Notice of Intent Application
Charles River
Aquatic Management Program

Newton, MA

2022

Prepared for:
DCR Lakes and Ponds
℅ Kara Sliwoski
251 Causeway Street, Suite 800
Boston, Ma 02114

Prepared by:
SŌLitude Lake Management
590 Lake Street
Shrewsbury, MA 01545

SŌLITUDE
LAKE MANAGEMENT

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Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

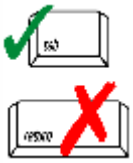
MassDEP File Number

Document Transaction Number

Newton

City/Town

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Note: Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

Charles River — a. Street Address
Newton — b. City/Town
c. Zip Code

Latitude and Longitude:
42.213391 — d. Latitude
-70.10611 — e. Longitude

f. Assessors Map/Plat Number
g. Parcel /Lot Number

2. Applicant:

Kara — a. First Name
Sliwoski — b. Last Name
Department of Conservation Recreation-Lakes and Ponds Program — c. Organization
251 Causeway Street, Suite 800 — d. Street Address
Boston — e. City/Town
MA — f. State
02114 — g. Zip Code
617-626-1388 — h. Phone Number
i. Fax Number
kara.sliwoski@state.ma.us — j. Email Address

3. Property owner (required if different from applicant): ☐ Check if more than one owner

Priscilla — a. First Name
Geigis — b. Last Name
Commonwealth of Massachusetts — c. Organization
d. Street Address
e. City/Town
f. State
g. Zip Code
h. Phone Number
i. Fax Number
priscilla.geigis@mass.gov — j. Email address

4. Representative (if any):

Keith — a. First Name
Gazaille — b. Last Name
SOLitude Lake Management — c. Company
590 Lake Street — d. Street Address
Shrewsbury — e. City/Town
MA — f. State
01545 — g. Zip Code
508-865-1000 — h. Phone Number
508-865-1200 — i. Fax Number
kgazaille@solitudelake.com — j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

a. Total Fee Paid
b. State Fee Paid
c. City/Town Fee Paid

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A. General Information (continued)

6. General Project Description:

The applicant is seeking an Order of Conditions for an Aquatic Management Program at the Charles River to control nuisance and non-native plant and algae growth utilizing treatment with USEPA/ MA State registered aquatic herbicides, and other BMP's (See attached Project Description)

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

1. ☐ Single Family Home
2. ☐ Residential Subdivision
3. ☐ Commercial/Industrial
4. ☐ Dock/Pier
5. ☐ Utilities
6. ☐ Coastal engineering Structure
7. ☐ Agriculture (e.g., cranberries, forestry)
8. ☐ Transportation
9. ■ Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. ■ Yes ☐ No

If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

2. Limited Project Type: 310 CMR 10.53(4) Controlling non-native vegetation and improving the natural capacity of a resource area to protect the interests of the Wetland Protection Act

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

a. County

b. Certificate # (if registered land)

c. Book

d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

1. ☐ Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
2. ■ Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

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B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Bank	1. linear feet	2. linear feet
b. ☐ Bordering Vegetated Wetland	1. square feet	2. square feet
	2,252,052	0
c. ☒ Land Under Waterbodies and Waterways	1. square feet	2. square feet
	0	
	3. cubic yards dredged	

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. ☐ Bordering Land Subject to Flooding	1. square feet	2. square feet
	3. cubic feet of flood storage lost	4. cubic feet replaced
e. ☐ Isolated Land Subject to Flooding	1. square feet	
	2. cubic feet of flood storage lost	3. cubic feet replaced

f. ☐ Riverfront Area

1. Name of Waterway (if available) - **specify coastal or inland**

2. Width of Riverfront Area (check one):

☐ 25 ft. - Designated Densely Developed Areas only

☐ 100 ft. - New agricultural projects only

☐ 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: _____ square feet

4. Proposed alteration of the Riverfront Area:

a. total square feet _____ b. square feet within 100 ft. _____ c. square feet between 100 ft. and 200 ft. _____

5. Has an alternatives analysis been done and is it attached to this NOI? ☐ Yes ☐ No

6. Was the lot where the activity is proposed created prior to August 1, 1996? ☐ Yes ☐ No

3. ☐ Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Note: for coastal riverfront areas, please complete **Section B.2.f**. above.

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B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. ☐ Land Under the Ocean	1. square feet 2. cubic yards dredged	
c. ☐ Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. ☐ Coastal Beaches	1. square feet	2. cubic yards beach nourishment
e. ☐ Coastal Dunes	1. square feet	2. cubic yards dune nourishment

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
f. ☐ Coastal Banks	1. linear feet	
g. ☐ Rocky Intertidal Shores	1. square feet	
h. ☐ Salt Marshes	1. square feet	2. sq ft restoration, rehab., creation
i. ☐ Land Under Salt Ponds	1. square feet 2. cubic yards dredged	
j. ☐ Land Containing Shellfish	1. square feet	
k. ☐ Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above 1. cubic yards dredged	
l. ☐ Land Subject to Coastal Storm Flowage	1. square feet	

4. ☐ Restoration/Enhancement

If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.

a. square feet of BVW

b. square feet of Salt Marsh

5. ☐ Project Involves Stream Crossings

a. number of new stream crossings

b. number of replacement stream crossings

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C. Other Applicable Standards and Requirements

☐ This is a proposal for an Ecological Restoration Limited Project. Skip Section C and complete Appendix A: Ecological Restoration Limited Project Checklists – Required Actions (310 CMR 10.11).

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm.

   a. ☐ Yes ☒ No

   If yes, include proof of mailing or hand delivery of NOI to:

   Natural Heritage and Endangered Species Program
   Division of Fisheries and Wildlife
   1 Rabbit Hill Road
   Westborough, MA 01581

   08/01/2021
   b. Date of map

   If *yes*, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.c, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.2.f, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

   c. Submit Supplemental Information for Endangered Species Review*

      1. ☐ Percentage/acreage of property to be altered:

         (a) within wetland Resource Area _____ percentage/acreage

         (b) outside Resource Area _____ percentage/acreage

      2. ☐ Assessor's Map or right-of-way plan of site

2. ☐ Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work **

   (a) ☐ Project description (including description of impacts outside of wetland resource area & buffer zone)

   (b) ☐ Photographs representative of the site

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/). Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.

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C. Other Applicable Standards and Requirements (cont'd)

(c) ☐ MESA filing fee (fee information available at http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_fee_schedule.htm). Make check payable to "Commonwealth of Massachusetts - NHESP" and ***mail to NHESP*** at above address

*Projects altering **10 or more acres** of land, also submit:*

(d) ☐ Vegetation cover type map of site

(e) ☐ Project plans showing Priority & Estimated Habitat boundaries

(f) OR Check One of the Following

1. ☐ Project is exempt from MESA review.
Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_exemptions.htm; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

2. ☐ Separate MESA review ongoing.
a. NHESP Tracking # _____ b. Date submitted to NHESP _____

3. ☐ Separate MESA review completed.
Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

3. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

a. ☐ Not applicable – project is in inland resource area only b. ☐ Yes ☐ No

If yes, include proof of mailing, hand delivery, or electronic delivery of NOI to either:

South Shore - Cohasset to Rhode Island border, and the Cape & Islands:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 South Rodney French Blvd.
New Bedford, MA 02744
Email: DMF.EnvReview-South@state.ma.us

North Shore - Hull to New Hampshire border:

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930
Email: DMF.EnvReview-North@state.ma.us

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.

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C. Other Applicable Standards and Requirements (cont'd)

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

   a. ☐ Yes ☐ No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.

   b. ACEC

5. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?

   a. ☐ Yes ☐ No

6. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?

   a. ☐ Yes ☐ No

7. Is this project subject to provisions of the MassDEP Stormwater Management Standards?

   a. ☐ Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:
      1. ☐ Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)
      2. ☐ A portion of the site constitutes redevelopment
      3. ☐ Proprietary BMPs are included in the Stormwater Management System.

   b. ☐ No. Check why the project is exempt:
      1. ☐ Single-family house
      2. ☐ Emergency road repair
      3. ☐ Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

☒ This is a proposal for an Ecological Restoration Limited Project. Skip Section D and complete Appendix A: Ecological Restoration Notice of Intent – Minimum Required Documents (310 CMR 10.12).

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. ☐ USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)

2. ☐ Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.

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D. Additional Information (cont'd)

3. ☐ Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. ☒ List the titles and dates for all plans and other materials submitted with this NOI.

a. Plan Title

b. Prepared By

c. Signed and Stamped by

d. Final Revision Date

e. Scale

f. Additional Plan or Document Title

g. Date

5. ☐ If there is more than one property owner, please attach a list of these property owners not listed on this form.

6. ☐ Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.

7. ☐ Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.

8. ☐ Attach NOI Wetland Fee Transmittal Form

9. ☐ Attach Stormwater Report, if needed.

E. Fees

1. ☐ Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

2. Municipal Check Number

3. Check date

4. State Check Number

5. Check date

SOLitude Lake Management

6. Payor name on check: First Name

7. Payor name on check: Last Name

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F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

1. Signature of Applicant	2. Date: 4/08/2022
3. Signature of Property Owner (if different)	4. Date: 4/12/2022
5. Signature of Representative (if any)	6. Date: 04/08/2022

For Conservation Commission:
Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:
One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:
If the applicant has checked the “yes” box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

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NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

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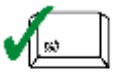

A. Applicant Information

1. Location of Project:

Charles River	Newton
a. Street Address	b. City/Town
c. Check number	d. Fee amount

2. Applicant Mailing Address:

Kara	Sliwoski	
a. First Name	b. Last Name	
Department of Conservation Recreation-Lakes and Ponds Program		
c. Organization		
251 Causeway Street, Suite 800		
d. Mailing Address		
Boston	MA	02114
e. City/Town	f. State	g. Zip Code
617-626-1388		kara.sliwoski@state.ma.us
h. Phone Number	i. Fax Number	j. Email Address

3. Property Owner (if different):

Priscilla	Geigis	
a. First Name	b. Last Name	
Commonwealth of Massachusetts		
c. Organization		
d. Mailing Address		
e. City/Town	f. State	g. Zip Code
		priscilla.geigis@mass.gov
h. Phone Number	i. Fax Number	j. Email Address

B. Fees

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).

Fee should be calculated using the following process & worksheet. ***Please see Instructions before filling out worksheet.***

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract $12.50. To calculate the city/town share of the fee, divide the total fee in half and add $12.50.

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NOI Wetland Fee Transmittal Form

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B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Category 2e	1		$500

Step 5/Total Project Fee: $500.00

Step 6/Fee Payments:

Total Project Fee: $500
a. Total Fee from Step 5

State share of filing Fee: $237.50
b. 1/2 Total Fee **less $**12.50

City/Town share of filling Fee: $262.50
c. 1/2 Total Fee **plus** $12.50

C. Submittal Requirements

a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
Box 4062
Boston, MA 02211

b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and the city/town fee payment.

To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

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WPA Form 3 – Notice of Intent
Appendix A: Ecological Restoration Limited Project Checklists
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Eligibility Checklist

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

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This Ecological Restoration Limited Project Eligibility Checklist guides the applicant in determining if their project is eligible to file as an Inland or Coastal Ecological Restoration Limited Project (310 CMR 10.53(4) or 310 CMR 10.24(8) respectively). These criteria must be met when submitting the Ecological Restoration Limited Project Notice of Intent to ensure that the restoration and improvement of the natural capacity of a Resource Area(s) to protect and sustain the interests identified in the WPA is **necessary** to achieve the project's ecological restoration goals.

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

Regulatory Features of All Coastal and Inland Ecological Restoration Limited Projects

(a) May result in the temporary or permanent loss of/or conversion of Resource Area: An Ecological Restoration Limited Project that meets the requirements of 310 CMR 10.24(8) may result in the temporary or permanent loss of Resource Areas and/or the conversion of one Resource Area to another when such loss is necessary to the achievement of the project's ecological restoration goals.

(b) Exemption from wildlife habitat evaluation: A NOI for an Ecological Restoration Limited Project that meets the minimum requirements for Ecological Restoration Projects and for a MassDEP Combined Application outlined in 310 CMR 10.12(1) and (2) is exempt from providing a wildlife habitat evaluation (310 CMR 10.60).

Note:
Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

(c) The following are considerations for applicants filing an Ecological Restoration Limited Project NOI and for the issuing authority approving a project as an Ecological Restoration Limited Project:

- ■ The condition of existing and historic Resource Areas proposed for restoration.
- ■ Evidence of the extent and severity of the impairment(s) that reduce the capacity of the Resource Areas to protect and sustain the interests identified in M.G.L. c. 131, § 40.
- ■ The magnitude and significance of the benefits of the Ecological Restoration Project in improving the capacity of the affected Resource Areas to protect and sustain the other interests identified in M.G.L. c. 131, § 40.
- ■ The magnitude and significance of the impacts of the Ecological Restoration Project on existing Resource Areas that may be modified, converted and/or lost and the interests for which said Resource Areas are presumed significant in 310 CMR 10.00, and the extent to which the project will:
  a. avoid adverse impacts to Resource Areas and the interests identified in M.G.L. c. 131, § 40, that can be avoided without impeding the achievement of the project's ecological restoration goals.
  b. minimize adverse impacts to Resource Areas and the interests identified in M.G.L. c. 131, § 40, that are necessary to the achievement of the project's ecological restoration goals.
  c. utilize best management practices such as erosion and siltation controls and proper construction sequencing to avoid and minimize adverse construction impacts to resource areas and the interests identified in M.G.L. c. 131, § 40.

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WPA Form 3 – Notice of Intent
Appendix A: Ecological Restoration Limited Project Checklists

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File Number

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Eligibility Criteria - Coastal Ecological Restoration Limited Projects (310 CMR 10.24(8))

Complete this Eligibility Criteria Checklist ***before*** filling out a Notice of Intent Application to determine if your project qualifies as a Coastal Ecological Restoration Limited Project. (310 CMR 10.24(8)) Sign the Eligibility Certification at the end of Appendix A, and attach the checklist with supporting documentation and the Eligibility Certification to your Notice of Intent Application.

General Eligibility Criteria for All Coastal Ecological Restoration Limited Projects

Notwithstanding the requirements of 310 CMR 10.25 through 10.35, 310 CMR 10.54 through 10.58, and the Wildlife Habitat evaluations in 310 CMR 10.60, the Issuing Authority may issue an Order of Conditions permitting an Ecological Restoration Project listed in 310 CMR 10.24(8)(e) as an Ecological Restoration Limited Project and impose such conditions as will contribute to the interests identified in the WPA M.G.L. provided that the project meets all the requirements in 310 CMR 10.24 (8).

☐ The project is an Ecological Restoration Project as defined in 310 CMR 10.04 and is a project type listed below [310 CMR 10.24(8)(e)].

☐ Tidal Restoration.

☐ Shellfish Habitat Restoration.

☐ Other Ecological Restoration Limited Project Type.

☐ The project will further at least one of the WPA (M.G.L. c. 131, § 40) interests identified below.

- ☐ Protection of public or private water supply.
- ☐ Protection of ground water supply.
- ☐ Flood control.
- ☐ Storm damage prevention.
- ☐ Prevention of pollution.
- ☐ Protection of land containing shellfish.
- ☐ Protection of fisheries.
- ☐ Protection of wildlife habitat.

☐ If the project will impact an area located within estimated habitat which is indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetlands, a NHESP preliminary written determination is attached to the NOI submittal that the project will not have any adverse long-term and short-term effects on specified habitat sites of Rare Species or the project will be carried out in accordance with an approved NHESP habitat management plan.

Eligibility Criteria - Coastal Ecological Restoration Limited Projects (310 CMR 10.24(8)) (Cont.)

General Eligibility Criteria for All Coastal Ecological Restoration Limited Projects (cont.)

☐ If the project is located in a Coastal Dune or Barrier Beach, the project avoids and minimizes armoring of the Coastal Dune or Barrier Beach to the maximum extent practicable.

☐ The project complies with all applicable provisions of 310 CMR 10.24(1) through (6) and 310 CMR 10.24(9) and (10).

Additional Eligibility Criteria for Specific Coastal Ecological Restoration Limited Project Types

These additional criteria must be met to qualify as an Ecological Restoration Limited Project to ensure that the restoration and improvement of the natural capacity of a Resource Area to protect and sustain the interests identified in the WPA is **necessary** to achieve the project's ecological restoration goals.

☐ This Ecological Restoration Limited Project application meets the eligibility criteria for Ecological Restoration Limited Project [310 CMR 10.24(8)(a) through (d) and as proposed, furthers at least one of the WPA interests is for the project type identified below.

☐ **Tidal Restoration Projects**

☐ A project to restore tidal flow that will not significantly increase flooding or storm damage impacts to the built environment, including without limitation, buildings, wells, septic systems, roads or other man-made structures or infrastructure.

☐ **Shellfish Habitat Restoration Projects**

☐ The project has received a Special Projects Permit from the Division of Marine Fisheries or, if a municipality, has received a shellfish propagation permit.

☐ The project is made of cultch (e.g., shellfish shells from oyster, surf or ocean clam) or is a structure manufactured specifically for shellfish enhancement (e.g., reef blocks, reef balls, racks, floats, rafts, suspended gear).

☐ **Other Ecological Restoration Projects** that meet the criteria set forth in 310 CMR 10.24(8)(a) through (d).

☐ Restoration, enhancement, or management of Rare Species habitat.

☐ Restoration of hydrologic and habitat connectivity.

☐ Removal of aquatic nuisance vegetation to impede eutrophication.

☐ Thinning or planting of vegetation to improve habitat value.

☐ Fill removal and re-grading.

☐ Riparian corridor re-naturalization.

☐ River floodplain re-connection.

Eligibility Criteria - Coastal Ecological Restoration Limited Projects (310 CMR 10.24(8)) (Cont.)

Additional Eligibility Criteria for Specific Coastal Ecological Restoration Limited Project Types

- ☐ In-stream habitat enhancement.
- ☐ Remediation of historic tidal wetland ditching.
- ☐ Eelgrass restoration.
- ☐ Invasive species management.
- ☐ Installation of fish passage structures.
- ☐ Other. Describe: _____

☐ This project involves the construction, repair, replacement or expansion of public or private infrastructure (310 CMR 10.24(9).

- ☐ The NOI attachment labeled _____ is an operation and maintenance plan to ensure that the infrastructure will continue to function as designed.
- ☐ The operation and maintenance plan will be implemented as a continuing condition in the Order of Conditions and the Certificate of Compliance.
- ☐ This project proposes to replace an existing stream crossing (310 CMR 10.24(10). The crossing complies with the Massachusetts Stream Crossing Standards to the maximum extent practicable with details provided in the NOI. The crossing type:
  - ☐ Replaces an existing non-tidal crossing that is part of an Anadromous/Catadromous Fish Run (310 CMR 10.35)
  - ☐ Replaces an existing tidal crossing that restricts tidal flow. The tidal restriction will be eliminated to the maximum extent practicable.
- ☐ At a minimum, in evaluating the potential to comply with the standards to the maximum extent practicable the following criteria have been consider site constraints in meeting the standard, undesirable effects or risk in meeting the standard, and the environmental benefit of meeting the standard compared to the cost, by evaluating the following:
  - ☐ The potential for downstream flooding;
  - ☐ Upstream and downstream habitat (in-stream habitat, wetlands);
  - ☐ Potential for erosion and head-cutting;
  - ☐ Stream stability;
  - ☐ Habitat fragmentation caused by the crossing;
  - ☐ The amount of stream mileage made accessible by the improvements;
  - ☐ Storm flow conveyance;

Eligibility Criteria - Coastal Ecological Restoration Limited Projects (310 CMR 10.24(8)) (Cont.)

Additional Eligibility Criteria for Specific Coastal Ecological Restoration Limited Project Types

- ☐ Engineering design constraints specific to the crossing;
- ☐ Hydrologic constraints specific to the crossing;
- ☐ Impacts to wetlands that would occur by improving the crossing;
- ☐ Potential to affect property and infrastructure; and
- ☐ Cost of replacement.

Eligibility Criteria - Inland Ecological Restoration Limited Project (310 CMR 10.53(4))

Complete this Eligibility Criteria Checklist ***before*** filling out a Notice of Intent Application to determine if your project qualifies as an Inland Ecological Restoration Limited Project. (310 CMR 10.53(4)) Sign the Eligibility Certification at the end of Appendix A, and attach the checklist with supporting documentation and the Eligibility Certification to your Notice of Intent Application.

General Eligibility Criteria for All Inland Ecological Restoration Limited Projects

Notwithstanding the requirements of any other provision of 310 CMR 10.25 through 10.35, 310 CMR 10.54 through 10.58, and 310 CMR 10.60, the Issuing Authority may issue an Order of Conditions permitting an Ecological Restoration Project listed in 310 CMR 10.53(4)(e) as an Ecological Restoration Limited Project and impose such conditions as will contribute to the interests identified in M.G.L. c. 131, § 40, provided that:

- ■ The project is an Ecological Restoration Project as defined in 310 CMR 10.04 and is a project type listed below [310 CMR 10.53(4)(e)].
  - ☐ Dam Removal
  - ☐ Freshwater Stream Crossing Repair and Replacement
  - ☐ Stream Daylighting
  - ☐ Tidal Restoration
  - ☐ Rare Species Habitat Restoration
  - ☐ Restoring Fish Passageways
  - ■ Other (describe project type): Aquatic Vegetation Management

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Eligibility Criteria - Inland Ecological Restoration Limited Project (310 CMR 10.53(4)) (cont.)

