

**PRIOR NOTIFICATION, POSTING AND
WATER SUPPLY PLAN
FOR LAKE CHAMPLAIN LAMPRICIDE APPLICATIONS**

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Introduction

In 1990, the Lake Champlain Fish and Wildlife Management Cooperative* (Cooperative) initiated an 8-year experimental program using lampricides to control sea lamprey in Lake Champlain. Lake Champlain tributaries receiving lampricide treatments during the experimental program included, the Great Chazy, Saranac, Salmon, Little Ausable, Ausable, Boquet, Poultney and Hubbardton rivers, Lewis and Putnam creeks, and, Mt. Hope, Trout and Stone Bridge brooks; the program included evaluations of the effects of sea lamprey control on salmonid populations, sport fisheries, and the area's economy (NYSDEC et al. 1990). Results of these and other studies demonstrated the experimental program was effective and showed fishery and economic benefits while having minimal adverse impacts on non-target organisms (Fisheries Technical Committee 1999). The Cooperative has been engaged in a long-term sea lamprey control program in Lake Champlain since 2002 (USFWS, et al. 2001).

Two lampricide active ingredients are used in sea lamprey control in New York and Vermont. First, 3-trifluoromethyl 4-nitrophenol (TFM) is used in liquid (TFM-HP [NY and VT] and Lampracid [NY only]) and in bar (TFM-BAR) formulations. The liquid formulations are metered carefully by calibrated pump to achieve a dosage lethal to sea lamprey. The bars are used in small tributaries to the treated mainstem to prevent dilution and the creation of freshwater refugia for larval sea lamprey. Second, Niclosamide is used in liquid (Bayluscide 20% Emulsifiable Concentrate) and granular (3.2% Granular Bayluscide) formulations. The liquid formulation is used as an additive to TFM treatments and is metered through a calibrated pump. When used at a concentration equivalent of 0.5 to 2% by weight of TFM, Niclosamide can reduce the amount of TFM needed by up to 40 percent. Granular Bayluscide is used on river deltas to kill resident larval lamprey in those areas. Granular Bayluscide is only approved for use in New York waters of Lake Champlain.

Toxicological information indicates that human exposure to water treated with lampricides at concentrations and durations used for sea lamprey control will not result in adverse health effects (USFWS et al. 2001). In 2004, the U. S. Environmental Protection Agency (USEPA) issued risk assessment guidance stating that TFM may be present in drinking water at levels up to 300 parts per billion (ppb) before there would be any potential concern about risk to human health (Lindsay 2004). Niclosamide is used worldwide in human medicine to treat tapeworm infections at single doses of 500 to 2,000 mg (WHO 2007). At typical TFM-Niclosamide combination treatment concentrations in Lake Champlain streams, it would require ingesting 20,000 to 50,000 liters of treated water to provide a 500 mg dose of niclosamide.

Lampricide treatment notification and water supply responsibilities have been transferred from the Vermont Department of Fish and Wildlife and the New York State Department of Environmental Conservation to the U.S. Fish and Wildlife Service (USFWS), effective in 2011. This plan replaces the procedures in Smith (2012, 2013), Chipman (2010) and Durfey (2002, 2007) and details the USFWS plans to provide prior treatment notification to affected riparian landowners and water users; to implement domestic, agricultural and recreational water use advisories; and to provide water for household and agricultural needs during water use advisories in both Vermont and New York during lampricide treatments.

* Agencies in the Cooperative include the New York Department of Environmental Conservation (NYSDEC), Vermont Department of Fish and Wildlife (VTDFW), and the U.S. Fish and Wildlife Service (USFWS)

Water Monitoring Protocol

A detailed description of the water monitoring protocol used to monitor lampricide levels and to impose or lift water use advisories for streams treated during the experimental sea lamprey control program can be found in Neuderfer (1989). The protocol includes numbers and locations of samples to be taken, the timing of the sampling, and the analytical methods used. An updated version of Neuderfer (1989) that includes current lampricide treatment areas is presented as an accompanying document to this notification plan (Smith 2016). It explains current advisory zones for all streams and methodology for sampling. Additional river-specific plans will be created and added to the Water Use Advisory Zone Monitoring Plan for lampricide treatments in Lake Champlain if new streams are determined to be in need of lampricide treatment. This plan may be revised if new data indicate that changes are necessary or advantageous.

The Lake Champlain Sea Lamprey control program conducts operations in the states of Vermont and New York. Because of differing regulatory policies, water use advisory thresholds and restrictions differ between the states. The USFWS conducts treatment operations based on state-specific permit requirements and in the case that treatment effects overlap both states simultaneously; the more conservative of the two sets of conditions are followed.

