



Enter your transmittal number

X231423

Transmittal Number

Your unique Transmittal Number can be accessed online: <http://mass.gov/dep/service/online/trasmfrm.shtml> or call MassDEP's InfoLine at 617-338-2255 or 800-462-0444 (from 508, 781, and 978 area codes).

Massachusetts Department of Environmental Protection

Transmittal Form for Permit Application and Payment

r/cd
1/5/2010

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

2. Make your check payable to the Commonwealth of Massachusetts and mail it with a copy of this form to: DEP, P.O. Box 4062, Boston, MA 02211.

3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application. Copy 2 must accompany your fee payment. Copy 3 should be retained for your records

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to:

MassDEP
P.O. Box 4062
Boston, MA
02211

* Note:
For BWSC Permits,
enter the LSP.

A. Permit Information

BRP WM 13

NPDES General Permit

1. Permit Code: 7 or 8 character code from permit instructions

2. Name of Permit Category

Request for General Permit Coverage: Surface Water Discharge from Potable Water Treatment Facilities

B. Applicant Information - Firm or Individual

Lynn Water and Sewer Commission

1. Name of Firm - Or, if party needing this approval is an individual enter name below:

2. Last Name of Individual
400 Parkland Avenue

3. First Name of Individual

4. MI

5. Street Address

Lynn

MA

01905

781-596-2400

204

6. City/Town

7. State

8. Zip Code

9. Telephone #

10. Ext. #

Andrew Hall

ahall@lynnwatersewer.org

11. Contact Person

12. e-mail address (optional)

C. Facility, Site or Individual Requiring Approval

Raymond F. Reardon Water Treatment Plant

1. Name of Facility, Site Or Individual

390 Parkland Avenue

2. Street Address

Lynn

MA

01905

781-595-5200

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

316300

8. DEP Facility Number (if Known)

9. Federal I.D. Number (if Known)

10. BWSC Tracking # (if Known)

D. Application Prepared by (if different from Section B)*

1. Name of Firm Or Individual

2. Address

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

8. Contact Person

9. LSP Number (BWSC Permits only)

E. Permit - Project Coordination

1. Is this project subject to MEPA review? ☐ yes ☐ no
If yes, enter the project's EOE file number - assigned when an Environmental Notification Form is submitted to the MEPA unit:

EOEA File Number

F. Amount Due

Special Provisions:

1. ☒ Fee Exempt (city, town or municipal housing authority)(state agency if fee is \$100 or less).
There are no fee exemptions for BWSC permits, regardless of applicant status.
2. ☐ Hardship Request - payment extensions according to 310 CMR 4.04(3)(c).
3. ☐ Alternative Schedule Project (according to 310 CMR 4.05 and 4.10).
4. ☐ Homeowner (according to 310 CMR 4.02).

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

Check Number

Dollar Amount

Date

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND - REGION I
ONE CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

Request for General Permit Authorization to Discharge Wastewater
(Notice of Intent to be covered by the General Permit (NOI))

Potable Water Treatment Facility (PWTF)
NPDES General Permit No. MAG640000 and NHG640000

rc'd
1/5/2010

A. Facility Information

1. Facility Owner:

Name Lynn Water and Sewer Commission e-mail ahall@lynnwatersewer.org
Street/PO Box 400 Parkland Avenue City Lynn
State MA Zip Code 01905
Contact Person Andrew Hall Telephone Number 781-596-2400 x204

2. Facility Operator (if different from above):

Name Veolia Water e-mail (optional) _____
Street/PO Box 23654 Network Place City Chicago
State IL Zip Code 60673-3654
Contact Person Robert Dawe Telephone Number 781-595-5200