General Eligibility Criteria for All Inland Ecological Restoration Limited Projects

☒ The project will further at least one of the WPA (M.G.L. c. 131, § 40) interests identified below.

- ☐ Protection of public or private water supply
- ☐ Protection of ground water supply
- ☐ Flood control
- ☐ Storm damage prevention
- ☐ Prevention of pollution
- ☐ Protection of land containing shellfish
- ☒ Protection of fisheries
- ☒ Protection of wildlife habitat

☐ If the project will impact an area located within estimated habitat which is indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetlands, a NHESP preliminary written determination is attached to the NOI submittal that the project will have no adverse long-term and short-term effects on specified habitat sites of Rare Species or the project will be carried out in accordance with an approved NHESP habitat management plan.

☒ The project will be carried out in accordance with any time of year restrictions or other conditions recommended by the Division of Marine Fisheries for coastal waters and the Division of Fisheries and Wildlife in accordance with 310 CMR 10.11(3).

☐ If the project involves the dredging of 100 cubic yards of sediment or more or dredging of any amount in an Outstanding Resource Water, a Water Quality Certification has been applied for or obtained.

☐ The project complies with all applicable provisions of 310 CMR 10.53(1), (2), (7), and (8).

Eligibility Criteria - Inland Ecological Restoration Limited Project (310 CMR 10.53(4)) (cont.)

Additional Eligibility Criteria for Specific Inland Ecological Restoration Limited Project Types

These additional criteria must be met to qualify as an Ecological Restoration Limited Project to ensure that the restoration and improvement of the natural capacity of a Resource Area to protect and sustain the interests identified in the WPA is **necessary** to achieve the project's ecological restoration goals.

☒ This project application meets the eligibility criteria for Ecological Restoration Limited Project in accordance with [310 CMR 10.53(4)(a) through (d) and as proposed, furthers at least one of the WPA interests is for the project type identified below:

☐ **Dam Removal**

☐ Project is consistent with MassDEP's 2007 Dam Removal Guidance.

☐ **Freshwater Stream Crossing Repair and Replacement**. The project as proposed and the NOI describes how:

☐ Meeting the eligibility criteria set forth in 310 CMR 10.13 would result in significant stream instability or flooding hazard that cannot otherwise be mitigated, and site constraints make it impossible to meet said criteria.

☐ The project design ensures that the stability of the bank is NOT impaired.

☐ To the maximum extent practicable, the project provides for the restoration of the stream upstream and downstream of the structure as needed to restore stream continuity and eliminate barriers to aquatic organism movement.

☐ The project complies with the requirements of 310 CMR 10.53(7) and (8).

☐ **Stream Daylighting Projects**

☐ The project meets the eligibility criteria for Ecological Restoration Limited Project [310 CMR 10.53(4)(a) through (d)] and as proposed the NOI describes how the proposed project meets to the maximum extent practicable, consistent with the project's ecological restoration goals, all the performance standards for Bank and Land Under Water Bodies and Waterways.

☐ The project meets the requirements of 310 CMR 10.12(1) and (2) and a wildlife habitat evaluation is not included in the NOI.

☐ **Tidal Restoration Project**

☐ Restores tidal flow.

☐ the project, including any proposed flood mitigation measures, will not significantly increase flooding or storm damage to the built environment, including without limitation, buildings, wells, septic systems, roads or other man-made structures or infrastructure.

Eligibility Criteria - Inland Ecological Restoration Limited Project (310 CMR 10.53(4)) (cont.)

- ☒ **Other Ecological Restoration Projects** that meet the criteria set forth in 310 CMR 10.53 (4) (a) through (d).
  - ☐ Restoration, enhancement, or management of Rare Species habitat.
  - ☐ Restoration of hydrologic and habitat connectivity.
  - ☒ Removal of aquatic nuisance vegetation to impede eutrophication.
  - ☒ Thinning or planting of vegetation to improve habitat value.
  - ☐ Riparian corridor re-naturalization.
  - ☐ River floodplain re-connection.
  - ☐ In-stream habitat enhancement.
  - ☐ Fill removal and re-grading.
  - ☐ Flow restoration.
  - ☐ Installation of fish passage structures.
  - ☒ Invasive species management.
  - ☐ Other. Describe: _____

- ☐ This project involves the construction, repair, replacement or expansion of public or private infrastructure. (310 CMR 10.53(7))
  - ☐ The NOI attachment labeled _____ is an operation and maintenance plan to ensure that the infrastructure will continue to function as designed.
  - ☐ The operation and maintenance plan will be implemented as a continuing condition in the Order of Conditions and the Certificate of Compliance.

- ☐ This project replaces an existing stream crossing (310 CMR 10.53(8)). The crossing type:
  - ☐ Replaces an existing non-tidal crossing designed to comply with the Massachusetts Stream Crossing Standards to the maximum extent practicable with details provided in the NOI.
  - ☐ Replaces an existing tidal crossing that restricts tidal flow. The tidal restriction will be eliminated to the maximum extent practicable.

Eligibility Criteria - Inland Ecological Restoration Limited Project (310 CMR 10.53(4)) (cont.)

☐ At a minimum, in evaluating the potential to comply with the standards to the maximum extent practicable the following criteria have been consider site constraints in meeting the standard, undesirable effects or risk in meeting the standard, and the environmental benefit of meeting the standard compared to the cost, by evaluating the following:

- ☐ The potential for downstream flooding;
- ☐ Upstream and downstream habitat (in-stream habitat, wetlands);
- ☐ Potential for erosion and head-cutting;
- ☐ Stream stability;
- ☐ Habitat fragmentation caused by the crossing;
- ☐ The amount of stream mileage made accessible by the improvements;
- ☐ Storm flow conveyance;
- ☐ Engineering design constraints specific to the crossing;
- ☐ Hydrologic constraints specific to the crossing;
- ☐ Impacts to wetlands that would occur by improving the crossing;
- ☐ Potential to affect property and infrastructure; and
- ☐ Cost of replacement.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

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Required Actions (310 CMR 10.11)

Complete the Required Actions before submitting a Notice of Intent Application for an Ecological Restoration Project and submit a completed copy of this Checklist with the Notice of Intent.

■ **Massachusetts Environmental Policy Act (MEPA) / Environmental Monitor**
http://www.mass.gov/eea/agencies/mepa/submitting-notices-to-the-environmental-monitor.html

For Ecological Restoration Limited Projects, there are no changes to MEPA requirements.

■ Submit written notification at least 14 days prior to the filing of a Notice of Intent (NOI) to the Environmental Monitor for publication. A copy of the written notification is attached and provides at minimum:

- ■ A brief description of the proposed project.
- ■ The anticipated NOI submission date to the conservation commission.
- ■ The name and address of the conservation commission that will review the NOI.
- ■ Specific details as to where copies of the NOI may be examined or acquired and where to obtain the date, time, and location of the public hearing.

☐ **Massachusetts Endangered Species Act (MESA) /Wetlands Protection Act Review**

☐ Preliminary Massachusetts Endangered Species Act Review from the Natural Heritage and Endangered Species Program (NHESP) has been met and the written determination is attached.

☐ Supplemental Information for Endangered Species Review has been submitted.

1. ☐ Percentage/acreage of property to be altered:
   a. Within Wetland Resource Area _____ Percentage/acreage
   b. Outside Wetland Resource Area _____ Percentage/acreage
2. ☐ Assessor's Map or right-of-way plan of site
3. ☐ Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work.
4. ☐ Project description (including description of impacts outside of wetland resource area & buffer zone)
5. ☐ Photographs representative of the site
6. ☐ MESA filing fee (fee information available at http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_fee_schedule.htm)

Required Actions (310 CMR 10.11) (cont.)

Make check payable to "Commonwealth of Massachusetts - NHESP" and mail to NHESP:

Natural Heritage & Endangered Species Program
MA Division of Fisheries & Wildlife
1 Rabbit Hill Road
Westborough, MA 01581

7. Projects altering 10 or more acres of land, also submit:

   a. ☐ Vegetation cover type map of site

   b. ☐ Project plans showing Priority & Estimated Habitat boundaries

OR Check One of the Following:

1. ☐ Project is exempt from MESA review.

Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/mass-endangered-species-act-mesa/; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59 – see C4 below)

2. ☐ Separate MESA review ongoing.

a. NHESP Tracking # _____ b. Date submitted to NHESP _____

3. ☐ Separate MESA review completed. Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

☐ **Estimated Habitat Map of State-Listed Rare Wetlands Wildlife**

If a portion of the proposed project is located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP), complete the portion below. To view habitat maps, see the **Massachusetts Natural Heritage Atlas** or view the maps electronically at: http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review

☐ A preliminary written determination from Natural Heritage and Endangered Species Program (NHESP) must be obtained indicating that:

☐ Project will NOT have long- or short-term adverse effect on the actual Resource Area located within estimated habitat indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetlands Wildlife published by NHESP.

☐ Project will have long- or short-term adverse effect on the actual Resource Area located within estimated habitat indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetlands Wildlife published by NHESP. A copy of NHESP's written preliminary determination in accordance with 310 CMR 10.11(2) is attached. This specifies:

☐ Date of the map: _____

Required Actions (310 CMR 10.11) (cont.)

☐ If the Rare Species identified is/are likely to continue to be located on or near the project, and if so, whether the Resource Area to be altered is in fact part of the habitat of the Rare Species.

☐ That if the project alters Resource Area(s) within the habitat of a Rare Species:

☐ The Rare Species is identified;

☐ NHESP's recommended changes or conditions necessary to ensure that the project will have no short or long term adverse effect on the habitat of the local population of the Rare Species is provided; or

☐ An approved NHESP habitat management plan is attached with this Notice of Intent.

Send the request for a preliminary determination to:
Natural Heritage & Endangered Species Program
MA Division of Fisheries & Wildlife
1 Rabbit Hill Road
Westborough, MA 01581

■ **Division of Marine Fisheries**

■ If the project will occur within a coastal waterbody with a restricted Time of Year, [see Appendix B of the Division of Marine Fisheries (DMF) Technical Report TR 47 "Marine Fisheries Time of Year Restrictions (TOYs) for Coastal Alteration Projects" dated April 2011 http://www.nae.usace.army.mil/Portals/74/docs/regulatory/StateGeneralPermits/NEGP/MADMFTR-47.pdf].

☐ Obtain a DMF written determination stating:

☐ The proposed work does NOT require a TOY restriction.

☐ The proposed work requires a TOY restriction. Specific recommended TOY restriction and recommended conditions on the proposed work is attached.

■ If the project may affect a diadromous fish run [re: Division of Marine Fisheries (DMF) Technical Reports TR 15 through 18, dated 2004: http://www.mass.gov/eea/agencies/dfg/dmf/publications/technical.html]

☐ Obtain a DMF written determination stating:

☐ The design specifications and operational plan for the project are compatible with the passage requirements of the fish run.

☐ The design specifications and operational plan for the project are not compatible with the passage requirements of the fish run.

Required Actions (310 CMR 10.11) (cont.)

Send the request for a written or electronic determination to:

South Shore – Cohasset to Rhode Island border, and the Cape & Islands:
Division of Marine Fisheries –
South Coast Field Station
Attn: Environmental Reviewer
836 South Rodney French Blvd.
New Bedford, MA 02744
Email: DMF.EnvReview-South@state.ma.us

North Shore – Hull to New Hampshire border:
Division of Marine Fisheries –
North Shore Field Station
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930
Email: DMF.EnvReview-North@state.ma.us

☐ **Division of Fisheries and Wildlife –** http://www.mass.gov/eea/agencies/dfg/dfw/

☐ Projects that involve silt-generating, in-water work that will impact a non-tidal perennial river or stream and the in-water work will not occur between May 1 and August 30.

☐ Obtain a written determination from the Division of Fisheries and Wildlife (DFW) as to whether the proposed work requires a TOY restriction.

☐ The proposed work does NOT require a TOY restriction.

☐ The proposed work requires a TOY restriction. The DFW determination with TOY restriction and other conditions is attached.

☐ **MassDEP Water Quality Certification**

☐ Project involves dredging of 100 cubic yards or more in a Resource Area or dredging of any amount in an Outstanding Resource Water (ORW). A copy and proof of the MassDEP Water Quality Certification pursuant to 314 CMR 9.00 is attached to the NOI.

☐ This project is a Combined Permit Application for 401 Dredging and Restoration (BRP WW 26).

☐ **MassDEP Wetlands Restriction Order**

Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?

☐ Yes ☐ No

☐ **Department of Conservation and Recreation**

Office of Dam Safety

☐ For Dam Removal Projects, obtain a written determination from the Department of Conservation and Recreation Office of Dam Safety that the dam is not subject to the jurisdiction of the Office under 302 CMR 10.00, a written determination that the dam removal does not require a permit under 302 CMR 10.00 or a permit authorizing the dam removal in accordance with 302 CMR 10.00 has been issued.

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Required Actions (310 CMR 10.11) (cont.)

Areas of Critical Environmental Concern (ACECs)

Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

☐ Yes ■ No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations).

Name of ACEC

Minimum Required Documents (310 CMR 10.12)

Complete the Required Documents Checklist below and provide supporting materials before submitting a Notice of Intent Application for an Ecological Restoration Project.

■ This Notice of Intent meets all applicable requirements outlined in for Ecological Restoration Projects in 310 CMR 10.12. Use the checklist below to insure that all documentation is included with the NOI.

At a minimum, a Notice of Intent for an Ecological Restoration Project shall include the following:

■ Description of the project's ecological restoration goals;

■ The location of the Ecological Restoration Project;

☐ Description of the construction sequence for completing the project;

☐ A map of the Areas Subject to Protection Under M.G.L. c. 131, § 40, that will be temporarily or permanently altered by the project or include habitat for Rare Species, Habitat of Potential Regional and Statewide Importance, eel grass beds, or Shellfish Suitability Areas.

☐ The method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.) is attached with documentation methodology.

☐ List the titles and dates for all plans and other materials submitted with this NOI.

Project Description and Attachments
a. Plan Title

SOLitude Lake management
b. Prepared by

c. Signed and Stamped by

d. Final Revision Date

e. Scale

f. Additional Plan or Document Title

g. Date

☐ If there is more than one property owner, attach a list of these property owners not listed on this form.

■ Attach NOI Wetland Fee Transmittal Form.

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Minimum Required Documents (310 CMR 10.12)

- ☐ An evaluation of any flood impacts that may affect the built environment, including without limitation, buildings, wells, septic systems, roads or other man-made structures or infrastructure as well as any proposed flood impact mitigation measures;
- ■ A plan for invasive species prevention and control;
- ☐ The Natural Heritage and Endangered Species Program written determination in accordance with 310 CMR 10.11(2), if needed;
- ■ Any Time of Year restrictions and/or other conditions recommended by the Division of Marine Fisheries or the Division of Fisheries and Wildlife in accordance with 310 CMR 10.11(3), (4), (5), if needed;
- ■ Proof that notice was published in the Environmental Monitor as required by 310 CMR 10.11(1;
- ■ A certification by the applicant under the penalties of perjury that the project meets the eligibility criteria set forth in 310 CMR 10.13;
- ☐ If the Ecological Restoration Project involves the construction, repair, replacement or expansion of infrastructure, an operation and maintenance plan to ensure that the infrastructure will continue to function as designed;
- ☐ If the project involves dredging of 100 cubic yards or more or dredging of any amount in an Outstanding Resource Water, a Water Quality Certification issued by the Department pursuant to 314 CMR 9.00;
- ☐ If the Ecological Restoration Project involves work on a stream crossing, information sufficient to make the showing required by 310 CMR 10.24(10) for work in a coastal resource area and 310 CMR 10.53(8) for work in an inland resource area; and
- ☐ If the Ecological Restoration Project involves work on a stream crossing, baseline photo-points that capture longitudinal views of the crossing inlet, the crossing outlet and the upstream and downstream channel beds during low flow conditions. The latitude and longitude coordinates of the photo-points shall be included in the baseline data.
- ☐ This project is subject to provisions of the MassDEP Stormwater Management Standards. A copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) is attached.
- ■ Provide information as the whether the project has the potential to impact private water supply wells including agricultural or aquacultural wells or surface water withdrawal points.

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Certification that the Ecological Restoration Project Meets the Eligibility Criteria

I hereby certify under penalties of perjury that the Ecological Restoration Project Notice of Intent application does not meet the Eligibility criteria for an Ecological Restoration Order of Conditions set forth in 310 CMR 10.13, but does meet the Eligibility Criteria for a Ecological Restoration Limited Project set forth in 10.24(8) or 10.53(4) whichever is applicable. I certify that I am familiar with the information contained in the application, and that to the best of my knowledge and belief such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities.

Keith Gazaille

Signature of Applicant or Authorized Agent

Keith Gazaille

Printed Name of Applicant or Authorized Agent

4/14/2022

Date

The certification must be signed by the applicant; however, it may be signed by a duly authorized agent (named in Item 2) if this form is accompanied by a statement by the applicant designating the agent and agreeing to furnish upon request, supplemental information in support of the application.

ATTACHMENT A

Abutter Notification

To: The Environmental Monitor

From: SŌLitude Lake Management

Date: 4/14/2022

Re: Notification of filing an NOI for Charles River in Newton, Waltham, Watertown, and Weston

Anticipated date of submission: 5/3/2022

The proposed project is seeking approval to initiate an Aquatic Management Program for the Charles River located in Newton, Waltham, Watertown, and Weston, MA. USEPA/State registered herbicides will be applied/used to manage invasive aquatic vegetation to protect the interests of the Wetlands Protection Act by impeding eutrophication and improving habitat value.

Reviewing Conservation Commission(s):

Newton Conservation Commission
Planning and Development Dept.
1000 Commonwealth Ave
Newton, MA 02459

Copies of the NOI may be examined or acquired from the Conservation Commission, or by contacting the applicant's representative, SŌLitude Lake Management, at info@solitudelake.com, or 508-865-1000, Monday - Friday between 9AM and 4PM.

See Conservation Commission website for the meeting schedule for exact dates and agendas.

AFFIDAVIT OF SERVICE

Under the Massachusetts Wetlands Protection Act I, Mary Nickerson, hereby certify under the pains and penalty of perjury that on _____, 2022, I mailed a Notification to Abutters in compliance with the second paragraph of the Massachusetts General Laws, Chapter 131, s.40, and the DEP Guide to Abutter Notification dated April 8, 1994, in connection with the following matter:

> A Notice of Intent was filed under the Massachusetts Wetlands Protection Act by SŌLitude Lake Management with the Newton Conservation Commission on _____, 2022, for an Aquatic Management Program at the Charles River in Newton, MA.

This form of the notification, and a list of the abutters to whom it was given and their addresses, are attached to this Affidavit of Service.

_____ _____

Name Date

SŌLitude Lake Management
590 Lake Street
Shrewsbury, MA 01545

Notification to Abutters Under the

Massachusetts Wetlands Protection Act

Chapter 131, Section 40

In accordance with the 2nd paragraph of Massachusetts General Laws Chapter 131, Section 40, you are hereby notified of the following:

A. The name of the applicant is: DCR Lakes and Ponds % Kara Sliwoski

B. The Applicant has filed a Notice of Intent with the Newton Conservation Commission, seeking to work within an Area Subject to Protection under the Massachusetts Wetlands Protection Act (General Laws Chapter 131, Section 40).

Description of Project: An integrated Aquatic Management Program at the Charles River in Newton, Waltham, Watertown, and Weston to monitor, assess and implement measures for control of non-native/nuisance aquatic vegetation and algae growth, specifically with the use of USEPA/State registered aquatic herbicides..

C. The location where the activity is proposed is at the Charles River in Newton, Waltham, Watertown, and Weston**.**

D. Copies of the Notice of Intent may be examined at the Newton Conservation Commission office during their normal business hours. For more information, call the Conservation Commission at 617-796-1000. Copies of the Notice of Intent are available (for a fee) from the applicant's representative (SOLitude Lake Management) by calling (508) 865-1000 between the hours of 8 AM and 4 PM (Monday through Friday).

E. Questions regarding this Notice of Intent may be directed to the applicant's representative (SOLitude Lake Management) by calling (508) 865-1000 between the hours of 8 AM and 4 PM (Monday through Friday)

F. The Newton Conservation Commission will hold a public hearing on 05/19/2022 at or after 7:00 pm on Zoom

NOTE: Notice of this public hearing, including date, time and place:

1) Will be published at least five (5) days in advance in the local newspaper

2) Will be posted in the City Hall not less than forty-eight (48) hours in advance of the public hearing.

NOTE: You may also contact your local Conservation Commission or the nearest Department of Environmental Protection Regional Office for more information about this application or the Wetlands Protection Act. To contact DEP, call the Northeast Regional Office at (978) 694-3200.

