 <p><b>NEW YORK</b> STATE OF OPPORTUNITY.</p> <p><b>Adirondack Park Agency</b></p> <p>P.O. Box 99 • Ray Brook, New York 12977 Tel: (518) 891-4050 Fax: (518)891-3938 www.apa.ny.gov</p>	<p><b>APA Project Permit 2015-72</b></p>
<p>In the Matter of the Application of <b>BAY POND CONDOMINIUM</b> for a permit pursuant to 9 NYCRR Part 578</p>	<p>Date Issued: September 11, 2015</p> <p>To the County Clerk: This permit must be recorded on or before <b>November 10, 2015</b> Please index this permit in the grantor index under the following name:</p> <p><b>1. BAY POND CONDOMINIUM</b></p>

**SUMMARY AND AUTHORIZATION**

This permit authorizes the use of the fish toxicant Prenfish in Bay Pond. The lake is surround by lands classified Resource Management on the Adirondack Park Land Use and Development Plan Map in the Town of Santa Clara, Franklin County.

This permit shall expire unless recorded in the Franklin County Clerk's Office on or before November 10, 2015 in the names of all persons listed above and in the names of all owners of record of any portion of the project site on the recordation date.

The project shall not be undertaken or continued unless the project authorized herein is in existence within four years from the date the permit is recorded. The Agency will consider the project in existence when the Prenfish treatment commences.

The project shall be undertaken in compliance with all conditions stated herein. Failure to comply with this permit is a violation and may subject the permittee, successors, and assigns to civil penalties and other legal proceedings.

This permit does not convey any right to trespass upon the lands or interfere with the riparian rights of others in order to undertake the authorized project, nor does it authorize the impairment of any easement, right, title or interest in real or personal property. Nothing contained in this permit shall be construed to satisfy any legal obligations of the permittee to obtain any governmental approval or permit from any entity other than the Agency, whether federal, State, regional or local.

### **PROJECT SITE**

The project site is the 238±-acre Bay Pond and its inlets. The lake is surrounded by lands classified Resource Management on the Adirondack Park Land Use and Development Plan Map. The site is identified on Town of Santa Clara Tax Map Section 406, Block 1 as Parcel 1 and is described in a Declaration of Condominium dated January 31, 1986 and recorded in the Franklin County Clerk's Office on May 22, 1986 in Liber 524 of Deeds at page 538. The project site is subject to a Deed of Conservation Easement to the Nature Conservancy dated December 27, 1979 and recorded December 27, 1979 in the Franklin County Clerk's Office in Book 495 at page 626.

### **PROJECT DESCRIPTION**

The project as conditionally approved herein involves a whole lake reclamation of Bay Pond using the piscicide Preenfish Toxicant (a toxicant containing 5% rotenone, EPA Reg. No. 655-422) for the purpose of restoring a native brook trout population. The project site to be treated with Preenfish includes the entirety of Bay Pond and its inlets.

Approximately 1,206 gallons of the piscicide Preenfish will be applied to achieve a target concentration of 1.0 ppm for 24 hours within the treatment area.

Prior to treatment the lake's dam's flash boards will be removed to lower the lake level by approximately 1 foot. Immediately prior to treatment they will be reset to the normal pool elevation and, except for possible minor leakage past the flash boards, water will be held entirely within the lake.

The piscicide will be stored and applied in accordance with label restrictions by NYSDEC-licensed pesticide applicators (current and former NYSDEC staff) using portable pumps and spray from boats and hand spraying from backpack applicators from the shoreline. The project will also likely use a drip feeder between the two lake basins and wick feeders at the head of each tributary. It is expected that the one-time treatment will be completed in the early fall 2015.

The pond's access points will be posted in accordance with NYSDEC protocol (posted prior to treatment with minimum 14 day swimming, cooking and drinking use restrictions). The signs will be removed following natural detoxification.

Dead fish will be allowed to decay in the pond and the pond will be re-stocked with brook trout, and the use of a detoxifier is not proposed.