3. Facility Data (attach topographic map or other map showing facility and discharge location(s)):

Name Raymond F. Reardon Water Treatment Plant e-mail (optional) rdawe@lynnwatersewer.org
Street/PO Box 395 Parkland Avenue City Lynn
State MA Zip Code 01905
Contact Person Richard Dawe Telephone Number 781-596-2400 x235
Facility Latitude 42 deg. 28' 34" North Facility Longitude 70 deg. 58' 20" West

4. Standard Industrial Classification (SIC Codes) and Descriptions of Processes:

SIC Code(s) 4941 Water Supply
Description(s) Water Filtration Plant Operation

5. Current Permitting Status (please check yes or no):

1. Has a prior NPDES permit been granted for the discharge? Yes ☒ (Permit Number: MA 1012610)
No ☐
2. Is the discharge a "new discharge" as defined by 40 CFR Section 122.22? Yes ☐ No ☒
3. Is the facility covered by an individual NPDES permit? Yes ☐ (Permit Number) No ☒
4. Is there a pending application on file with EPA for this discharge? Yes ☒ (Date of submittal: 07/17/91) No ☐

B. Discharge Information

1. Name of Receiving Waterbody Breeds Pond
2. Type of Receiving Waterbody (e.g. stream, lake, reservoir, estuary etc) Reservoir
3. State Water Quality Classification: A Freshwater: XX Marine Water:
4. Describe the discharge activities for which the owner/applicant is seeking coverage, including process discharges not specifically authorized in the PWTF GP which need to be authorized for discharge (and which attain the

effluent limits and other conditions of the general permit). This description should include all treatment methods used on the wastewater prior to discharge including lagoons, baffles, filter presses etc. If lagoons are used at the facility, please include the number and size of lagoons; the size and elevation of the entry pipe; the time of travel from the entry point of the discharge into the lagoon to the entry point to the receiving water; and the length of backwash cycle for any combination of number of filters. (attach extra sheets if necessary):

Applicant is seeking to permit discharge from Outfall #01, a 24" pipe discharging onto a 6' wide riprap apron tributary to Breeds Pond. Breeds Pond is one of Lynn's 4 reservoirs. This pipe is used periodically for "filter to drain" operations and as an emergency drain and overflow from various basins within the treatment plant, see Appendix 1.

5. Please provide a diagram depicting the treatment methods, outfalls, and receiving water.

6. Number of outfalls: 01 Latitude and Longitude for each outfall (attach additional pages if necessary)
 OUTFALL # Latitude 42 deg. 28' 36" North Longitude 70deg. 58' 26" West
 OUTFALL # Latitude Longitude

For each outfall:

7. What is the proposed sampling location(s) and proposed consistent times of the month for collecting samples:

Proposed sampling location is manhole "MH-1" at Northwestern edge of pavement. See attached Figure 2. Since discharge is infrequent, we plan to collect samples during actual discharge periods.

C. Effluent Characteristics

1. List here and attach information on any water additives used at the facility (Including chemicals for pH adjustment, dechlorination, control of biological growth, and control of corrosion and scale in water pipes): See Appendix 2.

2. Please report here any known remediation activities or water-quality issues in the vicinity of the discharge.
 None

3. Are aluminum-containing coagulants used at this facility? Yes ☒ No ☐

4. Does the discharge contain residual chlorine? Yes ☒ No ☐

5. Does the facility provide treatment to remove arsenic from the raw water source? Yes ☐ No ☒

6. Are phosphorus-containing chemicals added to the treated water at this facility? Yes ☒ No ☐

7. All applicants must attach a separate sheet listing all laboratory results (minimum of five) for total recoverable aluminum (in micrograms per liter) taken within the last six months. Do not include dilution when recording your results. See Section 4.4.5 of General Permit for more information.

