NEW YORK STATE | Adirondack Park Agency

Hand-delivered

PROJECT PUBLIC NOTICE
APPLICATION COMPLETED
APA PROJECT NO. 2025-0011

Date: January 31, 2025

The Agency determined on **January 28, 2025** that the application referenced below is complete and under formal review for Agency action. The purpose of this Notice is to inform you about the proposed project and to ask for any written comments that you may wish to make about the project. Comments previously submitted are already part of the project file and need not be repeated.

It is not necessary to respond to this notice unless you want to do so. If you wish to provide written comments, they must be received by **February 27, 2025.** The Agency website's page for **Public Comment & Hearing Opportunities** (https://apa.ny.gov/Hearings) includes information on the project, including the most recent maps and plans, and an electronic form for submitting any public comments. You may also submit written comments to **Aaron Ziemann** via e-mail (at **rpcomments@apa.ny.gov**) or via mail (at PO Box 99, Ray Brook, NY 12977). Please reference the above project number.

PROJECT SPONSOR, LOCATION AND DESCRIPTION

The Agency received an application on **January 14, 2025** for a project proposed by **the New York State Department of Environmental Conservation (NYSDEC)** in the Town of **Santa Clara, Franklin County**, in **Echo Pond** near **Fish Creek Pond Campground** in an area designated as **Underwater Lands administered by NYSDEC**. The tax map number of the project site is: Section **453,** Block **1,** Parcel(s) **1**. The attached map shows the approximate location of the project site.

The project is briefly described as follows: **Reclamation of Echo Pond (C-P136) with rotenone piscicide to remove native but widely introduced brown bullhead and restore and enhance the native brook trout population. This management action is stated in the Saranac Lakes Wild Forest UMP. The proposal requires an Adirondack Park Agency wetlands permit.**

1/31/25
Date

Ariel Lynch
Environmental Program Specialist 3 (EPS3)

cc: NYSDEC – Christopher Powers
Town, County & LGRB Officials

P2025-0011; NYS Department of Environmental Conservation

1/15/2025, 11:33:50 AM This is advisory only, not to be used to confirm exact boundary location or for determining Agency jurisdiction.

Park Boundary Blueline

NYS Adirondack Park Agency

NYS Adirondack Park Agency

NYS Adirondack Park Agency | NYS Adirondack Park Agency, NYS DOT | NYS ITS Geospatial Services | NHD, NYS Adirondack Park Agency | RPS | NYS Department of Environmental Conservation | NRCS, NYS Adirondack Park Agency |

NEW YORK STATE | Adirondack Park Agency

MAJOR PROJECT PUBLIC NOTICE
APPLICATION RECEIVED
APA PROJECT NO. 2025-0011

Date: January 16, 2025

The purpose of this notice is to inform you that the permit application described below was received by the Adirondack Park Agency on **January 14, 2025,** and to solicit any written comments you may have regarding it at this time. When the application has been deemed complete by the Agency, another notice with a more detailed project description will be provided to you, and you will have another opportunity to provide written comment relevant to the Agency's review.

This notice is being sent to adjoining landowners to the project site to the extent they were identified in the application; the Chairman of the County Planning Board, Chairman of the Regional Planning Board, if any; the chief elected officer, clerk and planning board chairman, if any, of the town or village where the project is located; and the Adirondack Park Local Government Review Board.

It is not necessary to respond to this notice unless you want to do so. Please address any written comments to **Aaron Ziemann** at **rpcomments@apa.ny.gov** and reference the above project number.

PROJECT SPONSOR, LOCATION AND DESCRIPTION

The Agency received an application from **NYSDEC** for a project located on or near **Echo Pond (C-P136), Fish Creek Ponds Campground** in the Town of **Santa Clara, Franklin** County, in an area designated as **State Land** on the Adirondack Park Land Use and Development Plan Map. The tax map number of the project site is: Section **453**, Block **1,** Parcel(s) **1.** The attached map shows the approximate location of the project site. The Agency is currently reviewing the application for completeness.

The project is briefly described as follows: **Reclamation of Echo Pond (C-P136) with rotenone piscicide to remove native but widely introduced brown bullhead and restore and enhance the native brook trout population.**

1/16/25
Date

Ariel Lynch
Environmental Program Specialist 3 (EPS3)

cc: NYSDEC
Town, County & LGRB Officials

P2025-0011; NYS Department of Environmental Conservation

1/15/2025, 11:33:50 AM This is advisory only, not to be used to confirm exact boundary location or for determining Agency jurisdiction.

Park Boundary Blueline

NYS Adirondack Park Agency

NYS Adirondack Park Agency

From:	Petith, Stephanie L (APA)
To:	dec.sm.ENB; Berkman, Thomas S (DEC); Crisafulli, Scott w (DEC); Rice, Barbara (APA); Bates, Angela (APA); McKeever, Keith P (APA); Brosseau, Benjamin (APA); Stodola, Damion (APA); Burth, John M (APA); Lynch, Ariel D (APA); Ziemann, Aaron C (APA)
Subject:	P2025-0011 (NYSDEC - Santa Clara)
Date:	Monday, February 3, 2025 9:17:00 AM
Attachments:	P2025-0011-ENB-Final.docx

Lindy Sue:

Please publish the attached notice in the ENB.

This notice has been reviewed by the Adirondack Park Agency Executive Staff, and complies with the new directive for ENB.

Through this communication, I am also forwarding this information to Thomas Berkman.

Thank you!

Stephanie L. Petith

Administrative Assistant 1

NYS Adirondack Park Agency
PO Box 99
1133 NYS Route 86
Ray Brook, NY 12977

(518) 891-4050 | Stephanie.Petith@apa.ny.gov
www.apa.ny.gov

The ENB SEQRA Notice Publication Form - *Please check all that apply*.

Deadline: Notices must be received by 6 p.m. Wednesday to appear in the following Wednesday's ENB.

____Negative Declaration - Type I

____Conditioned Negative Declaration

____Draft Negative Declaration

____Positive Declaration
____ with Public Scoping Session

____Draft EIS
____with Public Hearing

Generic
____Supplemental

____Final EIS

____Generic
____Supplemental

_**X**_ Exempt/Type II

Permit(s) Applied For: **9 NYCRR Part 578**

DEC Region: **5**

County: **Franklin**

_**X**_ Within the Adirondack Park

Applicant/Sponsor Name: **NYS Department of Environmental Conservation (NYSDEC)**

Project or Application Number: **2025-0011**

Brief Project Description: **The action involves reclamation of Echo Pond (C-P136) with rotenone piscicide to remove native but widely introduced brown bullhead and restore and enhance the native brook trout population. This management action is stated in the Saranac Lakes Wild Forest UMP. The proposal requires an Adirondack Park Agency wetlands permit.**

APA Land Use Classification: **Underwater Lands Administered by NYSDEC**

Project Location: **Echo Pond, Fish Creek Pond Campground, Town of Santa Clara, Tax Parcel 453.-1-1**

Contact Person for Project: **Christopher Powers**
NYSDEC Region 5 Fisheries
PO Box 296, Ray Brook, NY, 12977
518-897-1200

APA Contact Person: **Aaron Ziemann**
RPcomments@apa.ny.gov
NYS Adirondack Park Agency
P.O. Box 99, 1133 NYS Route 86
Ray Brook, NY 12977
518-891-4050

For Adirondack Park Agency: Comment Period ends: **February 27, 2025**

NEW YORK STATE OF OPPORTUNITY. Adirondack Park Agency

RECEIVED

Date: January 14, 2025

ADIRONDACK PARK AGENCY **Division of Regulatory Programs** PO Box 99, 1133 NYS Route 86 Ray Brook, New York 12977 Telephone (518) 891- 4050 www.apa.ny.gov	NEW YORK STATE OF OPPORTUNITY. **Adirondack Park Agency**	**APPLICATION FOR** **Waterbody Reclamation on Forest Preserve**

Applicability: This application is for an Adirondack Park Agency permit for the use of Rotenone for purposes of reclaiming a waterbody located on NYS Forest Preserve and involving wetlands subject to Agency permit jurisdiction.

Instructions: Please answer all of the questions in each numbered section and provide all requested attachments. Type or print clearly in ink. A site visit by Agency staff will also be required during the height of the vegetative growing season. The time period for review of the proposed project will not begin until the Agency determines that the application is complete. The proposed project may not be undertaken until a permit has been issued by the Agency.

1. **Authorized Representative:**

   Name Christopher Powers

   Mailing Address 1115 NY-86, Ray Brook, NY 12977

   Telephone 518-897-1334

   E-mail christopher.powers@dec.ny.gov

   Technical Representative

   Name Same as above

   Mailing Address _____

   Telephone _____

   E-mail _____

2. **Site Location/Details:**

   a. Waterbody Name and Pond Code Echo Pond (C-P136)

   b. Town and State Land Unit where waterbody is located:

   Santa Clara (Fish Creek Pond Campground & Saranac Lakes Wild Forest)

3. **Statement of Need:** Provide a detailed statement of need.
    a. If the current fish community includes the species that will be stocked after reclamation, describe why reclamation is warranted at this time.
    b. If the waterbody is located in a state land unit that is governed by an approved Unit Management Plan is the proposed activity approved in the UMP?
    c. Does the project comply with Guidelines for Fisheries management in Wilderness, Primitive, and Canoe Areas (Adopted by the Adirondack Park Agency on April 26, 1990 and amended July 10, 1992).

4. **Piscicide:**
    a. State the trade name of piscicide proposed to be used and provide a complete copy of the label
    b. Identify the target concentration and duration
    c. Identify the total amount of product expected to be used (gallons) and total volume of water to be treated
    d. Identify the proposed application date (or date range) and the physical state of thermal stratification
    e. Does the waterbody contain high concentrations of organics which may adversely affect reclamation efforts?
    f. Detail the method of product application.
    g. Detail the proposed use of motor vehicles, aircraft, and motorized equipment

5. **Fish Community Assessment:**
    a. Describe the fish species composition currently found within the waterbody and identify the date the fish assessment was undertaken.
    b. Provide a chronologic accounting of the fish community composition and fish management activities that have occurred within the waterbody. Provide details of earliest recorded surveys, changes in fish community structure over time, and prior fish management activities (including prior reclamations and the construction of, or major rehabilitations/improvements to fish barriers),
    c. If the fish community does not include the species that will be stocked upon completion of the reclamation provide mid-summer water quality information (i.e., temperature and dissolved oxygen profiles) demonstrating that the physical conditions are favorable for the long-term survival of the preferred species.

6. **Mapping:**

    Provide two scaled map(s) as follows:

    Map 1: Provide a bathymetric contour map of the waterbody and show the locations of all inlets and outlet(s),

    Map 2: Provide an expanded watershed map which shows:
    a. all inlets and outlet(s) (outlet(s) shown to the confluence to the first major stream, river, or other waterbody),
    b. the locations of any man-made or natural fish barriers (describe the barrier),
    c. the geographic extent of reclamation, including inlets, and outlet(s) and provide basis for determining each extent, and

d. physical features such as beaver dams, or lodges, dense emergent or deep water marsh vegetation or other potential areas of fish refugia.

7. **Protected Species**: Identify all plants and animals which are listed in 6 NYCRR 182.5 or 6 NYCRR 193.3 which were observed during field surveys to the project site or which are reported by the New York State Natural Heritage Program as being within or adjacent to the project site.

8. **Stocking:** Describe post reclamation stocking plans and describe any proposed efforts to keep undesired fish species from becoming established in the waterbody.

9. **Project Alternatives:** Describe other management methods considered (including a No Action alternative) and state the reason why each was rejected.

10. **SEQRA Documents:** Provide complete copy of all SEQRA documents (including but not limited to EAFs, findings, etc.) determinations for this project.

11. **Local Government Notice Form:** Provide a completed copy of the enclosed Local Government Notice Form for the municipality in which your project is located. Have it filled out and signed by an appropriate official (e.g., Zoning Administrator, Planning Board Chairman or Supervisor, if no Zoning Administrator or Planning Board Chairman) and return it with the project application. Please read the form for instructions.