The efficacy of treatment will be determined by a subsequent netting survey.

### **AGENCY JURISDICTION**

The project is a regulated activity requiring a wetlands permit pursuant to 9 NYCRR § 578.2 and § 578.3(n)(2)(i) of Agency regulations implementing the Freshwater Wetlands Act [Article 24 of the Environmental Conservation Law] because the piscicide application will occur in wetlands.

### **CONDITIONS**

#### **THE PROJECT IS APPROVED SUBJECT TO THE FOLLOWING CONDITIONS:**

1. The project shall not be undertaken until this permit has been recorded in the Franklin County Clerk's Office.
2. This permit is binding on the permittee, all present and future owners or lessees of the project site, and all persons undertaking all or a portion of the project. Copies of this permit shall be furnished by the permittee to all subsequent owners or lessees of the project site prior to sale or lease, and by the permittee and/or any subsequent owner or lessee to all persons undertaking any development activities authorized herein.
3. In addition to complying with all terms and conditions of this permit, all future activities on the project site shall be undertaken in compliance with the requirements of New York State's Adirondack Park Agency Act, Freshwater Wetlands Act and the Adirondack Park Agency's implementation regulations [9 NYCRR §§ 570-588].

#### **Permit Term**

4. This permit shall expire on December 31, 2017 unless an application for renewal is received by the Agency at least one month prior to that date.

#### **Application**

5. Prior to treatment the lake's dam's flash boards shall be removed to lower the lake level by approximately 1 foot. Immediately prior to treatment they shall be reset to the normal pool elevation.
6. No more of the piscicide Prentfish shall be applied than is necessary to achieve a 24 hour target concentration of 1.0 ppm.

7. The piscicide shall be stored and applied in accordance with label restrictions by NYSDEC-license piscicide applicators using portable pumps and spray from boats and hand spraying from backpack applicators from the shoreline.
8. This permit only authorizes one Prenfish treatment of Bay Pond. The treatment shall be completed in fall 2015, 2016, or 2017.
9. Standard netting procedures shall be undertaken to determine the efficacy of control. If re-treatment is necessary, the applicant shall advise the Agency in writing of reasons for failure of the prior treatment and re-treatment details, and obtain Agency approval prior to a second treatment.

### **Reports**

10. No later than 90 days after completion of the reclamation, the permittee shall provide the Agency with a treatment and stocking summary report. The report shall include field observations of any non-target species mortality, survival and recovery within 24 hours after final application, including but not limited to frogs, turtles, salamanders, mussels, and aquatic insects. The report shall also include detailed information on bioassays performed during treatment.
11. At the request of the Agency, the permittee or the permittee's successor shall report in writing the status of the project, including details of compliance with any terms and conditions of this permit.

### **FINDINGS OF FACT**

#### **Background/Prior History**

1. The project site is subject to a Deed of Conservation Easement to the Nature Conservancy dated December 27, 1979 and recorded December 27, 1979 in the Franklin County Clerk's Office in Book 495 at page 626. The easement allows active fish management of Bay Pond, including lake reclamations.
2. The lake has been reclaimed once in 1968 and once in 1989. The 1989 reclamation was authorized by the Agency pursuant to Agency Permit 89-90 which allowed for the application of 810 gallons of Prenfish to achieve a 24 hour target concentration of 0.75 ppm.
3. Agency jurisdictional determination 2013-306 advised that the rehabilitation of the dam and fish barrier did not require a permit from the Agency. The rehabilitation occurred in 2014.

4. The first documented occurrence of largemouth bass in Bay Pond was in the fall, 2007. Since 2006 fish surveys have reported a declining catch per unit effort for brook trout. Brook trout are vulnerable to the effects of predation and competition from competing fish species.