8. Please include the following effluent data for each outfall:

Characteristic (report if measured)	Average Monthly	Maximum Daily
Discharge Flow (gpd)		
TSS (mg/l)		
pH (s.u.)	(min)	(max)
Total Recoverable Aluminum (ug/l)		
Total Residual Chlorine (ug/l)		

(continued on next page)

8. Continued

Characteristic (report if measured)

Whole Effluent Toxicity (%) LC50 _____ and/or C-NOEC _____

9. If the discharge contains aluminum and/or residual chlorine, please provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water, the dilution factor, and attach any calculations used to support stream flow and dilution calculations (See Appendix VII for dilution calculations and additional information):

7Q10 _____ cfs Dilution Factor _____ cfs

D. Endangered Species Act Eligibility

1. Using the instructions in Appendix I of the PWTF GP, under which criterion listed in Part II are you eligible for coverage under this general permit?

A ☒ B _____ C _____ D _____ E _____ F _____

2. If you selected criteria D or F, has consultation with the federal services been completed? Yes _____ No _____

3. If consultation with U.S. Fish and Wildlife Service and/or NOAA Fisheries Service was completed, was a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat received? Yes ☒ No _____

4. Attach documentation of ESA eligibility as described below and required at Part 3.4.1 and Appendix I, Part III, Step 4, of the General Permit.

Criterion A - No federally-listed threatened or endangered species or federally-designated critical habitat are present: A copy of the most current county species list pages for the county(ies) where your site or facility and discharges are located. You must also include a statement on how you determined that no listed species or critical habitat are in proximity to your site or facility or discharge locations.

Criterion B - Section 7 consultation completed with the Service(s) on a prior project: A copy of the USFWS's and/or NMFS's, as appropriate, biological opinion or concurrence on a finding of "unlikely to adversely effect" regarding the ESA Section 7 consultation.

Criterion C - Activities are covered by a Section 10 Permit: A copy of the USFWS's and/or the NMFS's, as appropriate, letter transmitting the ESA Section 10 authorization.

Criterion D - Concurrence from the Service(s) that the discharge is "not likely to adversely affect" federally-listed species or federally-designated critical habitat (not including the four species of concern identified in Section I of Appendix I): A copy of the USFWS's and/or the NMFS's, as appropriate, letter or memorandum concluding that the discharge is consistent with the general permit's "not likely to adversely affect" determination.

Criterion E - Activities are covered by certification of eligibility: A copy of the documents originally used by the other operator of your site or facility (or area including your site) to satisfy the documentation requirement of Criteria A, B, C or D.

Criterion F - Concurrence from the Service(s) that the discharge is "not likely to adversely affect" species of concern, as identified in Section I of Appendix I: A copy of the USFWS and/or the NMFS, as appropriate, concurrence with the applicant's determination that the discharge is "not likely to adversely affect" listed species.

E. National Historic Properties Act Eligibility

1. Using the instructions in Appendix III of the PWTF GP, under which criterion listed in Part III are you eligible for coverage under this general permit?

1 ____ 2 ____ 3 ____

2. Have any State or Tribal historic preservation officers been consulted in this determination? Yes ☒ No ____
If yes, attach the results of the consultation(s).

F. Certification

I certify that the discharge for which I am seeking coverage under the general permit consists solely of a surface water discharge from a potable water treatment facility. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature Daniel F. O'Neill Date 12/29/09

Printed Name and Title Daniel F. O'Neill, P.E. Executive Director

Federal regulations require this application to be signed as follows:

1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

Note: Permits No. MAG640000 and NHG640000 may be found at www.epa.gov/region1/npdes/pwtfgp.html

Appendix 1

Lynn Water Treatment Plant Sources of Discharge to Breeds Pond Through Outfall #01

- Low Service Reservoir overflow-this happens infrequently and is caused by operator error. The discharge is finished water
- Filter backwash equalization basin overflow- emergency only
- Supernatant from wastewater clarifiers- normally routed to headworks of plant, In case of emergency can be dumped to reservoir.
- Filter drain, AKA "filter to waste"- this happens for approximately 10 days per year typically in October or November during carbon change out.
- Stormwater from cover of low service reservoir - water from on top of floating reservoir cover is periodically siphoned to the outfall line.
- Coagulation tank overflow- emergency only.
- Plant influent pipeline blow off- emergency only.
- High Service pipeline blow off- emergency only.
- Emergency plant drain (requires entire plant shut-down)- emergency only.