In New York, the lampricide advisory thresholds are determined by the State Department of Health (NYSDOH). The NYSDOH currently recommends a drinking water standard for TFM of 50 ppb per NYCRR §10 5-1.52. Recreational uses of stream water, including fishing and swimming, will be advised against until 24 hours after TFM concentrations fall below 100 ppb. These advisory threshold concentrations for minimizing human exposure to TFM are 3 to 6 times more restrictive than the USEPA's guidance for drinking water (Lindsay 2004).

As per Grey (1987), advisories following Granular Bayluscide treatments in New York are time-based and have three separate components. Potable water uses will be advised against for four days following treatments, while non-potable household uses will be advised against for two days. For recreational uses the advisory will last two days, with the public being advised that swimming and fishing could be associated with low-level exposure until four days following treatment. Additionally, the public will be advised of the potential for low-level exposure from consuming fish caught in the treated zone for fourteen days following treatment.

In Vermont, TFM advisory threshold concentrations for domestic and recreational water uses are established by the Vermont Department of Environmental Conservation (VTDEC) and included as Aquatic Nuisance Control permit conditions. Recommendations as to under what, if any conditions, the proposed use may result in negligible risk to public health under 10 VSA § 1455(d)(3) may be developed by VTDOH and provided to VTDEC for consideration. Currently VTDEC has set 3.0ppb TFM as a drinking water advisory threshold concentration and 35 ppb as a swimming and bathing advisory threshold concentration and 100 ppb TFM as a advisory threshold for recreational uses other than swimming. These advisory threshold concentrations for minimizing human exposure to TFM are 100 to 8.5 times more restrictive than the USEPA's guidance for drinking water (Lindsay 2004). The swimming and bathing water use advisory threshold is also applied to agricultural water uses, including irrigation and livestock watering. Recreational and domestic water use advisories are lifted in both states, 24 hours after monitoring indicates that TFM concentrations have declined below their respective threshold levels.

Niclosamide, if used in combination with TFM, will not be monitored for water use advisory purposes because niclosamide is a minor component of the TFM-niclosamide combination for stream treatments and would be at levels undetectable by conventional methods. Combination treatments result in smaller exposure areas and shorter water use advisory durations because they significantly reduce overall amount of pesticide applied to the environment.

Empirical data collected as part of the chemical monitoring plan dating from 1992 to the present was analyzed to determine the proposed advisory Zones in the Water Use Advisory Zone Monitoring Plan for Lampricide Treatments in Lake Champlain

Description of Riparian Owners

A list of specific riparian landowners who could potentially be impacted by water use restrictions during lampricide treatments will be maintained in a database. Multiple listings of the same individual indicate that the individual owns more than one parcel. The accuracy of these lists must be viewed as temporary, but they will be updated by conducting new landowner searches each year for rivers scheduled for treatment using Town-specific (Vermont) or County (New York) property tax rolls similar to Sausville (1990). In New York, GIS parcel maps are maintained and updated annually by counties. In Vermont, GIS parcel data is available for some Towns, but not all. GIS data, where available, will be accompanied by the most recent Grand List for each Town.

A cover letter and a water supply survey (Attachment 1, 1a) will be sent to every riparian landowner prior to each scheduled lampricide treatment. In order to facilitate the landowner notification process as well as to conserve government resources, an effort will be made to collect email addresses for all landowners. This request will be made on all surveys. Where email has been obtained, surveys and notification will contain links to an online survey, pesticide labels, and up-to-date information regarding treatment(s) affecting their parcel(s) or private water use. All landowners will continue to have the option to receive paper copies of all correspondence.

Follow-ups will only be done for new landowners who have never completed a water supply survey and for those who rent their properties to others. Efforts will be made to contact and interview non-respondents by follow-up mailings, by telephone, or in person, if necessary. Previously, follow-up mailings were sent via certified, return-receipt-requested mailings to all those who did not return the first water supply survey mailing. However, several complaints were filed from landowners regarding the inconvenience of having to make a special trip to the post office to sign for the mailing. In the past, in an effort to reduce cost and waste of extraneous mailings, landowners were informed that if they did not complete the latest water supply survey but had returned one previously, that we would assume they have made no changes to their water use since their last response and wish the same arrangements (or lack thereof) for alternate water supplies. In reality, the substantial program mailing costs have remained the same due to a self-addressed stamped envelope being included with every survey packet, regardless of landowner cooperation in the survey process. Costs and waste associated with postage, transportation (gasoline and vehicle usage), water purchases (large volumes of water going unused), and labor resources have been elevated due to non-respondents receiving water they requested years ago. To reduce the cost and waste, landowners will be advised that if they need drinking water or services relating to water use restrictions, they **must** notify the USFWS prior to treatment and make requests via the means provided: 1) Water supply survey filled out and returned using the self-addressed, postage paid

