

Adirondack Park Agency
2008G-1
Application

Permit Number:
2008-182

P.O. Box 992 Ray Brook, New York 12977
(518) 891-4050

Application and Certification for Management of
Aquatic Invasive Plants Using Benthic Barriers and
Hand Harvesting Techniques

Instructions: Please answer all of the questions in each section and complete the required attachments. Submit this form with the required attachments in person or by mail to the Deputy Director, Regulatory Programs, Adirondack Park Agency at the above address. A site visit by Agency staff is required. **You may not begin regulated activities at the project site until you have received this certification signed by Agency staff, and recorded the certificate in the County Clerk's Office.**

Section A- Applicability

This General Permit authorizes the following:

1. Allows the Adirondack Park Invasive Plant Program (APIPP), qualified lake associations or other qualified organizations, local municipalities, certified lake managers, and experienced lake managers subject to approval by the Agency to use benthic barriers and hand harvesting techniques to control aquatic invasive plants in water depths less than 2 meters (6.6 feet).
2. Allows for the removal and/or control of the following aquatic invasive plants: Eurasian watermilfoil (*Myriophyllum spicatum*), curlyleaf pondweed (*Potamogeton crispus*), water chestnut (*Trapa natans*), yellow floating heart (*Nymphoides peltata*), European frog-bit (*Hydrocharis morsus-ranae*), fanwort (*Cabomba caroliniana*) and those other species identified by the Supervisor, Resource Analysis and Scientific Services (RASS) Division.
3. Control activities only occur on privately owned waterbodies or watersbodies owned by the State of New York and under the jurisdiction of the NYS Office of General Services.
4. Does not apply to lands underwater determined to be NYS Forest Preserve.

Section B-Project Information

Name of Project Sponsor: Town of Ticonderoga with support of Town of Crown Point, with assistance Eagle Lake Property Owner's Inc. (ELPOI)

Mailing Address: 117 East Montcalm Street- Ticonderoga, NY 12883/
17 Monitor Bay Road, Suite 3- Crown Point, NY 12928

Telephone Number (daytime): Ti- 518-585-6265/ CP- 518-597-3035 FAX:
Email: Ti- robertdedrick@nycap.rr.com CP- crownpoint@bluemoo.net

Authorized Representative: Ti- Robert Dedrick CP - Dale French ELPOI - Rolf Tiedemann
Application completion: Rolf Tiedemann

Mailing Address: 358 Electric Ave., Rochester, NY 14613

Telephone Number (daytime) Rolf 585-647-2514 Roch 518-597-3618 lake:

Email: camptouchstone@yahoo.com

Prior Agency Contact:

Have you had any previous discussions with Agency staff regarding the proposed activities involving wetlands or has any Agency staff visited the project site with you or your representative?

No
 Yes, staff person=s name: Ed Snizek Date of Contact: varied 03-present

Name of Certified Lake Manager or Aquatic Consultant:

Name of Company:

Certified Lake Manager or Consultant:

See attached for names - report and results of visits are posted at <http://www.eaglelake1.org/archives.html>

Mailing Address:

N.A.

Telephone No:

FAX:

Project Site Location:

Town(s) Ticonderoga and Crown Point

County: Essex

Nearby Road(s): NYS Route 74, east of Northway (I 87) exit 28 and west of the Village of Ticonderoga

Tax Map Number (s): (applies to privately owned waterbodies only) **N.A.**

Section _____ Block _____ Parcel _____

Section _____ Block _____ Parcel _____

Waterbody

Name of Waterbody: Eagle Lake

Size of waterbody: 420 Acres

Maximum depth: 38-42 feet

Mean depth: 19 feet

Is your lake association an active participant in the Citizens Statewide Lake Assessment Program or other water quality monitoring program? If so, please provide copies of annual reports for the past 3 years.