Appendix 2

List of Chemicals used at Lynn Water Treatment Plant

Chemical Name	Use
Aluminum Sulfate	Coagulant
Sodium Aluminate	Coagulant (not currently used)
Caustic Soda (25%)	pH adjustment
Chlorine (one ton cylinders)	Disinfection
Sodium Chlorite	Used to manufacture chlorine dioxide
Hydrofluosilicic Acid	Fluoride addition
Zinc Orthophosphate	Corrosion control
Superfloc N-1986 (55gal barrels)	Coagulant in wastewater building

Appendix 3

Lynn Water Treatment Plant Endangered Species Act Eligibility

- A. Most recent Federally Listed Endangered and Threatened Species in Massachusetts list (06/22/2009)**
- B. Letter from United States Fish and Wildlife Services**
- C. Statement describing determination of “Criterion A” coverage under Endangered Species Act**

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES IN MASSACHUSETTS

COUNTY	SPECIES	FEDERAL STATUS	GENERAL LOCATION/HABITAT	TOWNS
Barnstable	Piping Plover	Threatened	Coastal Beaches	All Towns
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Chatham
	Sandplain gerardia	Endangered	Open areas with sandy soils.	Sandwich and Falmouth.
	Northern Red-bellied Cooter	Endangered	Inland Ponds and Rivers	Bourne (north of the Cape Cod Canal)
Berkshire	Bog Turtle	Threatened	Wetlands	Egremont and Sheffield
Bristol	Piping Plover	Threatened	Coastal Beaches	Fairhaven, Dartmouth, Westport
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Fairhaven, New Bedford, Dartmouth, Westport
	Northern Red-bellied Cooter	Endangered	Inland Ponds and Rivers	Taunton
Dukes	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Piping Plover	Threatened	Coastal Beaches	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Aquinnah and Chilmark
	Sandplain gerardia	Endangered	Open areas with sandy soils.	West Tisbury
Essex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Gloucester, Essex and Manchester
	Piping Plover	Threatened	Coastal Beaches	Gloucester, Essex, Ipswich, Rowley, Revere, Newbury, Newburyport and Salisbury
Franklin	Northeastern bulrush	Endangered	Wetlands	Montague
	Dwarf wedgemussel	Endangered	Mill River	Whately
Hampshire	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Hadley
	Puritan tiger beetle	Threatened	Sandy beaches along the Connecticut River	Northampton and Hadley
	Dwarf wedgemussel	Endangered	Rivers and Streams.	Hadley, Hatfield, Amherst and Northampton
Hampden	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Southwick
Middlesex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Groton
Nantucket	Piping Plover	Threatened	Coastal Beaches	Nantucket
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Nantucket
	American burying beetle	Endangered	Upland grassy meadows	Nantucket
Plymouth	Piping Plover	Threatened	Coastal Beaches	Scituate, Marshfield, Duxbury, Plymouth, Wareham and Mattapoisett
	Northern Red-bellied Cooter	Endangered	Inland Ponds and Rivers	Kingston, Middleborough, Carver, Plymouth, Bourne, Wareham, Halifax, and Pembroke
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Plymouth, Marion, Wareham, and Mattapoisett.
Suffolk	Piping Plover	Threatened	Coastal Beaches	Winthrop
Worcester	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Leominster

- Eastern cougar and gray wolf are considered extirpated in Massachusetts.
- Endangered gray wolves are not known to be present in Massachusetts, but dispersing individuals from source populations in Canada may occur statewide.
- Critical habitat for the Northern Red-bellied Cooter is present in Plymouth County.