envelope provided by USFWS, 2) Sea Lamprey Control Toll-Free Hotline, or 3) Email request. All methods are free of charge and convenient to virtually all landowners or water requestors. The survey mailing will be completed at least 1 month prior to a scheduled treatment. The results of the survey will allow us to identify those households within treatment advisory zones where water is used for drinking and household purposes, or for agricultural purposes, and if these households will want bottled or bulk water supplied by the USFWS. Landowners will also be asked for the names and addresses of tenants on their property and those who may have deeded access or other vested rights to the lake or tributary through their property. Tenants will be sent all relevant notifications and will also be contacted to verify their specific water needs. Others with access rights to the water will be verified and sent water supply survey forms and all relevant notifications. Because it is difficult for most people to estimate their water consumption and/or needs, the USFWS will contact personally those households who request water to determine if water is required, if bottled or bulk water is needed, and how much water will be needed during the advisory period.

A list of the riparian owners, their responses to water user surveys, and any required updates will be maintained in the database.

Notifications and Postings

Prior notification of pesticide applications will take two forms: long-term and short-term notifications. As with water-use advisory thresholds, the landowner notification process is slightly different between the States. New York pesticide law requires landowners to be provided with all relevant information to make an informed decision regarding their consent or objection to the water use advisories associated with the proposed treatments. Virtually all of the riparian landowners within New York advisory zones have been sent the information and a consent survey. As new landowners in the advisory area are identified, they will be sent both a consent survey and a water-use survey as described above. In addition, in New York, repeat consent surveys may need to be conducted for all riparian landowners as mandated by the Bureau of Pest Management. In Vermont, long-term notification is accomplished by the initial letter and Water-use survey.

Short-term notifications differ in the following ways. All potentially affected riparian landowners and their tenants, vested water users, and known consumptive water users will be sent a letter by first class mail or by email if previous authorization has been obtained approximately 15 days prior to a scheduled treatment. The short-term notification letter (Attachment 2) will describe our intent to treat and advise the riparian owners or tenants of the impending water use restrictions. It also will include the appropriate pesticide label and a toll free telephone number to call for additional information. In New York, for instances where there is a “multiple dwelling” as defined in ECL 33-0905(5), the owner or his/her agent will be requested to provide this information to the occupants or resident of such “multiple dwellings” at least seven days prior the proposed treatments. The owners/agent of such dwellings will be supplied with multiple copies of the letter for distribution to their tenants. Specific wording in notification letter may be changed to more accurately define the duration of the expected water use advisory.

Those households that withdraw raw lake or river water for drinking and other household or agricultural purposes as determined from the latest water user survey will be notified door to door by USFWS personnel during the week of scheduled treatments. They will be advised of the exact treatment schedule and will be questioned to verify if they need free drinking water to be supplied by the USFWS. If drinking water is requested, the household will be left a supply of drinking

water. A written notice (Attachment # 3) will also be given to them, and if no one is home a notice will be left on their door and a supply of bottled water will be left on their doorstep if requested in their water-use survey. Included in the notice are the exact water use advisories and a toll free number to be called for additional drinking water and/or advisory updates and information.

Agricultural users of raw lake or river water will also be contacted personally beginning at least two weeks prior to treatments. They will be advised of the exact treatment schedule, impending water use restrictions, and questioned to see if they are in need of delivery of free livestock water or temporary electric fencing to restrict livestock from accessing treated water. If temporary fencing is required, installation will be completed prior to the day that the specific water use advisory goes into effect.

General public notification of treatments and water use restrictions will be done via newspapers and broadcast media. Several news media outlets will be sent news releases announcing upcoming treatments and associated water use advisories via email at least one week prior to the scheduled treatment date and again within two days of the treatment date. Contact with local TV and radio stations and daily papers will be maintained to provide the public with any changes in the treatment schedule and updates on water use advisories. USFWS personnel will personally notify all household and agricultural water users of changes in water use restrictions. The toll free number providing information regarding treatments and advisories is also included in public announcements.

The posting of advisories at public and private access sites will begin 24-hours prior to actual treatment. Signs (in English and French) will be posted at conspicuous shoreline locations and at access sites within the water use advisory zone. Treatment personnel will patrol the advisory zones when advisories are in effect to check on the signs and replace any missing or damaged signs. All signs will be printed on waterproof material and attached to wooden stakes or other suitable mounting surfaces as individual situations warrant.

A water use advisory sign is shown in Attachment 4. To minimize any public confusion as to the beginning or end of the water use advisory and whether or not the advisory is for drinking, fishing, or other water based activities; the signs will only be removed when a consumptive advisory is lifted, as stated on the sign. The hotline will be updated when recreational advisories are lifted.