### **Project Site**

#### **Water Resources**

5. The project site is the 238±-acre Bay Pond and approximately four miles of its inlets.

#### **Wetlands**

6. The pond and its inlets include bog, shrub, and deep water marsh wetlands which have a value rating of "2" or "3" pursuant to 9 NYCRR 578.5.

#### **Wildlife/Habitat**

7. Many Adirondack waterbodies provide feeding and breeding habitat for birds and waterfowl which depend in part on fish or benthos for food, including Kingfishers, Rails, Grebes, Mergansers, Buffleheads, Goldeneye, Bald Eagles, Osprey, and Common Loon. Based on review of the New York State Heritage Program the Common Loon, a listed species of special concern, is located within the treatment area or its immediate surroundings. Agency staff did observe an adult loon without chicks on the pond during a July 6, 2015 site visit. Juvenile birds and waterfowl are generally fledged from mid-July through August and adults are capable of feeding on other waters.

#### **Nearby Land Uses**

8. The area surrounding Bay Pond consists of open space and low density residential development.

#### **Public Notice and Comment**

9. The Agency notified all adjoining landowners and other parties and published a Notice of Complete Permit Application in the Environmental Notice Bulletin, as required by the Adirondack Park Agency Act. No comments were received.

Rotenone

10. Rotenone is made from the root extracts of certain species of tropical plants, such as the South American cube plant. In New York State Rotenone has been used for eradication of unwanted fish species for over 60 years.
11. In addition to being a piscicide, rotenone is also registered as an organic home and commercial garden insecticide.
12. Current and historic peer reviewed literature identify rotenone as the most environmentally benign piscicide currently available and it is the only fish toxicant employed by the NYSDEC for lake reclamation projects. Published studies indicate that other than the use of a pesticide the only way to reclaim a lake or pond is through repeated draining the body of water, an alternative not available for consideration at the project site.
13. Rotenone is more toxic under low alkalinity conditions and persists longer in colder waters. Water clarity, turbidity, and temperature can change the effectiveness of the treatment. Degradation of rotenone will occur by natural exposure to sunlight, oxygen, and warm water temperatures; rotenone has a half-life of one to three days. Nearly all of the toxicity of the compound is lost within five to six days when exposed to spring sunlight and within two to three days when exposed to summer sunlight. Rotenone ultimately breaks down to carbon dioxide and water.
14. The Final Programmatic Environmental Impact Statement on "Fish Species Management Activities of the Department of Environmental Conservation" dated June 1980 and the Final Programmatic Environmental Impact Statement on "Undesirable Fish Removal by the Use of Pesticides" by the Department of Environmental Conservation dated March 24, 1981 lists the generic impacts from use of rotenone. Short-term impacts include temporary elimination of certain planktonic organisms (e.g. cladocerans), temporary reduction of certain benthic organisms (e.g. mayfly, dragonfly, damselfly larvae) and gill breathing stages of amphibians, mortality of fish, and temporary loss of fishing until restocking. The treatment will also result in a restriction in the use of water for drinking and swimming for a minimum of 14 days after treatment and temporary odors from the piscicide. The document also concluded "there are no significant long-term adverse effects on the environment which are attributable to lake and pond reclamation activities using rotenone...".
15. Risk of human health effects from either consumption of treated fish or drinking treated waters is very low due to several factors, including: humans are protected by effective oxidizing enzyme systems; slow, inefficient gastrointestinal absorption; the low percentage of rotenone (1% to 5%) commonly used in commercial preparations; rotenone's extremely low solubility in water; rotenone's unstable nature in air and light;

and rotenone residues in the edible flesh of poisoned fish are insignificant. The oral LD50 of rotenone to humans is 132 ppm; treated waters contain 1.0 ppm or less, and humans are unlikely to become ill from drinking them.

16. The USEPA approved label allows the use of Prenfish at concentrations of up to 4 ppm to control bullhead in rich organic ponds.
17. There are no alternative fish control options available to fisheries biologists that can effectively eliminate a fish population from an entire water body. As such, the project approved herein is the only reasonable method available to achieve the objective.
18. On August 27, 2015 the NYSDEC issued a permit for the project approved herein.