Yes – see <http://www.eaglelake1.org/archives.html> for all reports 2000 to present

Section C- Terms

Applicability:

1. This general permit only authorizes APIPP, qualified lake associations or other qualified organizations, local municipalities, certified lake managers, and experienced lake managers subject

to approval by the Agency to conduct the work. A qualified lake association is defined as: (i) a Not-For-Profit Corporation; (ii) recognized by the local municipality; (iii) that can demonstrate that they represent the majority of lakeshore owners. Note: individual shoreland owners are still allowed to hand harvest nuisance aquatic plants as outlined in APA guidance document entitled “Hand Harvesting of Nuisance Aquatic Plants in Water Depths Less Than 2 Meters.”

2. This general permit only authorizes the removal of aquatic invasive plants including Eurasian watermilfoil (*Myriophyllum spicatum*), curlyleaf pondweed (*Potamogeton crispus*), water chestnut (*Trapa natans*), yellow floating heart (*Nymphoides peltata*), European frog-bit (*Hydrocharis morsus-ranae*), fanwort (*Cabomba caroliniana*) and those other species identified by the Supervisor, Resource Analysis and Scientific Services (RASS) Division.
3. This general permit only applies to hand harvesting and benthic barrier use at water depths less than 2 meters. The Agency has previously determined that hand harvesting and the use of benthic barriers in water depths greater than 2 meters are non-jurisdictional activities and no APA permit is required.

Field Visit Requirements:

1. Depending on the proposed activity, size of control area(s) and potential impact to the freshwater wetlands a site visit may be required. Please contact the Agency to arrange for a site visit.

See Attachment to end of document for details for “required attachments”

Required Attachments: (your application will not be processed without all required attachments unless otherwise agreed to in advance by Agency staff)

1. Attach a site location map at 1”=2,000 feet for the entire project site.
2. List and locate any known threatened, rare or endangered species. Consult with the Natural Heritage Program, 700 Troy-Schenectady Road, Latham, New York, 12110-2400, 518-439-8082.
3. If the bed of the lake is privately owned provide a copy of current deed of record for the project site. If ownership is vested with the State of New York provide documentation which includes authorization from New York State Office of General Services (NYSOGS) which demonstrates your authority to undertake the proposed project and apply for all necessary approvals and permits. It is suggested that you contact Alan C. Bauder, NYSOGS Manager of Submerged Lands and Natural Resources, 518-474-2195, and request a letter stating that OGS has no objection to the control activities proposed.
4. Name the organization responsible for lake management and document its authority to propose activities with the consent of the riparian owners.
5. Indicate by name, title, and affiliation who will be implementing the aquatic plant control procedures. Include the name of any supervisory personnel who will be onsite during operations.
6. Provide a copy of all applications for permits or approvals, necessary from local, state, or federal agencies for this proposed project. Provide copies of written approvals and other permits received and names and phone numbers of key points of contacts with said agencies.
7. Provide a scaled bathymetric map of the lake if available.
8. Provide an inventory and scaled map of current aquatic plant communities associated with the lake. The aquatic plant monitoring plan shall be completed by a certified lake manager or experienced lake managers subject to approval by the Agency and shall consist of a detailed lake wide aquatic plant survey, including but not limited to, a list of all aquatic plants observed including, percent cover, relative abundance and location in the lake. The inventory and scaled mapping of the aquatic plant communities are required to evaluate the need for and method of control and will provide a baseline of the existing aquatic plant communities in the lake and effectiveness of the hand harvesting and/or benthic barrier control efforts. The map should clearly show the date and name and title of the person who prepared the map.

Either of the following aquatic plant survey methodologies shall be employed (Note: any existing aquatic plant monitoring plan which has been previously approved by the Agency and/or has been part of a lake wide aquatic plant management effort may be acceptable for purposes of this general permit):

a. Point Intercept Rake Toss Relative Abundance Method-

This methodology was first developed by US ACE and later modified by researchers at Cornell University. It has since been adopted by NYS DEC as the required aquatic plant monitoring standard for aquatic pesticide applications.