During Granular Bayluscide delta treatments a water use advisory sign (Attachment 5) will be affixed to buoys and placed directly around the treatment area. These buoys will be left in place for two weeks to advise the angling public that fish caught in the area could contain traces of Niclosamide for two weeks.

Provision of Water

As stated previously, those persons with impacted potable water supplies who request drinking and cooking water will have commercially bottled water delivered to their households free of charge. Requested water will be left at each household when their "Notice of Treatment" flyer is delivered. Subsequent deliveries will be made depending on individual requests. The bottled water will be obtained from a local supermarket and from a source approved by the VT and NY DOH. During treatment and while water use restrictions are in place, additional deliveries of drinking water will be made upon requests received via the toll-free number. The toll-free "Sea Lamprey Control

Hotline” will be monitored during business hours, and equipped with a voicemail box which will be monitored for messages during off hours and weekends while advisories are in effect. Delivery of additional drinking water will be made as soon as possible.

Water for other household uses, if requested, will be provided from centrally located bulk water tankers obtained from the NYS Emergency Management Office or the Vermont Army National Guard. They will be filled with potable water from local municipalities or certified bulk water haulers as close to the treatment area as possible; however, tankers will be posted with signs advising that the bulk water is not to be used for drinking or cooking. Since the number and location of potential users could change through time, actual tanker placements will have to be determined each year of a scheduled treatment based on updated information from the latest water user surveys. Affected households contacted during the door-to-door notifications will be informed of the location of the bulk water tanker closest to them. Special arrangements may be made for potentially affected small public water systems in cooperation with the Vermont DEC Water Supply Division or the NYS DOH.

If, during door-to-door contact separate provisions are requested for delivering household water to any handicapped person, the USFWS will find alternative means of bulk water delivery on an individual basis. Also at this time, if any household is unable to provide any type of their own container for transporting water, the USFWS will also make individual arrangements to assist them.

Water for livestock will be delivered to those who request it via trucks equipped with bulk water tanks or temporary connections to alternate water supplies. The tanks will be filled with water from local municipalities as close to the treatment area as possible or from other suitable sources as individual situations warrant. Stock tanks will also be provided to hold livestock water, as needed.

Notification of Expiration of Water Use Advisories

Water use advisories will be lifted 24 hours after the TFM concentrations fall below the respective threshold levels in an advisory zone. The general public will be notified via radio, TV and newspaper announcements when no advisories remain in effect. The shoreline advisory signs will be removed upon expiration of the swimming, bathing, agricultural and irrigation advisory. There will be no broadcast public notification of expiration of the recreational advisory. Persons calling the toll free number described above will receive information on the status of each advisory, specifically whether the recreational advisory is still in place or has been lifted. Those households that had use of their domestic or agricultural water supplies affected by treatment will be contacted personally and informed of the advisory expiration. They will be given a notice (Attachment 5) and if no one is home the notice will be left on their door. Potentially impacted agricultural water users will also be personally contacted and informed of the expiration of the water use advisories. Again, if no one is home, a notice will be left on the door. All such notifications will begin as soon as practicable 24 hours after the monitoring results indicate that advisories can be lifted.

References

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- Durfey, L. 2002. Prior notification, Posting and water supply plan. Proposed compliance with Lake Champlain sea lamprey control permit conditions and requirements of the NY State Department of Health. NYSDEC, Ray Brook. 25 pp.
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- Fisheries Technical Committee. 1999. Comprehensive evaluation of an eight-year program of sea lamprey control in Lake Champlain. Lake Champlain Fish and Wildlife Management Cooperative. 209 pp. plus appendices.
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- Lindsay, A. E. 2004. Letter to P. Benedict, Vermont Department of Agriculture, Food and Markets dated March 31, 2004. USEPA Office of Pesticide Programs, Washington, DC.
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Smith, S. 2013. Vermont prior notification, and water supply plan for lampricide applications. USFWS Lake Champlain Fish and Wildlife Resource Office. Essex Junction, VT. 9 pp. plus attachments.

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USFWS, VTDFW and NYSDEC. 2001. A long-term program of sea lamprey control in Lake Champlain. Final Supplemental Environmental Impact Statement #FES 01-27. Lake Champlain Fish and Wildlife Management Cooperative. 356 pp. plus appendices.

WHO. 2007. WHO model list of essential medicines. World Health Organization, Geneva, Switzerland.