SŌLITUDE
LAKE MANAGEMENT

abutters_id_field	abutters_owner1	abutters_owner2	abutters_address	abutters_address2	abutters_town	abutters_state	abutters_zip	abutters_bookpage	abutters_location
11-001-0001	PA RAND LLC		137-139 CALIFORNIA ST		NEWTON	MA	02458	69359/27	137-139 CALIFORNIA ST
11-001-0001-A	MAZZI RLTY LLC		34 PEREGRINE RD		NEWTON	MA	02459	73187/243	141-149 CALIFORNIA ST
11-001-0001-C	RIVERDALE REAL ESTATE CORP		44 RIVERDALE AVE		NEWTON	MA	02458	30395/15	44 RIVERDALE AVE
11-001-0001-D	GOSSELS WERNER F & ELAINE F TRS		17 BENNETT RD		WAYLAND	MA	01778	21532/376	151 CALIFORNIA ST
11-001-0003	RIVERDALE REAL ESTATE CORP		44 RIVERDALE AVE		NEWTON	MA	02458	30395/13	36 RIVERDALE AVE
11-001-0004	28-30 RIVERDALE AVE LLC		30 RIVERDALE AVE STE 3		NEWTON	MA	02458	64554/509	30 RIVERDALE AVE
11-001-0005	COMMONWEALTH OF MASSACHUSETTS	MDC-PARK COMM	20 SOMERSET ST		BOSTON	MA	02108	000000/0000	RIVERDALE AVE
11-002-0001	FRANCHI ROBERT A & JOANNE F		37 RIVERDALE AVE		NEWTON	MA	02458	21092/327	37 RIVERDALE AVE
11-002-0002	41-43 RIVERDALE AVE LLC		91 SPRING VALLEY RD		BELMONT	MA	02478	68859/56	41-43 RIVERDALE AVE
11-002-0006	DONATO JOAN M	DONATO JOSEPH R	40 LOS ANGELES ST		NEWTON	MA	02458	47259/595	40 LOS ANGELES ST
11-002-0007	THE RESIDENCES ON THE CHARLES LLP		1601 TRAPELO RD STE 174		WALTHAM	MA	02451	75420/312	2-4 LOS ANGELES ST
11-002-0008	MIDLAND NEWTON SERIES LLC	STASIOWSKI REALTY SERIES LLC	P O BOX 95190		NONANTUM	MA	02495	45507/448	8 MIDLAND AVE
11-002-0010	COMMONWEALTH OF MASSACHUSETTS	MDC-PARK COMM	20 SOMERSET ST		BOSTON	MA	02108	000000/0000	RIVERDALE AVE
11-004-0005	DONATO P A & A J & M J	DONATO J M & J R T/C	25-29 LOS ANGELES ST		NEWTON	MA	02458	70963/314	25-29 LOS ANGELES ST
11-004-0006	MCDONALDS CORP 020/0061		10 JEAN AVE U2		CHELMSFORD	MA	01824	11852/716	197 CALIFORNIA ST
11-004-0007	ZAGORIANAKOS WILLIAM TR	NUTMEG REALTY TRUST	181 DUDLEY RD		NEWTON	MA	02459	27387/221	213 CALIFORNIA ST
11-004-0008	ZAGORIANAKOS WILLIAM TR	NUTMEG REALTY TRUST	181 DUDLEY RD		NEWTON	MA	02459	27387/221	217 CALIFORNIA ST
11-004-0010	GIGI PROPERTIES LLC		225 CALIFORNIA ST		NEWTON	MA	02458	48631/95	227 CALIFORNIA ST
11-004-0013	CITY OF NEWTON	PLAYGROUND DEPARTMENT	1000 COMM AVE		NEWTON	MA	02459	000000/0000	229 R CALIFORNIA ST
11-004-0014	CONTRERAS SAMUEL & ALBA		235R CALIFORNIA ST		NEWTON	MA	02458	20003/445	233 CALIFORNIA ST
11-004-0015	JASSETT ROBERT G	C/O ABRAMO LOIS	59 GROVE ST		NORFOLK	MA	02056	000000/0000	235 CALIFORNIA ST
11-004-0016	WU JUSTIN	LEE DANA	241-243 CALIFORNIA ST #241		NEWTON	MA	02458	75951/569	243 CALIFORNIA ST #241
11-004-0016-A	SHANKARAN GIRISH		241-243 CALIFORNIA ST #243		NEWTON	MA	02458	75755/580	243 CALIFORNIA ST #243
11-004-0016-MAIN	243 CALIFORNIA ST MASTER DEED		243 CALIFORNIA ST		NEWTON	MA	02458	75597/416	243 CALIFORNIA ST
11-004-0020	SERA DOMINIC A & JOSEPHINE A TRS	46 48 RUSTIC ST REALTY TRUST	36 RUSTIC ST		NEWTON	MA	02458	44770/540	48 RUSTIC ST
11-004-0021	HEBBAR VIKRAM	HATWAR SUMANA	42 RUSTIC ST 42-1		NEWTON	MA	02458	62326/529	42-44 RUSTIC ST 42-1
11-004-0021-A	ETTINGER SHERRI L		42 RUSTIC ST 44-1		NEWTON	MA	02458	60732/521	42-44 RUSTIC ST 44-1
11-004-0021-MAIN	42-44 RUSTIC ST MASTER DEED							36573/536	42-44 RUSTIC ST
11-004-0022	SERA DOMINIC A TR	36 RUSTIC STREET REALTY TRUST	36 RUSTIC ST		NEWTON	MA	02458	68653/598	36 RUSTIC ST
11-004-0023	SERA DOMINIC A & JOSEPHINE A TRS	30 32 RUSTIC STREET REALTY TRUST	36 RUSTIC ST		NEWTON	MA	02458	44776/544	30-32 RUSTIC ST
11-004-0024	SERA DOMINIC A & JOSEPHINE A TRS	14-20 RUSTIC STREET RLTY TRUST	36 RUSTIC ST		NEWTON	MA	02458	45416/186	14 RUSTIC ST 14
11-004-0024-A	SERA DOMINIC A & JOSEPHINE A TRS	14-16 RUSTIC ST REALTY TRUST	36 RUSTIC ST		NEWTON	MA	02458	45790/142	16 RUSTIC ST 16
11-004-0024-B	SERA DOMINIC A TR	46-48 RUSTIC STREET REALTY TRUST	36 RUSTIC ST		NEWTON	MA	02458	68654/5	18 RUSTIC ST 18
11-004-0024-C	SERA DOMINIC A & JOSEPHINE A TRS	14-20 RUSTIC ST REALTY TRUST	36 RUSTIC ST		NEWTON	MA	02458	49445/179	20 RUSTIC ST 20
11-004-0024-D	WABAN MANAGEMENT CORP TR	WINDSOR TRUST	P O BOX 610-182		NEWTON HGLDS	MA	02461	45416/147	22 RUSTIC ST 22
11-004-0024-E	WABAN MANAGEMENT CORP TR	WINDSOR TRUST	P O BOX 610-182		NEWTON HGLDS	MA	02461	45416/147	24 RUSTIC ST 24
11-004-0024-F	WABAN MANAGEMENT CORP TR	WINDSOR TRUST	P O BOX 610182		NEWTON HGLDS	MA	02461	45416/147	26 RUSTIC ST 26
11-004-0024-G	WABAN MANAGEMENT CORP TR	WINDSOR TRUST	89 WORCESTER ST		NATICK	MA	01760	45416/179	28 RUSTIC ST 28
11-004-0024-MAIN	14-28 RUSTIC ST MASTER DEED							14520/334	14-28 RUSTIC ST
11-004-0029	COMMONWEALTH OF MASSACHUSETTS	MDC-PARK COMM	20 SOMERSET ST		BOSTON	MA	02108	11570/694	RIVERDALE AVE
11-005-0001	ROTHSTEIN MICHAEL		11 RUSTIC ST 11		NEWTON	MA	02458	77677/379	11 RUSTIC ST 11
11-005-0001-A	PORFIRIEV SERGEY & ELENA		13 RUSTIC ST		NEWTON	MA	02458	45516/188	13 RUSTIC ST 13
11-005-0001-B	MUKHERJEE RICHA SAGAR		37 LIBERTY AVE		LEXINGTON	MA	02420	56933/483	15 RUSTIC ST 15
11-005-0001-C	WABAN REAL ESTATE CORP TR	17 RUSTIC REALTY TRUST	P O BOX 81276		WELLESLEY	MA	02481	69525/494	17 RUSTIC ST 17
11-005-0001-D	WABAN REAL ESTATE CORP TR	19 RUSTIC REALTY TRUST	P O BOX 81276		WELLESLEY	MA	02481	69525/581	19 RUSTIC ST 19
11-005-0001-E	VALLETTA ALBERT		P O BOX 81276		WELLESLEY	MA	02481	15443/499	21 RUSTIC ST 21
11-005-0001-MAIN	11-21 RUSTIC ST MASTER DEED							14768/67	11-21 RUSTIC ST
11-005-0003	SERA DOMINIC A & JOSEPHINE A TRS	25 RUSTIC STREET REALTY TRUST	36 RUSTIC ST		NEWTON	MA	02458	44776/542	23-25 RUSTIC ST
11-005-0004	ASH TYLER D & ERIN M		39 RUSTIC ST 1		NEWTON	MA	02458	75639/45	39 RUSTIC ST #1
11-005-0004-A	KANASSERIL MELVIN CHACKO	PALACKAN MEERA GEORGE	39 RUSTIC ST 2		NEWTON	MA	02458	67820/6	39 RUSTIC ST #2
11-005-0004-MAIN	39 RUSTIC CONDOMINIUM MASTER DEED		39 RUSTIC ST		NEWTON	MA	02458	67788/89	39 RUSTIC ST
11-005-0005	FLORI ARTHUR & ANTOINETTA		47 RUSTIC ST		NEWTON	MA	02458	18984/484	43-45 RUSTIC ST
11-005-0007	CHAN SHERMAN & YAU SING		265 CALIFORNIA ST		NEWTON	MA	02458	18770/16	265 CALIFORNIA ST
11-005-0008	NONANTUM POST #440 INC	C/O AMERICAN LEGION OF MA	295 CALIFORNIA ST		NEWTON	MA	02458	13954/416	285 CALIFORNIA ST
11-005-0008-A	NONANTUM POST #440 INC	C/O AMERICAN LEGION OF MA	295 CALIFORNIA ST		NEWTON	MA	02458	12087/394	295 CALIFORNIA ST
11-005-0008-B	SERA DOMINIC A & JOSEPHINE A TRS	31 37 RUSTIC STREET REALTY TRUST	36 RUSTIC ST		NEWTON	MA	02458	44776/546	31 RUSTIC ST
11-005-0008-Y	CHAPEL BUSINESS PARTNERS LLC	C/O NONANTUM POST #440 INC	295 CALIFORNIA ST		NEWTON	MA	02458	13954/416	285 CALIFORNIA ST
11-005-0008-Z	NONANTUM POST #440 INC	RE: VERIZON WIRELESS	P O BOX 2549		ADDISON	TX	75001	12087/394	295 CALIFORNIA ST
11-005-0009	DALFONSO RINO V		24 WYOMING RD		NEWTONVILLE	MA	02460	36866/124	299-301 CALIFORNIA ST
11-005-0010	PAOLINI JOSEPH J TR	PAOLINI FAM RLTY TRUST	262 NEVADA ST		NEWTON	MA	02460	64776/60	305-307 CALIFORNIA ST
11-005-0011	IONNIS LOUMBRINIS & DESPINA		311 313 CALIFORNIA ST		NEWTON	MA	02458	38584/479	311-313 CALIFORNIA ST
11-005-0012	PALLADINO ANTHONY JR		315 CALIFORNIA ST		NEWTON	MA	02458	67448/441	315 CALIFORNIA ST
11-005-0013	STRASSMAN JEAN	STRASSMAN FRED P	5230 HAWKESBURY WAY		NAPLES	FL	34119	73319/360	317 CALIFORNIA ST
11-005-0014	REAGAN JEANETTE DARIA	BEUCHIER OLIVER	150 CHESTNUT AVE		JAMAICA PLAIN	MA	02130	46004/206	323 CALIFORNIA ST
11-005-0015	COMMONWEALTH OF MASSACHUSETTS	MDC-PARK COMM	20 SOMERSET ST		BOSTON	MA	02108	000000/0000	331 CALIFORNIA ST
11-005-0016	ZIBLAT ROY	MELTZER TALYA	337 CALIFORNIA ST		NEWTON	MA	02458	68661/575	337 CALIFORNIA ST
11-005-0017	BIANCHI EDWARD P & KAREN S		66 ARCADIA AVE		WALTHAM	MA	02452	19975/7	345 CALIFORNIA ST
11-005-0018	PURCELL JOHN C	SMITH ELAINE A	349 CALIFORNIA ST		NEWTON	MA	02458	73493/168	349 CALIFORNIA ST
11-005-0019	FEROLITO PAUL J JR & CLARISSA		355 CALIFORNIA ST		NEWTON	MA	02458	16620/362	355 CALIFORNIA ST
11-005-0020	PATEL KAUSHIK D TR	MARUTI REALTY TRUST	109 RAFFAELE DR		WALTHAM	MA	02154	44410/312	CALIFORNIA ST
11-005-0021	PATEL KAUSHIK D TR	MARUTI REALTY TRUST	109 RAFFAELE DR		WALTHAM	MA	02154	44410/312	367 CALIFORNIA ST
11-005-0022	COMMONWEALTH OF MASSACHUSETTS	MDC-PARK COMM	20 SOMERSET ST		BOSTON	MA	02108	000000/0000	0 BRIDGE ST
21-001-0002	MEHTA DEVANSHU & SHANU		21 ALBEMARLE RD		NEWTONVILLE	MA	02460	1567/172	21 ALBEMARLE RD
21-001-0003	SANTIAGO JANET A		15 ALBEMARLE RD		NEWTON	MA	02460	1356/143	15 ALBEMARLE RD
21-001-0004	MARINO EDITH TR	LUCIDO MARINO REV TRUST	25 ANTHONY RD		NEWTON	MA	02460	1433/117	25 ANTHONY RD
21-001-0005	LUN SONIA KAN KAN & KWOK CHEUNG		31 ANTHONY RD		NEWTON	MA	02460	1145/143	31 ANTHONY RD
21-001-0006	KALOUSTIAN SYLVIA G		37 ANTHONY RD		NEWTON	MA	02460	1259/50	37 ANTHONY RD
21-001-0012	FARWELL ON THE CHARLES LLC		57 JUNIPER RD		WESTON	MA	02493	73486/42	1 FARWELL CIR
21-001-0012-A	MALLOY PAUL F & SALLY M L/E	MALLOY PAUL F & SALLY M TRS	1 ALBEMARLE RD		NEWTON	MA	02460	36198/353	1 ALBEMARLE RD

