary acknowledges the findings of this comment and agrees to remove specific condition a.14. and subsequent discussion of that condition in finding c.7. from the draft permit related to the *Mudpuppy Population Assessment Study*. The Secretary is currently still able to conclude that there is an acceptable risk to the non-target environment with the removal of this condition.

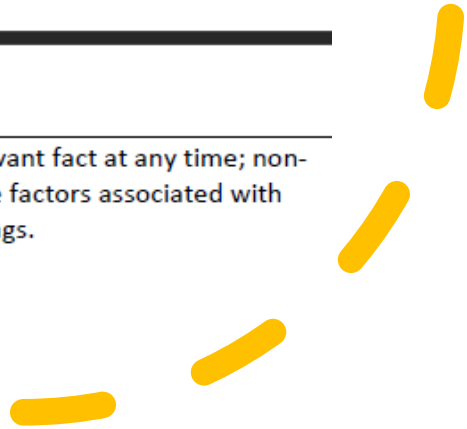
In removing this specific condition, the Secretary acknowledges the permittee's willingness to investigate the feasibility of improved mudpuppy population assessments, should that be warranted. In the event that mortality of non-target species from a treatment is determined to pose an unacceptable risk to the non-target environment, the Secretary may reopen or revoke the permit in accordance with standard conditions b.13. or b.14.:

b.13. Reopener. If after granting this permit the Secretary determines 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.

b.14. 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

Page 1 of 15


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 control activity such that the Secretary can no longer make all applicable findings.






Example #2 of the Process

Application #3051-ANC-C for lampricide in the Lamoille River

- The final permit and response to comments document was issued and posted to the ENB on October 13, 2020.
- 

Run-Through of Permit Conditions

Most recent ANC permit issued for a pesticide was for the herbicide ProcellaCOR in Lake Fairlee. This permit was issued on 2/24/2022.

Aquatic Nuisance Control Individual Permit Under 10 V.S.A. § 1455	
	
Permittee Information	
Permittee: Lake Fairlee Association Co-permittee: SOLitude Lake Management Permit Number: 3382-ANC-C	Control Activity: Pesticide (Herbicide – SePRO ProcellaCOR® EC) Waterbody: Lake Fairlee, Fairlee, West Fairlee, and Thetford
a. Specific Conditions	
<p>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 activity will comply with 10 V.S.A. § 1455 and is hereby approved under the following conditions.</p>	
<ol style="list-style-type: none">Pesticide Use. The use of SePRO ProcellaCOR® EC EPA Registration Number 67690-80 (treatment), formulation active ingredient 2.7% floryprauxifen-benzyl, is authorized to target Eurasian watermilfoil, <i>Myriophyllum spicatum</i>, in the waters of Lake Fairlee, Fairlee, West Fairlee, and Thetford. Only SePRO ProcellaCOR® EC shall be used in the waterbody over the course of one calendar year while there is active Eurasian watermilfoil growth. A treatment shall only occur on a Monday, Tuesday, Wednesday, or Thursday. This pesticide shall be registered with the U.S. Environmental Protection Agency and the Vermont Agency of Agriculture, Food and Markets at the time of use and handled, applied, and disposed of in conformance with all state and federal regulations.Certified Applicator. All applicators of the authorized pesticide shall be certified by the Vermont Agency of Agriculture, Food and Markets in Category Five – Aquatic Pest Control.Agency Notification. Notification shall be provided at least 30 days in advance of the scheduled treatment date to the Secretary of the Agency of Natural Resources and to the Agency of Agriculture, Food & Markets to coordinate pesticide use inspection at the time of treatment. The permittee shall contact Kanika Gandhi, Agrichemical Section Chief, of the Agency of Agriculture, Food & Markets at 802-461-5040 or Kanika.Gandhi@vermont.gov, or her replacement, to coordinate.Annual Request & Approval of Treatment Locations. A treatment shall only occur in locations that have been approved annually in writing by the Secretary. Prior to a treatment, the permittee and co-permittee (if applicable) shall submit a request to the Secretary with proposed annual treatment locations. Requests may be submitted to the Secretary over the growing season as needed. A request shall include:<ol style="list-style-type: none">A map identifying the acreage of the waterbody, acreage of the littoral zone of the waterbody, the proposed treatment date(s), the acreage and treatment concentration(s) at the proposed treatment location(s), and all other proposed locations and acreages for permitted non-chemical aquatic nuisance control activities (total control area) when applicable.A description of the population densities for Eurasian watermilfoil and the non-target native species that are controlled or sensitive to ProcellaCOR® EC (as identified in finding c.6.) within each proposed treatment location (condition a.12.).A map of the locations of wetlands as identified by the ANR Atlas or as defined by a dominance (>50% surface area coverage) of woody, emergent, or floating leaved vegetation anchored in sediment located in areas up to 6.5 feet deep. 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.A map of proposed treatment concentration monitoring locations.Annual Control Area. The total control area authorized by this permit and any additional authorizations shall not exceed 40% of the littoral zone of Lake Fairlee over the course of one calendar year, unless approved in	
Revised March 2020 Page 1 of 16	