Woldt, A. and W. P. Sullivan. 2014. Standard Operating Procedures for Application of Lampricides in the Great Lakes Fishery Commission Integrated Management of Sea Lamprey (*Petromyzon marinus*) Control Program. <http://www.glfsc.org/sealamp/sop.php>

Attachments

1. Initial Notification Letter and Water Supply Survey Forms

Attachment 1 Cover Letter.docx

Attachment 1A Water Supply Survey.docx

2. Short-term Treatment Notification Letter

Attachment 2 Notice 2-WEEK with Schedule.docx

3. Pre-Treatment Notice for Household Riparian Water Users

Attachment 3 Notice Door.docx

4. Shoreline Water Use Advisory Poster

Attachment 4 Signage with QR code.docx

5. Delta Treatment Zone Water Use Poster (buoy)

Attachment 5 Delta Treatment Area Signage.docx

6. Notice of Water Use Advisory Expiration

Attachment 6 Notice Lift.docx



United States Department of the Interior

FISH AND WILDLIFE SERVICE



SEA LAMPREY CONTROL PROGRAM

Lake Champlain Fish and Wildlife Conservation Office
11 Lincoln Street, Essex Junction, Vermont 05452

Dear Landowner,

A parcel(s) under your ownership has been identified by municipal records as one that abuts waters where a U.S. Fish and Wildlife Service (USFWS) sea lamprey control treatment is tentatively scheduled. The sea lamprey is a parasitic fish that has affected the trout and salmon populations in Lake Champlain most severely while also depressing the populations of other species such as walleye and the endangered lake sturgeon. Sea lamprey control is essential for restoration of Lake Champlain's fisheries.

TFM and Niclosamide are the active ingredients in chemical lampricides applied to control sea lamprey populations. Whereas TFM is the primary control chemical for river applications; in some high-volume rivers, the addition of 0.5 to 2% Niclosamide by weight of TFM reduces TFM requirements by approximately 40%. The combination reduces lampricide use by volume and provides an additional benefit of shorter water use advisories. Bayluscide® (active ingredient; Niclosamide) is used for delta applications which occur in New York.

A water use advisory will be in effect for approximately 3-7 days during and following a treatment to minimize public exposure. Water within an advisory area should not be used for human consumption and domestic use, swimming, or irrigation and livestock watering. Other recreational use (i.e. fishing, boating) is also advised against. If raw river or lake water is the primary domestic or agricultural water source at an affected parcel(s), the USFWS will provide drinking/cooking water upon request, including arrangements for livestock.

Affected landowners and tenants will be notified of a tentative treatment date approximately two weeks in advance. Landowners that use a surface water intake system will receive an additional door notice the day preceding a treatment and the day that advisories are lifted. Newspapers, radio, television stations, and a toll-free "Hotline" will provide specific treatment dates as well as advisory updates.

Please complete and return the enclosed "Water Supply Survey" form within 14 days in the enclosed postpaid envelope. When completed, the form will acknowledge receipt of this notice and inform the USFWS as to whether the parcel(s) water source may be temporarily affected and if an alternate water supply may be needed. If the USFWS does not receive a completed form, we will assume that water supply arrangements are not needed. Information provided will be used only for purposes of the USFWS Sea Lamprey Control Program.

Although the project is not hazardous, it is only prudent to avoid exposure to the treatment chemicals. The water-use advisories and accommodations for interruption of water use have been developed in cooperation with state and local health officials in New York and Vermont.

- General information about the USFWS Sea Lamprey Control Program:
<http://www.fws.gov/LCFWRO/projects/lamprey.html>
www.ChamplainLamprey.org
- Product labels specific to each lampricide: <http://www.fws.gov/lcfwro/landowner.htm>
- Tentative treatment schedules: <http://www.fws.gov/lcfwro/landowner.html>

For further inquiries or to request paper copies of the embedded links, please contact:

Aaron L. Keech
Landowner Coordinator
Aaron_Keech@fws.gov
Office: 802-872-0629 x16
Hotline: 888-596-0611

LAKE CHAMPLAIN SEA LAMPREY CONTROL PROGRAM WATER SUPPLY SURVEY

_____ **River/Delta**

Please complete this form and return within 14 days using the enclosed postpaid envelope. Listed below is the information USFWS has on file related to parcel owner, parcel address, and contact address (residential/winter). Make any corrections as needed, such as most relevant affected parcel address if multiple tax map numbers are listed.

<u>PARCEL OWNER</u>	<u>PARCEL ADDRESS</u>	<u>CONTACT ADDRESS</u>
J. J. Doe	P.O. Box 666 666 Street City, State Zip	P.O. Box 777 777 Street City, State Zip
<u>NEW OWNER since 20XX</u> YES	Tax Map Number(s):	

Telephone Number with Area Code: (Day) _____
(Evening) _____

Email Address(es): _____

• Select preferred correspondence: _____ Paper Mail _____ Paper and Email _____ Email

• Select the **one** category that best describes the parcel(s):

_____ Residential Home	_____ Commercial: Apartments / Trailer Park / Motel / Lodge / Restaurant
_____ Seasonal Home	
_____ Farm	_____ Other Commercial / Industrial
_____ Beach / Park / Campsite	_____ Undeveloped

• Does a parcel resident (owner or tenant) use water **obtained directly** from either the river to be treated or Lake Champlain for any of the following purposes?