abutters_id_field	abutters_owner1	abutters_owner2	abutters_address	abutters_address2	abutters_town	abutters_state	abutters_zip	abutters_bookpage	abutters_location
21-001-0012-B	FARWELL ON THE CHARLES LLC		57 JUNIPER RD		WESTON	MA	02493	73486/42	3 FARWELL CIR
21-001-0012-C	FARWELL ON THE CHARLES LLC		57 JUNIPER RD		WESTON	MA	02493	73486/42	5 FARWELL CIR
21-001-0012-D	FARWELL ON THE CHARLES LLC		57 JUNIPER RD		WESTON	MA	02493	73486/42	7 FARWELL CIR
21-001-0012-E	FARWELL ON THE CHARLES LLC		57 JUNIPER RD		WESTON	MA	02493	73486/42	9 FARWELL CIR
21-001-0012-F	FARWELL ON THE CHARLES LLC		57 JUNIPER RD		WESTON	MA	02493	73486/42	11 FARWELL CIR
21-001-0013	KMKC LLC		201 BEECH ST		ROSLINDALE	MA	02131	70108/537	50 FARWELL ST
21-001-0014	MCDONALD BRIAN TR	CONTINUOUS IMP RLTY TRST	462 MAIN ST		WATERTOWN	MA	02472	66159/457	44-46 FARWELL ST
21-001-0015	PAOLINI ANGELO D & PATRICIA L	PAOLINI LOUISE P TRS	266 NEVADA ST		NEWTONVILLE	MA	02460	31320/85	34 FARWELL ST
21-001-0016	TWO SQUARES LLC		56 REGENT ST		CAMBRIDGE	MA	02140	67062/206	26 FARWELL ST
21-001-0017	QUEEN SCREW & MANUFACTURING INC		49 FARWELL ST		WALTHAM	MA	02453	25034/168	60 FARWELL ST
21-001-0018	QUEEN SCREW & MANUFACTURING INC		49 FARWELL ST		WALTHAM	MA	02453	25034/168	60 R FARWELL ST REAR
21-001-0019	COMMONWEALTH OF MASSACHUSETTS	MDC-PARK COMM	20 SOMERSET ST		BOSTON	MA	02108	000000/0000	34 FARWELL ST REAR
21-002-0001	BEMIS MILL LLC		3 BRIDGE ST STE B100		NEWTON	MA	02458	62504/244	1-3 BRIDGE ST
21-002-0002	BEMIS MILL LLC		3 BRIDGE ST STE B100		NEWTON	MA	02458	62504/244	3 BRIDGE ST
21-002-0003	COMMONWEALTH OF MASSACHUSETTS	MDC-PARK COMM	20 SOMERSET ST		BOSTON	MA	02108	6738/16	439 CALIFORNIA ST REAR
21-002-0004	COMMONWEALTH OF MASSACHUSETTS	MDC-PARK COMM	20 SOMERSET ST		BOSTON	MA	02108	000000/0000	449 CALIFORNIA ST
21-006-0013	OLEARY FRANCIS X	OLEARY BARBARA J TRS	100 BEMIS ST		NEWTON	MA	02460	73549/135	100 BEMIS ST
21-007-0001	PARKER JOHN & MARY E		99 BEMIS ST		NEWTON	MA	02460	49632/592	99 BEMIS ST
21-007-0008	WALLACE DONALD E & JANE F		135 FESSENDEN ST		NEWTONVILLE	MA	02460	15569/258	135 FESSENDEN ST
21-008-0001	SPOSATO ANTHONY	DEVARENNES ANN	136 FESSENDEN ST		NEWTON	MA	02460	65103/457	136 FESSENDEN ST
21-008-0008	PATON ADAM B & LAUREN D		25 VILLAGE RD		NEWTON	MA	02460	22776/138	25 VILLAGE RD
21-009-0001	SALEM H & NICOLAZZO-SALEM P TRS	H SALEM &	24 VILLAGE RD		NEWTON	MA	02460	72248/599	24 VILLAGE RD
21-009-0002	PAGLIA RICHARD L & GAIL M		20 VILLAGE RD		NEWTON	MA	02460	36398/71	20 VILLAGE RD
21-009-0007	MINKIN JULIE O & SCOTT J		22 ALBEMARLE RD		NEWTON	MA	02460	23594/100	22 ALBEMARLE RD
21-009-0008	KELLEY CARL G & PORNJITT		16 ALBEMARLE RD		NEWTON	MA	02460	20724/166	16 ALBEMARLE RD
41-001-0003	COMMONWEALTH OF MASSACHUSETTS	MDC- PARK COMM	20 SOMERSET ST		BOSTON	MA	02108	000000/0000	2500 COMMONWEALTH AVE
41-001-0004	MASSACHUSETTS TURNPIKE AUTHORITY		80 BOYLSTON ST		BOSTON	MA	02116	12751/157	2450 COMMONWEALTH AVE
41-001-0005	COMMONWEALTH OF MASSACHUSETTS	MDC- PARK COMM	20 SOMERSET ST		BOSTON	MA	02108	000000/0000	COMMONWEALTH AVE
41-001-0007	SINGH SAURABH R	MOURIER ALIX J	19 OAKLAND AVE		AUBURNDALE	MA	02466	64022/382	19 OAKLAND AVE
41-001-0008	CALLNAN MICHAEL		25 OAKLAND AVE		AUBURNDALE	MA	02466	13489/473	25 OAKLAND AVE
41-018-0032-A	VENTOURIS NICHOLAS & ANGELINA		2171 COMMONWEALTH AVE		AUBURNDALE	MA	02466	66628/562	2171 COMMONWEALTH AVE
41-018-0033	LYNCH LYDIA	OGRADY PAUL	23 REGINA RD		AUBURNDALE	MA	02466	1563/8	23 REGINA RD
41-018-0034	HOWELL MICHAEL E & LAURA M		17 REGINA RD		AUBURNDALE	MA	02466	1487/135	17 REGINA RD
41-018-0035	CHESBROUGH PAULA E		11 REGINA RD		AUBURNDALE	MA	02466	1193/51	11 REGINA RD
41-018-0037	ALBERTSON JON A & RITA P		48 WARE RD		AUBURNDALE	MA	02466	1011/6	48 WARE RD
41-022-0001	CITY OF NEWTON	PLAYGROUND DEPT	1000 COMMONWEALTH AVE		NEWTON	MA	02459	15084/553	COMMONWEALTH AVE
41-022-0002	AEJAZ EYHAB M	AEJAZ HENNA K	19 ISLINGTON RD		AUBURNDALE	MA	02466	72998/398	19 ISLINGTON RD
41-022-0002-A	SHAH MOHAMMAD S	MALIK SALENA S	15 ISLINGTON RD		AUBURNDALE	MA	02466	73376/181	15 ISLINGTON RD
41-022-0003	LONDONO MARGARITA		27 ISLINGTON RD		AUBURNDALE	MA	02466	54210/157	27 ISLINGTON RD
41-022-0004	DROZ BEVERLY L & THOMAS L		35 ISLINGTON RD		AUBURNDALE	MA	02466	30102/92	35 ISLINGTON RD
41-022-0005	ABERNATHY FREDERICK H & ANNAMARIA		45 ISLINGTON RD		AUBURNDALE	MA	02466	23688/170	45 ISLINGTON RD
41-022-0009	FITZMYER ALEXANDER	NOWAK URSZULA	17 DUFFIELD RD		AUBURNDALE	MA	02466	74019/439	17 DUFFIELD RD
41-022-0010	STRAUSS DAVID	STRAUSS EMILY	21 DUFFIELD RD		AUBURNDALE	MA	02466	72187/189	DUFFIELD RD REAR
41-022-0012	TORRES GABRIEL P	DAVIES COURTNEY L	25 DUFFIELD RD		AUBURNDALE	MA	02466	75317/44	25 DUFFIELD RD
41-022-0013	BAIRD DAVID & SANDRA J S		37 DUFFIELD RD		AUBURNDALE	MA	02466	1517/14	37 DUFFIELD RD
41-023-0002	CITY OF NEWTON		1000 COMM AVE		NEWTON	MA	02459	12106/582	ISLINGTON RD
41-023-0003	COGGINS CLEMENCY C	COGGINS FRANKLIN CHRISTIANA TRS	48 ISLINGTON RD		AUBURNDALE	MA	02466	74995/355	48 ISLINGTON RD
41-023-0014	SINAY ASAF & LIMOR		2235 COMMONWEALTH AVE		AUBURNDALE	MA	02466	69596/505	2235 COMMONWEALTH AVE 2235
41-023-0014-A	PENG BO		2237 COMMONWEALTH AVE 2237		AUBURNDALE	MA	02466	71202/185	2237 COMMONWEALTH AVE 2237
41-023-0014-B	LEYFER VAL & TANYA		2239 COMMONWEALTH AVE 2239		AUBURNDALE	MA	02466	69428/144	2239 COMMONWEALTH AVE 2239
41-023-0014-C	LYNCH JOANNA A TR	JOANNE A LYNCH TRUST	2241 COMMONWEALTH AVE 2241		AUBURNDALE	MA	02466	74922/104	2241 COMMONWEALTH AVE #2241
41-023-0014-D	BERGEN-BARTEL SOLOMON	TAO YOU	2243 COMMONWEALTH AVE 2243		AUBURNDALE	MA	02466	68470/366	2243 COMMONWEALTH AVE 2243
41-023-0014-E	CHOI ANDREW	KWAK CHOI TAE	2245 COMMONWEALTH AVE		AUBURNDALE	MA	02466	69743/174	2245 COMMONWEALTH AVE 2245
41-023-0014-F	GLANTZ PHILIP A	ROBINSON CHERYL A	2247 COMMONWEALTH AVE		AUBURNDALE	MA	02466	19738/137	2247 COMMONWEALTH AVE 2247
41-023-0014-G	PATEL HETALKUMAR DAHYABHAI	PATEL HARDIKKUMAR K	2249 COMMONWEALTH AVE 2249		AUBURNDALE	MA	02466	75296/596	2249 COMMONWEALTH AVE 2249
41-023-0014-H	SPEAR CATHY J		2251 COMMONWEALTH AVE 2251		AUBURNDALE	MA	02466	51448/53	2251 COMMONWEALTH AVE 2251
41-023-0014-I	YEO ALAN TIEN	HUANG JING	2253 COMMONWEALTH AVE		AUBURNDALE	MA	02466	77982/362	2253 COMMONWEALTH AVE 2253
41-023-0014-J	JORFI MEHDI	SALEK-HEYDARI SARMINAZ	2255 COMMONWEALTH AVE 2255		AUBURNDALE	MA	02466	75321/409	2255 COMMONWEALTH AVE 2255
41-023-0014-K	VINOGRADOV DMITRY	VINOGRADOVA ANNA	2257 COMMONWEALTH AVE		AUBURNDALE	MA	02466	29569/131	2257 COMMONWEALTH AVE 2257
41-023-0014-L	DIPIETRO GUY M		2259 COMMONWEALTH AVE		AUBURNDALE	MA	02466	57259/144	2259 COMMONWEALTH AVE 2259
41-023-0014-M	TONG XINGLIN & MA NING		2261 COMMONWEALTH AVE 2261		AUBURNDALE	MA	02466	57232/320	2261 COMMONWEALTH AVE 2261
41-023-0014-MAIN	2235-2271 COMM AVE MASTER DEED							13819/49	2235-2271 COMMONWEALTH AVE
41-023-0014-N	SAHLINS JULIE		2263 COMMONWEALTH AVE		AUBURNDALE	MA	02466	49083/275	2263 COMMONWEALTH AVE 2263
41-023-0014-O	GRINBERG ALEXANDER	GRINBERG POLINA TRS	2265 COMMONWEALTH AVE 2265		AUBURNDALE	MA	02466	57034/240	2265 COMMONWEALTH AVE 2265
41-023-0014-P	SILVER DOROTHY C		2267 COMMONWEALTH AVE		AUBURNDALE	MA	02466	13821/74	2267 COMMONWEALTH AVE 2267
41-023-0014-Q	SUBRAMANIAN SANKAR	SWAMINATHAN UMA	2269 COMMONWEALTH AVE 2269		AUBURNDALE	MA	02466	73142/74	2269 COMMONWEALTH AVE 2269
41-023-0014-R	CHATHAM PROPERTIES LLC		594 MARRETT RD STE 16		LEXINGTON	MA	02421	50423/324	2271 COMMONWEALTH AVE 2271
41-023-0015	HAWK REAL ESTATE GROUP LLC		2285 COMMONWEALTH AVE		AUBURNDALE	MA	02466	49724/121	2285 COMMONWEALTH AVE
41-023-0016	HAWK REAL ESTATE GROUP LLC		2285 COMMONWEALTH AVE		AUBURNDALE	MA	02466	49724/121	112 WOODBINE ST
41-023-0018	CHSP NEWTON LLC		1775 TYSONS BLVD 7TH FLR		MCLEAN	VA	22102	55107/408	2345 COMMONWEALTH AVE
41-023-0018-A	COMMONWEALTH OF MASSACHUSETTS	MDC	20 SOMERSET ST		BOSTON	MA	02108	12712/722	2345 R COMMONWEALTH AVE
41-023-0020	COMMONWEALTH OF MASSACHUSETTS	MDC- PARK COMM	20 SOMERSET ST		BOSTON	MA	02108	000000/0000	COMMONWEALTH AVE
41-023-0021	CITY OF NEWTON		1000 COMM AVE		NEWTON	MA	02459	000000/0000	ISLINGTON RD
41-023-0022	CITY OF NEWTON		1000 COMM AVE		NEWTON	MA	02459	000000/0000	ISLINGTON RD
41-023-0023	CITY OF NEWTON		1000 COMM AVE		NEWTON	MA	02459	000000/0000	ISLINGTON RD
41-023-0024	CITY OF NEWTON		1000 COMM AVE		NEWTON	MA	02459	000000/0000	ISLINGTON RD
41-023-0025	CITY OF NEWTON		1000 COMM AVE		NEWTON	MA	02459	000000/0000	ISLINGTON RD
41-023-0026	CITY OF NEWTON		1000 COMM AVE		NEWTON	MA	02459	000000/0000	ISLINGTON RD
41-023-0027	CITY OF NEWTON		1000 COMM AVE		NEWTON	MA	02459	000000/0000	ISLINGTON RD

abutters_id_field	abutters_owner1	abutters_owner2	abutters_address	abutters_address2	abutters_town	abutters_state	abutters_zip	abutters_bookpage	abutters_location
41-025-0005	PENNIE PHILIP	SCHWARZ MARLENE C	161 ISLINGTON RD		AUBURNDALE	MA	02466	1168/71	161 ISLINGTON RD
41-025-0006	BOYLAN JEFFREY J	EZRIN PETER	169 ISLINGTON RD		AUBURNDALE	MA	02466	1462/122	169 ISLINGTON RD
41-025-0007	JACKSON ANGELA H		175 ISLINGTON RD		AUBURNDALE	MA	02466	1485/47	175 ISLINGTON RD
41-025-0008	BAIRD DAVID A & SANDRA J S		36 DUFFIELD RD		AUBURNDALE	MA	02466	1175/85	36 DUFFIELD RD
41-025-0009	LIEF DAVID & NATALIE		24 DUFFIELD RD		AUBURNDALE	MA	02466	1464/101	24 DUFFIELD RD
41-026-0001	WOODS BASIL K		122 ISLINGTON RD		AUBURNDALE	MA	02466	000000/0000	122 ISLINGTON RD
41-026-0002	MEHROTRA ATEEV & ANNA S		142 ISLINGTON RD		AUBURNDALE	MA	02466	62417/193	142 ISLINGTON RD
41-026-0004	VANHASSEL DANIEL	VANHASSEL EMILY	162 ISLINGTON RD		AUBURNDALE	MA	02466	72346/86	162 ISLINGTON RD
41-026-0005	SWERSEY JONATHAN & JULIE		184 ISLINGTON RD		AUBURNDALE	MA	02466	75086/147	184 ISLINGTON RD
41-026-0011	SONTHEIMER ERIK J	BREKUS CATHERINE A	236 ISLINGTON RD		AUBURNDALE	MA	02466	63840/577	236 ISLINGTON RD
41-026-0016	LIANG JING WEN	DENG WANTING	22 MALVERN TER		AUBURNDALE	MA	02466	71316/318	22 MALVERN TER
41-026-0017	COSSABOOM CHARLES	KEMSLEY DIANE	17 MALVERN TER		AUBURNDALE	MA	02466	67756/162	17 MALVERN TER
41-026-0018	TAO CHUNG YING FLORENCE	MONTESI LORENZO TRS	1264 VIA HUERTA		LOS ALTOS	CA	94024	76814/99	9 MALVERN TER
41-026-0019	SRINIVASAN MANDAYAM A	ANNASWAMY ANURADHA M	1 MALVERN TER		AUBURNDALE	MA	02466	63623/500	1 MALVERN TER
41-027-0001	SOHN STEPHEN A		189 ISLINGTON RD		NEWTON	MA	02459	30074/93	189 ISLINGTON RD
41-027-0002	CADE KATHRYN E TR	KATHRYN E CADE TRUST	195 ISLINGTON RD		AUBURNDALE	MA	02466	78138/45	195 ISLINGTON RD
41-027-0002-A	FAULKNER R & BUNN H FRANKLIN TRS	FAMILY TRUST OF THE MJF TRUST	203 ISLINGTON RD		AUBURNDALE	MA	02466	69314/274	203 ISLINGTON RD
41-027-0003	REGAN STEPHEN C TR	REGAN FAMILY REALTY TRUST	9 KINGSWOOD RD		AUBURNDALE	MA	02466	1138/93	9 KINGSWOOD RD
41-027-0004	ALLEN WILLIAM F S	ALLEN MARIANNE LINDAHL	15 KINGSWOOD RD		AUBURNDALE	MA	02466	72973/402	15 KINGSWOOD RD
41-027-0005	HOLLAND JOHN R	HOLLAND LINDA R	21 KINGSWOOD RD		AUBURNDALE	MA	02466	1522/110	21 KINGSWOOD RD
41-027-0006	CLEARY JOSEPHINE K TR	THE J K CLEARY TRUST NO 1	27 KINGSWOOD RD		AUBURNDALE	MA	02466	1204/198	27 KINGSWOOD RD
41-027-0007	ENGLANDER EDWARD S & LINDA R		35 KINGSWOOD RD		AUBURNDALE	MA	02466	1030/102	35 KINGSWOOD RD
41-027-0008	KIRSCH HARRY R		41 KINGSWOOD RD		AUBURNDALE	MA	02466	1354/39	41 KINGSWOOD RD
41-027-0009	WALD JERRY & DENA M		47 KINGSWOOD RD		AUBURNDALE	MA	02466	69010/39	47 KINGSWOOD RD
41-027-0010	LIU ANDREW M	BAKER BRENDA S	53 KINGSWOOD RD		AUBURNDALE	MA	02466	1373/108	53 KINGSWOOD RD
41-027-0011	CAMPBELL ALLAN R & MARTHA M		57 KINGSWOOD RD		AUBURNDALE	MA	02466	488/493	57 KINGSWOOD RD
41-027-0012	LURIE DAVID E		63 KINGSWOOD RD		AUBURNDALE	MA	02466	1308/70	63 KINGSWOOD RD
41-027-0013	SOLMAN PAUL	FREEMAN JANET	69 KINGSWOOD RD		AUBURNDALE	MA	02466	1284/98	69 KINGSWOOD RD
41-027-0014	SWIRE DONALD J & HARRIET J		75 KINGSWOOD RD		AUBURNDALE	MA	02466	1295/149	75 KINGSWOOD RD
41-027-0015	MCNAMARA KEVIN J & MAUREEN T TRS	K&M TRUST	81 KINGSWOOD RD		AUBURNDALE	MA	02466	1571/168	81 KINGSWOOD RD
41-027-0016	SAMPSON RICHARD J TR	RICHARD J SAMPSON LIVING TRUST	85 KINGSWOOD RD		AUBURNDALE	MA	02466	1566/118	85 KINGSWOOD RD
41-027-0017	BENIMA BENNO & MARIAN	C/O MAUREEN T MCNAMARA	81 KINGSWOOD RD		NEWTON	MA	02466	793/151	82 KINGSWOOD RD
41-027-0018	KOFFLER WILLIAM P	HAASS-KOFFLER CAROLINA L	76 KINGSWOOD RD		AUBURNDALE	MA	02466	1519/23	76 KINGSWOOD RD
41-027-0019	SMITH LAWRENCE M TR	70 KINGWOOD SMITH TRUST	70 KINGSWOOD RD		AUBURNDALE	MA	02466	1506/13	70 KINGSWOOD RD
41-027-0020	BURBA BRIAN T	HANSON DANA K	64 KINGSWOOD RD		AUBURNDALE	MA	02466	1286/23	64 KINGSWOOD RD
41-027-0021	HARRIS DAVID		58 KINGSWOOD RD		AUBURNDALE	MA	02466-1013	1146/69	58 KINGSWOOD RD
41-027-0022	SALTZMAN JOHN R & DEBORAH L TRS	SALTZMAN NEWTON RLTY TRUST	52 KINGSWOOD RD		AUBURNDALE	MA	02466	1559/191	52 KINGSWOOD RD
41-027-0023	SHARMA RAVEEN & ALLISON		46 KINGSWOOD RD		AUBURNDALE	MA	02466	54228/254	46 KINGSWOOD RD
41-027-0024	DICARLO WAYNE R		40 KINGSWOOD ROAD		AUBURNDALE	MA	02466	13197/378	40 KINGSWOOD RD
41-027-0025	HELM DONALD R JR & JUDITH A		34 KINGSWOOD RD		AUBURNDALE	MA	02466	946/19	34 KINGSWOOD RD
41-027-0026	WILSON SCOTT N & ANNE ALLAN		28 KINGSWOOD RD		AUBURNDALE	MA	02466	1057/168	28 KINGSWOOD RD
41-027-0027	CETLIN DANA A	DARWIN AMANDA D	22 KINGSWOOD RD		AUBURNDALE	MA	02466	1154/174	22 KINGSWOOD RD
41-027-0028	KUTTY AJAYKUMAR	KUTTY ROSHNI	16 KINGSWOOD RD		AUBURNDALE	MA	02466	1544/137	16 KINGSWOOD RD
41-027-0031	GOLANN DWIGHT & SCARLETT HELAINE		221 ISLINGTON RD		AUBURNDALE	MA	02466	20528/98	221 ISLINGTON RD
41-027-0039	MCNEIL ALEXANDER M & MARY SPENCER		301 ISLINGTON ROAD		AUBURNDALE	MA	02466	14707/143	301 ISLINGTON RD
41-027-0040	NOWAK MARY THERESA		304 ISLINGTON RD		AUBURNDALE	MA	02466	25240/419	304 ISLINGTON RD
41-027-0041	DE BIVORT BENJAMIN	ERICKSON JENNIFER	300 ISLINGTON RD		AUBURNDALE	MA	02466	78054/384	300 ISLINGTON RD
41-027-0042	SAVITZ RAPHAEL Y	SAVITZ GLENDA J	296 ISLINGTON RD		AUBURNDALE	MA	02466	78155/75	296 ISLINGTON RD
41-027-0043	GOMBERG RICHARD FISHER & DIANA		290 ISLINGTON RD		AUBURNDALE	MA	02466	27602/138	290 ISLINGTON RD
41-027-0044	HAYWOOD BENJAMIN T TR	JON V HAYWOOD FAMILY TRUST	284 ISLINGTON RD		NEWTON	MA	02466	77259/387	284 ISLINGTON RD
41-027-0045	PAYNE BARRY	SHEPHERD SUSAN A	280 ISLINGTON RD		AUBURNDALE	MA	02466	64920/243	280 ISLINGTON RD
41-027-0046	ELHAUGE EINER RICHARD		270 ISLINGTON RD		AUBURNDALE	MA	02466	77608/458	270 ISLINGTON RD
41-027-0047	ROTHMAN FRAN TR	ARBEITER FAMILY IRR TRUST	264 ISLINGTON RD		AUBURNDALE	MA	02466	44853/140	264 ISLINGTON RD
41-027-0048	COMMONWEALTH OF MASSACHUSETTS	MDC- PARK COMM	20 SOMERSET ST		BOSTON	MA	02108	000000/0000	280 R ISLINGTON RD OFF
41-028-0001	MULLEN SHARON A TR	SHARON A MULLEN TRUST	104 WEST PINE ST		AUBURNDALE	MA	02466	74909/371	104 WEST PINE ST
41-028-0002	WILCOX VALERIE A TR	VALERIE A WILCOX TRUST	9 EDGEWATER PK		AUBURNDALE	MA	02466	52925/365	9 EDGEWATER PK
41-028-0003	SCOTT GARY F	SCOTT SARA R DESIMONE	15 EDGEWATER PK		AUBURNDALE	MA	02466	23453/383	15 EDGEWATER PK
41-028-0004	SULEWSKI STEVEN S	SULEWSKI JENNIFER A	21 EDGEWATER PK		AUBURNDALE	MA	02466	52009/437	21 EDGEWATER PK
41-028-0025	VA CAPITAL LLC		16500 COLLINS AVE 3052		SUNNY ISLES	FL	33160	1432/119	39 BENCLIFFE CIR
41-028-0026	GOLDIN DINA		45 BENCLIFFE CIR		AUBURNDALE	MA	02466	1129/162	45 BENCLIFFE CIR
41-028-0027	ZHU JULIA TR	P & J FONG TRUST 2016	51 BENCLIFFE CIR		AUBURNDALE	MA	02466	1503/82	51 BENCLIFFE CIR
41-028-0028	FUJISAKI JOJI		57 BENCLIFFE CIR		AUBURNDALE	MA	02466	1562/153	57 BENCLIFFE CIR
41-028-0029	WONG EUGENE E		63 BENCLIFFE CIR		AUBURNDALE	MA	02466	1512/116	63 BENCLIFFE CIR
41-028-0043	NANNUCCI APRIL A & PETER R		61 CHASKE AVE		NEWTON	MA	02466	58993/220	61 CHASKE AVE
41-031-0006	ESS BRISTOL NEWTON LLC		2795 E COTTONWOOD PKWY UN 400		SALT LAKE CITY	UT	84121	72334/432	137 RUMFORD AVE
41-031-0007	CAPASSO DONATO D TR		49 LEXINGTON ST		NEWTON	MA	02465	11348/621	89 LEXINGTON ST
41-031-0010	JIANG SHUYI		101 LEXINGTON ST 103		AUBURNDALE	MA	02466	69010/313	101-103 LEXINGTON ST
41-031-0011	CHOW PING CHEN	CHOW TAK LIEN	197 HIGHLAND AVE		QUINCY	MA	02170	58108/520	107-109 LEXINGTON ST
41-031-0012	CAPASSO DONATO D TR		49 LEXINGTON ST		NEWTON	MA	02465	11908/11	125 LEXINGTON ST
41-031-0014	CAPASSO PAUL E & JERROD	CAPASSO CHARLES & SHERRY E GP	49 LEXINGTON ST		NEWTON	MA	02465	22839/325	145 LEXINGTON ST
41-031-0016	CAPASSO DONATO D TR		49 LEXINGTON ST		NEWTON	MA	02465	11748/522	155-163 LEXINGTON ST
41-031-0017	CAPASSO DONATO D TR		49 LEXINGTON ST		NEWTON	MA	02465	11825/291	181 LEXINGTON ST
41-031-0018-A	CAPASSO PAUL E & JERROD CHARLES	SHERRY ELIZABETH ANN	49 LEXINGTON ST		NEWTON	MA	02465	22340/117	199 LEXINGTON ST
41-031-0018-C	MARUCCI SCOTT J & PATRICIA		203 LEXINGTON ST		AUBURNDALE	MA	02466	59410/553	203-205 LEXINGTON ST
41-031-0019	CARUSO GIOVANNI L/E	TOCCI NICOLE & CARUSO JOSEPH TRS	11 STANIFORD ST		AUBURNDALE	MA	02466	70994/428	11 STANIFORD ST
41-031-0019-A	WONG MARIKO K & ALAN C		221 LEXINGTON ST 221-1		NEWTON	MA	02466	68934/528	221-227 LEXINGTON ST #221-1
41-031-0019-AB	GUO JINSHAN	SUN CHEN	221-227 LEXINGTON ST #223-2		AUBURNDALE	MA	02466	73971/304	221-227 LEXINGTON ST #223-2
41-031-0019-AC	RHODES HOWARD I AND DONNA H		227 LEXINGTON ST UN 3		AUBURNDALE	MA	02466	43467/355	221-227 LEXINGTON ST #227-3
41-031-0019-AD	FERNANDEZ AGUSTIN TR	AGUSTIN FERNANDEZ TRUST	221-227 LEXINGTON ST #225-4		AUBURNDALE	MA	02466	76896/511	221-227 LEXINGTON ST #225-4