Run-Through of Permit Conditions

1. Pesticide Use. The use of SePRO ProcellaCOR® EC EPA Registration Number 67690-80 (treatment), formulation active ingredient 2.7% florpyrauxifen-benzyl, is authorized to target Eurasian watermilfoil, *Myriophyllum spicatum*, in the waters of Lake Fairlee, Fairlee, West Fairlee, and Thetford. Only SePRO ProcellaCOR® EC shall be used in the waterbody over the course of one calendar year while there is active Eurasian watermilfoil growth. A treatment shall only occur on a Monday, Tuesday, Wednesday, or Thursday. This pesticide shall be registered with the U.S. Environmental Protection Agency and the Vermont Agency of Agriculture, Food and Markets at the time of use and handled, applied, and disposed of in conformance with all state and federal regulations.
2. Certified Applicator. All applicators of the authorized pesticide shall be certified by the Vermont Agency of Agriculture, Food and Markets in Category Five – Aquatic Pest Control.
3. Agency Notification. Notification shall be provided at least 30 days in advance of the scheduled treatment date to the Secretary of the Agency of Natural Resources and to the Agency of Agriculture, Food & Markets to coordinate pesticide use inspection at the time of treatment. The permittee shall contact Kanika Gandhi, Agrichemical Section Chief, of the Agency of Agriculture, Food & Markets at 802-461-5040 or Kanika.Gandhi@vermont.gov, or her replacement, to coordinate.

Run-Through of Permit Conditions

4. Annual Request & Approval of Treatment Locations. A treatment shall only occur in locations that have been approved annually in writing by the Secretary. Prior to a treatment, the permittee and co-permittee (if applicable) shall submit a request to the Secretary with proposed annual treatment locations. Requests may be submitted to the Secretary over the growing season as needed. A request shall include:
 - A. A map identifying the acreage of the waterbody, acreage of the littoral zone of the waterbody, the proposed treatment date(s), the acreage and treatment concentration(s) at the proposed treatment location(s), and all other proposed locations and acreages for permitted non-chemical aquatic nuisance control activities (total control area) when applicable.
 - B. A description of the population densities for Eurasian watermilfoil and the non-target native species that are controlled or sensitive to ProcellaCOR® EC (as identified in finding c.6.) within each proposed treatment location (condition a.12.).
 - C. A map of the locations of wetlands as identified by the ANR Atlas or as defined by a dominance (>50% surface area coverage) of woody, emergent, or floating leaved vegetation anchored in sediment located in areas up to 6.5 feet deep. 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. A map of proposed treatment concentration monitoring locations.
5. Annual Control Area. The total control area authorized by this permit and any additional authorizations shall not exceed 40% of the littoral zone of Lake Fairlee over the course of one calendar year, unless approved in writing by the Secretary. The same treatment location shall not be targeted with the same authorized pesticide for more than two consecutive years.
6. Treatment Plan. Treatment(s) shall be carried out in accordance with the “PROCELLACOR™ EC HERBICIDE TREATMENT PLAN” as identified in the Approved Application. The treatment plan shall be updated as necessary to minimize potential adverse impacts on the resource and to ensure compliance with this permit. All updates to the treatment plan shall be submitted to the Secretary for approval.