- Method: One Rake Toss per Site.
- Number of Sampling Sites (minimum number of sampling sites unless otherwise agreed to by Agency staff):

Lakes less than 50 hectares(124 acres):

Sample a minimum of 5 sites/hectare of treatment area and a minimum of 1 site/hectare outside the treatment area, for a minimum of 15 sample sites. Sample sites located outside of treatment area shall be evenly distributed throughout the littoral area and shall be representative of the aquatic plant community composition of the waterbody. If protected aquatic plant species are known to be in the area additional sample sites may be required to insure the protection of the species.

Lakes greater than 50 hectares (124 acres):

Sample a minimum of 5 sites/hectare of treatment area and a minimum of 1 site/hectare equally distributed in the area within one mile of the treatment zone(s), for a minimum of 100 sites. Sample sites located outside of treatment area shall be evenly distributed throughout the littoral area and shall be representative of the aquatic plant community composition of the waterbody. If protected aquatic plant species are known to be in the area additional sample sites may be required to insure the protection of the species.

- Site Identification: GPS coordinates, UTM NAD83 preferred
- Site Mapping: Sites labeled on USGS topographic maps or representative bathymetric base map
- Plant Identification: Target and exotic plants identified to species level. All other plants identified to genus level
- Plant Abundance: Quantified by Cornell/US Army Corps Abundance Scale:
 - Z = no plants
 - T = trace plants = fingerful on rake
 - S = sparse plants = handful on rake
 - M = medium plants = rakeful of plants
 - D = dense plants = difficult to bring into boat
- Bookkeeping: Plant IDs, plant abundance listing (see above) and site identification in table format (preferably spreadsheet)
- Archiving (optional): Digital photographs of target and exotic plants.

b. Transect Method (line intercept approach)

- Method: Establish permanent line transects which are representative of the lake and aquatic plant community found in the littoral area. Using the line-intercept

approach record all aquatic plant species which intersect the vertical plane of the transect line.

- **Number of Sampling Sites:**

Lakes < 50 hectares- a minimum of 5 transects which extend perpendicular to the shoreline and extend to just beyond the maximum depth of plant growth (minimum of 50 meters).

Lakes > 50 hectares- a minimum of 10 transects which extend perpendicular to the shoreline and extend to just beyond the maximum depth of plant growth (minimum of 50 meters).

- **Site Locations:** A minimum of one transect shall be established at each of the following habitats:
 - Littoral zone with presence of target invasive plant species
 - Littoral zone with mix of native aquatic plants and invasive plants
 - Littoral zone without presence of invasive plants
 - Littoral zone in close proximity to inlet and/or outlet
 - Within the hand harvesting and/or benthic barrier control areas
- **Site Identification:** GPS coordinates, UTM NAD83 preferred or use known shoreline fixed reference points
- **Site Mapping:** Transect sites labeled on USGS topographic map or representative bathymetric base map
- **Plant Identification:** Target and exotic plants identified to species level. All other plants identified to genus level
- **Plant Abundance:** in addition to determining species composition and relative abundance at each established transect a whole lake visual assessment of aquatic plant species relative abundance is required.
- **Bookkeeping:** Plant IDs and Abundance Listing in Table format (preferably spreadsheet).
- **Archiving (optional):** Digital photographs of target and exotic plants.

9. Provide location of all areas of proposed control efforts and identify control method (i.e. hand harvesting or benthic barrier) on scaled map requested in item 8 above.

Hand Harvesting

10. If harvested plant material will be composted onsite identify the location(s) (i.e. tax map parcel number) where the harvested material will be transported for composting. Describe how the material will be transported to this location, and how the material will be stored and how dewatering will be accomplished. Describe any offsite disposal methods which may include composting, burying and incineration (with any necessary NYSDEC permit).

Benthic Barriers

11. Specify the material to be used for the benthic barrier, describe how the mats will be anchored to the lake bed and the means to provide gas venting. Describe who will install and maintain the temporary mats and remove upon achieving control of target plant. Are there any water supply

intakes or other physical barriers on the bottom at the proposed sites which would make installation difficult or unfeasible?