abutters_id_field	abutters_owner1	abutters_owner2	abutters_address	abutters_address2	abutters_town	abutters_state	abutters_zip	abutters_bookpage	abutters_location
41-031-0019/A-MAIN	221-223 LEXINGTON ST MASTER DEED							43273/185	221-223 LEXINGTON ST
41-031-0021	KANE BUILT INC		5 KANE INDUSTRIAL DR		HUDSON	MA	01749	77938/158	19 STANIFORD ST
41-031-0022	LUO YUXIA LISA	ZHANG YUHUA GEORGE	11 DANVILLE ST		WEST ROXBURY	MA	02132	64806/522	27 STANIFORD ST
41-031-0023	PATEL SANDIP V & VIBHA S		39 STANIFORD ST		AUBURNDALE	MA	02466	37165/228	39 STANIFORD ST
41-031-0023-A	ASHAI ZAID AHMAD	RAHMAN SARAH	33 STANIFORD ST		AUBURNDALE	MA	02466	61718/206	33 STANIFORD ST
41-031-0024	BARBERIO JAMES P	BARBERIO DIANNE M TRS	49 STANIFORD ST		AUBURNDALE	MA	02466	1538/97	49 STANIFORD ST
41-031-0024-A	KADAMBI NARAYAN	KADAMBI LAKSHMI NARAYAN	55 STANIFORD ST		NEWTON	MA	02466	1350/40	55 STANIFORD ST
41-031-0024-B	WEST CHARLES L TR	MAUI REALTY TRUST	95 FOUNTAIN ST		NEWTON	MA	02465	1443/86	65 STANIFORD ST
41-031-0026	FISHER NICHOLAS D	FISHER ALISON R	79 STANIFORD ST		AUBURNDALE	MA	02466	72241/355	79 STANIFORD ST
41-031-0037	CITY OF NEWTON		1000 COMM AVE		NEWTON	MA	02459	6343/567	WEST PINE ST
41-031-0038	AIKMAN WILLIAM F		83 STANIFORD ST 1		AUBURNDALE	MA	02466	56189/332	83 STANIFORD ST 1
41-031-0038-A	GOLDMAN MICHAEL M & AMY B		83 STANIFORD ST 2		AUBURNDALE	MA	02466	43539/240	83 STANIFORD ST 2
41-031-0038-AA	POLLACK SIDNEY D TR	THE RIVERWOOD REALTY TRUST	91 STANIFORD ST UN 8		AUBURNDALE	MA	02466	47097/277	91 STANIFORD ST 8
41-031-0038-B	XING HEMING	LI YING	17 PLYMOUTH RD		WINCHESTER	MA	01890	40734/513	83 STANIFORD ST 3
41-031-0038-C	PRICE RONALD F TR	RONALD F PRICE TRUST	83 STANIFORD ST 4		AUBURNDALE	MA	02466	72501/134	83 STANIFORD ST 4
41-031-0038-D	FALK LAURENCE		85 5 STANIFORD ST UN 83 5		AUBURNDALE	MA	02466	31699/382	83 STANIFORD ST 5
41-031-0038-E	BOUDREAU ALBERT T JR		83 STANIFORD ST 6		AUBURNDALE	MA	02466	19404/491	83 STANIFORD ST 6
41-031-0038-F	GILRAY DEREK B & TOVAH P TRS	GILRAY FAMILY REALTY TRUST	83 STANIFORD ST 7		AUBURNDALE	MA	02466	77848/240	83 STANIFORD ST 7
41-031-0038-G	RUNDLETT ROBERT D & VERA L		85 1 STANIFORD ST UN 85 1		AUBURNDALE	MA	02466	27337/272	85 STANIFORD ST 1
41-031-0038-H	SANDHU HARTEJ S	STUART K RAINA T/C	85 STANIFORD ST UN 2		AUBURNDALE	MA	02466	71810/439	85 STANIFORD ST #2
41-031-0038-J	MAI XIAOLING		85 STANIFORD ST 3		AUBURNDALE	MA	02466	59721/366	85 STANIFORD ST 3
41-031-0038-K	BISHOP SHARON M	JAN MARY MT T/C	85 STANIFORD ST 4		AUBURNDALE	MA	02466	53908/567	85 STANIFORD ST 4
41-031-0038-L	ZHENG YANMING	ENRRIQUE VIDAL JORGE JR	89 STANIFORD ST UN 1		AUBURNDALE	MA	02466	69858/252	89 STANIFORD ST 1
41-031-0038-M	WHITESTONE ALLEN TR	ALLEN WHITESTONE LIVING TRUST	89 STANIFORD ST UN 2		AUBURNDALE	MA	02466	26835/460	89 STANIFORD ST 2
41-031-0038-MAIN	83-91 STANIFORD ST MASTER DEED							15578/227	83-91 STANIFORD ST
41-031-0038-N	ZHUKOVSKY GEORGE		89 STANIFORD ST 3		AUBURNDALE	MA	02466	57826/21	89 STANIFORD ST 3
41-031-0038-P	GORDON PHYLLIS		89 STANIFORD ST UN 4		AUBURNDALE	MA	02466	35701/250	89 STANIFORD ST 4
41-031-0038-Q	KATZ PETER & LINDA T/C		81 PARK AVE		NEWTON	MA	02458	68816/433	89 STANIFORD ST 5
41-031-0038-R	ZHANG XIAODAN		3 RHODODENDRON AVE		MEDFIELD	MA	02052	58035/219	89 STANIFORD ST 6
41-031-0038-S	WEISS DAVID J TR	DAVID J WEISS TRUST	89-7 STANIFORD ST UN1		AUBURNDALE	MA	02466	77580/72	89 STANIFORD ST 7
41-031-0038-T	MCISAAC JOHN	DICKEY LAURA T/C	91 STANIFORD ST 1		AUBURNDALE	MA	02466	71094/454	91 STANIFORD ST 1
41-031-0038-U	DEMEO MICHAEL J TR	THE DEMEO FAMILY TRUST	P O BOX 25401		ALEXANDRIA	VA	22314	18503/545	91 STANIFORD ST 2
41-031-0038-V	MISHOL TINA P TR	TINA P MISHOL FAMILY TRUST	91 STANIFORD ST UN 3		AUBURNDALE	MA	02466	75574/590	91 STANIFORD ST 3
41-031-0038-W	WANG DEGANG	HUANG HUAN	16 SOUTH WOODSIDE AVE		WELLESLEY	MA	02482	53926/43	91 STANIFORD ST 4
41-031-0038-X	WOODS DEIRDRE MARIE TR	DEIRDRE MARIE WOODS TRUST	91 STANIFORD ST 5		AUBURNDALE	MA	02466	63956/507	91 STANIFORD ST 5
41-031-0038-Y	SAFDAR SYED & NAUREEN		1128 S POINTE PREMIER		ANAHEIM	CA	92807	76024/200	91 STANIFORD ST #6
41-031-0038-Z	LUCAS JUDITH FINN & PAUL J		535 DEAN ST APT 518		BROOKLYN	MA	11217	60789/226	91 STANIFORD ST 7
41-031-0039	COMMONWEALTH OF MASSACHUSETTS	MDC-PARK COMM	20 SOMERSET ST		BOSTON	MA	02108	000000/0000	20 FOREST GROVE RD
41-031-0040	NICHOLS HOBART JOHN & SUSAN D		10 FOREST GROVE RD APT 66191		AUBURNDALE	MA	02466	14924/524	10 FOREST GROVE RD
41-031-0043	CITY OF NEWTON	CITY LANDFILL	1000 COMM AVE		NEWTON	MA	02459	667/138	211 LEXINGTON ST
41-031-0043-A	DURBANO VITTORIO L	C/O MARUCCI SALLY	25 SMITH CT		WEST NEWTON	MA	02465	000000/0000	LEXINGTON ST
41-031-0044	CITY OF NEWTON		1000 COMMONWEALTH AVE		NEWTON	MA	02459	000000/0000	71 WABASSO ST
41-031-0047	CITY OF NEWTON		1000 COMMONWEALTH AVE		NEWTON CENTRE	MA	02459	29021/10	68 WABASSO ST
41-031-0050	SSG RUMFORD NEWTON LLC		129 SOUTH ST 4TH FL		BOSTON	MA	02111	70123/524	131 RUMFORD AVE
41-031-0051	CITY OF NEWTON		1000 COMM AVE		NEWTON	MA	02459	6872/398	WABASSO ST
41-031-0052	CITY OF NEWTON		1000 COMM AVE		NEWTON	MA	02459	000000/0000	WABASSO ST REAR
41-031-0053	CITY OF NEWTON		1000 COMMONWEALTH AVE		NEWTON	MA	02459	50331/144	30 WABASSO ST
41-031-0054	HOBICA ZAINA		2 FOREST GROVE RD		AUBURNDALE	MA	02466	45857/345	10 WABASSO ST
41-032-0001	PACKARD COVE ASSOCIATES LLP		49 LEXINGTON ST		NEWTON	MA	02465	44587/566	241-247 RIVERVIEW AVE
41-032-0001-A	PACKARD COVE ASSOCIATES LLP		49 LEXINGTON ST		NEWTON	MA	02465	1320/87	105 RUMFORD AVE
41-032-0004	PACKARD COVE ASSOCIATES LLP		49 LEXINGTON ST		NEWTON	MA	02465	44587/566	237 RIVERVIEW AVE
41-032-0005	PACKARD COVE ASSOCIATES LLP		49 LEXINGTON ST		NEWTON	MA	02465	35792/97	225 RIVERVIEW AVE
41-032-0007	CITY OF NEWTON		1000 COMMONWEALTH AVE		NEWTON	MA	02459	6660/150	RIVERVIEW AVE
41-032-0010	VINOKUROV MIKHAIL	VINOKUROVA NATALYA	209 RIVERVIEW AVE UN 1		AUBURNDALE	MA	02466	35459/146	209 RIVERVIEW AVE 1
41-032-0010-A	DAGOSTINO LORYANN K TR	LDLL REALTY TRUST	479 MOODY ST STE 20		WALTHAM	MA	02453	31124/307	209 RIVERVIEW AVE 2
41-032-0010-AA	HARRIS BRANDON D		290 RIVERVIEW AVE 37		AUBURNDALE	MA	02466	71869/39	209 RIVERVIEW AVE 37
41-032-0010-AB	MOSHINSKY NATASHA		209 RIVERVIEW AVE 38		AUBURNDALE	MA	02466	70859/549	209 RIVERVIEW AVE 38
41-032-0010-AC	209 RIVERVIEW LLC		205 PIGEON LN		WALTHAM	MA	02452	77407/131	209 RIVERVIEW AVE 39
41-032-0010-B	CHAN BETTY		209 RIVERVIEW AVE 3		AUBURNDALE	MA	02466	64008/560	209 RIVERVIEW AVE 3
41-032-0010-C	LUONG NU TR	NU LUONG 2016 TRUST	209 RIVERVIEW AVE 4		AUBURNDALE	MA	02466	68549/217	209 RIVERVIEW AVE 4
41-032-0010-D	KAUFMAN KATHRYN		209 RIVERVIEW AVE 5		AUBURNDALE	MA	02466	77628/560	209 RIVERVIEW AVE 5
41-032-0010-E	DAGOSTINO LORYANN K TR	LDLL REALTY TRUST	479 MOODY ST STE 20		WALTHAM	MA	02453	31124/315	209 RIVERVIEW AVE 6
41-032-0010-F	HUANG XIAOMIN	ZHU LIN	209 RIVERVIEW AVE 7		AUBURNDALE	MA	02466	73725/407	209 RIVERVIEW AVE 7
41-032-0010-G	ZHANG YIRAN		209 RIVERVIEW AVE 8		AUBURNDALE	MA	02466	65908/181	209 RIVERVIEW AVE 8
41-032-0010-H	FLEKEL YEFIM & RITA		209 RIVERVIEW AVE UN 9		AUBURNDALE	MA	02466	25776/399	209 RIVERVIEW AVE 9
41-032-0010-I	ZHENG HUA	ZOU LINA	209 RIVERVIEW AVE 10		AUBURNDALE	MA	02466	64828/388	209 RIVERVIEW AVE 10
41-032-0010-J	LEE TERENCE K	MAK STELLA S	209 RIVERVIEW AVE 20		AUBURNDALE	MA	02466	28663/340	209 RIVERVIEW AVE 20
41-032-0010-K	BELBASE SUBHADRA	BELBASE LEKH NATH	209 RIVERVIEW AVE 21		AUBURNDALE	MA	02466	60285/303	209 RIVERVIEW AVE 21
41-032-0010-L	PRESTI FRANCESCA & JOSEPH		36 HOOD DR		PLYMOUTH	MA	02360	27104/538	209 RIVERVIEW AVE 22
41-032-0010-M	LI MENGYIN		209 RIVERVIEW AVE 23		AUBURNDALE	MA	02466	70851/56	209 RIVERVIEW AVE 23
41-032-0010-MAIN	209 RIVERVIEW AVE MASTER DEED							0/0	209 RIVERVIEW AVE
41-032-0010-N	DUMOVA VERA		209 RIVERVIEW AVE 24		AUBURNDALE	MA	02466	45122/18	209 RIVERVIEW AVE 24
41-032-0010-O	BURACK LYENA		209 RIVERVIEW AVE U25		AUBURNDALE	MA	02466	51613/277	209 RIVERVIEW AVE 25
41-032-0010-P	EHRMANN JOHANNA		209 RIVERVIEW AVE UN 26		AUBURNDALE	MA	02466	26289/347	209 RIVERVIEW AVE 26
41-032-0010-Q	NEMIROVSKY LIDIA		21 COMMONWEALTH TER		BRIGHTON	MA	02135	26568/287	209 RIVERVIEW AVE #27
41-032-0010-R	SONG YANG	LIU YUJIAN	209 RIVERVIEW AVE 28		AUBURNDALE	MA	02466	68202/501	209 RIVERVIEW AVE 28
41-032-0010-S	ZHANG SHIJIAN	HU JIANHUI	209 RIVERVIEW AVE 29		AUBURNDALE	MA	02466	69352/502	209 RIVERVIEW AVE 29
41-032-0010-T	YEH FEN		209 RIVERVIEW AVE 30		AUBURNDALE	MA	02466	65885/103	209 RIVERVIEW AVE 30
41-032-0010-U	VIROVSKY YEVGEN		209 RIVERVIEW AVE 31		AUBURNDALE	MA	02466	58607/337	209 RIVERVIEW AVE 31

abutters_id_field	abutters_owner1	abutters_owner2	abutters_address	abutters_address2	abutters_town	abutters_state	abutters_zip	abutters_bookpage	abutters_location
41-032-0010-V	DRAGONE LAUREN		48 BLOSSOM ST		WALTHAM	MA	02451	60717/522	209 RIVERVIEW AVE 32
41-032-0010-W	CARVELLI WILLIAM		209 RIVERVIEW AVE UN 33		AUBURNDALE	MA	02466	20018/497	209 RIVERVIEW AVE 33
41-032-0010-X	SMITH CHRISTOPHER J		209 RIVERVIEW AVE 34		AUBURNDALE	MA	02466	51404/566	209 RIVERVIEW AVE 34
41-032-0010-Y	MYERS SOPHIA & SAMUEL	C/O MOREY MYERS	1121 MYRTLE ST		SCRANTON	PA	18510	68910/459	209 RIVERVIEW AVE 35
41-032-0010-Z	MCLAUGHLIN JOHN B		209 RIVERVIEW AVE 36		AUBURNDALE	MA	02466-1359	72022/446	209 RIVERVIEW AVE 36
41-032-0012	LY THOMAS	TRAN PHUONG T	203 RIVERVIEW AVE		AUBURNDALE	MA	02466	39452/74	203 RIVERVIEW AVE

ATTACHMENT B

Project Description

1.0 INTRODUCTION

The "Applicant", the Massachusetts Department of Conservation and Recreation - Lakes and Ponds Program (DCR), is seeking approval to initiate a single all-encompassing Aquatic Vegetation Management Program throughout the Lakes District (Commonwealth Ave Bridge in Newton to the Watertown Dam in Watertown) of the Charles River.

The primary objective of the management program is to provide site specific control of submersed non-native and invasive aquatic plant species and also to restore and maintain the natural capacity of the Charles River to provide suitable open water and native plant habitat. Based on the type, distribution, and density of the current vegetation assemblage within the Lakes District, it has been concluded that the restoration goals of the Applicant can best be achieved through an integrated management program focused on monitoring, the prudent use of USEPA/MA Department of Agricultural Resources (MDAR) registered aquatic herbicides, and mechanical control strategies.

The secondary objective of this plan is to provide a single comprehensive management program that will replace/supersede the other individual (Wares Cove, Purgatory Cove, mechanical harvesting) programs that have preceded it. A single plan, unified under one Order of Conditions, will not only allow for better system level management, but will create a more consistent set of regulatory conditions for the project. Consistent regulatory conditions will simplify ongoing monitoring, reporting, and general regulatory compliance and oversight. As such the proposed program works to incorporate the successes of other and/or prior management efforts, while at the same time incorporating advances in technology and approach that have been realized more recently. Once new Orders of Conditions are issued in all municipalities for this Notice of Intent filing, Certificates of Compliance will be requested for the respective existing Orders of Conditions that will be replaced.

The proposed project has been filed as an Ecological Restoration Limited Project under 310 CMR 10.53(4)e(5) as it will improve the natural capacity of the resource area to protect and sustain the interests identified in the Wetland Protection Act (MGL c.131 s.40). However, this project is not eligible for consideration for a Restoration Order of Conditions as it does not meet the project type criteria outlined in 310 CMR 10.13. As such we have filed WPA form 3 and included a completed Appendix A. The control/removal of nuisance and invasive aquatic vegetation will slow system eutrophication and help improve water quality and fisheries habitat.[1] The presence of invasive species within the Lakes District of the Charles River likely results from direct anthropogenic influences including the River's high recreational use via boats which spread invasive aquatic plant species, unintended but increased nutrient input from surrounding developed land and roadways, and the possible innocent dumping of aquarium trade plant species.

It is important to remember that "no amount of watershed management will control an existing infestation of rooted macrophytes".

- Rooted aquatic plant growth are not controlled by clean water
- Increased water clarity may extend plant growth

[1] Department of Environmental Protection. Guidance for Aquatic Plant Management in Lake and Ponds as it Relates to the Wetlands Protection Act: April 2004, 1p.

- Watershed management complements in-lake management.[2]

2.0 SITE DESCRIPTION

The Charles River begins in Hopkinton and flows generally eastward through 23 cities and towns, over approximately 80 miles in total, before reaching the Atlantic Ocean in Boston Harbor. The Lakes District, which is the focus of this Notice of Intent, is being defined as the area from the Commonwealth Avenue (Route 30) Bridge in Newton to the Watertown Dam in Watertown (Appendix B – Figure 1). This section of the Charles River is an urban/suburban waterway with varying densities of submersed and floating leaf aquatic vegetation growing in the shallower cover areas of the ponded section and along the sides of the main water flow channel. Although the River flows slowly overall, the shallow littoral areas of the Lakes District provide optimal growing conditions (near quiescent water flow, shallow water depths, abundant nutrient rich sediment, etc.) for the abundant growth of both non-native and native submersed vegetation.

The shoreline along the Lakes District supports high density development beyond the parks system and other undeveloped open space along the immediate edge of the river. The Lakes District is frequently used for boating, fishing, and passive wildlife viewing.

In late May of 2021, a vegetation survey, utilizing point-intercept methods, was conducted throughout the Lakes District of the river. A list of the plant species documented during that survey is provided in the following table (listed in order of relative abundance). Species maps depicting location and abundance are attached.

[2] Practical Guide to Lake Management in Massachusetts, Commonwealth of Massachusetts, Executive Office of Environmental Affairs, 2004, p. 22.

