



Maine Department of Environmental Protection

NOTICE OF INTENT (NOI) FOR COVERAGE INVASIVE FISH GENERAL PERMIT

(For use with MEG 180000 Application of Piscicides for Control of Invasive Fish General Permit)

1. MDIFW Fisheries Division Contact

Name: _____

Mailing Address: _____

Telephone Number: (____) _____ e-mail: _____

2. Agent Managing the Project (if different from Division Contact)

Name of Agent: _____

Mailing Address: _____

Telephone Number: (____) _____ e-mail: _____

3. Licensed Applicator Information

Name of Applicator: _____

Mailing Address: _____

Phone Number: (____) _____ e-mail: _____

Maine Board of Pesticides Control License Number: _____, expiration: _____

4. Statement of Significant Need to Control Invasive Species

The proposed treatment is consistent with and supported by MDIFW's legislative mandate 12 M.R.S. § 702 (7011), Administrative Policy Regarding Fisheries Management, State of Maine Action Plan for Managing Invasive Species, and the Revised Strategic Management Plan for Fisheries, 2001-2016 as follows. MDIFW may submit additional justification.

- The Maine Legislature established the MDIFW “to preserve, protect and enhance the inland fisheries and wildlife resources of the State.” This legislation empowers the MDIFW to develop policies and programs for the management of Maine’s inland fisheries. Reclamation projects under this program are consistent with the MDIFW’s legislative mandate as an effort to restore and/or enhance native fisheries and fishery opportunities in the State.
- MDIFW Administrative Policy Regarding Fisheries Management states “Management programs will focus on...protection and restoration of habitat...” and Habitat Section-3 reads, “Projects intended to enhance habitat, although very similar to restoration projects, are intended to improve the habitat value for certain fish species, but are not being done to restore a pre-existing, or historical condition.” The proposed reclamation program falls under the umbrella of habitat restoration and/or enhancement as defined in MDIFW’s management policy.
- State of Maine Action Plan for Managing Invasive Species states that MDIFW will remove illegally introduced fish when feasible, and chemical reclamation is the most common and effective means of accomplishing this goal. The proposed program helps MDIFW achieve the objectives outlined in this federally approved plan and MDIFW has identified invasive fish species in the treatment area, pursuant to 38 MRSA, §466.8-A.
- The Revised Strategic Management Plan for Fisheries, 2001-2016 - under the Brook Trout Species Plan states, “Objective 4: Improve fishing quality in lakes and ponds.

In the treatment area, MDIFW has determined that the following species is/are INVASIVE.

- | | | |
|---|---|---|
| <input type="checkbox"/> Common sucker
<i>Catostomus commersoni</i> | <input type="checkbox"/> Golden shiner
<i>Notemigonus crysoleucas</i> | <input type="checkbox"/> Rudd
<i>Scardinius erythrophthalmus</i> |
| <input type="checkbox"/> Creek chub sucker
<i>Erimyzon oblongus</i> | <input type="checkbox"/> Common shiner
<i>Luxilus cornutus</i> | <input type="checkbox"/> Goldfish
<i>Carassius auratus</i> |
| <input type="checkbox"/> Creek chub
<i>Semotilus atromaculatus</i> | <input type="checkbox"/> Rainbow smelt
<i>Osmerus mordax</i> | <input type="checkbox"/> Carp
<i>Cyprinus carpio</i> |
| <input type="checkbox"/> Lake chub
<i>Couesius plumbeus</i> | <input type="checkbox"/> Emerald shiner
<i>Notemigonus crysoleucas</i> | <input type="checkbox"/> Northern pike
<i>Esox lucius</i> |
| <input type="checkbox"/> Muskellunge
<i>Esox masquinongy</i> | <input type="checkbox"/> Largemouth bass
<i>Micropterus salmoides</i> | <input type="checkbox"/> Smallmouth bass
<i>Micropterus dolomieu</i> |
| <input type="checkbox"/> Black crappie
<i>Pomoxis nigromaculatus</i> | <input type="checkbox"/> Brown bullhead
<i>Ameirus nebulosus</i> | <input type="checkbox"/> Other
List: _____ |

In the treatment area, MDIFW has determined that the following native species are to be RESTORED or ENHANCED.