Section D- General Conditions

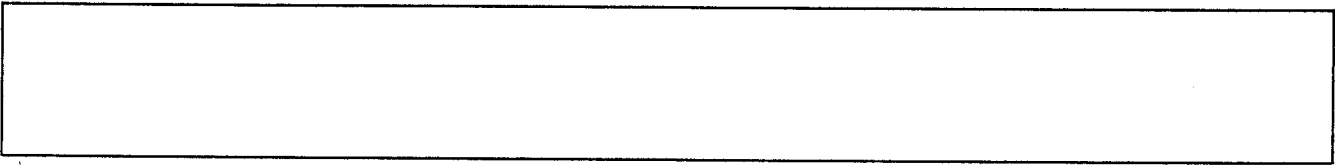
1. This general permit is issued based on the expressed understanding that the project will be undertaken and completed only as described in the submitted and approved application and certification and in compliance with the Terms and Conditions contained in the signed individual permit. In the case of conflict, the Terms and Conditions control.
2. The aquatic invasive plant species management activities described in this signed application and required attachments may not be undertaken unless and until the Agency has made the site visit, if necessary, the application and certification is signed by the Deputy Director, Regulatory Programs (or designee) of the Adirondack Park Agency, and the signed permit is returned to the Permittee, and is recorded in the Office of the County Clerk.
3. Failure to comply with this general permit is a violation and may subject the applicant, successors and assigns to civil penalties and other legal proceedings, including modification, suspension or revocation of the permit.
4. Nothing contained in this general permit certification shall be construed to satisfy any legal obligations of the applicant to obtain any governmental approval or permit for any entity other than the Agency, whether federal, State, regional or local.
5. By signing the application and certification, the permittee(s) and their contractor(s), if any, accept full legal responsibility for all damages, direct or indirect, of whatever nature and by whomever suffered, arising out of the project and agrees to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from this project.
6. The Agency may conduct on-site investigations, examinations and evaluations as it deems necessary to ensure compliance with the terms and conditions of this permit. Such activities shall take place at reasonable times and upon advance notice where possible.
7. At the written request of the Agency, the permittee shall report in writing the status of the project, including details of compliance with any terms and conditions of this permit.
8. This permit does not grant the permittee any right to trespass upon the lands of, or interfere with the riparian rights of others in order to perform the permitted work, nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.
9. The permittee shall require that any agent, contractor, certified lake manager, or other person responsible for the overall supervision of this project read and understand this permit and approved plans and all terms and conditions prior to undertaking the project. Copies of the signed permit and approved plans shall be kept at the project site during all control activities.

10. Any deviation from the type of project authorized by this permit or failure to comply precisely with all the terms and conditions of this permit and approved plans must be expressly approved in writing and in advance by authorized staff of the Agency.
11. The permittee shall be required to provide 15 days advance mail notice to all shoreland property owners located adjacent to or within 500 feet of the proposed aquatic plant control sites. The notice shall describe the proposed management activity, date(s) and duration of the control activity and name of individual, including daytime telephone number, responsible for supervising the control effort.
12. Additional condition, if any, may be added as determined by the Project Analyst and Deputy Director of Regulatory Programs based on site conditions.

Monitoring and Reporting Requirements

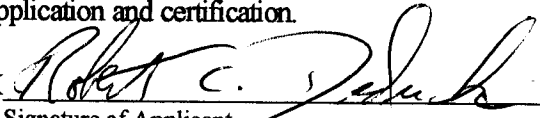
13. Frequency of Aquatic Plant Monitoring: Monitoring shall utilize the sampling method previously used for this General Permit. One sampling event shall be required every 3 years following the first year of control using hand harvesting or benthic barriers and continue for the duration of this permit and all subsequent permits. Please note that aquatic plant monitoring should be completed when target plant(s) grows most extensively. The monitoring report shall be in a similar format as previously submitted for this General Permit and shall include a summary of methodology used, site mapping of all rake toss or transect sites, and data tables indicating aquatic plant composition at each site. The monitoring report shall include an evaluation of the effectiveness of the hand harvesting and/or benthic barrier effort. Report shall be submitted to the Agency by December 31st of year the aquatic plant survey is completed.
14. Annual Reporting: An annual report shall be submitted to the Agency by December 31st each year following each successful field season and shall include at a minimum the following:
 - a. Hand harvesting- include summary of amount of plant material hand harvested (i.e. total number of bags) at each site, total sampling effort(i.e. total dive hours) and note the presence and site location(s) of any rare, threatened, endangered species or exploitably vulnerable species.
 - b. Benthic barriers- provide total number of barriers used and total square footage of aquatic plant coverage/control achieved during the season. Note the presence and site location(s) of any rare, threatened, endangered species or exploitably vulnerable species.