Macrophyte Inventory for Charles River Lakes District – 2021		
Common Name	**Scientific Name**	**Frequency of Occurrence**
Eurasian Watermilfoil	*Myriophyllum spicatum*	60%
White Waterlily	*Nymphaea odorata*	57%
Fanwort	*Cabomba caroliniana*	21%
Coontail	*Ceratophyllum demersum*	22%
Yellow Waterlily	*Nuphar variegata*	12%
Variable Watermilfoil	*Myriophyllum heterophyllum*	12%
Curly-leaf Pondweed	*Potamogeton crispus*	11%
Duckweed	*Lemna minor*	10%
Water Bulrush	*Schoenoplectus subterminalis*	9%
Common Waterweed	*Elodea canadensis*	8%
Tapegrass	*Vallisneria americana*	8%
Purple Loosestrife	*Lythrum salicaria*	6%
Water Chestnut	*Trapa natans*	6%
Water Starwort	*Callitriche sp.*	4%
Smartweed	*Polygonum sp.*	3%
Large-leaf Pondweed	*Potamogeton amplifolius*	3%
Slender Naiad	*Najas flexilis*	1%
Leafy Pondweed	*Potamogeton foliosus*	<1%
Ribbon-leaf Pondweed	*Potamogeton epihydrus*	<1%

Red indicates invasive status

Overall, the subject area was well vegetated, with vegetation present at 77% (278 of 361) of the sample sites accessed within the Lakes District section. Of the 19 species observed within this area of the river, six are considered invasive species (~32%). Vegetation distribution maps by individual species are provided in Attachment B. Based on the frequency of occurrence for the sites sampled, Eurasian watermilfoil (EWM) and white

waterlily are the two most dominant species, occurring at 60% and 57% at the sample sites, respectively. However, at the 278 sites where vegetation growth was recorded, 215 of them supported EWM growth (77%). The top 10 most abundant species identified make up more than 67% of the vegetation documented throughout the Lakes District section indicating that although species diversity is good (19 different species) the species richness is impacted by the presence of invasive plants. In fact, EWM, fanwort, variable watermilfoil (VWM), and curly-leaf pondweed make up nearly 50% of the top 10 vegetation abundance.

The water chestnut infestation within the Lakes District has been the focus of ongoing management for decades. In fact, at its peak, water chestnut occupied nearly all open water area in this section of the river. During the May 2021 survey, however, water chestnut growth was recorded at only 6% of the sites sampled. It is important to note that this frequency of occurrence may likely be somewhat underrepresented from actual mature growth conditions, as full nut germination and plant emergence had likely not occurred at the time the survey was conducted.

In addition to the submersed invasive plant growth, scattered growth of purple loosestrife occurred sporadically along much of the Lakes District shoreline.

General Site Characteristics - Lakes District of the Charles River[3]	
Surface Area (acres)	Approximately 246
Estimated Mean Depth (feet)	4
Estimated Volume	1060 ac-ft 345 million gallons
Dominant Plant Species	Eurasian Watermilfoil White Waterlily Fanwort Coontail Yellow Waterlily Variable Watermilfoil

3.0 PROBLEM STATEMENT

Based on the results of a 2021 vegetation survey, the invasive macrophyte assemblage dominates the aquatic plant growth within the project area. This abundance of invasive plant species and their aggressive colonization habits pose a significant threat to native plant populations, recreational access/useability, and general water quality conditions within the river. In fact, due to the increasing colonization by these invasive species and the resulting increase in overall plant abundance, many of the user and advocate groups associated with the Charles River have expressed concerns over long-term ecological impacts and potential boating and safety hazards. For these reasons DCR believes that a comprehensive and immediate management intervention is necessary to enhance native

[3] Estimates based on observed and reported conditions

species diversity/richness and mitigate future degradation of the resource; though individual areas of the Lakes District (mentioned previously) have historically been managed, the project area should be managed as a whole.

4.0 PROPOSED MANAGEMENT PROGRAM

4.1 Program Overview:

Multiple (5) - year approval is requested for the implementation of an integrated Aquatic Management Program within the Lakes District of the Charles River. The goal of the management program is to control growth of invasive, non-native plant species to improve and maintain open water habitat, promote the growth of less pervasive plant species, and provide safe recreational access throughout the river. This management program has been developed to be compatible with the long-term preservation of the resource area, the regulatory interests of the Wetlands Protection Act, and the individual communities (Newton, Watertown, Waltham and Weston) affected by the project. All of the proposed management strategies presented in this filing are approved methodologies in the Commonwealth and are included within the document *Eutrophication and Aquatic Plant Management in Massachusetts Final Generic Environmental Impact Review* (FGEIR, EOEA 2004).

As the jurisdiction of this project spans four municipalities, the following management options sought for approval are applicable for all towns based on the species present throughout the entire Lake District. However, community specific information is provided to illustrate the scope of the initial management phase within each specific community (Section 4.3.2). Additionally, the management options included in this filing remain as consistent as possible, based on conditions, with the recent filing and approved Orders of Conditions for management of the Lower Basin of the Charles River, in an effort to truly manage the river as a whole entity. Effective long-term management of dynamic aquatic systems requires program modifications to best address evolving target plant and environmental conditions. For this reason, we have included an outline of contingent strategies for future review and consideration by the Commissions should conditions warrant their use beyond the initial phase of management.

4.2 Project Monitoring:

Effective monitoring is the cornerstone of any successful aquatic management program, as the data collected provides the foundational basis on which to evaluate the feasibility of available management strategies. However, beyond initial program design, repeatable and quantifiable monitoring data is critical to evaluating the program impacts on target and non-target species. This information is critical to adaptive long-term management and ensuring that the established goals of the project are being achieved as site conditions change over time.

4.2.1 Vegetation Surveys

During each management season, at least one pre-management survey of the Lakes District will be conducted within the early part of the growing season to assess the overall aquatic invasive species growth. This visual survey will focus on accurately determining the areal extent of the targeted invasive plant species. WAAS enabled GPS will be used to geospatially reference the perimeter of various invasive plant beds within the project area. This information will culminate into target plant bed and management area maps.

These data will be used to inform the annual management effort throughout the program.

Throughout the course of annual management activities, interim surveys will be conducted to qualitatively document the progress of the annual management effort and confirm no unintended non-target impacts have or are occurring. Additionally, by conducting interim surveys during different times of the growing season, data can be gathered on the full seasonal spectrum of species, which may not have been fully reflected in previous survey findings.

At or near the conclusion of active management and the growing season, a post-management survey of the Lakes District will be conducted. This survey will replicate the 423 point-intercept survey established during the 2021 survey effort. This survey methodology allows for the collection of a repeatable and quantifiable data set excellent for monitoring changes and identifying trends in species distribution and density over time. This aquatic plant survey method was developed by the US Army Corp of Engineers and Cornell University specifically for monitoring aquatic vegetation and has long been the industry standard. In fact, this survey methodology is preferred by management project stakeholders and regulatory agencies.

The Point-Intercept Method (PIM) is designed to determine the extent of submersed aquatic plant growth within an area of concern. The total number of survey points is typically based on the total acreage of a waterbody, where one sample location per acre is surveyed at a given site. According to the 2021 survey effort, much of the Lakes District can be considered littoral zone, with rooted plant growth being documented at most all point locations. Point-intercept locations within the river were previously determined by a 60-meter grid data layer placed over an orthophoto of the Lakes District. The Lakes District point-intercept survey has approximately 1.7 points per acre of survey area.

Two rake tosses will be conducted at each site for enhanced detection of target species and other less frequently occurring species. Each species collected will be identified and categorized using the relative abundance scale (below) defined by this methodology.

Z Zero: No plants on rake
T Trace: Fingerful on rake
S Sparse: Handful on rake
M Medium: Rakeful of plants
D Dense: Difficult to bring into boat

As is the practice on all of DCR's aquatic vegetation management programs, the Lakes and Ponds program staff will routinely inspect site conditions throughout the course of the project. DCR Lakes and Ponds staff will also use best professional judgment when conducting spot checks of consultant/contractor vegetation survey and treatment results to ensure the data reported are of the highest accuracy possible.

4.2.2 Water Quality Monitoring

The Lakes District of the Charles River is under the jurisdiction of the Massachusetts Division of Marine Fisheries (DMF) because of anadromous fish migration and spawning.

DCR will abide by and conduct all DMF required pre- and post- treatment water quality monitoring. Based on the recent Lower Basin filings, it is anticipated that requirement of a monitoring program will be dependent on whether treatment work is being requested during their prescribed Time of Year (TOY) restrictions (February 15 -July 15 & September 1- November 15) for this project. At present, we anticipate that effective target plant control can be achieved using the proposed strategies while abiding by the DMF TOY restrictions. However, DCR and its contractor will look to consult other available water quality data being gathered by other groups (e.g., Charles River Watershed Association) to best inform ongoing management practices. In the event that active management is to take place within the DMF TOY restrictions, requiring a water quality monitoring program, the approved DMF monitoring program will be shared with the Commissions during the pre-management meetings in early summer.

4.3 Phase I Aquatic Vegetation Management

The initial phase of management will be comprised of a 2-3 year effort consisting of whole basin treatment with Sonar (fluridone) to manage the entire invasive plant assemblage within the project area (2022 and/or 2023) as well as area-selective control of invasive milfoil growth with ProcellaCOR EC (florpyrauxifen-benzyl) as required in subsequent years. The Phase I larger scale management effort is anticipated to include the Lower Basin portion of the river that was permitted in the fall of 2021.

The proposed Phase I herbicides specifically affect the target species to be controlled and have a negligible effect on the non-target species and wildlife when applied in accordance with the label directions. All products will be applied at low doses (below maximum label rate) intended to provide the greatest impact on target species while minimizing the effects on native non-target species. Prior to the initial application each year, a License to Apply Chemicals permit will be obtained from MA Department of Environmental Protection.

Management of water chestnut in the Lakes District during Phase I will continue to be a combination of mechanical harvesting and manual hand-pulling. These strategies have affected a positive reduction in water chestnut occurrence in the Lakes District over the last decade and more. The focus of these non-chemical removal efforts will be dictated by pre-management survey information related to the location and density of the water chestnut growth. As with previous programs mechanical harvesting will be employed to address larger contiguous areas of growth, while manual hand-pulling will be reserved for smaller, low density patches or individual plants. Also hand-pulling will be used in areas that are deemed inaccessible to mechanical harvesting equipment (shallow).

No significant alteration to the wetland resource areas will occur as a result of the proposed aquatic plant management program; instead, the resource areas will be enhanced by controlling non-native, invasive aquatic plant species, improving water quality, and improving wildlife habitat.

4.3.1 Anticipated Project Schedule

Year	Phase	Timing	Task
2022	I	Spring	Application and issuance of OOCs for management of the Lakes District
		May/June	Pre-management vegetation survey (Lakes District & Lower Basin)
		May/June	Meeting with Conservation Commissions to give update on tentative management plan based on survey results Mechanical and manual harvesting to control designated water chestnut growth, as required
		July	Initiate low-dose whole-river Sonar treatment program to comply with DMF time of year restrictions. Mechanical and manual harvesting to control designated water chestnut growth, as required
		August	Sonar booster applications, as necessary based on results and monitoring Mechanical and manual harvesting to control designated water chestnut growth, as required
		September	Post-management point-intercept survey
		December	Year-end reporting

Year	Phase	Timing	Task
2023	I	May/June	Pre-management vegetation survey
		May/June	Meeting with Conservation Commission to give update on tentative management plan based on survey results Mechanical and manual harvesting to control designated water chestnut growth, as required
		July	Initiate low-dose whole-river Sonar treatment program to comply with DMF time of year restrictions Mechanical and manual harvesting to control designated water chestnut growth, as required
		August	Sonar booster applications, as necessary based on results and monitoring Mechanical and manual harvesting to control designated water chestnut growth, as required
		September	Post-management point-intercept survey
		December	Year-end reporting
2024-2026	II	May/June	Pre-management vegetation survey
		May/June	Meeting with Conservation Commission to give update on project and present any proposed modifications to the management plan based on survey results Mechanical and manual harvesting to control designated water chestnut growth, as required
		July/August	Spot treatment applications likely with ProcellaCOR and/or Sonar for milfoil and/or fanwort control, respectively, to comply with DMF time of year restrictions Mechanical and manual harvesting to control designated water chestnut growth, as required
		September	Post-management point-intercept survey
		December	Year-end reporting

4.3.2 Anticipated Management Area(s)

The following table provides management areas for each community and the specific invasive species as recorded in the 2021 point intercept survey (see attached maps). The extent of specific management areas will be confirmed and/or modified annually based on the current year pre-management survey results.

Community (Town/City)	Target Invasive Species	Total Area (acres)
Newton	***Max. Treatment Area[1]***	***51.7***
	Eurasian watermilfoil	39.0
	Fanwort	17.0
	Variable watermilfoil	28.0
	Curly-leaf pondweed	13.75
	Water Chestnut	14.75
Watertown	***Max. Treatment Area***	***17.9***
	Eurasian watermilfoil	7.25
	Fanwort	0.0
	Variable watermilfoil	0.0
	Curly-leaf pondweed	7.4
	Water Chestnut	1.3
Waltham	***Max. Treatment Area***	***153.8***
	Eurasian watermilfoil	121.0
	Fanwort	*91.75*
	Variable watermilfoil	73.5
	Curly-leaf pondweed	35.75
	Water Chestnut	21.25
Weston	***Max. Treatment Area***	***23.0***
	Eurasian watermilfoil	*16.25*
	Fanwort	*6.25*
	Variable watermilfoil	11.25
	Curly-leaf pondweed	0.0
	Water Chestnut	0.0

[1]- *Given that the depths throughout the Lakes District are capable of supporting rooted aquatic vegetation growth, the Maximum treatment area listed in this table represents the entire surface area of the river located in the respective Town.*

4.3.3 Proposed Phase I Products and Management Techniques

The use of herbicides to control nuisance aquatic plant and algae growth is the most widely used management strategy for waterbodies with submersed aquatic plant infestations that are beyond effective control with smaller scale non-chemical techniques like suction harvesting and/or bottom barriers. Although these smaller scale techniques are not recommended for

the species composition and current target plant distribution in the Lakes District, non-chemical strategies like hand-pulling and mechanical harvesting remain the best approach for the long-term control of water chestnut under current conditions. Effective removal of the water chestnut plants prior to the development of mature nuts/seeds can and has resulted in the incremental reduction of the infestation through repetitive annual management. As such, these non-chemical strategies will continue to be the focus for water chestnut management in the Lakes District under this program.

Herbicides that are registered for aquatic use must meet strict federal guidelines and demonstrate that there is not an "unreasonable risk" to humans and the environment when applied in accordance with their product label. According to Madsen (2000), "currently no product can be labeled for aquatic use if it poses more than a one in a million chance of causing significant damage to human health, the environment, or wildlife resources. In addition, it may not show evidence of biomagnification, bioavailability or persistence in the environment". DCR is requesting approval for the use of the following techniques in the Lakes District.

Mechanical & Physical Removal

Mechanical harvesters are paddle-wheel driven barges that cut and/or collect aquatic vegetation. An aquatic harvester uses reciprocating cutters that can be lowered into the water to cut the stems of target vegetation above the bottom substrate. The plant material is then collected and conveyed onboard the harvester barge. The collected plant material is then transported to a designated shoreline location and off-loaded for disposal. This equipment runs on a vegetable-based hydraulic oil that is biodegradable. The machines carry oil containment "booms" and absorbent pads in the unlikely and unforeseen event of a hydraulic or fuel leak. All other necessary precautions are taken while fueling and maintaining the machine.

Mechanical and physical removal has been a staple for the effective control of water chestnut in the Lakes District for decades. Given this track record of effective management, the use of mechanical harvesters to control dense growth of water chestnut would be continued. In the event large contiguous stands of chestnut develop, harvesting would be employed annually, potentially on multiple occasions, to address newly germinated plants resulting from the removal of the dense floating canopy of rosettes.

Staging Areas

Staging areas will be situated along the management area at Charles River Road and Forest Grove Road, Waltham. These locations have been selected based on proximity to the management area and characteristics such as water depth that will minimize impacts to the riverbank. The properties are state-owned (Commonwealth of Massachusetts c/o DCR) and have previously been used as staging areas for mechanical removal projects. The attached Charles River Road and Forest Grove Road Waltham Staging Area documents depict the general set-up of each staging area, including dumpster and off-load locations. Straw wattles will be installed at the shoreline of each off-load area and surrounding each dumpster as it dewaters. Daily inspections of the site will be conducted

by the on-site project manager who will be responsible for ensuring all erosion controls remain secure and effective.

Equipment

All equipment, including harvesters, tending boats, etc. will undergo DCR-approved decontamination procedures prior to their launch in the Charles River. Large pieces of equipment (i.e. harvester(s)) will be launched onto the water body from the Woerd Avenue boat ramp. Once launched, the hydro-rake(s) and harvester(s) will remain on the water for the duration of the project. Refueling will be conducted when equipment is securely anchored at the staging area and best management practices, including use of absorption pads, will be implemented for spill prevention. A petroleum spill response kit will be maintained on each piece of mechanical equipment. The harvester and hydro-rake machines use Bio-HyGARD II hydraulic fluid (manufactured by John Deere), which is biodegradable. As a precaution, absorbent pads and other cleaning material will be maintained onsite in the event of a leak or spill.

Harvesting of Biomass

Removal efforts will progress from upstream to downstream sections of the river to manage the collection of floating plant debris from the harvesting operations. Each piece of equipment will be equipped with a GPS device to track progression. Tracking will also aid in identifying the areas that will require removal via mechanical harvesting and/or hand-harvesting. When harvesters are unable to operate due to shallow water depths (less than approximately 2 feet) they will move to the next area or section. Harvested material will be off-loaded from the harvesters' conveyor with the use of a compact skid-steer loader, which will place the plant material in an onshore container to dewater.

Hand-harvesting (i.e., manual removal of water chestnut plants by staff in small boats) will be conducted in wetland areas and along shorelines that are inaccessible to the mechanical equipment.

As the density and distribution of water chestnut changes with management efforts, the distribution of effort between mechanical harvesting and hand-harvesting may fluctuate.

Disposal of Removed Biomass

Two forty-yard containers will be delivered to the site when work commences. Containers will be filled, removed, and replaced with a new container, as needed. Alternating the piling of plant material into two containers will allow for dewatering and compaction, which reduces the tonnage and disposal cost.

Impacts Specific to the Wetlands Protection Act[4] using Mechanical Harvesting

- Protection of public and private water supply – Generally neutral (no significant interaction), although reduced plant density may benefit taste and odor control and minimize clogging of intakes
- Protection of groundwater supply – Generally neutral (no significant interaction)
- Flood control – Generally neutral (no significant interaction)
- Storm damage prevention – Generally neutral (no significant interaction)

[4] Commonwealth of Massachusetts Executive Office of Environmental Affairs. *Practical Guide to Lake Management*: 2004. 106 p.

- Prevention of pollution – Generally neutral (no significant interaction), but could be a detriment if sediment disruption and resultant turbidity are high, or if cut vegetation is left in the water to decay
- Protection of land containing shellfish – Generally neutral (no significant interaction)
- Protection of fisheries – Detriment from mechanical harvesting (direct fish removal), but with potential benefit by habitat improvement (may have benefit and detriment to different species in same lake from same effort)
- Protection of wildlife habitat - Potential benefit by habitat improvement, but may have benefit and detriment to different species in same lake from same effort

Florpyrauxifen-benzyl (ProcellaCOR EC - EPA # 67690-80 or equivalent)

ProcellaCOR (florpyrauxifen-benzyl) is a recently registered herbicide in Massachusetts and is an effective, milfoil selective, systemic herbicide. After receiving its full aquatic registration from the EPA in February 2018, ProcellaCOR was used in numerous locations throughout the country for control of milfoil and other susceptible invasive aquatic plants. In 2018 in New England, SŌLitude applied ProcellaCOR at approximately a dozen locations in New Hampshire and Connecticut for the control of variable milfoil and Eurasian watermilfoil. In 2019, ProcellaCOR was registered for use in Massachusetts and SŌLitude applied ProcellaCOR to many waterbodies in Vermont, New York, New Hampshire, Massachusetts, Maine, and Connecticut. Results of all treatments performed in the Northeast to date by SŌLitude (>100) have been extremely positive, achieving nearly complete control of targeted milfoil growth with little or no impact to non-target native plants.

ProcellaCOR will be applied to the areas of milfoil growth at or below the permissible label dose (maximum label rate is 25 PDU/ac-ft). A PDU is a prescription dose unit, which is a unit of measurement that SePRO developed for ease of calculations in the field. One PDU is equal to 3.17 ounces. Due to the limited contact-exposure time required for control of the target species, concentrations only need to be maintained for hours to several days to achieve management. The anticipated application rates for ProcellaCOR in the Lakes District of the Charles range from 2 to 4 PDU/ac-ft. Each treatment area will be dosed accordingly based on its density of milfoil plants, density of native plants, configuration, amount of surface area, potential for dilution, average depth and any other influencing factors. The ProcellaCOR label indicates that the rate is also determined based on the acreage of the entire "waterbody" as well as area of influence – each of those will be factored into the decision on application rate for each treatment area.

The only water use restrictions listed on the current ProcellaCOR™ EC label are all centered around the use of ProcellaCOR-treated water for irrigation purposes. There are no restrictions on using ProcellaCOR-treated water for drinking water, swimming or fishing. Irrigation restrictions vary depending on what is being irrigated. Turf may be irrigated immediately after treatment without restriction. Irrigation of landscape vegetation and other non-agricultural plants can occur once ProcellaCOR concentrations are determined to be less than 2 ppb or by following a waiting period of 7 days for the use rates being proposed. The shoreline of the waterbody will be posted with signs warning of these temporary water-use restrictions, prior to treatment. Based on ProcellaCOR's Reduced Risk classification profile issued by the US EPA and its overall brief presence within the water (24-48 hours maximum; reported photolytic half-life is 0.07 days or 1.68 hours), there are no cumulative adverse impacts anticipated to affect the river as a resource for its users.