Run-Through of Permit Conditions

7. Public Informational Notification. A public informational notification (notification) shall be posted and provided to the public at least 30 days in advance of the scheduled treatment date. A webpage shall be made available to the public for posting a digital copy of the notification and for additional information on the authorized treatment. Postings of the physical and digital copies of the notification shall remain posted for no less than 30 days after the treatment occurred. If there are changes to the information on the notification, the notification shall be updated and reposted.
 - A. The notification shall include:
 - i. A map of the annually approved treatment location(s).
 - ii. The scheduled treatment date(s).
 - iii. The authorized pesticide to be used.
 - iv. The name(s), address(es), and telephone number(s) for all permittees.
 - v. The webpage made available to the public for information on the authorized treatment.
 - vi. A summary of the Water Use Advisories & Recommendations (condition a.9.).
 - vii. A statement identifying that the permittee shall supply potable water upon request to those who depend upon the treated waterbody or its outlet stream(s) (within one mile of the effluent) for domestic use to prepare food or drink on the day of treatment.
 - viii. A statement informing all property owners that if their property is leased, rented, or used at any time during treatment and/or while the use advisories are in effect, the property owner is responsible for informing all transient users.
 - B. The notification shall be provided to the Secretary, the municipal offices of Fairlee, West Fairlee, and Thetford, all property owners (including commercial camps) that abut Lake Fairlee, and all property owners that abut the waters receiving effluent up to one mile downstream of Lake Fairlee's outlet by a method that provides proof of notification.
 - C. Physical copies of the notification shall be posted:
 - i. In locations visible to vehicle traffic, shoreline property owners, and potential lake users along all public roadways within 1,000 feet of the waterbody.
 - ii. On weather resistant material and at least 8½ inches by 11 inches in size.
 - iii. At all public access points to the waterbody, including all public boat launches, public beaches, or other similar public locations providing access to the waterbody.
 - D. The website made available to the public shall include a digital copy of the notification, this permit, the Approved Application, the [SePRO ProcellaCOR® EC Specimen Label](#), the [SePRO ProcellaCOR® EC Safety Data Sheet](#), and the status of the Water Use Advisories & Recommendations (condition a.9.).

Run-Through of Permit Conditions

8. Treatment Concentration Monitoring. Water samples shall be collected at each of the approved monitoring locations (condition a.4.D.) to determine the concentration of florpyrauxifen-benzyl after completion of each treatment. The results shall be submitted to the Secretary within 24 hours of the permittee receiving the results and be posted to the webpage as required under condition a.7. of this permit.
 - A. Water samples shall be chemically tested 48 hours after completion of each treatment. If samples indicate that florpyrauxifen-benzyl concentrations are greater than 2 parts per billion (ppb), monitoring shall continue after an additional 24-hour period. This monitoring process shall proceed until all monitoring locations are less than or equal to 2 ppb florpyrauxifen-benzyl, or if this process is authorized to be discontinued by the Secretary.
 - B. The Secretary may require additional monitoring, including additional monitoring locations or the frequency of monitoring, if determined necessary.
 - C. Samples shall be analyzed using a methodology with a minimum detection limit of at least 1 ppb florpyrauxifen-benzyl.
9. Water Use Advisories & Recommendations. On the day of treatment, no use of the treated waterbody and associated outlet stream for up to one mile downstream is recommended for any purpose, including swimming, boating, fishing, irrigation, and all domestic uses. It is recommended to not compost aquatic plant material from the treatment location for up to four weeks after the day of treatment. Additional advisories and recommendations related to irrigation and the use of treated waters that are listed under the following sections of the [ProcellaCOR® EC Specimen Label](#) shall be posted to the webpage as required under a.7. of this permit: *Use Precautions, Use Restrictions, Application to Waters Used for Irrigation on Turf and Landscape Vegetation, Residential and other Non-Agricultural Irrigation, and TABLE 1: Non-agricultural irrigation following in-water application.*
10. Potable Water. On the day of treatment, the permittee shall supply potable water upon request to those who depend upon the treated waterbody or its outlet stream for up to one mile downstream for domestic use to prepare food or drink.