- | | | |
|---|--|--|
| <input type="checkbox"/> Brook trout
<i>Salvelinus fontinalis</i> | <input type="checkbox"/> Landlocked Atlantic salmon
<i>Salmo salar sebago</i> | <input type="checkbox"/> Swamp darter
<i>Etheostoma fusiforme</i> |
| <input type="checkbox"/> Landlocked Arctic charr
<i>Salvelinus alpinus oquassa</i> | <input type="checkbox"/> Lake whitefish
<i>Coregonum clupeaformis</i> | <input type="checkbox"/> Other
List: _____ |

5. Reasons for this project:

The significant reasons to control the invasive species in this treatment area include, but are not limited to the following. MDIFW shall provide an accompanying project narrative.

- Invasive population of fish cannot be controlled by non-chemical means;

- Significant potential for the invasive fish populations to spread rapidly;
- Significant disruption of the aquatic habitat is being caused by the invasive species;
- Treatment is required to enable a broader scale fish control project under a fish management plan;
- Treatment is needed to restore habitat and/or that failure to rapidly control the invasive species threatens to result in significant environmental harm to this or other natural resources.

6. Describe past control efforts:

- Rapid Response action is proposed as the first effort to control invasive species.
- Rotenone has been used to treat this area **with** success but invasive fish have been reintroduced.
- Rotenone has been used to treat this area **without** complete success and this treatment is necessary to control the invasive species.
- Management plan and/or the stocking program for the resource was revised in response to the invasive species introduction, however control is now necessary.
- Other, provide additional detail.

7. This treatment:

The proposed aquatic piscicide application(s) will be performed:

- As a rapid response project requiring immediate action to contain a newly identified invasive fish population;
- In conjunction with a specific written management plan for the receiving water and including a reference to that plan; or
- Pursuant to other resource management tools or objectives (provide details).

8. Project timeline:

Please provide a timeframe for all relevant activities.

9. Maps:

1. A map extending one mile beyond treatment site(s), indicating extent of defined treatment area and secondary effects zone; and
2. A map of the water body to be treated showing monitoring location(s) and the area(s) to be treated (spots or entire lake). Indicate the extent of the defined treatment area and secondary effects zone.

10. Treatment Area Description:

Please describe each area to be treated, including, but not limited to; range of depths, average depth, substrate character (sand, gravel, mud/organic, etc), identification of any intermittent or permanent inlets to or outlets from the water body, presence or absence and characterization of

non-target fish species within the water body, and any physical aspects of the site(s) to be treated that affect operations. The estimated size of the area(s) to be treated reported in square meters or acres. The estimated volume(s) to be treated reported in cubic meters or acre-feet. If available list www.lakesofmaine.org information.

11. Treatment Information:

Please indicate below which piscicide(s) will be used and at what application rate and frequency.

PRENTOX Prenfish Toxicant Liquid E.C. (EPA Reg No. 655-422)(5% rotenone).
 Application rate: 0.5 mg/L 0.75 mg/L 1.0 mg/L 1.5 mg/L 2.0 mg/L
 Frequency of Application: Single application with ability to reboost within 30-hours; Annual application.

PRENTOX Rotenone Fish Toxicant Powder (EPA Reg No. 655-691)(8.74% rotenone).
 Application rate: 0.5 mg/L 0.75 mg/L 1.0 mg/L 1.5 mg/L 2.0 mg/L
 Frequency of Application: Single application with ability to reboost within 30-hours; Annual application.

PRENTOX CFT Legumine™ Fish Toxicant (EPA Reg No. 655-899)(5% rotenone).
 Application rate: 0.5 mg/L 0.75 mg/L 1.0 mg/L 1.5 mg/L 2.0 mg/L
 Frequency of Application: Single application with ability to reboost within 30-hours; Annual application.