Required Signatures:

I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED IN THIS APPLICATION, INCLUDING ALL ATTACHMENTS. I BELIEVE THIS INFORMATION TO BE TRUE, ACCURATE AND COMPLETE.

Signature of Authorized Representative:

Christopher Powers Christopher Powers 01/14/2025

Signature **Print Name** **Date**

NEW YORK STATE OF OPPORTUNITY. Adirondack Park Agency
RECEIVED
Date: January 14, 2025

3. Statement of Need

a. Age and growth data from brook trout collected at Echo Pond indicate that competition from native but widely introduced brown bullhead is negatively impacting growth and survival. A 2019 fisheries survey found that brook trout were exhibiting diminished growth rates in comparison to a survey that occurred in 2005 prior to the introduction of brown bullhead (See Technical Fisheries Brief#519028 attached). A follow up survey in 2024, captured only 6 brook trout (3 trout/experimental gillnet night), ranging from 10-15.8". The 2024 survey also confirmed the continued presence of brown bullhead in Echo Pond. Although some larger fish were captured during this survey effort, the low catch per unit effort (3 brook trout/experimental gillnet night) demonstrates that brown bullhead are negatively impacting the stocked brook trout population, especially considering the pond is stocked with 500 Fall fingerling brook trout annually (See Technical Fisheries Brief #524029 attached).

b. The Saranac Lakes Wild Forest UMP and Final Environmental Impact Statement (2019) states that "Echo Pond will be managed as an Adirondack brook trout pond. It will be reclaimed upon establishment of non-native or other fishes to enhance and restore a native fish community".

c. The project is consistent with the Guidelines for Fisheries Management in Wilderness, Primitive and Canoe Areas.

4. Piscicide:

a. ROTENONE Fish Toxicant Powder (See attached product label)

PRENFISH TOXICANT – Liquid Emulsifiable (See attached product label)

b. The target concentration of this treatment is 1.5ppm for a period of at least 24 hours to effectively eradicate brown bullhead which are considered a tolerant species. The actual concentration will be assessed using bioassay after a period of 24 hours following the initial treatment. If found to be below 1.425ppm (95% of target) the DEC will apply a calculated boost amount as directed from the bioassay performed on site to achieve the target concentration.

c. A bathymetric map of Long Pond was generated in 2020. The total volume of the pond is 284.4 acre feet. The pond will require 1153.7 pounds of ROTENONE Fish Toxicant Powder in order to treat at 1.5 ppm (4.056lbs/acre foot). A small amount of liquid formulation (Prenfish Toxicant) may be applied via backpack sprayer in the littoral zone of the pond to effectively treat areas which cannot be reached with the boat mounted powder-based spraying system.

d. The proposed treatment time frame is October 2025 dependent on Fall weather conditions. This timeframe was selected to anticipate a homothermous, non-stratified condition in the pond which will facilitate treatment. The treatment will not commence until staff have verified the pond has undergone Fall turnover and is in a homothermous state.

e. Echo Pond is seepage ponds with some organic material present, however not at levels that would preclude a successful treatment. Organic matter on the bottom of a pond can provide refugia to fish from rotenone and rapidly bind with rotenone, breaking it down to inert compounds. Boosting following an in-situ bioassay may be necessary to achieve a concentration of 1.5 ppm over a 24-hour period.

f. The chemical will be applied via boat mounted pumps and sprayers, in addition to backpack sprayers and wick feeders.

g. Vehicles and UTV's will be used to transport application equipment and rotenone pesticide to the pond via the Fish Creek Campground. Staff will access the pond by foot from the campground road. Small outboard boat motors and water pumps will be used at the pond for piscicide application.

5. Fish Community Assessment:

a. A fisheries survey was conducted on Echo Pond on July 10th & 11th, 2024 (See Technical Fisheries Brief #524029 attached). Six brook trout were collected in addition to four brown bullhead. The low catch per unit effort (3 brook trout/experimental gill net night) is likely a result direct competition between stocked fall fingerling brook trout and the brown bullhead which are now established in the pond. Furthermore a 2019 survey which compared the brook trout population pre- and post- bullhead invasion clearly demonstrates the deleterious impact that bullheads have had on the brook trout population (See Technical Fisheries Brief #519028 attached).

Number and length ranges of fish collected at Echo Pond, 2024.

Species	Number collected	Minimum length (in)	Maximum length (in)
Brook trout	6	10	15.8
Brown bullhead	4	3.5	8.5

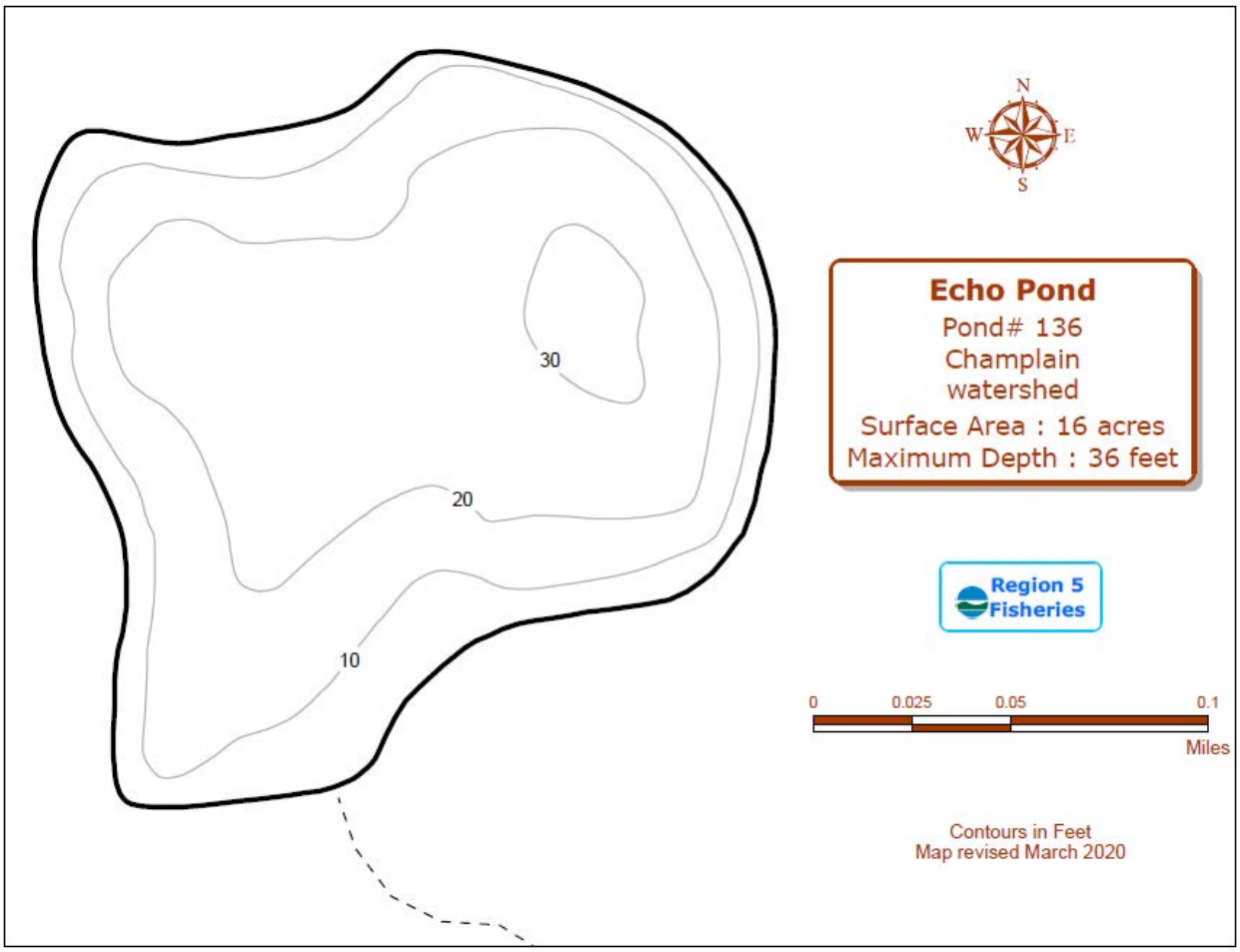
b. Echo Pond is a 16.3-acre Adirondack brook trout pond located about 0.25-miles north of the entrance to Fish Creek Campgrounds. Visible from State Route 30, the pond is accessed by a flat, 50-yard trail. Comments on the 1929 survey map for Echo Pond mention it was formerly a fine brook trout pond and recommended brook trout stocking which has been done since 1942. A brook trout monoculture was present in a 1957 survey which also recorded a pH of level of 5.5. A 1964 survey had the same result, but an effort in 1966 caught no fish. This was blamed on drought conditions and marginal chemistry.

Only a few brook trout were caught in 1968 and poor chemical conditions were again noted. Echo Pond was limed for the first time in 1969 and later in 1975, 1976, 1980 and 1984. Annual chemical monitoring has occurred since the 1970's. Since the 1984 liming, pH levels have remained stable near 7.0. Netting conducted in 1985 captured mostly brook trout, but also lake trout, brown trout and white sucker. The lake trout and brown trout probably originated from stocking mistakes. Anecdotal reports of large lake trout being caught were periodically received in the 1990's. In 1997, anglers began reporting catches of largemouth bass, large schools of minnows, and a decline in the brook trout fishery. Echo Pond was reclaimed in 1998 which confirmed the former presence of largemouth bass, smallmouth bass and golden shiner. Brook trout and rainbow trout were stocked after the successful reclamation. A 2005 netting survey on the pond captured 35 brook trout from 8.4-16.6” with no other fish species observed. A 2019 survey captured 32 brook trout ranging from 5.1-12.7” in addition to 26 brown bullheads, a new fish species for the pond at that time. This survey clearly illustrates the impact that the introduction of brown bullhead had on the growth of stocked brook trout. A 2024 survey caught 6 brook trout and 4 bullhead. It is unclear why only four bullhead were encountered, but they are still present in the pond and are having a negative impact on native brook trout.

c. N/A – Brook trout captured in 2020 survey.

6. Mapping

a. Map 1 – Bathymetric Contour map of Echo Pond (C-P136).



b. Map 2 – Local Watershed Map

Echo Pond (C-P136) - Watershed Map

N
W E
S

Echo Pond is a seepage water with no inlet or outlet streams. The shoreline is predominantly hard substrate with little to no emergent vegetation. There is one small inundated channel extending from the shoreline of the pond between the Southeast shoreline and NY-30(red line on map).

7. Protected Species

A search of the Natural Heritage Database on GIS found no endangered or threatened species within or near the treatment area. Common Loon, a species of Special Concern are present in the area surrounding Echo Pond. No adverse impacts to common loon are expected. Rotenone application will occur over the course of 2-3 days in October when many loons have migrated away from the Adirondacks. Loons that may be present on the pond can relocate to numerous nearby waterbodies. Consumption of deceased fish resulting from the piscicide treatment does not pose a health threat to loons. The pond will be restocked with brook following a successful application and loons will not be deterred from consuming those fish. There have been no observations of any listed species by DEC staff during their visits to Echo Pond.

8. Stocking

Temiscamie x domestic hybrid strain fall fingerling brook trout will be air stocked in the year following the reclamation. An annual policy of 500 fall fingerlings will be maintained to support this fishery.

9. Project Alternatives

The following alternatives were considered to the application of rotenone in Long Pond:

No Action

The no action alternative would not fulfill the mandated responsibilities of the DEC to manage waters to perpetuate a natural community where man's influence is not apparent by allowing a non-native species of fish to persist in a ponded water that is a reclamation candidate.

Nets

The use of nets to remove brown bullhead is not feasible in Echo Pond due to the sheer number of non-native fish present in the lake. It would be an impractical use of man hours to attempt control with this method and no amount of netting effort would completely eradicate brown bullhead from the pond.

Water Level Manipulation

Echo Pond does not have a perennial outlet stream that could be used for dewatering. Moreover, a draw down may have a significant impact on the other flora and fauna of the pond.