Additional conditions, if any, as determined by the Project Analyst and Deputy Director of Regulatory Programs based on site conditions:

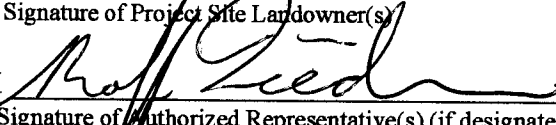


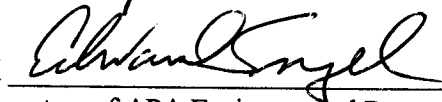
Section E- Authorization

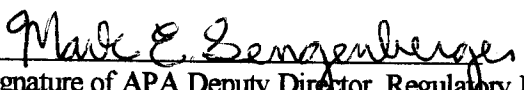
By signing this permit application, the applicants agree to strictly comply with the terms and conditions of this application and certification.

X 
Signature of Applicant

X _____
Signature of Project Site Landowner(s)

X 
Signature of Authorized Representative(s) (if designated above)

X  Date: 7-30-08
Signature of APA Environmental Program Specialist or Associate A.P. Project Analyst
(Required before regulated activity can be started)

X  Date: 7/30/08
Signature of APA Deputy Director, Regulatory Programs (or designee)
(Required before regulated activity can be started)

Required Attachments for APA 2008G-1 Application

Eagle Lake – Essex County NY.

Prepared by: Rolf Tiedemann, Eagle Lake Milfoil Project Coordinator for Town of Ticonderoga, July 14, 2008.

Certified Lake Manager or Consultant

Various consultants have visited and cataloged plants in Eagle Lake over the past 20 or so years. All visits were with the express purpose of identifying and charting the growth and spread of Eurasian Water milfoil.

Studies were made by:

Larry Eichler – Freshwater Institute - plant inventories 1990 and 1998
Scott Kishbaugh – NYSDEC 1999 Lake Classification and Inventory (LCI)
CSLAP – 2000 – present - inventories
Glenn Sullivan – Allied Biological – various year and location visual inventories of possible treatment sites
US Army Corps of Engineers – 2000 survey of invasive milfoil
Dr. Bob Johnson – Cornell University – 2000 visual observation for herbivore activity
Tim Ladue – Upper Saranac Lake – 2004 report on observations for hand harvesting / mating
Michael Tiedemann – Eagle Lake – 2003 GPS survey of milfoil beds

Required Attachments

1) See http://www.eaglelake1.org/archives/html/gps_survey.html – for map, also see http://www.eaglelake1.org/archives/permits/permit_support_pictures/support_pictures.html for additional site location information. Sites along south shore from 3 to 36 will be the harvesting goal for the 2008 season. Additional sites as indicated on the GPS survey will be addressed as time and funding permit. Sites indicated in NYS OGS map as “Forrest Preserve” on north shore will not be addressed as part of this project.

2) A letter dated June 9, 2008 was sent to the Natural Heritage Program requesting details for their database to identify locations for any know TRE species. Per a conversation with Tim Sinnott in 2006 it was reported that the Heritage Program archive listed only the rare plant Potamogeton Alpinus (Reddish Pondweed) for Eagle Lake. The Fresh Water Institute 1990 report indicates that the plant Isoetes macrospora (Quillwort) was the “only plant observed that was on the NYS rare plant list”. It further states “placement of this species on the rare plant list is more due to the lack of appropriate observations, or searches, for this species, than its actual rarity, since it tends to occur in deep water habitats... and often requiring SCUBA to find. Details from the Natural Heritage Program reply show only the plant Potamogeton Alpinus with its location identified as being in Crown Point Bay see [Natural Heritage Program Plant Identification Survey](#) (1988 -Crown Point Bay) for details. The locations of the plant Isoetes macrospora in the lake are unknown. Qualified individuals will swim over the project site prior to hand harvesting or mating activities to identify if these species are present. If they are, steps will be taken to avoid their disturbance.