Domestic consumption and pets (drink/cook).	Yes _____	No _____
Domestic household use (bathe/dishes/clothes).	Yes _____	No _____
Livestock water or to clean milking equipment.	Yes _____	No _____
Farm irrigation.	Yes _____	No _____

• The water use(s) designated in the previous question are:

Year round: _____
Seasonal: Month _____ **through** Month _____

• Select the water source(s) used for **domestic purposes** at the parcel(s).
Please clarify in comments section if more than one source is indicated.

_____ Self-supplied water (bottled / other source)
_____ Public water supply (Municipal / Fire District / Homeowners Association)
_____ Well on parcel
_____ Drilled/driven _____ Dug
Depth _____
Distance from river bank or Lake Champlain shore _____
_____ Spring on parcel
_____ Direct surface water intake from River or Tributary (name) _____
_____ Direct surface water intake from Lake Champlain

ID: <Parcel_ID>

Location: <Parcel_Address>, <Taxmapnum_Multiple>

Reference: <Treatment_Name_RD (River or Delta)>, <Parcel_RL (River or Lake)>, <Zone>

- Sea lamprey control treatments result in temporary water-use restrictions for affected parcels. In most cases, these advisories are in effect for 2-7 days.

WELLS greater than 30ft from affected water bodies ARE NOT AFFECTED. Parcels affected by water-use advisories include ONLY those whose primary water source is a private raw river or raw lake water intake, or water from shallow wells located within 30ft of affected water bodies.

If you request it, the USFWS will provide water at no cost if your water use is affected. Please select the response(s) which apply to water use needs at the parcel(s):

- Parcel water supply will not be affected.
- Parcel water supply may be affected, but owner will provide own arrangements for water.
- Request for water: Domestic consumption (drink/cook). *
- Request for water: Domestic household use (bathe/dishes/clothes). *
- Request for water: Livestock water or to clean milking equipment. *

** USFWS personnel will contact the parcel owner prior to treatment to determine individual water needs.*

- Is the parcel **rented or leased** to another person(s)? If so, please provide number of rented/leased units: _____

USFWS will send additional direct notifications to residents of two or less units if contact information is provided. For three or more units, additional notifications will be provided to the parcel owner for distribution.

Name _____
 Address _____
 _____ Zip _____
 Phone _____
 Email _____

Name _____
 Address _____
 _____ Zip _____
 Phone _____
 Email _____

- Do others have deeded lake access across the parcel for recreation or lake-water supply lines? Yes ____ No ____

USFWS will send additional direct notifications to entities with deeded access if contact information is provided. If three or more entities have deeded access, additional notifications will be provided to the owner for distribution.

Name _____
 Address _____
 _____ Zip _____
 Phone _____
 Email _____

Name _____
 Address _____
 _____ Zip _____
 Phone _____
 Email _____

Comments and Clarifications:

• **SIGNATURE** _____

DATE _____

ID: <Parcel_ID>

Location: <Parcel_Address>, <Taxmapnum_Multiple>

Reference: <Treatment_Name_RD (River or Delta)>, <Parcel_RL (River or Lake)>, <Zone>

NOTICE



United States Department of the Interior FISH and WILDLIFE SERVICE



SEA LAMPREY CONTROL PROGRAM Lake Champlain Fish and Wildlife Conservation Office 11 Lincoln Street, Essex Junction, Vermont 05452

A parcel(s) under your ownership has been identified by municipal records as one that abuts waters where a U.S. Fish and Wildlife Service (USFWS) sea lamprey control treatment is tentatively scheduled. The sea lamprey is a parasitic fish that has affected the trout and salmon populations in Lake Champlain most severely while also depressing the populations of other species such as walleye and the endangered lake sturgeon. Sea lamprey control is essential for restoration of Lake Champlain's fisheries.

TFM and Niclosamide are the active ingredients in chemical lampricides applied to control sea lamprey populations. TFM is the primary control chemical for river applications. In some high volume rivers, Niclosamide is added to the TFM at 1% by weight. The combination reduces TFM use by up to 40% and provides an additional benefit of decreased water use advisory times. Bayluscide® (active ingredient; Niclosamide) is used for delta applications which only occur in New York. A water use advisory will be in effect during and following a treatment to minimize exposure.

RIVER TREATMENTS: River or lake water in the water use advisory area should not be used for **drinking, cooking or other household purposes such as bathing, showering, and dish and clothes washing; or for swimming, irrigation or livestock watering.** Fishing and other water-based recreation activities will also be restricted for a period of time following treatment.