10. SEQRA Documents

Saranac Lakes Wild Forest Unit Management Plan & Final Environmental Impact Statement (April 2019)

11. Local Government Notice Form

Completed and Signed Form Attached

NEW YORK STATE OF OPPORTUNITY. | Adirondack Park Agency

NEW YORK STATE OF OPPORTUNITY. | Adirondack Park Agency

RECEIVED

Date: January 14, 2005

LOCAL GOVERNMENT NOTICE FORM
for Project/Variance Application to the Adirondack Park Agency

The Adirondack Park Agency will not deem an application complete until the appropriate municipal official in the Town/Village where a project is located has completed, signed and returned this form to the Agency.

If the Town/Village where the project site is located has zoning or other regulations which apply to the proposal, the Adirondack Park Agency will be unable to issue a permit if: (a) the town or village has either refused to grant a necessary permit or variance, or (b) the proposal is a prohibited use in that jurisdiction.

To be completed by the Applicant:

APA Project Number (if available): _____

Applicant Name: NYS DEC Bureau of Fisheries Landowner Name: New York State DEC

Project site location: Town/Village: Santa Clara Tax Map Number: 453.-1-1

Project type/description: Reclamation of Echo Pond (Fish Creek Campground) to remove non-native brown bullhead, a known brook trout competitor.

If the project involves a subdivision, please provide the appropriate local official a copy of the proposed plat as part of the project description with the plan title and date recorded in the space provided above.

To be completed by the Town/Village:

Does the Town/Village have land use controls?	X Yes ___ No
If the Town/Village has zoning, provide Zoning District Name(s) State lands	
Is the "use" allowed in the zoning district(s)	X Yes ___ No
Is the project prohibited by any local law or ordinance?	___ Yes X No
Does this project require a municipal permit?	___ Yes X No
If yes, is the required permit a building permit only?	___ Yes ___ No
If no, identify the type of permit required: _____	
Does this project require a municipal variance?	___ Yes X No
If yes, identify the type of variance required (e.g., area, setback, etc.) _____	
Does the project require any other municipal approval?	___ Yes X No
If yes, identify the approval required: _____	
Has the municipality received an application for this project?	___ Yes X No
If yes, has the municipality issued any decision on this project?	___ Yes ___ No

Provide explanation for any decisions on this project or inconsistencies the project may have with local laws or any comments you wish to provide to the Agency about the project: _____

Please provide a daytime contact telephone number with the best days/times to be reached, and/or an email address for the official signing this form, should Agency staff have further questions regarding municipal review of this project: (518) 524-7289 e-mail Santaclaraceo@gmail.com

_____

Signature of Zoning Official or Planning Board Chair (or Supervisor/Mayor if no such official exists)

Joseph David Code/Zoning Officer

Name and Title (Print)

11/25

Date

Please return this completed & signed form to the address or fax number below.

P.O. Box 99 • 1133 NYS Route 86 • Ray Brook, NY 12977 • Tel: 518 891-4050 • Fax: 518 891-3938 • www.apa.ny.gov

Bureau of Fisheries Technical Brief #tb519028

Echo Pond General Biological Survey #519028

Jonathan Fieroh, Region 5 Fisheries

12/20/2019

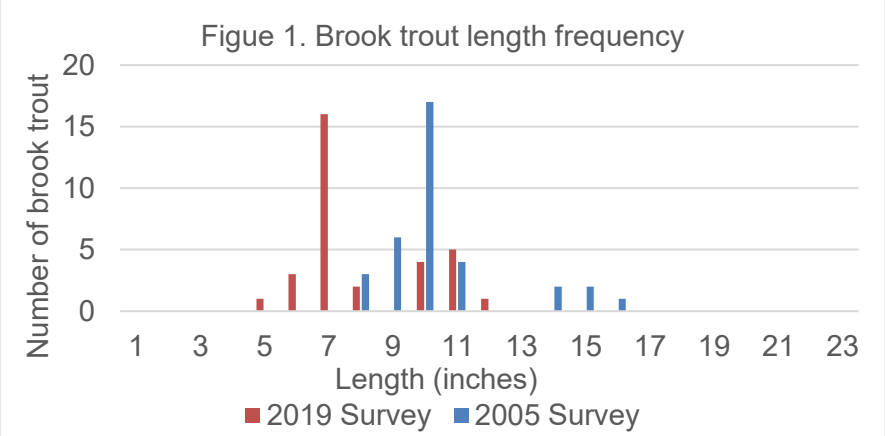
Echo Pond (C-P136) is a 16-acre water located 0.25 miles north of the entrance to Fish Creek Campgrounds in Franklin County. Visible from State Route 30, the pond is accessed by a flat, 50-yard trail. Part of the shoreline is in the Saranac Lakes Wildforest and part is Intensive Use, in the Fish Creek Campground. Echo Pond has a long and complicated fish management history including liming, it was last limed in 1984, and a reclamation that was performed in 1998. Brook trout have been stocked since the 1998 reclamation. This seepage water has a maximum depth of 32 feet, the mean depth is 14.4 feet and there was sufficient dissolved oxygen for trout to 18 feet in the spring 2019 survey.

In 2019 water samples were drawn for analysis at five feet and 20 feet (Table 1.). The pH here has been monitored annually since 1989, but acidity is no longer an issue at Echo Pond.

Table 1. Echo Pond water chemistry variables 2019.

Year	Depth (feet)	Air Equilibrated pH (pH units)	Acid Neutralizing Capacity (µeq/L)	Conductivity (µmhos/cm)	Silica mg L^{-1}	Sodium mg L^{-1}
2019	5	6.42	24.4	9.1	0.0	0.46
	20	6.75	37.9	12.6	0.2	0.56

Prompted by multiple reports of poor angling and the possible addition of new species to the fish community a fish survey was conducted. In 2019, two 150-ft Swedish experimental gill nets, a 30-ft minnow net, and a minnow trap were set overnight. A total of 26 brown bullhead were taken during the survey and it is likely that competition from this species has greatly affected the brook trout population. A length frequency histogram showing the brook trout population before the introduction of brown bullhead (2005) and after their introduction (2019) illustrates the stark differences in the two populations (Figure 1.). Brook trout numbers remained relatively constant (35 were collected in 2005 and 32 were collected in 2019). However, the maximum size, growth and length at age appear to be greatly affected by the introduction of brown bullhead. For example,



the average one-year old brook trout in 2019 was 2.5 inches shorter than the analogous fish in 2005. Echo Pond is a very popular water near an extremely popular NYSDEC campground. Liming is not required and while the current level of stocking (500 Temiscamie x Domestic hybrid brook trout annually) is providing a fishery and should be continued, it seems clear that Echo Pond should be reclaimed.

Bureau of Fisheries Technical Brief

NEW YORK STATE OF OPPORTUNITY. Department of Environmental Conservation

Echo Pond General Biological Survey (Survey #:524029)

Chris Powers, Region 5 Fisheries

01/13/2025

NEW YORK STATE OF OPPORTUNITY. Adirondack Park Agency
RECEIVED
Date: January 14, 2025

Echo Pond (C-P136) is a 16.3-acre pond with a maximum depth of 30' located off NY-30 in the Fish Creek Ponds Campground, town of Santa Clara, Franklin County, New York. This Adirondack brook trout pond has a long management history, with brook trout stocking dating back to 1942. The pond was treated with lime five times between 1969 and 1984 to combat the negative impacts of acid precipitation and to maintain pH levels suitable for the survival of brook trout. The pond was successfully reclaimed with rotenone in 1998 to eradicate largemouth bass and golden shiner, known brook trout competitors. A 2019 fisheries survey (#519028) on the pond captured brook trout and brown bullhead and concluded that "the maximum size, growth and length at age (of brook trout) appear to be greatly affected by the introduction of brown bullhead. For example, the average one-year old brook trout in 2019 was 2.5 inches shorter than the analogous fish in 2005" (Fieroh, 2019). This reduction in the growth of stocked brook trout is likely a result of interspecific competition with brown bullhead, as the stocking rate on this water has remained stable at 500 Fall fingerling Temiscamie x domestic hybrid strain brook trout annually. Due to its location in the Fish Creek Campground, this pond is very popular with anglers. The purpose of the current survey was to assess the fish community and brook trout population in preparation for a 2025 reclamation effort. A reclamation with powdered rotenone is tentatively planned for Fall 2025.

Two 125' long 6-panel experimental gill nets, one 30' monofilament minnow net and minnow trap were set in the pond for ~24 hours on May 23rd, 2024. Nets were set in similar locations to the 2019 survey effort. Six brook trout and three brown bullhead were captured (Table 1).

Table 1. Fish species captured at Echo Pond during 2024 survey.

Species	Number Collected	Size Range (inches)
Brook trout	6	10.0 - 15.8
Brown bullhead	4	3.5 - 8.5

Low brook trout catch rates (3 fish/gill net) are likely a result of competition for resources between age 0+ stocked Fall fingerlings and native but widely introduced brown bullhead, possibly leading to mortality of stocked fish. It was a somewhat puzzling that no age 2 trout were captured during this survey, as there were numerous captured in the 2019 and 2005 surveys. Only 3 brown bullhead were captured in this survey; however, nets were set in deeper, cooler water to intentionally target trout. Brown bullhead may have been inhabiting the shallow, warmer littoral zone of the pond at the time of the survey, one of the bullheads was in fact captured in the 30' long minnow net that was set in shallow water near the edge of the pond.

SPORT FISH RESTORATION

Brook trout catch rates and growth rates continue to be diminished in this pond in comparison to the 2005 survey when the pond was still a brook trout monoculture (Table 1). The average length of an age 3 brook trout was 14.3” as compared to 14.9” in 2005. The average weight of an age 3 brook trout was 1.1 and 1.6 pounds in 2024 and 2005 respectively (Table 1).

Table 1. Average length and weight at age of brook trout captured during 2024 survey effort.

Age	# Captured	Average Length (in.)	Average Weight (lbs)
1	1	10.0	0.39
2	0	n/a	n/a
3	3	14.3	1.1
4	2	15.4	1.3

The Saranac Lakes Wild Forest Unit Management Plan (NYSDEC, 2019) states “Echo Pond will be managed as an Adirondack brook trout pond. It will be reclaimed upon establishment of non-native or other fishes to enhance and restore a native fish community”. A reclamation of Echo Pond with powdered rotenone is planned for the Fall of 2025, pending Adirondack Park Agency permit approval. A follow up survey will be conducted post-treatment to determine the efficacy of the treatment. Following the reclamation, an annual stocking policy of 500 Fall fingerling Temiscamie x domestic strain brook trout will be reinstated.

Literature Cited

Fieroh, J., 2019. New York State Department of Environmental Conservation Bureau of Fisheries Technical Brief: Echo Pond General Biological Survey #519028.

New York State Department of Environmental Conservation, Region 5, Division of Lands & Forests, 2019. Saranac Lakes Wild Forest Unit Management Plan: 263.

ACCEPTED
VIA NOTIFICATION
LABEL NOT REVIEWED

April 27, 2020

New York State Department
of Environmental Conservation
Division of Materials Management
Pesticide Product Registration

DOC ID 567396

Classified for
"RESTRICTED USE"
in New York State
under 6NYCRR Part 326

RESTRICTED USE PESTICIDE

Due to acute oral and acute inhalation toxicity categories. For retail sale to, and use only by, Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

PRENFISH™ FISH TOXICANT

Liquid Emulsifiable Fish Toxicant

For Control of Fish in Lakes, Ponds, Reservoirs, and Streams

THE APPLICATOR IS RESPONSIBLE FOR CONFORMING TO THE LABEL. IMPORTANT GUIDANCE ON THE SAFE AND EFFECTIVE USE OF THIS PRODUCT IS PROVIDED IN THE ROTENONE SOP MANUAL, AVAILABLE FROM THE REGISTRANT OR THE AMERICAN FISHERIES SOCIETY AT https://units.fisheries.org/rotenone-stewardship/.