3) An affirmative no objection letter from NYS OGS was obtained, for the prior Non Jurisdictional hand

harvesting and mat placement in waters greater than 2 meter permit application, by the Town of Ticonderoga. OGS contacted again to see if this letter will also cover activities under this permit application. See [2005 Office of Government Services \(OGS\)](#) (Determination of Lake Bottom Ownership Letter) for details. In a follow-up letter dated June 26, 2008 sent to Mr. Ed Snezik with cc. Eagle Lake Association Mr. Alan Bauder indicates “the Office of General Services has no objection....” A copy of this letter can be found at [2008 Office of Government Services \(OGS\)](#) (handharvest in waters less than 2 meters)

4) Lake residents have been informed of this project by the lake association (Eagle Lake Property Owners, Inc.), and of proposed milfoil removal plans. In a resolution dated June 16, 2007, ELPOI’s board unanimously approved supporting the Towns of Crown Point and Ticonderoga in seeking funding and permits for a milfoil project. See <http://www.eaglelake1.org/milfoilproject.html> - [ELPOI](#) (Resolutions to Under Take the Project) for details.

5) Rolf Tiedemann – Project coordinator for ELPOI and crew chief working with Lycott Environmental.

6) Per a 6-9-2008 phone conversation with Tom Hall of DEC Region 5 Permits, the DEC has no objection to the verbal description for this project as long as mat placement is done without the use of sandbags for mat weights and no direct suction is used for plant removal.

7) See <http://www.eaglelake1.org/archives.html> for details in Freshwater Institute 1989 or 1998 Eagle Lake plant survey for map. [Fresh Water Institute 1989 Lake Plant Survey](#) (4.3mb) or [Fresh Water Institute 1998 Lake Plant Survey](#) (.8mb)

8) See reports for # 7 above also see http://www.eaglelake1.org/archives/html/gps_survey.html for a GPS survey of milfoil site locations.

9) See GPS map identified in #8 above for site locations. Sites along south shore of lake will be addressed in the summer of 2008. Additional sites around the lake will be addressed in future years. Both hand harvesting and matting will be used as appropriate at each site, and additional sites that are identified during the work program.

10) On site disposal of material will be handled by a local lake resident who will be composting the removed milfoil in a “secure to the lake” location. Compost will be mixed with topsoil for local on site gardening. Location for this is at property map location #28. See property map at <http://eaglelake1.org/elpoi.html> Transport to this site will be by boat.

11) Benthic mats will be constructed using DEC approved International Paper mill wire, BUD (Benefit of Use Determination) is on file at DEC, or additional mat material meeting DEC requirements. To this ½” steel bars will be zip tied at 3 foot intervals as weights. Individual mat sections will be approximately 10’ X 16’. The size, nature of construction and the nature of the material have proven that no additional “gas venting” is required. Installation, maintenance, relocation and end of project removal will be handled by hired contract services and local lake resident volunteers. Mats will be relocated after approximately 6 weeks; those placed late in the season will be relocated in the following spring. The bottom of Eagle Lake presents many challenges that will make mat placement difficult or impossible, the lakes shoreline has many midsize large boulders and fallen trees with limbs, both of these obstacles prevent easy mat placement in the locations that most often trap

milfoil and encourage its growth. There are only a few private water intakes on Eagle Lake and these should not present problems for this project.

General Conditions (note of clarity)

Per a conversation with Ed Snezik satisfaction of general condition #11 for shore land property owner notification can and will be satisfied by ELPOI Newsletter.