DELTA TREATMENTS: Delta water may contain treatment-level concentrations of Bayluscide®. Water within a delta advisory area should not be used for human consumption for four days after treatment completion, but may be safely used for other domestic, agricultural, and recreational purposes two days after treatment completion.

Treatment Dates (opposite) are subject to change due to stream flows, weather conditions, or technical problems. Advisories will be indicated on signs posted at public access points. Newspapers, radio, and television stations will be provided specific treatment dates, as well as advisory updates. A toll-free hotline (below) will be active for affected water users to call for further information and updates.

Prior to this notification, a water use survey was mailed to you. If you returned and indicated that raw river or lake water is the primary domestic or agricultural water source at your parcel(s), USFWS personnel will contact you concerning your water use needs. If determined that the water source may be temporarily affected, the USFWS will provide a drinking/cooking water supply upon request, including arrangements for livestock. A centrally located bulk water tank will be allocated to communities as needed for other domestic purposes (bathe, dishes, clothes), but transport containers will not be provided. Landowners that request water, use a surface water intake system, or could not be contacted will receive an additional door notice the day preceding a treatment and the day advisories are lifted. If water is needed and USFWS personnel have not contacted you within 24 hours of a scheduled treatment, please call the hotline. Potable water will remain available until the advisory has been lifted.

WELLS greater than 30ft from affected water bodies ARE NOT AFFECTED. Parcels affected by water-use advisories include **ONLY** those whose primary water source is a private raw river or raw lake water intake, or water from shallow wells located within 30ft of affected water bodies.

Do not rely on your own senses for detection; at the dilute concentrations present in the advisory areas, the treatment chemicals are colorless, odorless, and tasteless. Although the project is not hazardous, it is only prudent to avoid exposure to the treatment chemicals. The water-use advisories and accommodations for interruption of water use have been developed in cooperation with state and local health officials in New York and Vermont.

If the parcel is rented or leased to another person(s), please provide this person(s) with a copy of this notice within one week. If additional copies are needed, please call the hotline.

Aaron L. Keech
Landowner Coordinator
Aaron_Keech@fws.gov

Hotline: 888-596-0611

TREATMENT SCHEDULE OPPOSITE



U.S. FISH and WILDLIFE SERVICE
 SEA LAMPREY CONTROL PROGRAM
 11 Lincoln Street
 Essex Junction, VT 05452

J. J. DOE
 P.O. BOX 777
 777 STREET
 CITY, STATE ZIP



United States Department of the Interior
FISH and WILDLIFE SERVICE



SEA LAMPREY CONTROL PROGRAM
 Lake Champlain Fish and Wildlife Conservation Office
 11 Lincoln Street, Essex Junction, Vermont 05452

2016 Tentative Treatment Schedule

EFFECTIVE DATE	Name	River/Delta	NY/VT	Lampricide(s)	Miles ^a /Acres ^b	Town/City
Spring	Beaver	River	NY	TFM	2.5 Miles	Westport
Spring	Putnam	River	NY/VT	TFM	5.2 Miles	Crown Point
00 September	LaPlatte	River	VT	TFM	3.3 Miles	Shelburne
00 September	Stonebridge	River	VT	TFM	3.6 Miles	Milton
00 September	Missisquoi	River	VT	TFM/Niclosamide	7.8 Miles	Swanton
00 September	XXXXXXXXXX	Delta	NY	Bayluscide®	XXX Acres	XXXXXXXXXX

^a River mileage refers to length from application point to mouth.

^b Delta acreage refers to total area surveyed to determine population distribution. Actual area treated will be substantially reduced to represent only areas of sufficient population density.

NOTICE

Effective: _____



United States Department of the Interior FISH and WILDLIFE SERVICE



SEA LAMPREY CONTROL PROGRAM Lake Champlain Fish and Wildlife Conservation Office 11 Lincoln Street, Essex Junction, Vermont 05452

A parcel(s) under your ownership has been identified by county records as one that abuts waters where a U.S. Fish and Wildlife Service (USFWS) sea lamprey control treatment is scheduled. The sea lamprey is a parasitic fish that has affected the trout and salmon populations in Lake Champlain most severely while also depressing the populations of other species such as walleye and the endangered lake sturgeon. Sea lamprey control is essential for restoration of Lake Champlain's fisheries.