ACTIVE INGREDIENTS:	
Rotenone	5% w/w
Cube Resins other than rotenone	5%
OTHER INGREDIENTS[1]	90%
Total	100%

[1] Contains Petroleum Distillates

EPA Reg. No. 89459-85

EPA Est. No. Ⓐ 44616-MO-1* Ⓑ 44616-MO-2*

KEEP OUT OF REACH OF CHILDREN

DANGER - POISON - PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See booklet for additional Precautionary Statements

FIRST AID – Call a poison control center or doctor immediately for treatment advice.

If inhaled • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.

If swallowed • Call a poison control center or doctor immediately for treatment advice. • Do not give **any** liquid to the person. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.

If on skin or clothing • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes.

If in eyes • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.

Have the product container or label with you when calling a poison contrcl center or doctor, or going for treatment. You may contact 1-800-248-7763 for information including health concerns, medical emergencies or pesticide incidents, 24 hrs/day, 7 days/wk.

NOTE TO PHYSICIAN: Contains petroleum distillate. Vomiting may cause aspiration pneumonia. Symptoms of exposure include numbness, lethargy and incoordination. Decontamination, symptomatic and supportive treatment is recommended.

*Circled letter in front of the EPA Est No. corresponds to the first letter in lot number on bottom of container.

NET CONTENTS: 2.5 GAL

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continuous rate using the equation:

$$X = Y(70\ F1) \text{ or } X = Y(2{,}472\ F2)$$

X = ml of 2.5% permanganate solution per minute, Y = ppm of desired permanganate concentration, F1 = stream flow (ft^3/s) or F2 = stream flow (m^3/s) or, granular potassium permanganate is applied at a continuous rate using the equations:

$$Z = Y(1.7\ F1) \text{ or } Z = Y(60.02\ F2)$$

Z = grams of granular potassium permanganate per minute, Y = ppm of desired permanganate concentration, F1 = stream flow (ft^3/s) or F2 = stream flow (m^3/s).

Check flow of permanganate at least hourly. Live fish in cages placed immediately above the permanganate application site will show signs of stress signaling the need for beginning deactivation. Deactivation can be terminated when replenished fish survive and show no signs of stress for at least four hours.

Deactivation of rotenone by permanganate requires between 15 to 30 minutes contact time (travel time). Cages containing live fish can be placed at these downstream intervals to judge the effectiveness of deactivation. At water temperatures less than 50°F, deactivation may be retarded, requiring a longer contact time.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Store only in original containers, in a dry place inaccessible to children and pets. This product will not solidify nor show any separation at temperatures down to 40°F and is stable for a minimum of one year when stored in sealed drums at 70°F.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your state pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

(For Containers 5 Gallons or less:) Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available or reconditioning, if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

(For Containers greater than 5 Gallons:) Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

WARRANTY STATEMENT: Our recommendations for the use of this product are based upon tests believed to be reliable. The use of this product being beyond the control of the manufacturer, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice. To the extent consistent with applicable law, the buyer must assume all responsibility, including injury or damage, resulting from its misuse as such, or in combination with other materials.

CENTRAL Garden & Pet

LAST PAGE
8

RESTRICTED USE PESTICIDE

Due to acute oral and acute inhalation toxicity categories.
For retail sale to, and use only by, Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

PEEL DOWN

PRENFISH™ FISH TOXICANT

Liquid Emulsifiable Fish Toxicant

For Control of Fish in Lakes, Ponds, Reservoirs, and Streams

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EPA Reg. No. 89459-85
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DANGER - POISON - PELIGRO
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See inside panels for additional Precautionary Statements

FIRST AID – Call a poison control center or doctor immediately for treatment advice.

If inhaled • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.

If swallowed • Call a poison control center or doctor immediately for treatment advice. • Do not give any liquid to the person. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.

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NOTE TO PHYSICIAN: Contains petroleum distillate. Vomiting may cause aspiration pneumonia. Symptoms of exposure include numbness, lethargy and incoordination. Decontamination, symptomatic and supportive treatment is recommended.

*Circled letter in front of the EPA Est No. corresponds to the first letter in lot number on bottom of container.

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BOOKLET COVER
1

PRECAUTIONARY STATEMENTS – HAZARDS TO HUMANS AND DOMESTIC ANIMALS – DANGER – POISON

Fatal if swallowed or inhaled. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Causes moderate eye irritation. Do not breathe spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

Personal Protective Equipment (PPE)

All mixers, loaders, applicators, and other handlers (except pilots) must wear at a minimum, the following PPE: (1) coveralls, over long-sleeved shirt and long pants; (2) chemical-resistant gloves made out of barrier laminate, nitrile rubber ≤ 14 mils, neoprene rubber ≤ 14 mils, or viton ≤ 14 mils; (3) chemical-resistant footwear plus socks; (4) protective eyewear; and (5) a NIOSH approved particulate respirator with any N, R or P filter with NIOSH approval prefix TC-84A; or a NIOSH approved powered air purifying respirator with HE filter with NIOSH approval prefix TC-21C.

In addition, mixers, loaders, and others exposed to the concentrate, through cleaning equipment or spills must wear a chemical-resistant apron. Exception: waterproof waders may be worn in place of coveralls, chemical-resistant apron and chemical-resistant footwear. See **Engineering Controls** for additional requirements and exceptions.

User Safety Requirements

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate; do not reuse them.

Engineering Controls for Mixing/Loading/Applying Liquid Formulations Packaged in Containers > 5 Gallons

Mixers/loaders/applicators must either:

(1) Use a closed system that meets the requirements listed in Worker Protection Standard (WPS) for dermal protection of agricultural pesticides [40 CFR 170.240(d)(4)], or

(2) Use the Semi-Closed Probe Mixing/Loading/Applicator System described below.

Remove plug from bung of drum containing this product only when drum is sitting on the ground or on a secure level platform, with the drum pointed up. Do not pour this product from its drum. Transfer product from the drum to the mixing tank by use of a suction hose connected to one end of the suction pump on the mixing tank and connected at the other end to a probe/dip tube. Remove the plug from the bung of the drum and insert the probe/dip tube into the bung of the drum until the foam ring/gasket fits snugly around the bung opening to minimize leakage of liquid rotenone. Ensure that the probe/dip tube is specifically sized to insure a snug fit into the bung which incorporates an anti-drip flange to remove excess liquid rotenone when the probe/dip tube is removed. In addition, the foam ring/gasket on the probe/dip tube insures a snug fit to minimize leakage of liquid rotenone. Do not handle the probe/dip tube in a manner that allows dripping or splattering of the product onto yourself or any other person. Do not touch the portion of the probe/dip tube that has been in contact with this product until the probe has been triple rinsed with water. See Rotenone SOP Manual (SOP 8) for further information on the operation of the Semi-Closed Probe system.

If the entire product is removed from the drum, then triple rinse the probe while it remains inside of the drum, if possible. If not, remove the aspirator probe and triple rinse it and all parts of the aspirator in site water. If an unrinsed probe must be removed from the drum, triple rinse it and all parts of the aspirator in treated site water. The anti-drip flange must be designed to remove excess rotenone product from the probe as it is extracted from the drum. Take the following steps if the probe must be disconnected from the suction hose before both the probe and the hose have been triple rinsed: (1) equip the probe end of the hose with a shutoff valve; (2) install a dry-brake coupling between the valve and the probe, and then close the shutoff valve before disconnecting the probe. See Rotenone SOP Manual (SOP 8) for further information on unrinsed probes.

Mixers/loaders/applicators using all systems must wear PPE as required in the PPE section of this labeling for mixers/loaders. All systems must be capable of removing the pesticide from the shipping container and transferring it into mixing tanks and/or application equipment. At any disconnect point, the system must be equipped with a dry disconnect or dry-couple shutoff device to minimize drips.

Transferring (Mixing/Loading) Liquid Formulations

Mixers and loaders must transfer product from original container to mixing tank or secondary container using a measuring device, inside a plastic-lined bermed area or other secondary confinement area capable of recovering spilled product. Wash plastic liner or other secondary confinement area and dispose of into treated site water. Do not handle this product in a manner that drips or splatters the product onto yourself or any other person. See Rotenone SOP Manual (SOP 10) for further guidance.

Product Containers ≤ 5 Gallons - Transfer product from original container into measuring device, within secondary confinement area, by pouring or using pump or pipette-type device. See Rotenone SOP Manual (SOP 10) for further guidance.

Product Containers > 5 Gallons - Do not pour rotenone concentrate from containers > 5 gallons. Transfer product from original container into measuring device, within secondary confinement area, using hand or electric drum pump. See Rotenone SOP Manual (SOP 10) for further guidance.

Engineering Controls for Applying Liquid Formulations

Applications using a boom or other mechanized equipment must release this product below the water surface. Applications made with aircraft, backpack sprayer, drip can, or handheld or hand-directed nozzle may release this product above the water surface.

Engineering Controls for Aerial Applications

Open cockpits are prohibited. Pilots must use a cockpit that has a non-porous barrier that totally surrounds the cockpit occupants and prevents contact with pesticides outside the enclosed area. Pilots in enclosed cockpits may wear a long-sleeved shirt, long pants, shoes, and socks instead of the PPE required for applicators in the PPE section of this labeling.

Engineering Controls for Boat Applications

When boat pilots or others on the application boat are located within an enclosed area that has a non-porous barrier that totally surrounds the occupants and prevents contact with pesticides outside the enclosed area, they: (1) may wear long-sleeved shirt, long pants, shoes, and socks, instead of the PPE required for applicators in the PPE section of this labeling; (2) must be provided and have immediately available in the use of an emergency when they must exit the enclosed area while the application is taking place, the PPE required for applicators of the PPE section of this labeling; (3) must take off any PPE that's worn while outside the enclosed area before reentering the enclosed area; and (4) store all such used PPE in a chemical-resistant container, such as a plastic bag, to prevent contamination of the enclosed area.

User Safety Recommendations

Certified Applicators applying or supervising any aspect of the application of this product should attend a training program for the Rotenone SOP Manual. The American Fisheries Society offers this training: go to https://units.fisheries.org/rotenone-stewardship/ for current schedule of training.

Users should remove clothing/PPE if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is extremely toxic to fish and other aquatic organisms. Fish kills are expected at recommended rates. Consult your State Fish and Game Agency and other agencies before applying this product to public waters to determine if a permit is needed for such an application. Do not contaminate water outside of the treatment area by cleaning of equipment or disposal of equipment washwaters. Do not contaminate water outside of the treatment area, food or feed by storage or disposal. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority (PTOW).

PHYSICAL AND CHEMICAL HAZARDS

Combustible. Do not use or store near heat or open flame. Do not allow product to come into contact with oxidizing agents and/or strong acids.

DIRECTIONS FOR USE

RESTRICTED USE PESTICIDE

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING, INCLUDING BOTH THE CONTAINER LABEL AND THE ROTENONE STANDARD OPERATION PROCEDURES MANUAL (SOP) available from the registrant or the American Fisheries Society at https://units.fisheries.org/rotenone-stewardship/. THIS PRODUCT MUST BE ACCOMPANIED BY AN EPA-APPROVED ROTENONE SOP MANUAL. READ THE CONTAINER LABEL AND ROTENONE SOP MANUAL PRIOR TO USE. THE APPLICATOR IS RESPONSIBLE FOR FOLLOWING THE DIRECTIONS FOR USE CONTAINED WITHIN BOTH THE CONTAINER LABEL AND THE SOP MANUAL.

This product is registered for use by or under permit from, and after consultation with State and Federal Fish and Wildlife and/or Natural Resource Agencies.

GENERAL INFORMATION

This product is a specially formulated product containing rotenone to be used in fisheries management for the eradication of fish from lakes, ponds, reservoirs, rivers and streams.

Precautions and Restrictions: The Certified Applicator supervising the treatment must remain on site for the duration of the application. Do not allow recreational access (e.g., wading, swimming, boating and fishing) within the treatment area while rotenone is being applied (see Placarding of Treatment Areas). In streams/rivers/lakes/reservoirs/ponds, do not apply this product in a way that will result in active rotenone concentrations > 200 parts per billion/0.2 ppm (> 4 ppm 5% rotenone formulation). Do not apply this product in a way that will contact workers

or other persons, either directly or through drift. Only protected handlers may be in the area during application (see Placarding of Treatment Areas and Re-entering the Treatment Area). This product must not be applied to estuarine or marine environments. Where practical, users should collect and bury dead fish. Properly dispose of unused product. Do not use dead fish for food or feed. Do not use water treated with rotenone to irrigate crops or release within ½ mile upstream of an irrigation water intake in a standing body of water such as a lake, pond or reservoir.