12. Application Method for Protection of Non-Target Resources and Organisms:

Description (provide details for each in supplemental materials)	Indicate
Well defined treatment area with no toxic discharge beyond physical obstructions.	<input type="checkbox"/>
Well defined treatment area & minimized secondary effects zone with provisions for non-target protection.	<input type="checkbox"/>
Summer treatment program with provisions for non-target protection.	<input type="checkbox"/>
Fall/winter treatment program with provisions for non-target protection.	<input type="checkbox"/>
Physical drawdown of treatment area planned.	<input type="checkbox"/>
Provisions to treat/recycle/retain treated discharges until nontoxic.	<input type="checkbox"/>
Limited spot/area treatments based on life histories of target species.	<input type="checkbox"/>
Protection ensured for non-target resources and organisms by other means.	<input type="checkbox"/>

Provide a narrative description of the defined treatment area noting locations of physical obstructions that will prevent unaided reestablishment of target invasive fishes.

If aquatic piscicide toxicity is anticipated to extend beyond the defined treatment area based on modeling or other predictive tools, MDIFW shall provide a clear demonstration of the significant need to conduct the program as designed, details of the resulting secondary effects zone, and measures taken to ensure protection of non-target resources and organisms.

13. Monitoring Program:

Select the appropriate monitoring regime for the effects of the piscicide(s) on fishes and other aquatic organisms, including non-target species. Monitoring shall be sufficient to evaluate the community as to species present and relative abundances before and after the treatment program. Any deviations from these standard protocols will be detailed and a justification for deviation supplied with the NOI. Please note that the computer model(s) indicating projected rotenone degradation and dispersal must be provided.

Monitoring Within the Treatment Area

Table 3 from Invasive Fishes General Permit		X = Required		
Description	Before Treatment	During Treatment	After Treatment	
Biological Monitoring - Conduct all surveys indicated unless extenuating circumstances and justification provided				
Treatment area fish survey	X	---	X	
Treatment area visual invertebrate survey	X	---	X	
Area non-game, threatened or endangered species survey.	X	---	---	
www.lakesofmaine.org species research	X	---	---	
Piscicide Monitoring				
Sentinel fish cages in treatment area (standard, other options must be justified)	---	---	X	
Sentinel fish tested offsite with water samples from treatment area using <i>S. fontinalis</i> or other MEDEP approved species.	---	---		
Indirect rotenone levels using <i>C. dubia</i> or other MEDEP approved species.	---	---		
Direct rotenone levels (not currently available in Maine)	---	---		
Water Quality Monitoring -Conduct all monitoring indicated unless extenuating circumstances and justification provided				
Dissolved oxygen profiles	X	---	X	
Water temperature profiles	X	---	X	
Secchi Disk transparency	X	---	X	
pH	X	---	X	
Alkalinity	X	---	X	
Phosphorous	X	---	X	
Conductivity	X	---	X	
Physical Monitoring -for drawdown and intermittent outlet conditions only				
Water level	X	X	X	
Outlet flow	X	X	X	
Computer Modeling of Rotenone Degradation and Dispersal -conduct and provide both models unless extenuating circumstances and justification provided.				
Computer modeling of treatment area	X	---	---	
Computer modeling of outlet	X	---	---	

X = Required

Monitoring Within the Secondary Effects Zone and Downstream of the Treatment Area