Based on the ecotoxicological testing completed for ProcellaCOR, there was no toxicity observed for avian, fish, or other non-plant species exposed to the product during both short

and long-term studies. It should be noted that these testing efforts included higher concentrations than those available at the maximum label rate.

This herbicide is quickly absorbed by the target vegetation and translocated within the plant. The mode of action of the herbicide causes impacted vegetation to lose structural integrity at growth nodes. Residual levels of the herbicide in treated water decline rapidly and reduction is due to the uptake by the targeted vegetation and degradation.

Following treatment efforts, the plants within the treatment areas would be anticipated to follow a similar decomposition timeline as follows: within a week of treatment – EWM plants are anticipated to be leaning over within the water column; within two weeks of treatment – EWM plants are anticipated to be leaning and more fallen over within the water column, beginning to brown and get discolored, and if touched, the plants would be anticipated to easily break apart, however fragments of these plants are no longer viable; within three weeks of treatment – EWM plants are anticipated to have completely fallen out of the water column and be difficult to find even along the bottom sediment. As a result of the timeframe of decomposition, and minimal amount of area to be managed utilizing ProcellaCOR relative to the overall waterbody acreage, there is no additional concern for an algal bloom beyond that which exists every year for the Lakes District.

Excellent selectivity and minimal impact to non-target species has been demonstrated with ProcellaCOR treatments that have been performed in the Northeast to date. Of the species reported in the Lakes District of the Charles River in 2021, the only plants that may show some impact following treatment are coontail (*Ceratophyllum demersum*), and waterlilies (white & yellow). Coontail is typically not impacted by ProcellaCOR treatments except when using rates of 4+ PDUs/ac-ft, while the waterlilies may show some discoloration (yellowing) and twisting, depending on their proximity to the treatment area(s), before outgrowing the symptoms within a few weeks. Waterlilies are a hardy and resilient species, with significant root systems, and can easily rebound from the typical impacts of a ProcellaCOR herbicide treatment.

It is anticipated that treatment areas would experience multiple years of control following one treatment effort. However, it is understood that any fragments entering the treated area(s) from unmanaged areas in the river may allow for the population to be reestablished within that area.

Impacts Specific to the Wetlands Protection Act using Florpyrauxifen-benzyl

- Protection of public and private water supply – Neutral (no significant interaction)
- Protection of groundwater supply – Generally neutral (no interaction)
- Flood control - Neutral (no significant interaction)
- Storm damage prevention – Neutral (no significant interaction)
- Prevention of pollution – Generally neutral (no significant interaction), but could be a detriment if plant die-off causes low oxygen at the bottom of the river
- Protection of land containing shellfish - Generally neutral (no significant interaction), but reduced algae might reduce food resources for shellfish, and direct toxicity is possible under unusual circumstances
- Protection of fisheries - Possible benefit (habitat enhancement) and possible detriment (food source alteration, loss of cover)
- Protection of wildlife habitat – Possible benefit (habitat enhancement) and possible detriment (food source alteration, loss of cover)

Fluridone (Sonar – EPA # 67690-4 or equivalent)

Fluridone is a systemic herbicide that offers long-term control on invasive (Eurasian watermilfoil, fanwort) and other nuisance aquatic vegetation. Fluridone also provides annual control of curlyleaf pondweed. Fluridone has also been observed, in some instances, to regulate the growth of water chestnut when the fluridone treatment program is initiated prior to the water chestnut rosettes reaching the water surface.

This herbicide hinders the ability of susceptible plants to produce carotene which functions to protect chlorophyll from photodegradation. If chlorophyll is left unprotected, it breaks down rendering the plant incapable of photosynthesis, ultimately resulting in mortality and long-term control of the targeted species (i.e., directly impacts the standing population and prevents regrowth from viable root stock). This process is known as chlorosis and may be observed visually as the plant begins to lose its green color and take on a white or pink shade. Fluridone requires an extended contact time (45-90 days), so it has historically been used for low-dose, whole-pond treatments where dilution and contact time are more predictable. However, newer granular formulations that release the active ingredient slowly over time, allow for more effective partial or spot treatment scenarios. A series of low-dose applications (booster treatments) would be required to provide the effective contact time within the Lakes District, likely 3-4 depending on water flow and timing.

Fluridone, when applied at recommended dosages, is generally viewed as having one of the most environmentally friendly toxicology profiles of all products currently on the market. The US EPA has approved a limit of 150 ppb to be allowed in water used for drinking. Concentrations in the range of 5-10 ppb will be targeted for the control of the invasive species assemblage present in the Lakes District. Understanding that MA DMF has placed a time-of-year restriction on management activities, the treatment program will not be initiated until after the end of the restricted period - July 15th, unless a water quality monitoring program is approved by DMF and enacted. Additionally, the slow staggered rate of mortality associated with Sonar treatment eliminates the potential for low dissolved oxygen related stress to fish and other aquatic wildlife.

Presently, liquid and slow-release pellet formations of this herbicide are available and included under this management plan. For pellet applications, the herbicide will be placed into a rotary spreader mounted to the bow of the treatment vessel and evenly distributed over the surface of the treatment area. Using the pellet formulations, the active ingredient is gradually released from the clay carrier pellet over a period of several weeks. This allows for a controlled and extended exposure to fluridone concentrations. For liquid applications, the herbicide will be placed into an onboard mixing tank, mixed with river water and evenly distributed throughout the surface of the treatment area via boat. This herbicide will be applied under the water surface through trailing hoses, minimizing the chance of herbicide drift and assuring accurate placement over the target species.

Where this would be a long-duration, low-concentration treatment program, adjustments in the planned treatment protocol may be needed to accommodate changes in plant response or varying water flow and water volume turnover.

Fluridone water use restrictions include no application within one-quarter mile of a potable water intake and no use of treated water for irrigation purposes within 30 days of application. Although there are no restrictions on swimming, boating or fishing, prudent use suggests that we recommend minimal recreational use for the day of treatment. The

shoreline of the river will be posted with signs warning of these temporary water use restrictions, prior to treatment.

Water samples will be collected from multiple locations within the treatment area throughout the treatment program to test for fluridone residues using the manufacturer's FasTEST procedure. Results of these analyses will help guide subsequent booster application dosages and timing.

Impacts Specific to the Wetlands Protection Act using Fluridone[5]

- Protection of public and private water supply – Generally neutral, but may have detriment at high doses (prohibition within ¼ -mi. of drinking water intakes at doses >20 ppb)
- Protection of groundwater supply – Generally neutral (no significant interaction)
- Storm damage prevention – Neutral (no significant interaction)
- Prevention of pollution – Generally neutral (no significant interaction)
- Protection of land containing shellfish - Generally neutral (no significant interaction)
- Protection of fisheries - Possible benefit (habitat enhancement) and possible detriment (food source alteration, loss of cover)
- Protection of wildlife habitat – Possible benefit (habitat enhancement) and possible detriment (food source alteration, loss of cover)

5.0 PHASE II - CONTINGENT MANAGEMENT TECHNIQUES FOR FUTURE CONSIDERATION

Ongoing management of this well-established invasive plant community will most certainly be required beyond the initial Phase I management effort, as true eradication of this infestation is likely not an attainable goal. For this reason, we have included a variety of management strategies that we believe may be necessary to effectively address smaller areas of remaining target plant growth and/or small patches of regrowth or recolonization following Phase I. In this Phase II of the program the annual management approach will be commensurate with the type, location, and abundance of the target vegetation growth; therefore, a level of flexibility on which strategy or combination of strategies will be important to the further reduction of the invasive plants and sustained long-term control.

In Phase II of the program the annual vegetation monitoring will drive the evaluation and ultimate selection of the annual management techniques employed. As such, it would be our intention and expectation to meet with the Commission for their review and approval of the proposed annual plan each time a new strategy becomes necessary. Below is a table outlining the contingent strategies that we believe may be required, in addition to Phase 1 strategies, at some point during the course of this 5-year program. We have also provided a brief outline of the scenarios where they may likely be needed in future management. Additional general information on these strategies is provided in the sections below.

[5] Commonwealth of Massachusetts Executive Office of Environmental Affairs. *Practical Guide to Lake Management*: 2004. 133 p.

Contingent Management Strategy	Anticipated Potential Use
Tribune (diquat) herbicide	This product is fast-acting and therefore allows for effective small-scale treatment in a moving water scenario. As a result, this product may be used to provide rapid "emergency" level control in areas where the invasive species growth has potential to interfere with public events and recreational user safety (i.e., Head of the Charles).
Clearcast (imazamox) herbicide	May be used to control water chestnut growth that is too widespread and/or dense for manual hand-pulling and/or inaccessible to larger mechanical harvesting equipment.
Flumigard (flumioxazin) herbicide	This product is the only herbicide that would be effective at selectively managing small areas of fanwort growth in a flowing system like the river. It therefore would be used to manage small areas of fanwort regrowth that cannot be effectively managed with Sonar (due to extended contact time).
Algaecides (copper & peroxide)	These would be employed to address harmful cyanobacteria blooms should they arise.

Diquat (Tribune - EPA # 100-1390 or equivalent)

Tribune (diquat) is an effective herbicide for spot-application treatments due to its rapid mode of action and short herbicide concentration-exposure-time requirements. Even though diquat is classified as a contact herbicide, longer term control may be seen as plants' root crowns will not be allowed to develop.

The USEPA/MA registered herbicide diquat will be applied to the area at or below the permissible label dose. Tribune is a widely used herbicide, applied to greater than 500 lakes and ponds annually throughout the northeast to control nuisance submersed aquatic plants. At this time, there are no immediate plans to utilize diquat within the Lakes District of the Charles River. However, as diquat is a valuable tool in the aquatic plant management toolbox, we are including it in the event an appropriate and justified need arises. Diquat is able to control milfoil, curly-leaf pondweed, and other nuisance submersed plants at the application rate of 1.0-2.0 gal/acre, if necessary. Ultimately, diquat would likely only be used to control curly-leaf pondweed, if necessary, during non-fluridone treatment years (as fluridone is also able to control this species on an annual basis). Milfoil spot-treatments will be conducted using ProcellaCOR.

Temporary water use restrictions for diquat are: 1) No drinking or cooking for 3 days, 2) No irrigation of turf for 3 days and of food crops for 5 days, and 3) No livestock watering for 1 day. There are no restrictions on swimming, boating, or fishing, but prudent herbicide/algaecide management suggests that we recommend avoiding use of the treatment area(s) on the day of treatment. The shoreline will be posted with signs warning of these temporary water use restrictions, prior to treatment.

Diquat is translocated to some extent within the plant. Its rapid action tends to disrupt the leaf cuticle of plants and acts by interfering with photosynthesis. Upon contact with the soil, it is adsorbed immediately and thereby biologically inactivated. Residual levels of diquat in treated water decline rapidly and their reduction is due to the uptake by the targeted vegetation and adsorption to suspended soil particles in the water or on the bottom

sediment. Photochemical degradation accounts for some loss under conditions of high sunlight and clear waters.

Impacts Specific to the Wetlands Protection Act using Diquat[6]

- Protection of public and private water supply – Benefit (water quality improvement)
- Protection of groundwater supply – Neutral (no interaction as diquat is adsorbed to soil particles)
- Flood control - Neutral (no significant interaction)
- Storm damage prevention – Neutral (no significant interaction)
- Prevention of pollution – Generally neutral (no significant interaction), but could be a detriment if plant die-off causes low oxygen at the bottom of the lake
- Protection of land containing shellfish - Generally neutral (no significant interaction), but reduced algae might reduce food resources for shellfish, and direct toxicity is possible under unusual circumstances
- Protection of fisheries - Possible benefit (habitat enhancement) and possible detriment (food source alteration, loss of cover)
- Protection of wildlife habitat – Possible benefit (habitat enhancement) and possible detriment (food source alteration, loss of cover)

Imazamox (Clearcast – EPA # 241-437-67690)

The USEPA/MA registered systemic herbicide imazamox will be applied to a respective area at or below the permissible label dose. Imazamox would be applied to control invasive water chestnut growth at the application rate of 1.5 lbs ai/acre (approximately 1 gal/ac.), if necessary. At this time, there is no immediate plan to utilize Clearcast in the Lakes District as water chestnut growth is anticipated to be managed via a combination of mechanical harvesting and hand-pulling efforts. If water chestnut growth expands to areas that are not accessible to mechanical harvesters and in quantities beyond the feasible capabilities of hand-pulling the use of Clearcast will be considered on a site-by-site basis.

As Clearcast would be applied as a foliar application that is conducted using a hand-held gun sprayer from a low-volume pump system, the herbicide would be diluted onboard the treatment boat with river water and a spray adjuvant would be added to ensure the product adheres to and remains on the water chestnut rosettes for maximum uptake. Treatment is usually conducted between the end of June and the end of August – once the rosettes have surfaced, but prior to the nutlets dropping from the plants into the river. By conducting a foliar application this way, the water chestnut plants can be easily targeted with little to no non-target impacts. Clearcast is quickly absorbed by the water chestnut foliage and rapidly translocated to the growing points within the plant, stopping growth. Treatment would not be conducted when there is any rain forecasted within the day to ensure maximum uptake by the plants. Additionally, if the wind speeds exceed 10 mph, treatment would be rescheduled accordingly to prevent any drift to non-target species.

Temporary water use restrictions for imazamox are: 1) No drinking or cooking using treated waters until residue testing results are below 50 ppb, 2) No irrigation until concentrations are below 50 ppb. There are no restrictions on swimming, boating, fishing, watering of livestock, or domestic use, but prudent herbicide management suggests that we close the treatment

[6] Commonwealth of Massachusetts Executive Office of Environmental Affairs. *Practical Guide to Lake Management*: 2004. 124 p.

area on the day of treatment. The shoreline will be posted with signs warning of these temporary water use restrictions prior to treatment.

Impacts Specific to the Wetlands Protection Act using Imazamox

- Protection of public and private water supply – Generally neutral, but may have detriment at high doses (setback of treatment required, with distance based on dose and area treated)
- Protection of groundwater supply – Neutral (no interaction)
- Flood control - Neutral (no significant interaction)
- Storm damage prevention – Neutral (no significant interaction)
- Prevention of pollution – Generally neutral (no significant interaction), but could be a detriment if plant die-off causes low oxygen at the bottom of the lake
- Protection of land containing shellfish - Generally neutral (no significant interaction)
- Protection of fisheries - Possible benefit (habitat enhancement) and possible detriment (food source alteration, loss of cover)
- Protection of wildlife habitat – Possible benefit (habitat enhancement) and possible detriment (food source alteration, loss of cover)

Flumioxazin (Flumigard- EPA #81927-78 or equivalent)

The USEPA/MA registered herbicide flumioxazin (Flumigard) is the only contact herbicide currently approved for use in Massachusetts that can provide effective control of fanwort. Flumioxazin use carries a number of state specific restrictions which limit its use potential. Until flumioxazin is more widely used in the state and more data is collected (which is in process at another waterbody SOLitude currently manages in the state) it is unlikely that these restrictions will change, so its use would be reserved for small spot-treatments in high-use areas of the river. If greater acreages require control, fluridone herbicide would be a better fit.

Currently in the Lakes District of the Charles River, the distribution and density of fanwort are better addressed through the application of fluridone (Sonar). As such, at this time there are no immediate plans to utilize flumioxazin. In the event of small, localized areas of fanwort growth when Sonar (fluridone) herbicide use is not feasible, then flumioxazin would be considered.

Flumioxazin herbicide is classified as a PPO (Protoporphyrinogen oxidase) inhibitor that initiates cell membrane disruption providing control of a broad range of susceptible plants. Flumioxazin is a true contact herbicide that provides quick and effective control of target plant species. Although flumioxazin is not shown to have systemic activity, one or more years of reasonable control have been observed at other projects in New England where it has been applied. Flumioxazin is extremely fast-acting and has a very short half-life so it is well suited for spot/site specific treatments.

Impacts Specific to the Wetlands Protection Act using Flumioxazin

- Protection of public and private water supply – Benefit (water quality improvement)
- Protection of groundwater supply – Neutral (no interaction as flumioxazin has a low leaching potential)
- Flood control - Neutral (no significant interaction)
- Storm damage prevention – Neutral (no significant interaction)
- Prevention of pollution – Generally neutral (no significant interaction), but could be a detriment if plant die-off causes low oxygen at the bottom of the lake

- Protection of land containing shellfish - Generally neutral (no significant interaction), but reduced algae might reduce food resources for shellfish, and direct toxicity is possible under unusual circumstances
- Protection of fisheries - Possible benefit (habitat enhancement) and possible detriment (food source alteration, loss of cover)
- Protection of wildlife habitat – Possible benefit (habitat enhancement) and possible detriment (food source alteration, loss of cover)

Algaecides (Captain XTR – EPA # 67690-9, SeClear – EPA # 67690-55, GreenClean PRO – EPA #70299-15, or equivalent)

Approval for the use of a copper or peroxide-based algaecide is requested in the event that hazardous or nuisance algae conditions develop that jeopardize human health or recreation, warranting treatment. Although the Charles River has supported historical cyanobacteria (blue-green algae) blooms, there is no immediate plan to conduct an algaecide treatment in the Lakes District. Algaecides have been included for approval so that if a cyanobacteria bloom is documented around the time of a large recreational event on the Charles River (i.e., Head of the Charles Regatta, or similar), in which human health may be negatively impacted by the bloom, a treatment can be conducted to effectively alleviate the conditions. Although treatment of a cyanobacteria bloom is only a short-term solution, the ability to react accordingly when public health may be at stake is crucial.

Copper based algaecides (i.e., Captain XTR, CuSO4, SeClear) are widely used and are applied to lakes and ponds throughout North America to control nuisance filamentous and microscopic algae – inclusive of cyanobacteria (blue-green algae) blooms. There are no water use restrictions associated with copper-based algaecides; SŌLitude treats several direct, potable (drinking) water reservoirs and an increasing number of recreational waterbodies in the Commonwealth with these algaecides, on a yearly basis. The concentrated liquid algaecides are first diluted with river water and are then applied subsurface (in the same process as the liquid herbicides mentioned previously) throughout the treatment area. The application rate is generally 0.2 ppm of copper or less for algae control. If applied, treatment will not exceed 50% of the waterbody volume so that dissolved oxygen levels can be preserved as to not impact any aquatic wildlife.

Peroxide based algaecides (i.e., GreenClean PRO, GreenClean Liquid) are a recent addition to algae management. Similar to copper algaecides, there are no water use restrictions. The concentrated products are diluted with river water and then sprayed evenly throughout the treatment area. The application rate is 0.5 – 1.5 gallons per acre-foot for algae control. If applied, treatment will not exceed 50% of the waterbody volume.

Algae management in the Charles River system is a difficult endeavor, as common reactionary strategies like copper and peroxide based algaecides only offer a short-term solution to the problem. Internal and external nutrient reduction offers a longer-term approach, but the potential for success on this scale (large watershed, high density development, significant accumulation of organic sediments, etc.) is likely incapable of producing a nutrient level reduction capable of precluding high phytoplankton production under suitable growing conditions.

Impacts Specific to the Wetlands Protection Act using Copper[7] and Peroxide Algaecides

- Protection of public and private water supply – Benefit (used to control algae)
- Protection of groundwater supply – Neutral (no significant interaction)
- Flood control - Neutral (no significant interaction)
- Storm damage prevention – Neutral (no significant interaction)
- Prevention of pollution - Generally neutral (no significant interaction), but could be a detriment if algae/plant die-off causes low oxygen at the bottom of the lake or causes release of taste and odor compounds or toxins
- Protection of land containing shellfish - Generally neutral (no significant interaction), but reduced algae might reduce food resources for shellfish, and direct toxicity is possible under unusual circumstances.
- Protection of fisheries - Possible benefit (habitat enhancement) and possible detriment (food source alteration, direct toxicity)
- Protection of wildlife habitat – Possible benefit (habitat enhancement) and possible detriment (food source alteration, direct toxicity)

Management Technique Descriptions

Detailed information on all the approaches proposed in this NOI can be found at the **Massachusetts Department of Conservation and Recreation, Lakes and Ponds Program website**. There are links under the Publications tab to the "Generic Environmental Impact Report for Eutrophication and Lake Management in Massachusetts" and the "Practical Guide to Lake Management in Massachusetts."
<http://www.mass.gov/eea/agencies/dcr/water-res-protection/lakes-and-ponds/eutrophication-and-aquatic-plant-management.html>

Additional information on the herbicides and algaecides can be found at the **Massachusetts Department of Agricultural Resources website**:

<http://www.mass.gov/eea/agencies/agr/pesticides/aquatic-vegetation-management.html>

6.0 Alternatives Analysis:

Alternatives to the proposed Aquatic Plant Management Plan were considered. SŌLitude and DCR staff evaluated all available strategies for management of the Lakes District of the Charles River. Findings and recommendations are based on direct experience and discussions found in the *Eutrophication and Aquatic Plant Management in Massachusetts Final Generic Environmental Impact Review* (FGEIR, EOEA 2004).

Bottom/Benthic Weed Barriers: Not Recommended

Physical controls, such as the use of bottom weed barriers (i.e., Aquatic Weed Net or Palco) can be effective for small dense patches of nuisance vegetation, but are not cost effective or feasible for large areas. Weed barriers are expensive to install and maintain at ~$2.00+/ft^2 (material & installation). Semi-annual maintenance to retrieve, clean and re-deploy the barriers would be expensive and time consuming. Additionally, covering expansive areas of the river bottom may also have detrimental impacts on invertebrates or

[7] Commonwealth of Massachusetts Executive Office of Environmental Affairs. *Practical Guide to Lake Management*: 2004. 122 p.

other types of wildlife. Based on the configuration of the Lakes District, the relatively large distribution of various invasive aquatic plants within the area, and the known presence of contaminated sediment which would be disturbed with the installation/removal, we do not believe bottom barriers are a viable management strategy in this case.