Applications using a boom or other mechanized equipment must release this product below the water surface. Applications made with aircraft, backpack sprayer, drip can, or handheld or hand-directed nozzle may release this product above the water surface.

Mixers/loaders of liquid rotenone product containers of 5 gallons or less should not handle more than 25 gallons of undiluted product per day.

Re-entering the Treatment Area: For applications that result in concentrations greater than 0.09 ppm active rotenone (when applying at a rate of > 1.8 ppm of 5% rotenone formulation), handlers re-entering treated water, must wear, at a minimum, the following PPE: (1) coveralls over long-sleeved shirt and long pants; (2) chemical-resistant gloves; (3) chemical-resistant footwear plus socks; and (4) chemical-resistant apron. Duration of PPE requirements for handlers re-entering treated water exactly corresponds to duration of placarding requirements (e.g., PPE requirements end when placards are removed; see Placarding of Treatment Areas section of this labeling). Exception: waterproof waders may be worn in place of coveralls, chemical-resistant apron and chemical-resistant footwear.

Placarding of Treatment Areas: The Certified Applicator in charge of the application (or someone under his/her supervision) must placard all access areas to the treatment area. Detailed instructions for placarding are presented in the Rotenone SOP Manual. Placards must be placed every 250 feet along the shoreline of the treated area OR, at public access points (e.g., trailheads, roads and trails). Placards must contain the following information: (1) DANGER/PELIGRO; (2) DO NOT ENTER WATER/NO ENTRE AGUA; Pesticide Application; (3) Prenfish™ Fish Toxicant; (4) the purpose of the application; (5) the start date and time of application; (6) end date and time of application; (7) "Recreational access (e.g., wading, swimming, boating, fishing, etc.) within the treatment area is prohibited while rotenone is being applied"; (8) "Do not swim or wade in treated water while placard is displayed"; (9) "Do not consume dead fish from treated water"; and (10) the name, address, and telephone number of the responsible agency or entity performing the application.

Signs must remain legible during the entire posting period. For lotic (flowing water) and lentic (standing water) applications of ≤ 0.09 ppm active rotenone (≤ 1.8 ppm 5% formulation), signs can be removed once application is complete. For lotic applications, > 0.09 ppm active rotenone (>1.8 ppm 5% rotenone formulation), signs can be removed 72 hours after the application is complete. For lentic applications, > 0.09 ppm active rotenone (>1.8 ppm 5% rotenone formulation), signs can be removed following 24-hour bioassay demonstrating survival of bioassay sentinel fish or 14 days, whichever is less.

Monitoring and Notification Requirements for Water

Aquaculture: For treated water bodies used for aquaculture, the Certified Applicator or designee under his/her direct supervision must prohibit the restocking of fish unless monitoring samples confirm rotenone concentrations are below the level of detection for 3 consecutive samples taken no less than 4 hours apart. Detailed guidance for monitoring levels of rotenone in water is presented in the Rotenone SOP Manual (SOP 16).

Drinking Water: For applications > 40 ppb or 0.04 ppm active rotenone (> 0.8 ppm 5% rotenone formulation) in waters with drinking water intakes or hydrologic connections to wells, 7 to 14 days prior to application, the Certified Applicator or designee under his/her direct supervision must provide notification to the party responsible for the public water supply or individual private water users against the consumption of treated water until: (1) active rotenone < 0.04 ppm as determined by analytical chemistry, or (2) fish of the Salmonidae or Centrichidae families can survive for 24 hours, or (3) dilution with untreated water yields a calculation that active rotenone is < 0.04 ppm, or (4) distance or travel time from the application sites demonstrates that active rotenone is < 0.04 ppm. See Rotenone SOP Manual (SOP 16) for guidance on notification and bioassay and chemical analysis techniques and dilution, distance, and travel time criteria.

Specifications to Control Spray Drift

RELEASE HEIGHT: Spray must be released at the lowest height consistent with pest control and flight safety.

BOOM LENGTH: The boom length must not exceed 75% of the wing span or 90% of the rotor blade diameter. Orient nozzles backward with minimal downward angle into slip stream.

SWATH ADJUSTMENT: When applications are made with the cross wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind. Leave at least one swath unsprayed at the downwind edge of the treated area.

DROPLET SIZE: Use low drift nozzles designed to produce larger spray droplets with fewer driftable fines. Apply as a medium or coarser spray (ASAE standard 572).

WIND SPEED: Do not apply when wind speeds are > 12 miles per hour.

DETERMINING TREATMENT RATE

Use this product only at locations, rates, and times authorized and approved by appropriate State and Federal Fish and Wildlife and/or Natural Resource Agencies. The actual treatment rate and rotenone concentration needed to control fish varies widely, depending on the type of water environmental factors including pH, temperature, depth, turbidity, and the target species. The tables below are a general guide for the proper rates and concentrations for complete kills of target species. The Certified Applicator must conduct bioassay using site water (or water of similar quality) and target species (or surrogate species of similar sensitivity) to refine the treatment rate with the maximum limit allowed. Detailed guidance bioassays and designing treatment for complete kills of target species are presented in the Rotenone SOP Manual (SOP 5). Rates must be within the range specified on the label.

FOR USE IN PONDS, LAKES, AND RESERVOIRS

The tables below are a general guide for the proper rates and concentrations. This product disperses readily laterally and vertically. For complete coverage, it is best to apply this material to water bodies that are not thermally-stratified. However, this material will eventually penetrate below the thermocline in thermally-stratified bodies of water.

Computation of Water Body Volume: To determine volume of any given body of water, make a series of transects across the body of water taking depths at regular intervals. Add the depths and divide by the number of measurements made to determine the average depth. Multiply this average depth by total surface area in order to determine the volume to be treated. Volume is expressed as acre-feet (AF) or cubic meters (m^3). Surface area can be determined by Global Positioning System (GPS) instrumentation and topographic maps. See Rotenone SOP Manual for further guidance.

Amount of Prenfish™ Fish Toxicant Needed for Specific Uses: To determine the approximate number of gallons (or liters) needed, find your "Type of Use" in the first column of the tables below and then divide the corresponding numbers in the fourth column, "AF (or m^3) per Gallon (or Liter) Liquid" into the number of AF or m^3 in your body of water. For example, a normal use of 0.05 ppm active rotenone will require 33 gallons of 5% active rotenone liquid for 100 AF.

Table - Recommended rotenone treatment concentrations and number of acre-feet (AF) standing water covered by one gallon (5% A.I.) product. Adjust amount of product according to the actual rotenone content on Ingredient Statement on label.

Type of Use	Parts per Million (ppm)		AF per Gallon Liquid
	Product (5% A.I.)	Active Rotenone	
Normal	0.5 - 1.0	0.025 - 0.05	6.0 to 3.0
Tolerant Species	1.0 - 3.0	0.05 - 0.15	3.0 to 1.0
Tolerant Species in Organic Ponds	2.0 - 4.0	0.1 - 0.2	1.5 to 0.75

Table - Recommended rotenone treatment concentrations and number of cubic meters (m^3) standing water covered by one liter of (5% A.I.) product. Adjust amount of product according to the actual rotenone content on Ingredient Statement on label.

Type of Use	Parts per Million (ppm)		m^3 per Liter Liquid
	Product (5% A.I.)	Active Rotenone	
Normal	0.5 - 1.0	0.025 - 0.05	2000 to 1000
Tolerant Species	1.0 - 3.0	0.05 - 0.15	1000 to 333
Tolerant Species in Organic Ponds	2.0 - 4.0	0.1 - 0.2	500 to 250

Recommended Pre-Mixing and Method of Application: Pre-mix with water at a rate of 10% of product to site water. Uniformly apply over water surface or through underwater lines. Divide water body into manageable sections, delineated by marker buoys or flags or GPS coordinates, and treat within 48 hours to avoid deactivation. See Rotenone SOP Manual (SOP 8) for additional guidance.

Deactivation: Water treated with this product will deactivate (neutralize) under natural conditions within one week to one month depending upon temperatures, alkalinity, etc. Rapid deactivation can be accomplished by adding potassium permanganate to the water at the same rate as Prenfish™ Fish Toxicant in parts per million, plus enough additional to meet the organic demand of the untreated water. See Rotenone SOP Manual (SOP 6 and 7) for guidance.

Restocking after Treatment: Typically, wait 2 to 4 weeks after treatment prior to restocking. Place a sample of fish to be stocked in wire cages in the coolest part of the treated waters. If the fish are not killed within 24 hours, the water may be restocked.

USE IN STREAMS AND RIVERS

In order to treat a stream you must: (1) Select the concentration of active rotenone; (2) Compute the flow rate of the stream; (3) Select an exposure time; (4) Select dilution of product and calculation of application rate; (5) Estimate the amount of product needed; and (6) Follow the method of application. For practicality, apply undiluted product to flows > 25 ft^3/s (> 0.708 m^3/s), and apply diluted product to flows < 25 ft^3/s (< 0.708 m^3/s). For streams associated with a treatment of standing body of water, to prevent movement of fish from the pond, lake, or reservoir, the stream treatment should begin before and continue throughout treatment of the pond, lake or reservoir until mixing has occurred.

Concentration of Active Rotenone

Select the concentration of active rotenone based on the type of use from those listed on the tables below. Example: If you select "normal use", you could select a concentration of 0.025 – 0.05 parts per million.

Table - Recommended rotenone treatment concentrations and number of cubic feet per second (ft^3/s) flowing water treated for 4- and 8-hour periods with one gallon of (5% A.I.) product. Adjust amount of product according to the actual rotenone content on Ingredient Statement on label.

Type of Use	Parts per Million (ppm)		ft^3/s per Gallon (4-hr)	ft^3/s per Gallon (8-hr)
	Product (5% A.I.)	Active Rotenone		
Normal	0.5 - 1.0	0.025 - 0.05	18.4 to 9.2	9.2 to 4.6
Tolerant Species	1.0 - 3.0	0.05 - 0.15	9.2 to 3.1	4.6 to 1.6
Tolerant Species in Organic Waters	2.0 - 4.0	0.1 - 0.2	4.6 to 2.3	2.3 to 1.2

Table - Recommended rotenone treatment concentrations and number of cubic meters per second (m^3/s) flowing water treated for 4- and 8-hour (hr) periods with one liter of (5% A.I.) product. Adjust amount of product according to the actual rotenone content on Ingredient Statement on label.

Type of Use	Parts per Million (ppm)		m^3/s per Liter (4-hr)	m^3/s per Liter (8-hr)
	Product (5% A.I.)	Active Rotenone		
Normal	0.5 - 1.0	0.025 - 0.05	0.138 to 0.069	0.069 to 0.034
Tolerant Species	1.0 - 3.0	0.05 - 0.15	0.069 to 0.024	0.034 to 0.013
Tolerant Species in Organic Waters	2.0 - 4.0	0.1 - 0.2	0.034 to 0.018	0.018 to 0.008

Measurement of Flow Rate for Stream

Select a cross section of the stream where the banks and bottom are relatively smooth and free of obstacles and the flow appears laminar. Best discharge measurements are achieved with an electronic flow meter and use of the United States Geological Survey Weighted Area Method.

Alternatively, divide the stream surface width into 3 equal sections and determine the water depth and surface velocity at the center of each section. Determine the velocity by dropping a float and measure the time required to move 10 feet or more. Take at least three readings at each point. To calculate the flow rate from the information obtained above, use the following formula:

$$F = \frac{Ws \times D \times L \times C}{T}$$

Where F = flow rate (ft^3/s or m^3/s), Ws = surface width (ft or m), D = mean depth (ft or m), L = mean distance traveled by float (ft or m), C = constant (0.8 for rough bottoms and 0.9 for smooth bottoms), T = mean time (s) for float to travel distance.

