

Commonwealth of Massachusetts

Executive Office of Environmental Affairs ■ MEPA Office

ENF

Environmental Notification Form

<i>For Office Use Only</i>	
<i>Executive Office of Environmental Affairs</i>	
EOEA No.:	<u>12812</u>
MEPA Analyst:	<u>Jay Wickesha</u>
Phone: 617-626-	<u>1022</u>

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Aquatic Vegetation Management at Forest Park Ponds (Barney, Swan, Duck Ponds; Porter & Fountain Lakes)		
Street: 200 Trafton Road		
Municipality: Springfield	Watershed: Connecticut River	
Universal Transverse Mercator Coordinates: UTM NAD 83 Meters Zone 18 N: 46 60 781 to 46 61 876 E: 07 00 614 to 07 01 713	Latitude: 42°4'24" to 42°4'58" N Longitude: 72°34'29" to 72°33'41" W	
Estimated commencement date: 7/1/02	Estimated completion date: Yearly	
Approximate cost: Est. \$25,000 yr 2002	Status of project design: 100% complete	
Proponent: Springfield Parks and Recreation Department		
Street: 200 Trafton Street		
Municipality: Springfield	State: MA	Zip Code: 01108
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Patrick Sullivan		
Firm/Agency: Springfield Parks and Recreation Department	Street: 200 Trafton Road	
Municipality: Springfield	State: MA	Zip Code: 01108
Phone: 413-787-6440	Fax:	E-mail:

- Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
 Yes No
- Has this project been filed with MEPA before?
 Yes (EOEA No. _____) No
- Has any project on this site been filed with MEPA before?
 Yes (EOEA No. 4685, 6042, 7242, 9502) No
- Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:
- a Single EIR? (see 301 CMR 11.06(8)) Yes No
 - a Special Review Procedure? (see 301 CMR 11.09) Yes No
 - a Waiver of mandatory EIR? (see 301 CMR 11.11) Yes No
 - a Phase I Waiver? (see 301 CMR 11.11) Yes (if EIR waiver denied) No

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres) **DEM Small Lakes and Ponds Grant, \$25,000 with 100% matching funds.**

Are you requesting coordinated review with any other federal, state, regional, or local agency?

Yes (Specify _____) No

List Local or Federal Permits and Approvals: **Order of Conditions** _____

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- | | | |
|---------------------------------|---------------------------------------|--|
| <input type="checkbox"/> Land | <input type="checkbox"/> Rare Species | <input checked="" type="checkbox"/> Wetlands, Waterways, & Tidelands |
| <input type="checkbox"/> Water | <input type="checkbox"/> Wastewater | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Air | <input type="checkbox"/> Solid & Hazardous Waste |
| <input type="checkbox"/> ACEC | <input type="checkbox"/> Regulations | <input type="checkbox"/> Historical & Archaeological Resources |

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
LAND				<input checked="" type="checkbox"/> Order of Conditions <input checked="" type="checkbox"/> Superceding Order of Conditions <input type="checkbox"/> Chapter 91 License <input type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input checked="" type="checkbox"/> Other Permits <i>(including Legislative Approvals) – Specify:</i> <input type="checkbox"/> USACOE 404 Permit PGP II <input type="checkbox"/> NPDES Construction <input type="checkbox"/> SWPPP <u>BRP WM 04 License to Apply Chemical for Control of Nuisance Aquatic Vegetation</u> _____ _____ _____ _____
Total site acreage	34.5*			
New acres of land altered		0		
Acres of impervious area	0	0	0	
Square feet of new bordering vegetated wetlands alteration		0		
Square feet of new other wetland alteration		34.5*		
Acres of new non-water dependent use of tidelands or waterways		0		
STRUCTURES				
Gross square footage	0	0	0	
Number of housing units	0	0	0	
Maximum height (in feet)	0	0	0	
TRANSPORTATION				
Vehicle trips per day	0	0	0	
Parking spaces	0	0	0	
WATER/WASTEWATER				
Gallons/day (GPD) of water use	0	0	0	
GPD water withdrawal	0	0	0	
GPD wastewater generation/ treatment	0	0	0	
Length of water/sewer mains (in miles)	0	0	0	

Based on DEP comments on site walk of 5/9/02; alteration constitutes environmental improvement and will not result in impairment of aquatic habitat.

CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

Yes (Specify _____) No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

Yes (Specify _____) No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

Yes (Specify **Triangle Floater Mussel**, see attachment D) No

HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

Yes (Specify _____) No **Forest Park (former Barney Estate) determined eligible for National Register of Historic Places.**

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

Yes (Specify _____) No

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

Yes (Specify _____) No

PROJECT DESCRIPTION: The project description should include (a) a description of the project site, (b) a description of both on-site and off-site alternatives and the impacts associated with each alternative, and (c) potential on-site and off-site mitigation measures for each alternative (You may attach one additional page, if necessary.)

Site Description:

It is proposed to treat and manage the excessive growth of aquatic vegetation in 5 urban ponds in Forest Park, Springfield, MA: Porter Lake, Fountain Lake, Duck Pond, Barney Pond, and Swan Pond. Porter Lake, Fountain Lake, Duck Pond are all sequential impoundments of Pecousic Brook, which drains the urban watershed of Springfield, Longmeadow, East Longmeadow, and Wilbraham. Barney Pond and Swan Pond are tributary to Pecousic Brook. Each of these waterbodies has been previously studied and dredged to remove culturally accumulated sediments. However, the continual re-introduction of urban influenced waters provides a high nutrient load which fuels heavy aquatic plant growth during late spring and summer months and diminishes the functional utility of these public park waterbodies. These ponds are plagued by green algal scums, dense submerged aquatic plants, and near 100% surface accumulations of duckweed and American lotus. Such conditions have greatly diminished the aquatic habitat of the ponds, in addition to creating adverse aesthetic conditions. The targeted aquatic plant reduction is 80 to 90%. This reduction of the dense growth will potentially allow non-invasive/nuisance species to become established including such species as Nitella, Chara and muskgrasses, which colonize the pond bottoms. Aquatic plant surveys will be conducted before and after treatment(s) to assess the results of the treatment and establish the need to follow-up maintenance applications. Follow-up treatment during the summer season and during subsequent years will be based upon the monitored degree of regrowth. All vegetation control will be performed within the pond. Areas of bordering vegetated wetland will not be treated. The proposed method of treatment and management will be through a combination of the licensed application of chemical herbicides, algicides, and alum as summarized below.

Waterbody	Acreage Treated	Target Species	Treatment Methods	Estimated Frequency of Treatment
Porter Lake	23.9	coontail, duckweed, watermeal, filamentous algae	Sonar(fluridone) Alum	2-4 treatments in 2002, depending upon start date. Subsequent treatments dependent upon success
Fountain Lake	5.8	coontail, Elodea, lotus, filamentous algae	Reward (diquat) Rodeo (glyphosate) Chelated Cu	2-4 treatments in 2002, depending upon approved start date. Subsequent treatments dependent upon success
Duck Pond	1.9	coontail, Elodea, lotus, filamentous algae	Reward (diquat) Chelated Cu Rodeo (glyphosate)	2-4 treatments in 2002, depending upon approved start date. Subsequent treatments dependent upon success
Barney Pond	2.1	coontail, Elodea, filamentous algae,	Reward (diquat) Chelated Cu	2-4 treatments in 2002, depending upon approved start date. Subsequent treatments dependent upon success
Swan Pond	0.75	coontail, filamentous algae, duckweed, watermeal	Sonar(fluridone) Chelated Cu	2-4 treatments in 2002, depending upon approved start date. Subsequent treatments dependent upon success