## **PROJECT IMPACTS**

### **Wetlands/Habitat**

19. The lowering of the lake level to undertake the piscicide treatment will result in a minimal and temporary impact to wetlands and their associated values. Provided the project authorized herein is undertaken as proposed and in accordance with the conditions contained herein, the entire wetland will be preserved.
20. Rotenone acts as a respiratory inhibitor, affecting cellular aerobic respiration. Gill breathing organisms, including fish and gill breathing states of amphibians and insects, are susceptible to rotenone. If summer or spring treatments are undertaken, other impacts, due to the greater abundance of amphibians in the water bodies at those times of year, could occur. Additionally, while some species of salamanders use shallow vegetative areas of ponds, most of the populations of salamanders depend on ephemeral pools for breeding habitat. However, research shows that populations of gill breathing benthic organisms and zooplankton impacted by rotenone treatments generally recover over the spring and summer following treatment, and all species found in the Adirondack post-treatment observations by DEC staff have shown that salamanders and frog tadpoles are not significantly impacted by treatment levels of 1.0 ppm and survive the fall treatments at the concentrations used in Adirondack waterbodies. Reclaiming the lake in fall will mitigate the impacts to amphibians. Larvae hatched during the spring and summer will have matured beyond the gill breathing stage and thus not be susceptible to the rotenone treatment.
21. Although re-stocking the lake will not occur the same year of treatment, returning adult birds can use other water bodies and wetlands in the vicinity, as well as alternate foods including aquatic insects, mollusks, crustaceans and amphibians, and terrestrial organisms.

22. Requiring the lowering of the water elevation of Bay Pond immediately prior to treatment and requiring the re-installation of the flash boards to re-establish the normal pool elevation at the time of treatment will provide up to 22 days of retention time. This will ensure that the project's impacts will be isolated and that fish kills will not occur below the fish barrier while reducing the overall impacts to wetlands which are associated with the lowering of the normal pool elevation of the lake.

#### **Nearby Land Uses**

23. Since the lake is not open to the public the project will not result in any impacts to the general public.

#### **Historic Sites or Structures**

24. The project will not cause any change in the quality of "registered," "eligible," or "inventoried" property as those terms are defined in 9 NYCRR 426.2 for the purposes of implementing §14.09 of the New York State Historic Preservation Act of 1980.

#### **CONCLUSIONS OF LAW**


The Agency has considered all statutory and regulatory criteria for project approval set forth in the Freshwater Wetlands Act and 9 NYCRR Part 578. The Agency hereby finds that the project authorized as conditioned herein:

- a. will be consistent with the land use and development plan;
- b. will not have an undue adverse impact upon the natural, scenic, aesthetic, ecological, wildlife, historic, recreational or open space resources of the Park or upon the ability of the public to provide supporting facilities and services made necessary by the project, taking into account the economic and social benefits that might be derived therefrom;
- c. will secure the natural benefits of wetlands associated with the project, consistent with the general welfare and beneficial economic, social, and agricultural development of the state; and
- d. will result in minimal degradation or destruction of the wetland or its associated values, and is the only alternative which reasonably can accomplish the applicant's objectives



PERMIT issued this 11 day  
of September 2015.

ADIRONDACK PARK AGENCY

BY:   
Richard E. Weber, III Deputy Director  
(Regulatory Programs)

STATE OF NEW YORK)  
) ss.:  
COUNTY OF ESSEX )

On the 11 day of September in the year 2015, before me, the undersigned, a Notary Public in and for said State, personally appeared Richard E. Weber III, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that they executed the same in their capacity, and that by their signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

  
Notary Public

MARY L. REARDON  
Notary Public - State of New York  
Qualified in Franklin County  
No. 01RE6114798  
Commission Expires, August 23, 20 16

REW:LRW:JMH:ESS:mlr