Exposure Time and Spacing

Apply rotenone as a drip for 4 to 8 hours to the flowing portion of the stream. Multiple application sites are used along the length of the treated stream, spaced approximately ½ to 2 miles apart depending on the water flow travel time between sites. Multiple sites are used because rotenone is diluted and detoxified with distance. Application sites are spaced at no more than 2 hours or at no less than 1-hour travel time intervals. This assures that the treated stream remains lethal to fish for a minimum of 2 hours. A non-toxic dye such as Rhodamine-WT® or fluorescein can be used to determine travel times. Cages containing live fish placed immediately upstream of the downstream application sites can be used as sentinels to assure that lethal conditions exist between sites.

Amount of Product and Calculation of Application Rate of Undiluted Product:

$$X = F1\ (1.699\ B) \text{ or } X = F2\ (59.99\ B)$$

X = ml per minute of undiluted Prenfish™ Fish Toxicant applied to the stream, F1 = the flow rate (ft^3/s) and F2 the flow rate (m^3/s) (see Measurement of Flow Rate for Stream in this labeling), B = parts per million desired concentration of Prenfish™ Fish Toxicant. Total amount of product needed: $Y = X(60)H$

Y = total ml of undiluted Prenfish™ Fish Toxicant required for treatment, X = ml per minute of undiluted product, and H = duration (hours) of treatment.

Amount of Product in Drip Can and Flow Rate of Diluted Product:

$$Y = B\ (102\ F1)\ H \text{ or } Y = B\ (3{,}602\ F2)\ H$$

Y = ml of undiluted product in the reservoir, B = parts per million desired concentration of Prenfish™ Fish Toxicant, F1 = the flow rate (ft^3/s) and F2 = flow rate (m^3/s) (see Measurement of Flow Rate for Stream in this labeling), and H = duration (hours) of treatment. Discharge of the diluted product: $X = Z/60/H$

X = ml per minute of diluted Prenfish™ Fish Toxicant applied to the stream from drip can, Z = volume (ml) of drip can, and H = duration (hours) of treatment.

Method of Application

The unique nature of every application site could require minor adjustments to the method and rate of application. Should these unique conditions require major deviation from the use directions, obtain a Special Local Need 24(c) registration from the state. Before application, authorization must be obtained from State or Federal Fish and Wildlife and/or Natural Resource agencies. Since local environmental conditions will vary, consult with the State Fish and Wildlife Agency to ensure the method and rate of application are appropriate for that site. Prenfish™ Fish Toxicant may be applied undiluted or pre-mixed at rates up to 10 parts water to 1 part Prenfish™ Fish Toxicant. Prenfish™ Fish Toxicant may be applied undiluted to lakes and ponds to achieve the rates listed on this label. Dilution may be required to achieve uniform application at lower application rates or in shallow water areas.

Contact the local water department to determine if any water intakes are within one mile downstream of the section of stream, river, or canal to be treated. If so, coordinate the application with the water department to make sure the intakes are closed during treatment and detoxification.

Prenfish™ Fish Toxicant can drain directly into the center of the stream. Check flow at least hourly. Spray backwater, stagnant, and spring areas of streams by hand with a 1 to 2% v/v solution of 5% rotenone product to assure a complete coverage. Treat streams for 4 to 8 hours in order to clear the treated section of stream of fish. See Rotenone SOP Manual for detailed guidance on application equipment, methods and strategies

DEACTIVATION

Flow in a stream and outflow from a treated lake beyond the treatment area must be deactivated with potassium permanganate to minimize exposure beyond the treatment area unless unnecessary. (See Rotenone SOP Manual [SOP 6] for the definition of treatment area, examples when deactivation with potassium permanganate is unnecessary, and detailed guidance for deactivating with potassium permanganate [SOP 7].)

Within 1 to 2 hours travel time from the furthest downstream rotenone application site, the rotenone can be deactivated with a potassium permanganate solution or granules at a resultant stream concentration of 2 to 4 parts per million, depending on rotenone concentration and organic demand of the water. A 2.5% (10 pounds potassium permanganate to 50 gallons of water) permanganate solution is dripped in at a

RESTRICTED USE PESTICIDE

Due to acute oral and acute inhalation toxicity categories.

For retail sale to, and use only by, Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

PRENFISH™ FISH TOXICANT

Liquid Emulsifiable Fish Toxicant

For Control of Fish in Lakes, Ponds, Reservoirs, and Streams

THE APPLICATOR IS RESPONSIBLE FOR CONFORMING TO THE LABEL. IMPORTANT GUIDANCE ON THE SAFE AND EFFECTIVE USE OF THIS PRODUCT IS PROVIDED IN THE ROTENONE SOP MANUAL, AVAILABLE FROM THE REGISTRANT OR THE AMERICAN FISHERIES SOCIETY AT https://units.fisheries.org/rotenone-stewardship/.

EPA Reg. No. 89459-85

EPA Est. No. Ⓐ 44616-MO-1* Ⓑ 44616-MO-2*

ACTIVE INGREDIENTS:	
Rotenone	5% w/w
Cube Resins other than rotenone	5%
OTHER INGREDIENTS[1]	90%
Total	100%

[1] Contains Petroleum Distillates

KEEP OUT OF REACH OF CHILDREN

DANGER - POISON - PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

See attached booklet for additional Precautionary Statements

Manufactured for:
Central Garden & Pet Company
1501 East Woodfield Road 200W
Schaumburg, Illinois 60173

*Circled letter in front of the EPA Est No. corresponds to the first letter in lot number on bottom of container.

300527874

ROTENONE
Fish Toxicant Powder

RESTRICTED USE PESTICIDE

Due to acute inhalation and acute oral toxicity and due to toxicity to fish and other aquatic organisms.
For retail sale to, and use only by, Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

THE APPLICATOR IS RESPONSIBLE FOR CONFORMING TO THE LABEL. IMPORTANT GUIDANCE ON THE SAFE AND EFFECTIVE USE OF THIS PRODUCT IS PROVIDED IN THE *ROTENONE SOP MANUAL,* AVAILABLE FROM THE REGISTRANT OR THE AMERICAN FISHERIES SOCIETY AT *http://rotenone.fisheries.org*

SPECIMEN LABEL

ACTIVE INGREDIENTS:

Rotenone	8.74% w/w
Cube Resins other than rotenone	13.11%
OTHER INGREDIENTS*:	78.15%
TOTAL:	100.00%

*Contains Petroleum Distillates

KEEP OUT OF REACH OF CHILDREN

WARNING - DANGER

See Additional First Aid, Precautionary Statements and Directions for Use including Storage and Disposal Instructions

EPA Reg.No. 89459-32
EPA Est. No. 2724-TX-1

FIRST AID	
If swallowed	• Call a poison control center or doctor immediately for treatment advice. • Do not give any liquid to the person. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If inhaled	• Move person to fresh air. • If person is not breathing, call an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
If in eyes	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may contact 1-800-248-7763 for information on this pesticide product (including health concerns, medical emergencies or pesticide incidents).	
NOTE TO PHYSICIAN: Symptoms of exposure include numbness, lethargy and in-coordination. Decontamination, symptomatic and supportive treatment is recommended.	

PRECAUTIONARY STATEMENTS – HAZARDS TO HUMANS AND DOMESTIC ANIMALS
DANGER – POISON

Fatal if swallowed. Fatal if inhaled. Do not breathe dust powder or the vapors or spray mists resulting from mixing/ loading/applying this product. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Personal Protective Equipment (PPE)

All mixers, loaders, applicators, and other handlers (except pilots) must wear at a minimum, the following PPE: (1) coveralls, over long-sleeved shirt and long pants; (2) chemical-resistant gloves made out of: barrier laminate nitrile rubber $\geq$ 14 mils, neoprene rubber $\geq$ 14 mils, or viton $\geq$ 14 mils; (3) chemical-resistant footwear plus socks; (4) protective eyewear; and (5) A NIOSH approved particulate respirator with any N, R or P filter with NIOSH approval prefix TC-84A; or a NIOSH approved powered air purifying respirator with HE filter with NIOSH approval prefix TC-21C.

In addition, mixers, loaders, and others exposed to the concentrate, through cleaning equipment or spills must wear a chemical-resistant apron. Exception: waterproof waders may be worn in place of coveralls, chemical-resistant apron and chemical-resistant footwear.

See **Engineering Controls** for additional requirements and exceptions.

User Safety Requirements

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been heavily contaminated with this product's concentrate; do not reuse them. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

Engineering Controls for Mixing/Loading for Wettable Powder Formulations

Mixers/loaders/applicators must either:

(1) Use a closed system that meets the requirements listed in Worker Protection Standard (WPS) for dermal protection of agricultural pesticides [40 CFR 170.240(d)(4)],

(2) Use the powder/sand/gelatin mixture as described in the For Use in Springs, Seeps, and Areas With Poor Water Exchange section of this labeling, or

(3) Use the Semi-Closed Aspirator Mixing/Loading System described below.

Before applying this product, roll the sealed drum on the ground to loosen the rotenone powder that may have settled during shipping and storage. Remove top of the drum containing this product and insert the aspirator probe into the bung opening in the plastic liner until the foam ring/gasket on the aspirator probe fits snuggly around the bung opening in the plastic liner to minimize rotenone powder dispersing into the air. The bung opening is specifically designed for a snug fit around the aspirator probe and incorporates a soft plastic flange to remove excess powder rotenone when the aspirator probe is removed. Do not pour this product from its drum. Transfer the product from the plastic-lined drum to the mixing tank by use of a suction hose connected to one end of the suction pump (aspirator) on the mixing tank and connected at the other end to the aspirator probe that is inserted into the bung opening in the plastic liner. Handle the aspirator probe in a manner that minimizes the dispersing of rotenone powder onto you, any other person or into the air. Once the application is complete, remove the aspirator probe and triple rinse it and all parts of the aspirator in site water. See Rotenone SOP Manual (SOP 9) for further information on the operation of the semi-closed aspirator system.

After the application is complete and the aspirator probe is removed from the drum, shake residual powder into the bottom of the plastic liner, fold the plastic liner into the drum, and reseal the drum. The liners are triple rinsed by removing from the drum, submerging the liner before cutting open, and wetting the liner under water. See Rotenone SOP Manual (SOP 9) for further information on cleaning aspirator and rinsing liners.

Mixers and loaders using all systems must wear PPE as required in the PPE section of the labeling for mixers and loaders. All systems must be capable of removing the pesticide from the shipping container and transferring it into mixing tanks and/or application equipment.

Applications using a boom or other mechanized equipment must release this product below the water's surface. Applications made with hand-held or hand-directed nozzle may release this product above the water's surface. Applications with an aircraft, backpack sprayer and drip can are prohibited.

Engineering Controls for Boat Applications

When boat pilots or others on the application boat are located within an enclosed area that has a non-porous barrier that totally surrounds the occupants and prevents contact with pesticides outside the enclosed area, they: (1) may wear long-sleeved shirt, long pants, shoes, and socks, instead of the PPE required for applicators in the PPE section of this labeling; (2) must be provided and have immediately available in the use of an emergency when they must exit the enclosed area while the application is taking place, the PPE required for applicators of the PPE section of this labeling; (3) must take off any PPE that is worn while outside the enclosed area before reentering the enclosed area; and (4) store all such used PPE in a chemical resistant container, such as a plastic bag, to prevent contamination of the enclosed area.

User Safety Recommendations

Certified Applicators applying or supervising any aspect of the application of this product should attend a training program for the *Rotenone SOP Manua*l. American Fisheries Society offers this training: go to http://rotenone.fisheries.org for current schedule of training.

Users should remove clothing/PPE if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is extremely toxic to fish and other aquatic organisms. Fish kills are expected at recommended rates. Consult your State Fish and Game Agency and other agencies before applying this product to public waters to determine if a permit is needed for such an application. Do not contaminate water outside of the treatment area by cleaning of equipment or disposal of equipment washwaters. Do not contaminate water outside of the treatment area, food or feed by storage or disposal. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority (PTOW).