Run-Through of Permit Conditions

11. Treatment Report. A treatment report shall be submitted to the Secretary within one week of each treatment and include the following:
 - A. Date, time, and duration of treatment.
 - B. Herbicide manufacturer, trade name, and formulation used.
 - C. Total amount of the herbicide applied.
 - D. Total surface area of the herbicide treatment.
 - E. Target herbicide concentration and related calculations.
 - F. Herbicide treatment technique and equipment used.
 - G. Weather and lake conditions at time of herbicide treatment.
12. Aquatic Plant Surveys. Aquatic plant surveys shall be completed as follows:
 - A. A pre-treatment quantitative aquatic plant survey shall be completed in the year prior to a proposed treatment.
 - B. A pre-treatment qualitative aquatic plant population density survey shall be completed within the proposed treatment location(s) prior to and during the year of a proposed treatment to assess populations of Eurasian watermilfoil and the non-target native species that are controlled or sensitive to ProcellaCOR® EC (as identified in finding c.6.).
 - C. A post-treatment quantitative aquatic plant survey shall be completed after a treatment in the year a treatment took place.
 - D. A post-treatment quantitative aquatic plant survey shall be completed in the year following a treatment.
 - E. Quantitative aquatic plant surveys (i.e., condition a.12.A., a.12.C., a.12.D.) shall:
 - i. Be completed from July 1st through September 30th.
 - ii. Be completed using the point-intercept rake-toss methodology using a grid size of no greater than 80 meters between each point within the littoral zone, or as approved by the Secretary.
 - iii. Have the following data collected at each point-intercept:
 1. Latitude and longitude
 2. Depth
 3. Aquatic plant species that are present
 4. A measure of abundance of each aquatic plant species that is present

Run-Through of Permit Conditions

13. Annual Report. An annual report shall be submitted to the Secretary on the year of treatment and one year thereafter by December 31st and shall include:
 - A. A summary of treatment concentration monitoring when applicable.
 - B. Aquatic plant survey(s) (condition a.12.). Presentation of aquatic plant survey data shall include a map depicting all survey points and maps of each aquatic plant species present at each point-intercept with a representation of its abundance. Quantitative aquatic plant survey data (a.12.E.) shall be submitted via a spreadsheet (e.g., Microsoft Excel).
 - C. A map of the treatment location(s) and all other locations where additional non-chemical aquatic nuisance control activities occurred that year when applicable.
 - D. A map of the potential future treatment location(s) and all other proposed locations for additional aquatic nuisance control activities when applicable.
 - E. A summary of the control activity, including a status of aquatic plant re-growth in treatment locations.
14. Pesticide Minimization Measures. Beginning the first calendar year of a treatment until expiration of this permit, the permittee shall implement pesticide minimization measures annually. Pesticide minimization measures shall include one or a combination of Eurasian watermilfoil non-chemical control projects and/or efforts that reduce the likelihood of Eurasian watermilfoil populations from developing. Should pesticide minimization measures not be completed over a calendar year, or the Secretary has determined that pesticide minimization measures were insufficient at achieving the purpose of pesticide minimization, the permittee shall submit a pesticide minimization compliance plan to be approved by the Secretary prior to any additional proposed use of pesticide under this permit.
15. Pesticide Minimization Annual Report. Beginning the first calendar year of a treatment until expiration of this permit, the permittee shall submit an annual pesticide minimization report to the Secretary by December 31st and shall include:
 - A. A summary of pesticide minimization measures completed during the current calendar year.
 - B. A summary of proposed pesticide minimization measures to be completed over the following calendar year.