TFM and Niclosamide are the active ingredients in chemical lampricides applied to control sea lamprey populations. TFM is the primary control chemical for river applications. In some high volume rivers, Niclosamide is added to the TFM at 1% by weight. The combination reduces TFM use by up to 40% and provides an additional benefit of shorter water use advisories. Bayluscide® (active ingredient; Niclosamide) is used for delta applications which only occur in New York. A water use advisory will be in effect during and following a treatment to minimize exposure. Although lampricide concentrations in the water will be very low, **you should not use the treated water for drinking and cooking; or for other household purposes such as bathing, showering, and clothes or dish washing; or for swimming, fishing, irrigation and watering of livestock.**

Do not drink the water from your private lake or river water supply or use such water for the other purposes listed above until you are notified that the advisory has been lifted. U.S. Fish and Wildlife Service (USFWS) personnel will deliver free commercially bottled water for drinking and cooking if requested by landowners whose potable water supply will be exposed to lampricides.

WELLS greater than 30ft from affected water bodies ARE NOT AFFECTED. Parcels affected by water use advisories include **ONLY** those whose primary water source is a private raw river or raw lake water intake, or water from shallow wells located within 30ft of affected water bodies.

If you need more drinking water, please call our toll-free number listed below Monday through Friday from 7:30 am - 4:30pm. You may also leave a message at this number at other times as USFWS personnel will be checking for voice messages frequently during the water use advisory period. You will be personally notified when lampricide concentrations have dissipated and you can resume normal use of your water supply.

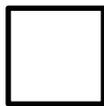
Do not rely on your own senses for detection; at the dilute concentrations present in the advisory areas, the treatment chemicals are colorless, odorless, and tasteless. Although the project is not hazardous, it is only prudent to avoid exposure to the treatment chemicals. The water use advisories and accommodations for interruption of water use have been developed in cooperation with state and local health officials in New York and Vermont.

Aaron L. Keech
Landowner Coordinator
Aaron_Keech@fws.gov
Hotline: 888-596-0611

WARNING

SEA LAMPREY CONTROL PROJECT AQUATIC PESTICIDE IN USE

The water in this area may contain TFM, a combination of TFM/Niclosamide, or Niclosamide alone; used to control a parasitic fish, the sea lamprey, to help restore fish populations in Lake Champlain. TFM formulations also contain the solvent isopropanol, the main ingredient in rubbing alcohol.



TFM or TFM+Niclosamide
River Application (VT/NY)



NICLOSAMIDE
Delta Application (NY)

THE FOLLOWING ADVISORIES APPLY
TO THE WATER IN THIS AREA

EFFECTIVE: _____ TIME: _____

NO DRINKING

NO DOMESTIC USE

NO FISHING

NO SWIMMING

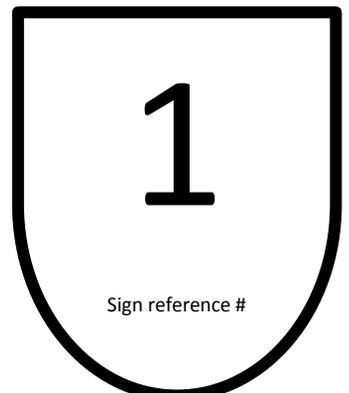
NO IRRIGATION

NO WATERING LIVESTOCK

UNTIL THIS SIGN IS REMOVED

UNITED STATES FISH and WILDLIFE SERVICE

For further information: 1-888-596-0611



Treatment Date: _____

SEA LAMPREY CONTROL PROJECT

Parasitic Sea Lamprey are being treated with Bayluscide in this area to protect and improve the fishery of Lake Champlain

THE FOLLOWING ADVISORY APPLIES TO THE WATER IN THIS AREA:

UNTIL TWO DAYS AFTER THE TREATMENT DATE

**NO FISHING
NO SWIMMING,
NO LIVESTOCK WATERING
AND NO IRRIGATION**

IN ADDITION, SWIMMING AND FISHING IN THE TREATMENT AREA MAY BE ASSOCIATED WITH LOW-LEVEL EXPOSURE TO BAYLUSCIDE FOR FOUR DAYS FOLLOWING THE TREATMENT DATE AND THE CONSUMPTION OF FISH FROM THE TREATMENT AREA MAY RESULT IN LOW-LEVEL EXPOSURE TO BAYLUSCIDE FOR 14 DAYS FOLLOWING THE TREATMENT DATE

U. S. Fish and Wildlife Service
For further information call 1-888-596-0611



NOTICE



United States Department of the Interior FISH and WILDLIFE SERVICE



SEA LAMPREY CONTROL PROGRAM
Lake Champlain Fish and Wildlife Conservation Office
11 Lincoln Street, Essex Junction, Vermont 05452

***The water use advisory for
this area has been lifted.***

**EFFECTIVE IMMEDIATELY,
WATER USE AT THIS PARCEL
MAY RESUME FOR ANY
DOMESTIC, AGRICULTURAL,
OR RECREATIONAL PURPOSE**

For further information call 1-888-596-0611