DIRECTIONS FOR USE
RESTRICTED USE PESTICIDE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling, including both the container label and the Rotenone Standard Operation Procedures Manual (SOP) available from the registrant or the American Fisheries Society at http://rotenone.fisheries.org. This product must be accompanied by an EPA-Approved Rotenone SOP Manual. Read the container label and Rotenone SOP Manual prior to use. The applicator is responsible for following the Directions For Use contained within both the container label and the SOP Manual. This product is registered for use by or under permit from, and after consultation with State and Federal Fish

and Wildlife and/or Natural Resource Agencies.

GENERAL INFORMATION

This product is a specially formulated product containing rotenone to be used in fisheries management for the eradication of fish from lakes, ponds, reservoirs.

Precautions and Restrictions: The Certified Applicator supervising the treatment must remain on site for the duration of the application. Do not allow recreational access (e.g., wading, swimming, boating, and fishing) within the treatment area while rotenone is being applied (see Placarding of Treatment Areas). Do not apply this product in a way that will result in active rotenone concentrations > 200 parts per billion/0.2 ppm (> 4 ppm 5% rotenone formulation). Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application (see Placarding of Treatment Areas and Re-entering the Treatment Area section of this labeling). This product must not be applied to estuarine or marine environments. Where practical, users should collect and bury dead fish. Properly dispose of unused product. Do not use dead fish for food or feed. Do not use water treated with rotenone to irrigate crops or release within ½ mile upstream of an irrigation water intake in a standing body of water such as a lake, pond or reservoir.

Applications using a boom or other mechanized equipment must release this product below the water surface. Applications made with hand-held or hand-directed nozzle may release this product above the water surface. Applications made with aircraft, backpack sprayer, drip can are prohibited.

Re-entering the Treatment Area: For applications that result in concentrations greater than 0.09 ppm active rotenone (when applying at a rate of > 1.8 ppm of 5% rotenone formulation), handlers re-entering treated water, must wear, at a minimum, the following PPE: (1) coveralls over long-sleeved shirt and long pants; (2) chemical-resistant gloves; (3) chemical-resistant footwear plus socks; and (4) chemical-resistant apron. Duration of PPE requirements for handlers re-entering treated water exactly correspond to duration of placarding requirements (e.g., PPE requirements end when placards are removed; see Placarding of Treatment Areas section of this labeling). Exception: waterproof waders may be worn in place of coveralls, chemical-resistant apron and chemical-resistant footwear.

Placarding of Treatment Areas: The Certified Applicator in charge of the application (or someone under his/her supervision) must placard all access areas to the treatment area. Detailed instructions for placarding are presented in the Rotenone SOP Manual. Placards must be placed every 250 feet along the shore line of the treated area OR, at public access points (e.g., trailheads, roads and trails). Placards must contain the following information: (1) DANGER/PELIGRO; (2) DO NOT ENTER WATER/NO ENTRE AGUA; Pesticide Application; (3) Rotenone Fish Toxicant Powder; (4) the purpose of the application; (5) the start date and time of application; (6) end date and time of application; (7) "Recreational access (e.g., wading, swimming, boating, fishing, etc.) within the treatment area is prohibited while rotenone is being applied"; (8) "Do not swim or wade in treated water while placard is displayed"; (9) "Do not consume dead fish from treated water"; and (10) the name, address, and telephone number of the responsible agency or entity performing the application.

Signs must remain legible during the entire posting period. For applications of ≤ 0.09 ppm active rotenone (≤ 1.8 ppm 5% formulation), signs can be removed once application is complete. For applications > 0.09 ppm active rotenone (> 1.8 ppm 5% rotenone formulation), signs can be removed following 24-hour bioassay demonstrating survival of bioassay sentinel fish or 14 days, whichever is less.

Monitoring and Notification Requirements for Water

Aquaculture: For treated water bodies used for aquaculture, the Certified Applicator or designee under his/her direct supervision must prohibit the restocking of fish unless monitoring samples confirm rotenone concentrations are below the level of detection for 3 consecutive samples taken no less than 4 hours apart. Detailed guidance for monitoring levels of rotenone in water is presented in the Rotenone SOP Manual (SOP 16).

Drinking Water: For applications > 40 ppb or 0.04 ppm active rotenone (> 0.8 ppm 5 % rotenone formulation) in waters with drinking water intakes or hydrologic connections to wells, 7 to 14 days prior to application, the Certified Applicator or designee under his/her direct supervision must provide notification to the party responsible for the public water supply or individual private water users against the consumption of treated water until: (1) active rotenone < 0.04 ppm as determined by analytical chemistry, or (2) fish of the Salmonidae or Centrichidae families can survive for 24 hours, or (3) dilution with untreated water yields a calculation that active rotenone is < 0.04 ppm, or (4) distance or travel time from the application sites demonstrates that active rotenone is < 0.04 ppm. See Rotenone SOP Manual (SOP 16) for guidance on notification, bioassay and chemical analysis techniques and dilution, distance, and travel-time criteria.

Determining Treatment Rate

Use this product only at locations, rates, and times authorized and approved by appropriate State and Federal Fish and Wildlife and/or Natural Resource Agencies. The actual treatment rate and rotenone concentration needed to control fish varies widely, depending on the type of water environmental factors including pH, temperature, depth, turbidity, and the target species. The tables below are a general guide for the proper rates and concentrations for complete kills of target species. The Certified Applicator must conduct bioassays using site water (or water of similar quality) and target species (or surrogate species of similar sensitivity) to refine the treatment rate with the maximum limit allowed. Detailed guidance bioassays and designing treatment for complete kills of target species are presented in the Rotenone SOP Manual (SOP 5). Rates must be within the range specified on the label.

For Use In Ponds, Lakes, Reservoirs and Slow Moving Rivers

The tables below are a general guide for the proper rates and concentrations. This product disperses readily laterally and vertically, but may not penetrate the thermocline. The product is best applied when the water body is not thermally stratified or pumped below the thermocline if thermally stratified.

Computation of Water Body Volume: To determine volume of any given body of water, make a series of transects across the body of water taking depths at regular intervals. Add the depths and divide by the number of measurements made to determine the average depth. Multiply this average depth by total surface area in order to determine the volume to be treated. Volume is expressed as acre-feet (AF) or cubic meters (m^3). Surface area can be determined by Global Positioning System (GPS) instrumentation and topographic maps. See Rotenone SOP Manual for further guidance.

Amount of Rotenone Fish Toxicant Powder Needed for Specific Uses: To determine the approximate number of pounds (or kilograms) needed, find your "Type of Use" in the first column of the tables below and then divide the corresponding numbers in the fourth column, "AF

(or m^3) Per Pound (or Kilogram) Powder" into the number of AF (or m^3) in the body of water. For example if you have a normal use at 0.05 ppm active rotenone, then 270 pounds of 5% rotenone powder is required to treat 100 AF.

Table – Recommended rotenone treatment concentrations and number of acre-feet (AF) standing water covered by one pound (5% A.I.) product. Adjust amount of product according to the actual rotenone content on Ingredient Statement on label.

Type of Use	Parts per Million (ppm)		AF Per Pound Powder
	Product (5% A.I.)	Active Rotenone	
Normal	0.5 – 1.0	0.025 – 0.05	0.74 to 0.37
Tolerant Species	1.0 – 3.0	0.05 – 0.15	0.37 to 0.123
Tolerant Species in Organic Ponds	2.0 – 4.0	0.1 – 0.2	0.185 to 0.093

Table – Recommended rotenone treatment concentrations and number of cubic meters (m^3) standing water covered by one kilogram of (5% A.I.) product. Adjust amount of product according to the actual rotenone content on Ingredient Statement on label.

Type of Use	Parts per Million (ppm)		m^3 per Kilogram Powder
	Product (5% A.I.)	Active Rotenone	
Normal	0.5 – 1.0	0.025 – 0.05	2000 to 1000
Tolerant Species	1.0 – 3.0	0.05 – 0.15	1000 to 333
Tolerant Species in Organic Ponds	2.0 – 4.0	0.1 – 0.2	500 to 250

Note to User: Adjust pounds or kilograms of powder according to the actual rotenone assay as noted under the Ingredient Statement on this label. For example, if the required amount of 5% rotenone is 21 pounds and the rotenone assay is 7%, use $^5/_7$ of 21 pounds or 15 pounds of this product to yield the proper amount of active rotenone.

Recommended Pre-Mixing and Method of Application: Using the semi-closed aspirator system, pre-mix at approximately 1 to 5% w/w powder to water. Uniformly apply over water surface or through underwater lines. Divide water body into manageable sections, delineated by marker buoys or flags or GPS coordinates, and treat within 48 hours to avoid deactivation (detoxification). See Rotenone SOP Manual (SOP 9) for additional guidance.

Deactivation: Water treated with this product will deactivate under natural conditions within one week to one month depending upon temperatures, alkalinity, etc. Rapid deactivation can be accomplished by adding potassium permanganate to the water at the same rate as Rotenone Fish Toxicant Powder in parts per million, plus enough additional to meet the organic demand of the untreated water. See Rotenone SOP Manual (SOP 6 and 7) for guidance.

Restocking after Treatment: Typically, wait 2 to 4 weeks after treatment prior to restocking. Place a sample of fish to be stocked in wire cages in the coolest part of the treated waters. If the fish are not killed within 24 hours, the water may be restocked.

Method of Application

The unique nature of every application site could require minor adjustments to the method and rate of application. Should these unique conditions require major deviation from the use directions, a Special Local Need 24(c) registration should be obtained from the state. Before application, authorization must be obtained from State or Federal Fish and Wildlife and/or Natural Resource agencies. Since local environmental conditions will vary, consult with the State Fish and Wildlife and/or Natural Resource Agency to ensure the method and rate of application are appropriate for that site.

Contact the local water department to determine if any water intakes are within one mile downstream of the section of stream, river, or canal to be treated. If so, coordinate the application with the water department to make sure the intakes are closed during treatment and detoxification.

For Use In Springs, Seeps and Areas With Poor Water Exchange

Rotenone powder/gelatin/sand mixture can be used in conditions where other means of application (drips, backpack sprayers, etc.) will not yield a steady concentration of rotenone necessary to eradicate target from treatment area. Mixture formula is one pound (0.454 kg) of powdered rotenone to one pound (0.454 kg) of fine to medium washed sand to 2 ounces (0.0567 kg) of unflavored gelatin (1:1:0.0125), and add sufficient water to create a dough-like consistency. Keep mixture moist by storing in a sealed container. Only use when in a dough like consistency to insure efficacy. See Rotenone SOP Manual (SOP 13) for detailed guidance on preparation and use of rotenone powder/gelatin/sand mixture.

Deactivation

Flow in a stream and outflow from a treated lake beyond the treatment area must be deactivated with potassium permanganate to minimize exposure beyond the treatment area unless unnecessary. (See Rotenone SOP Manual [SOP 6] for the definition of treatment area, examples when deactivation with potassium permanganate is unnecessary, and detailed guidance for deactivating with potassium permanganate [SOP 7].)

Within 1 to 2 hours travel time from the furthest downstream rotenone application site, the rotenone can be deactivated with a potassium permanganate solution or granules at a resultant stream concentration of 2 to 4 parts per million, depending on rotenone concentration and organic demand of the water. A 2.5% (10 pounds potassium permanganate to 50 gallons of water) permanganate solution is dripped in at a continuous rate using the equation:

$X = Y(70\ F1)$ or $X = Y(2{,}472\ F2)$

X = ml of 2.5% permanganate solution per minute, Y = ppm of desired permanganate concentration, F1 = stream flow (ft^3/s) or F2 = stream flow (m^3/s) or, granular potassium permanganate is applied at a continuous rate using the equations:

$Z = Y(1.7\ F1)$ or $Z = Y(60.02\ F2)$

Z = grams of granular potassium permanganate per minute, Y = ppm of desired permanganate concentration, F1 = stream flow (ft^3/s) or F2 = stream flow (m^3/s).