Diver Hand-Pulling or Diver-Assisted Suction Harvesting (DASH): Not Recommended

Diver hand-pulling and/or diver-assisted suction harvesting (DASH) can be a potential management tool for small, scattered growth of species such as milfoil, fanwort, and curlyleaf pondweed. The plants are individually pulled by the stem to gently lift the root from the sediment and placed into a mesh bag (with the diver hand-pulling) or suctioned up to a boat on the surface (with DASH). Unfortunately, due to the presence of contaminated sediment in the Charles River, the high frequency and use of recreational boats, and prohibited swimming, we are not recommending these management strategies for use in the Lakes District in order to protect the safety of the divers.

Mechanical Harvesting: Recommended

Harvesting of water chestnut plants *only* is recommended in the Lakes District. Further information about the proposed mechanical harvesting strategy is provided in section 4.3.3.

It should be noted that harvesting Eurasian watermilfoil, variable watermilfoil and fanwort growth is not recommended because of their ability to reproduce through vegetative fragmentation. As such, this management approach has the potential to increase propagation of these invasive species within and downstream of the Lakes District. Additionally, harvesting would be costly and at best would only provide seasonal relief of these species with little or no long-term benefits. The overall ecological disruption and non-target impacts would be more significant than with spot-treatments using aquatic herbicides.

Biological: Not Recommended

There are no proven biological controls available or approved by the State for the control of the invasive aquatic plant species present in the Lakes District of the Charles River.

Sediment Excavation/Dredging: Not Recommended

Dredging nutrient rich bottom sediment is sometimes used as a strategy to control excessive weed growth. Conventional (dry) or hydraulic dredging would require the expenditure of hundreds of thousands of dollars in design and permitting fees alone. Dredging may also have severe impacts to aquatic organisms (i.e., fish and macroinvertebrates) in the river with no guarantees of elimination of invasive vegetation.

Do Nothing: Not Recommended

If the non-native and nuisance plant growth is allowed to continue unabated, eutrophication and inevitable filling-in at the Lakes District will continue to occur at an accelerated rate due to the annual decomposition of extra plant material. Stagnant conditions will also increase water temperatures promoting both algae and bacterial growth as well as providing extensive mosquito breeding habitat. The river's recreational and aesthetic value would be significantly degraded.

7.0 Compliance

Massachusetts Wetlands Protection Act:

The objective of this project is to control invasive species. Managing densities of non-native species will typically not adversely affect wildlife habitat and will not negatively impact other interests of the Massachusetts Wetlands Protection Act. No significant alteration to wetland resources areas will occur as a result of the proposed management program; instead the resource areas will be enhanced by controlling the nuisance plant and algae growth. The proposed management activities are consistent with the guidelines in the following documents:

- Final Generic Environmental Impact Report: Eutrophication and Aquatic Plant Management in Massachusetts (June 2004)
- Guidance for Aquatic Plant Management in Lakes and Ponds: As it Relates to the Wetlands Protection Act (April 2004 – DEP Policy/SOP/Guideline # BRP/DWM/WW/G04-1)
- The Practical Guide to Lake Management in Massachusetts (2004)

DEP License to Apply Chemicals:

All herbicide applications will be performed by Certified Applicators. A site specific "License to Apply Chemicals" for the proposed treatment will be filed with Massachusetts DEP, Office of Watershed Management. The USEPA/MA registered aquatic herbicides will be applied at recommended label rates, in accordance with the "Order of Conditions" and DEP "License to Apply Chemicals" permits (BRP WM04). Prior to treatment, the shoreline will be posted with signs warning of all temporary water use restrictions.

Massachusetts Environmental Policy Act:

The strategies proposed in this NOI are options approved under the Massachusetts Environmental Protection Act (MEPA) process that was approved in 2004 with the issuance of the FGEIR and the *Practical Guide to Lake and Pond Management in Massachusetts*. These approaches do not require individual MEPA review.

Massachusetts Endangered Species Act:

According to the most recent Natural Heritage maps provided by MA GIS, the Lakes District of the Charles River contains one Priority Habitat (PH1301) as determined by the Massachusetts Natural Heritage & Endangered Species Program (NHESP). As such, a formal review by NHESP will be required. A copy of this program request has been submitted to NHESP for review under MESA.

Chapter 91:

Based on the types of activities that are subject to Chapter 91 authorization (structures, filing, dredging, change in use, and structural alteration), the work proposed in this Notice of Intent application is not classified as any of those activities. These approaches do not require a Chapter 91 authorization.

US Army Corps of Engineers:

The Lakes District of the Charles River falls into the US Army Corps of Engineers jurisdiction. Based on the types of activities that are subject to their approval, we believe filing a Self-Verification will fulfill this regulatory requirement.

8.0 Impacts of the Proposed Management Plan Specific to the Wetlands Protection Act:

Protection of public and private water supply – The Lakes District of the Charles River is not used directly as a drinking water supply. Aquatic herbicide treatment at the river will not have any adverse impacts on the public or private water supply, when used in accordance with the project label and conditions of the MA DEP License to Apply Chemicals.

Protection of groundwater supply – According to available studies, there is no reason to believe that the groundwater supply will be adversely impacted by the proposed management strategies, specifically the application of the herbicides at the proposed rates to the Lakes District of the Charles River, when used in accordance with the product labels. Contamination of groundwater by aquatic herbicides is limited by their low rate(s) of application, rapid rate of degradation, and uptake by target plants. SŌLitude's State licensed applicators take all necessary precautions when mixing and disposing/recycling of all chemical containers.

Flood control and storm damage prevention – No construction, dredging or alterations of the existing floodplain and storm damage prevention characteristics of the river are proposed. However, in some instances, abundant and excessive aquatic plant growth can contribute to high water and flooding. Most commonly this occurs in the vicinity of waterbody outlets or water conveyance channels and structures. The unmanaged annual growth and decomposition of abundant plant growth is also known to increase sediment deposition at an accelerated rate. Therefore, the proposed management approaches may increase the capacity of the resource area over the long-term to provide flood protection.

Prevention of pollution – No degradation of water quality or increased pollution is expected by the proposed management approaches. The proposed herbicides are relatively slow acting in controlling the nuisance vegetation. This results in a slow release of nutrients from the decaying plants, reducing the potential for increases in nutrients that can cause algae blooms. Removal of the excessive growth of aquatic vegetation will contribute to improved water circulation and a reduction in the potential for anoxic conditions. The post-management decrease in plant biomass will help to decrease the rate of eutrophication currently caused by the decomposing of excessive plant material.

Protection of fisheries and shellfisheries – Contiguous, dense beds of aquatic vegetation provide poor habitat for most species of fish. Dense plant cover frequently results in significant diurnal fluctuations in dissolved oxygen as well as oxygen depletion during certain times of the year. While temporary effects on some desirable submersed and floating-leafed species may occur following the application of an aquatic herbicide, non-target plants typically rebound quickly. Shoreline emergent plants will not be impacted following the use of aquatic herbicides.

Protection of wildlife and wildlife habitat – In general, excessive and abundant plant growth, especially non-native plants, provides poor wildlife habitat for fish and other wildlife. The proposed management plan is expected to help prevent further degradation of the waterbody through excessive weed growth and improve the wildlife habitat value of the pond in the long-term. Maintaining a balance of open water and vegetated areas is intended.

ATTACHMENT C

Figures

Charles River Upper Basin - Lakes District to Watertown (Route 16) Bridge - Area of Work by Town & NHESP Habitat Areas

SOLITUDE LAKE MANAGEMENT
888.480.5253
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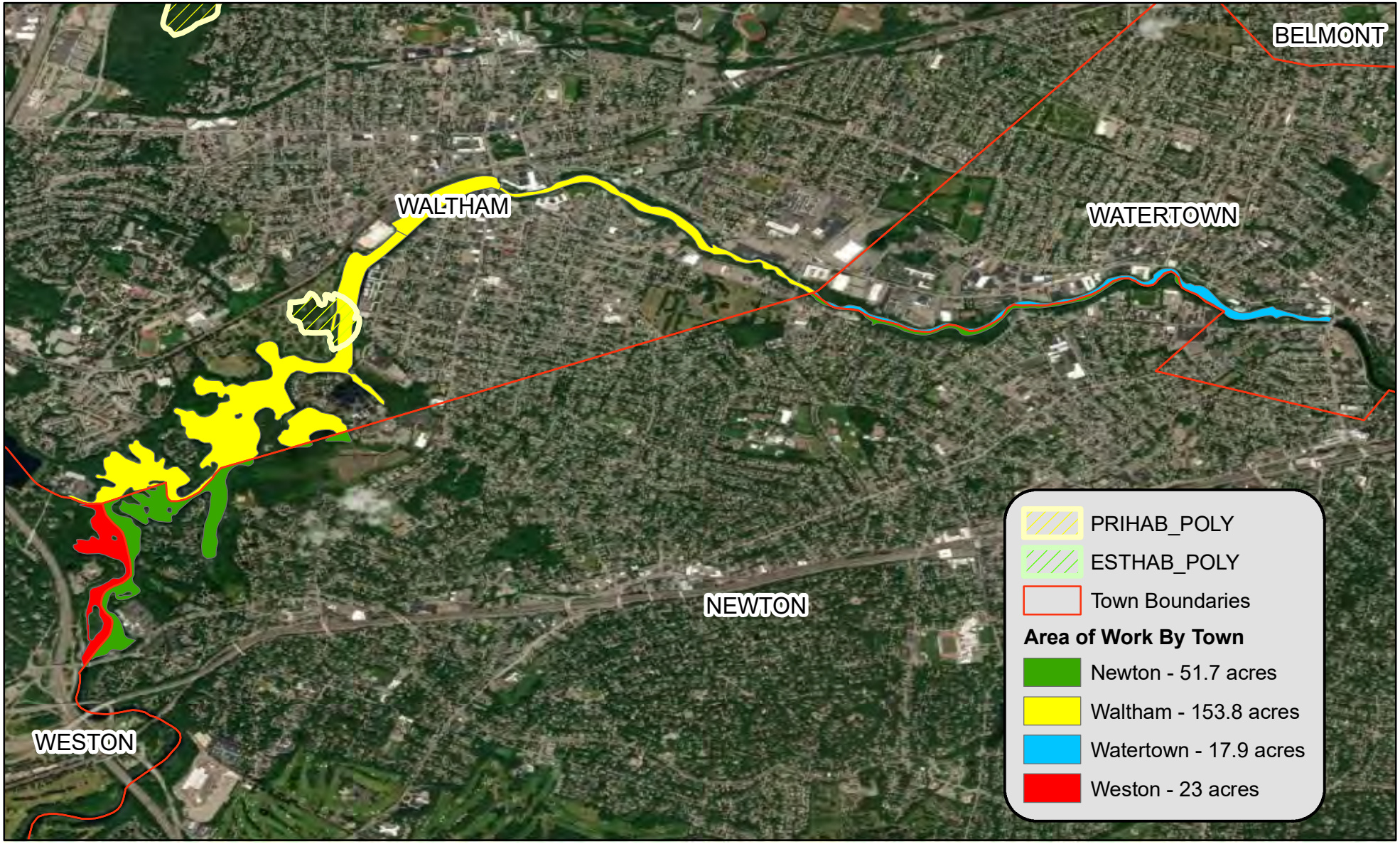
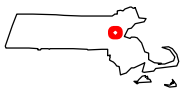


Charles River
Weston, Newton
Waltham, Watertown, MA
[Middlesex/Suffolk County]



Charles River

1:36,297

0 2,600 5,200 10,400 Feet

N

Map Date: 2/16/2022
Prepared by: DMM
Office: Shrewsbury, MA

Charles River - Newton
Distribution of Non-Native Species (Section A)

SOLITUDE
LAKE MANAGEMENT
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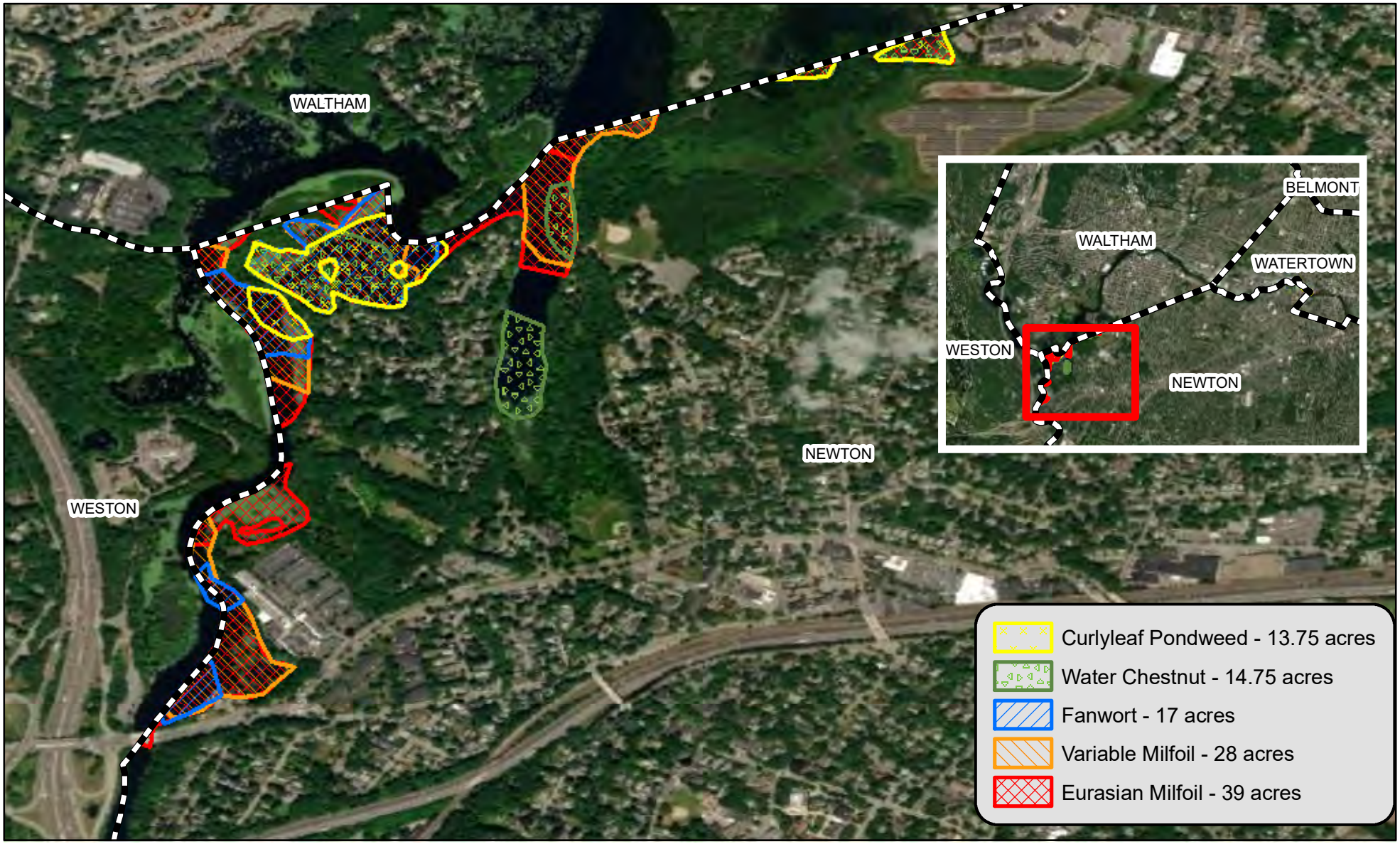

Charles River
Weston, Newton
Waltham, Watertown, MA
[Middlesex/Suffolk County]

Charles River

1:11,887

0 800 1,600 3,200 Feet

N

Map Date: 1/25/2022
Prepared by: DMM
Office: Shrewsbury, MA

Charles River - Newton
Distribution of Non-Native Species (Section B)

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LAKE MANAGEMENT
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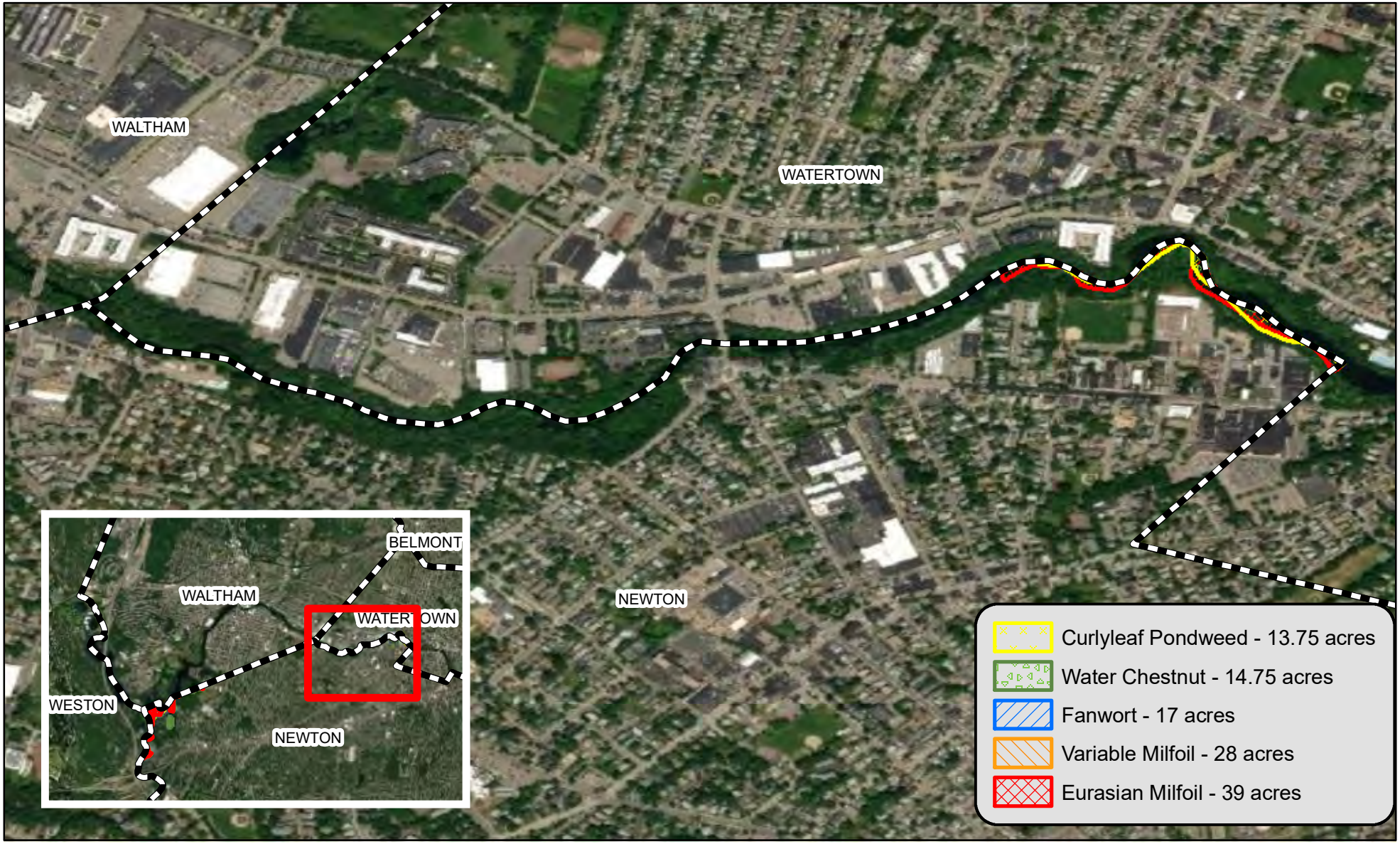

Charles River
Weston, Newton
Waltham, Watertown, MA
[Middlesex/Suffolk County]

Charles River

1:11,887

0 800 1,600 3,200 Feet

N

Map Date: 1/25/2022
Prepared by: DMM
Office: Shrewsbury, MA

Site Locus

SOLITUDE LAKE MANAGEMENT
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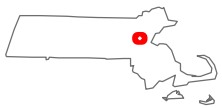
solitudelakemanagement.com

Charles River
Waltham, MA



Charles River Lakes District Area

0 — 3,900 — 7,800
Feet

N

Map Date: 01/27/2022
Prepared by: KV
Office: SHREWSBURY, MA

ATTACHMENT D

Herbicide/Algaecide Information

Detailed information herbicides proposed in this NOI can be found at the **Massachusetts Department of Conservation and Recreation, Lakes and Ponds Program website.** There are links under the Publications tab to the "Generic Environmental Impact Report for Eutrophication and Lake Management in Massachusetts" and the "Practical Guide to Lake Management in Massachusetts."

<http://www.mass.gov/eea/agencies/dcr/water-res-protection/lakes-and-ponds/>

Additional information on these herbicides can be found at the **Massachusetts Department of Agricultural Resources website**

http://www.mass.gov/eea/agencies/agr/pesticides/aquatic-vegetation-management.html