Table 4 from Invasive Fishes General Permit		X = Required		
Description	Before Treatment	During Treatment	After Treatment	
Biological Monitoring -Conduct all surveys indicated unless extenuating circumstances and justification provided				
Secondary effects zone and downstream fish composition using IFW Stream Survey Protocol Level 1, Level 2 or Level 3	X	---	X	
Secondary effects zone and downstream habitat composition		---		
Secondary effects zone and downstream visual invertebrate survey	X	---	X	
Area non-game, threatened or endangered species survey.	X	---	---	
www.lakesofmaine.org species research	X	---	---	
Piscicide Monitoring				
Sentinel fish cages in secondary effects zone and downstream area(s). (standard, other options must be justified)	---	---	X	
Sentinel fish tested offsite with water samples from downstream area using <i>S. fontinalis</i> or other MEDEP approved species.	---	---		
Indirect rotenone levels using <i>C. dubia</i> or other MEDEP approved species.	---	---		
Direct rotenone levels (not currently available in Maine)	---	---		
Water Quality Monitoring -Conduct all monitoring indicated unless extenuating circumstances and justification provided				
Dissolved oxygen profiles	X	---	X	
Water temperature profiles	X	---	X	
Secchi Disk transparency	X	---	X	
pH	X	---	X	
Alkalinity	X	---	X	
Phosphorous	X	---	X	
Conductivity	X	---	X	
Physical Monitoring -for drawdown and intermittent outlet conditions only				
Water level	X	X	X	
Outlet flow	X	X	X	
Computer Modeling of Rotenone Degradation and Dispersal -conduct and provide both models unless extenuating circumstances and justification provided.				
Computer modeling of treatment area	X	---	---	
Computer modeling of secondary effects zone and downstream areas.	X	---	---	

X = Required

14. Additional Submissions Required The following documents **must** be submitted with the NOI.

- ✓ Chart or schematic showing the exact location, mean low water depth, configuration of pen mooring systems and support platforms associated with the facility, and directions of prevailing currents
- ✓ A diagram showing the proposed sampling locations with unique and consistent labels and GPS coordinates to meet testing requirements of this General Permit
- ✓ Baseline monitoring data if required
- ✓ A statement that a current Operation and Maintenance (O&M) Plan has been developed for the facility
- ✓ Evidence of title, right or interest (TRI)
- ✓ Copies of the published Notice of Intent to File and a list of abutters to whom notice was provided
- ✓ For corporations, a *Certificate of Good Standing* or a statement signed by a corporate officer affirming that the corporation is in good standing

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Additionally, by signing below, I certify that (1) notice of this application has been made by publication in the newspaper(s) on or about ; (2) notice and a copy of this application have been provided to the clerk of the municipality(ies) or County Commissioners where the discharge is located; and (3) I have read and understand the Maine Department of Environmental Protection Application of Piscicides for the Control of Invasive Fishes General Permit MEG180000, and the facility described in this Notice of Intent will comply with the terms and conditions therein. The forgoing steps have been taken in accordance with the instructions attached to this application and the provisions of Chapter 529 of the Department's rules.

By:

Signature:

Date:

Printed Name:

Title:

NOTICE OF INTENT TO FILE
MAINE WASTE DISCHARGE GENERAL PERMIT FOR
APPLICATION OF PISCICIDES FOR THE CONTROL OF INVASIVE FISHES

Please take note that, pursuant to the Maine Department of Environmental Protection General Permit for the Application of Piscicides for the Control of Invasive Fishes, MEG180000,

_____ of

[applicant name]

_____ plans to file a Notice of Intent for coverage with

[applicant address]

the Department of Environmental Protection (Department). If the coverage is granted, it will allow the discharge of pollutants associated with an approved piscicide treatment plan to

_____, in _____, Maine, subject to the terms

[name of receiving water(s)]

[town(s)]

and conditions of the General Permit. The Notice will be filed on or about _____ and will be available for public inspection at the Department's Augusta office during normal business hours. A copy may also be seen at the offices in _____, Maine.

[municipality or county if unorganized]

A copy of the General Permit may be obtained from the Department or at

<http://www.maine.gov/dep/water/wd/herbicides-piscicides-application/index.html>

The Department will take no action on the Notice of Intent until 30 days from the date of this publication. Any person wishing to submit comments to the Department regarding the Notice of Intent should do so in writing within 30 days of this publication. Comments should be limited to the applicant's ability to comply with the terms and conditions of the General Permit. The Department will take these comments into consideration in determining whether or not to approve of the Notice of Intent.

Written public comments, requests for information or questions may be directed to the Maine Department of Environmental Protection, Division of Water Quality Management, Waste Discharge Permitting, State House Station #17, Augusta, Maine 04333. Telephone (207) 287-7688.