Licenses to apply these chemical controls in each of these waterbodies were issued by the Division of Watershed Management, Department of Environmental Protection on May 8, 2002 to Lycott Environmental Research, Inc. The herbicides and algicide will be placed in a mixing tank aboard an airboat or jonboat. It will then be injected below the water's surface and evenly distributed throughout the treatment area. The duckweed, watermeal and coontail will be treated with Sonar at a rate of 50 ppb. The initial application rate will be determined by the estimated flow and turnover rate within the waterbodies. The fluridone concentration will need to be maintained at 30-50 ppb for forty days for effective management. The fluridone levels will be assayed and monitored and booster treatments will be added as necessary to achieve the effective concentration for the desired period. Reward will be applied at a rate of 1-2 gallons per surface acre. Chelated copper compound will be used to manage the filamentous algae at a rate of one gallon per acre-foot, with a lesser concentration for micro-algae. Aluminum sulfate (alum) will be used at a rate of 2.3 ppm to flocculate nutrients and suspended matter from the water column to aid in precluding the growth of algae, duckweed and watermeal. The herbicide Rodeo (glyphosate) will be used to manage American lotus in Fountain Lake and Duck Pond, applied at a rate of 1.5% solution directly onto the plants with hand-held equipment.

The project has been developed to meet the performance standards for Land Under Water in conformance with the MA Wetlands Protection Act 310 CMR 10.56(4)(a). The water carrying capacity of the waterbodies will be unaffected by the treatment. Water quality will be protected through conformance with the DEP licensing process for chemical application. The aquatic vegetation reduction is considered an improvement to aquatic habitat within the ponds. Important wildlife habitat characteristics along the waterbody shorelines has been identified and appropriate setback limits have been established in coordination with DEP under the Superceding Order of Conditions process (issuance pending MEPA completion). MA Natural Heritage and Endangered Species Program has determined that there will be no impact to known populations of rare species (see attachment D).

The alteration of vegetation within a total of 34.5 acres of Land Under Water is the regulatory trigger for MEPA compliance, exceeding the threshold for a mandatory EIR due to the larger acreage associated with Porter Lake. The proponent is requesting a waiver from the requirements to prepare an EIR. An

Environmental Impact Report (EIR) is required for this project due to the environmental resource impact threshold for alteration of ten or more acres of any other wetlands (301 CMR 11.03 (3)(a)1(b)). As part of this work, 34.5± acres of Land Under Water will be altered by the application of herbicides and algicide, with the target reduction of non-desirable aquatic vegetation by 80 to 90 percent. In discussions, DEP-WERO is considering this removal of nuisance aquatic vegetation to constitute an environmental improvement with no impairment to the area of effect. The granting of the waiver from the requirement for an EIR will potentially allow treatment to occur within the 2002 growing season. Further, the requirement for an EIR will not serve to avoid or minimize damage to the environment as the project will ultimately result in the improvement of the aquatic habitat, recreational value, and improve health and safety of the five ponds at Forest Park. The Springfield Parks and Recreation Department has ample infrastructure facilities and services to support the project, which will be performed as a bid contract with engineering supervision throughout the duration of the work. Aquatic vegetation monitoring will occur before and following the treatment of the ponds. The project is undergoing environmental review under 310 CMR 10.00 (Massachusetts Wetlands Protection Act) under a request for a superseding Order of Conditions. Preparation of an Environmental Impact Report is unlikely to result in benefits to the environmental resources beyond those to be attained if the Waiver is granted.

In the alternative should the EIR waiver request not succeed, a Phase I waiver is hereby requested for Fountain Lake, Swan Pond, and Barney Pond (all waterbodies except Porter Lake and Duck Pond). This request is made, in accordance with Section 11.11 of the MEPA regulations, for the following reasons:

- Strict compliance with the requirement for an EIR would not serve to avoid or minimize Damage to the Environment.
- The potential environmental alterations associated with the Phase 1 work are insignificant and beneficial to aquatic habitat.
- The Phase 1 work is severable and does not require the implementation of any other future phase.
- The total impact on Land Under Water in Phase 1 would be 8.7 acres, below the 10 acre threshold for a mandatory EIR.
- The work conducted under Phase 1 would still be subject to permitting under the MA Wetlands Protection Act, and any applicable conditions thereunder.