Flow of permanganate should be checked at least hourly. Live fish in cages placed immediately above the permanganate application site will show signs of stress signaling the need for beginning deactivation. Deactivation can be terminated when replenished fish survive and show no signs of stress for at least four hours. Deactivation of rotenone by permanganate requires between 15 to 30 minutes contact time (travel time). Cages containing live fish can be placed at these downstream intervals to judge the effectiveness of deactivation. At water temperatures less than 50°F, deactivation may be retarded, requiring a longer contact time.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Store only in original containers, in a dry place inaccessible to children and pets. If spilled, sweep up and dispose of as below.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional office for guidance.

CONTAINER HANDLING: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then dispose of in a sanitary landfill.

Central Garden & Pet Company, 1501 East Woodfield Road, 200W, Schaumburg, Illinois 60173

NOTE: This specimen label is for informational purposes only. All uses may not be approved in all states. See product labeling for use directions.

PCO 17-009

February, 2017
Schaumburg, IL

State Land Consultation

File Number: SL 2025-0004

NEW YORK STATE OF OPPORTUNITY. Adirondack Park Agency

KATHY HOCHUL
Governor

BARBARA RICE
Executive Director

NEW YORK STATE OF OPPORTUNITY. Adirondack Park Agency
RECEIVED
Date: January 14, 2025

STATE LAND PROJECT CONSULTATION FORM

Completion of this form is required to receive a determination of Adirondack Park State Land Master Plan (APSLMP) and/or Unit Management Plan compliance and wetland jurisdiction for all DEC State land projects from the Agency. A site visit by Agency staff may be required depending on the complexity of the project, the natural resources involved and the level of documentation provided.

Part 1

(To be completed by DEC staff)

A. Project Identification

Project Name: Reclamation of Echo Pond (C-P136)

DEC Contact Person: Christopher Powers

Telephone: 518 897 1334

Email: christopher.powers@dec.ny.gov

B. Project Location and Other Information

State Land Unit: Saranac Lakes Wild Forest & Fish Creek Pond Campground

Region: 5

Town: Santa Clara

County: Franklin

Is a UMP for this unit completed and approved? Yes ☑ No ☐

(If yes, please attach a copy of the cover page and all pages relevant to this project.)

Is the proposal to replace an existing structure? Yes ☐ No ☑

If yes:

a) When was the structure constructed?

b) Will the new structure be the same size and located in the same place?

Yes ☐ No ☐ (Describe in the narrative, section D.)

C. Prior Agency Contact

Has there been prior contact (including any wetland delineation work) with the Agency regarding this project? Yes ☑ No ☐

If yes, name of contact person(s) and date(s) (approximate, if not known):

Contact person: Aaron Ziemann Date: 8/30/24

D. Project Description

Provide a brief, narrative description as precisely as possible with any additional location information necessary. Include/attach map(s), photograph(s) and plan(s) whenever possible. (attach another sheet if needed)

Reclamation of Echo Pond using Rotenone piscicide to eradicate native but widely introduced brown bullhead and restore the native fish community consisting of a brook trout monoculture. This management action is stated in the Saranac Lakes Wild Forest UMP (see attached pages below) The pond will be accessed on foot from the Fish Creek Pond Campground. DEC Vehicles and UTV will be used to transport application equipment and pesticide to the shore of the pond. Outboard boat motors will be used to apply powdered rotenone to the surface of the pond in October of 2025.

If the proposed project is determined to be compliant with the APSLMP but jurisdictional for wetlands, the Agency can determine if the project qualifies for *General Permit 2005G-1R* or if an individual Article 24 Freshwater Wetlands permit will be required. If either of these wetlands permits is applied for, additional information about the project will likely be requested. Agency staff can provide the appropriate permit application form with the return of this completed State Land Consultation Form, if requested.

Submitted by: Christopher Powers

Date: 1/13/25

Return this form to the Agency (preferably electronically) for APA staff completion of Part 2.

Part 2
(To be completed by APA staff)

ADIRONDACK PARK STATE LAND MASTER PLAN COMPLIANCE REVIEW

Planning Status (check one)

A) The project, as planned, is described sufficiently in an approved UMP and *does not require additional consultation* with APA State land staff before being undertaken. ☐

B) The project is proposed in insufficient detail in an approved UMP and so *does require additional consultation* with APA State land staff before being undertaken. ☐

C) The project is not proposed in an approved UMP and – via this submission - *is the subject of consultation* with APA State land staff to determine if it may be undertaken, as per Section V of the DEC/APA MOU. ☐

DEC/APA Consultation Guidelines

Planning Status "A" Projects:

- The proposed project has been determined by the APA Board, via approval of a UMP, to conform to APSLMP guidelines and criteria in all respects *other than* potential wetland impacts.

- IF the result of the "Preliminary APA Wetlands Jurisdiction Assessment" (page 6) is an APA staff conclusion that jurisdictional wetlands:

  - WILL NOT be involved or affected by the proposed project, THEN, the project may be undertaken.

  - MAY BE involved or affected by the proposed project, THEN, the Agency can determine if the project qualifies for *General Permit 2005G-1R* or an individual Article 24 Freshwater Wetlands permit and may request additional information.

Planning Status “B” Projects:

- The proposed project, via review and approval of a UMP, has received conceptual approval by the APA Board but must still be reviewed by APA State land staff in sufficient detail before it may be determined to conform to APSLMP guidelines and criteria in all respects *other than* potential wetland impacts.

- IF the result of the “Preliminary APA Wetlands Jurisdiction Assessment” (page 6) is an APA staff conclusion that jurisdictional wetlands:

  - WILL NOT be involved or affected by the proposed project, THEN, the project may be undertaken.

  - MAY BE involved or affected by the proposed project, THEN, the Agency can determine if the project qualifies for *General Permit 2005G-1R* or an individual Article 24 Freshwater Wetlands permit and may request additional information.

- IF the result of the “APSLMP Compliance Review” is a conclusion that the proposed project:

  - DOES NOT CONFORM to APSLMP guidelines and criteria regardless of wetland impacts, THEN, the project should not be undertaken by DEC staff.

Planning Status “C” Projects:

- The project has NOT been proposed within a UMP approved by the APA Board, and so it has not been determined to conform to APSLMP guidelines and criteria. It must therefore be determined by APA State land staff to meet the definition of “ordinary maintenance,” “rehabilitation” or “minor relocation” of conforming structures or improvements as per Section V of the DEC/APA MOU if it is to be undertaken without being included in such a UMP.

- IF the result of the determination is that the proposed project:

  - CANNOT BE so defined, THEN, the project should not be undertaken by DEC staff at this time.

  - CAN BE so defined, THEN, the Agency can determine if the project qualifies for *General Permit 2005G-1R* or an individual Article 24 Freshwater Wetlands permit and may request additional information.

- IF the result of the “Preliminary APA Wetlands Jurisdiction Assessment” (page 6) is an APA staff conclusion that jurisdictional wetlands:

- WILL NOT be involved or affected by the proposed project, THEN, the project may be undertaken.

- MAY BE involved or affected by the proposed project, THEN, the Agency can determine if the project qualifies for *General Permit 2005G-1R* or an individual Article 24 Freshwater Wetlands permit and may request additional information.

APA State Land Staff Determination Regarding Consistency with the Adirondack Park State Land Master Plan

Staff have determined the proposed project – in all respects other than potential wetlands impacts – conforms ☐ , does not conform ☐ , to the guidelines and criteria of the Adirondack Park State Land Master Plan.

/s/ Megan Phillips	1/27/2025
Deputy Director, Planning or designee	Date

Rationale for Determination

See attached rationale.

PRELIMINARY APA WETLANDS JURISDICTION ASSESSMENT

1) Is the proposed project located in a wetland? Yes ☐ No ☐

2) Does the project involve any of the following activities whether or not it is located in a wetland?

Discharge of liquid wastes into (or so as to drain into) a wetland, including sewage treatment effluent within 100' of a wetland? Yes ☐ No ☐

Any other form of pollution of a wetland? Yes ☐ No ☐

Any activity that may substantially impair the functions served by, or the benefits derived from, wetlands? Yes ☐ No ☐

APA RASS Staff Preliminary Assessment Regarding Adirondack Park Freshwater Wetlands Jurisdiction

Staff have determined that wetlands subject to the review jurisdiction of the Adirondack Park Agency may ☐, will not ☐ be involved or affected by the proposal.

Supervisor, Natural Resource Analysis or designee

Date

Rationale for Determination

If the project is determined to be jurisdictional for wetlands, the Agency will determine if the project qualifies for *General Permit 2005G-1R* or an individual Article 24 Freshwater Wetlands permit and may request additional information.

Form completed by APA State Land member:

Completion Date:

Distribution:

DEC Contact:

Regional Forester:

Natural Resources Supervisor of Region:

Forest Preserve Coordinator, Central Office:

NEW YORK STATE OF OPPORTUNITY. | Department of Environmental Conservation

SARANAC LAKES WILD FOREST

and

Lake Placid Boat Launch
Lake Flower Boat Launch
Upper Saranac Lake Boat Launch
Raquette River Boat Launches

Unit Management Plan

River Area Management Plans

Saranac River, Ausable River, and Raquette River

Final Environmental Impact Statement

NYS DEC, REGION 5, DIVISION OF LANDS AND FORESTS

P.O. Box 296, 1115 State Route 86, Ray Brook, NY 12997-0296
r5.ump@dec.ny.gov

www.dec.ny.gov **April 2019**

sites are present on East Pine Pond. Many anglers canoe across East Pine Pond to reach the portage trail to West Pine Pond. A steep esker separates the two ponds. East Pine Pond has a moderate amount of aquatic vegetation, particularly in its shallow northern bay. The pond substrate has patches of sand, gravel and muck.

East Pine Pond will be managed as a warmwater pond to preserve its native fishes in the presence of non-native species.

Management Class: Warmwater

Echo Pond (C-P136)

Echo Pond is a 16.3-acre Adirondack brook trout pond located about 0.25-mile north of the entrance to Fish Creek Campgrounds. Visible from State Route 30, the pond is accessed by a flat, 50-yard trail. Old-timers sometimes refer to this pond as Duck Pond. Comments on the 1929 survey map for Echo Pond mention it was formerly a fine brook trout pond and recommended brook trout stocking which has been done since 1942. A brook trout monoculture was present in a 1957 survey which also recorded a pH of level of 5.5. A 1964 survey had the same result, but an effort in 1966 caught no fish. This was blamed on drought conditions and marginal chemistry. Only a few brook trout were caught in 1968 and poor chemical conditions were again noted. Echo Pond was limed for the first time in 1969 and later in 1975, 1976, 1980 and 1984. Annual chemical monitoring has occurred since the 1970's. Since the 1984 liming, pH levels have remained stable near 7.0. Netting conducted in 1985 captured mostly brook trout, but also lake trout, brown trout and white sucker. The lake trout and brown trout probably originated from stocking mistakes. Anecdotal reports of large lake trout being caught were periodically received in the 1990's. In 1997, anglers began reporting catches of largemouth bass, large schools of minnows, and a decline in the brook trout fishery. Echo Pond was reclaimed in 1998 which confirmed the former presence of largemouth bass, smallmouth bass and golden shiner. Brook trout and rainbow trout were stocked after the reclamation. Echo Pond reaches 32 feet in depth with an average depth of 14.4 feet. Unlike many nearby ponds, Echo Pond has a hard shoreline with no sphagnum mat fringe. It has clear water and no flowing inlets or outlets. Sand and muck comprise most of the substrate.

Echo Pond will be managed as an Adirondack brook trout pond. It will be reclaimed upon establishment of non-native or other fishes to enhance and restore a native fish community. Echo Pond will also be limed when pH levels approach the liming criteria of 6.0. Liming would be conducted with the assistance of the Franklin County Federation of Sportsmen who funded and participated in the 1984 effort. As part of DEC’s liming program, midsummer water chemistry monitoring will be conducted annually.

Management Class: Adirondack Brook Trout

Echo Pond (C-P251)

Echo Pond is also sometimes referred to as Echo Lake. This 14.3-acre lake is located