Revised 06/22/2009



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New England Field Office
70 Commercial Street, Suite 300
Concord, New Hampshire 03301-5087
<http://www.fws.gov/northeast/newenglandfieldoffice>

January 2, 2009

To Whom It May Concern:

This project was reviewed for the presence of federally-listed or proposed, threatened or endangered species or critical habitat per instructions provided on the U.S. Fish and Wildlife Service's New England Field Office website:

(<http://www.fws.gov/northeast/newenglandfieldoffice/EndangeredSpec-Consultation.htm>)

Based on the information currently available, no federally-listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service (Service) are known to occur in the project area(s). Preparation of a Biological Assessment or further consultation with us under Section 7 of the Endangered Species Act is not required.

This concludes the review of listed species and critical habitat in the project location(s) and environs referenced above. No further Endangered Species Act coordination of this type is necessary for a period of one year from the date of this letter, unless additional information on listed or proposed species becomes available.

Thank you for your cooperation. Please contact Mr. Anthony Tur at 603-223-2541 if we can be of further assistance.

Sincerely yours,

Thomas R. Chapman
Supervisor
New England Field Office

**Statement Describing Determination of "Criterion A"
Coverage Under Endangered Species Act**

I determined that no listed species or critical habitat are in proximity to my site by inspection of a list downloaded from the United States Fish and Wildlife Service Northeast Office. In the County of Essex, Lynn is not listed under the "Towns" column.

Signed: Andrew Hall **Date:** 12/29/09

**Andrew Hall, P.E.
Engineer
Lynn Water and Sewer Commission**

Appendix 4

Lynn Water Treatment Plant National Historic Properties Act Eligibility

Massachusetts Historical Commission Project Notification Form

(Determination Pending)

950 CMR: OFFICE OF THE SECRETARY OF THE COMMONWEALTH

APPENDIX A
MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD
BOSTON, MASS. 02125
617-727-8470, FAX: 617-727-5128

PROJECT NOTIFICATION FORM

Project Name: Raymond F. Reardon Water Treatment Plant, NPDES Permit Application

Location / Address: 390 Parkland Avenue

City / Town: Lynn, MA 01905

Project Proponent

Name: Lynn Water & Sewer Commission, ATTN: Andrew Hall

Address: 400 Parkland Avenue

City/Town/Zip/Telephone: Lynn, MA 01905 781-596-2400 x204

Agency license or funding for the project (list all licenses, permits, approvals, grants or other entitlements being sought from state and federal agencies).

Agency Name

Type of License or funding (specify)

USEPA

Notice of Intent to be covered by General Permit
NPDES General Permit #MAG640000

Project Description (narrative):

Lynn Water & Sewer Commission is seeking permit coverage for an existing outfall tributary to Breed's Pond (see attached map). This outfall has been active since 1989. No new work is proposed.

Does the project include demolition? If so, specify nature of demolition and describe the building(s) which are proposed for demolition.

N/A

Does the project include rehabilitation of any existing buildings? If so, specify nature of rehabilitation and describe the building(s) which are proposed for rehabilitation.

N/A

Does the project include new construction? If so, describe (attach plans and elevations if necessary).

N/A

950 CMR: OFFICE OF THE SECRETARY OF THE COMMONWEALTH

APPENDIX A (continued)

To the best of your knowledge, are any historic or archaeological properties known to exist within the project's area of potential impact? If so, specify.

No

What is the total acreage of the project area?

Woodland _____ acres
Wetland 197 acres
Floodplain _____ acres
Open space _____ acres
Developed _____ acres

Productive Resources:

Agriculture _____ acres
Forestry _____ acres
Mining/Extraction 197 acres - Public Water Supply
Total Project Acreage 197 acres

What is the acreage of the proposed new construction? N/A acres

What is the present land use of the project area?

Drinking Water Reservoir
Public Water Supply ID # 31630000

Please attach a copy of the section of the USGS quadrangle map which clearly marks the project location.

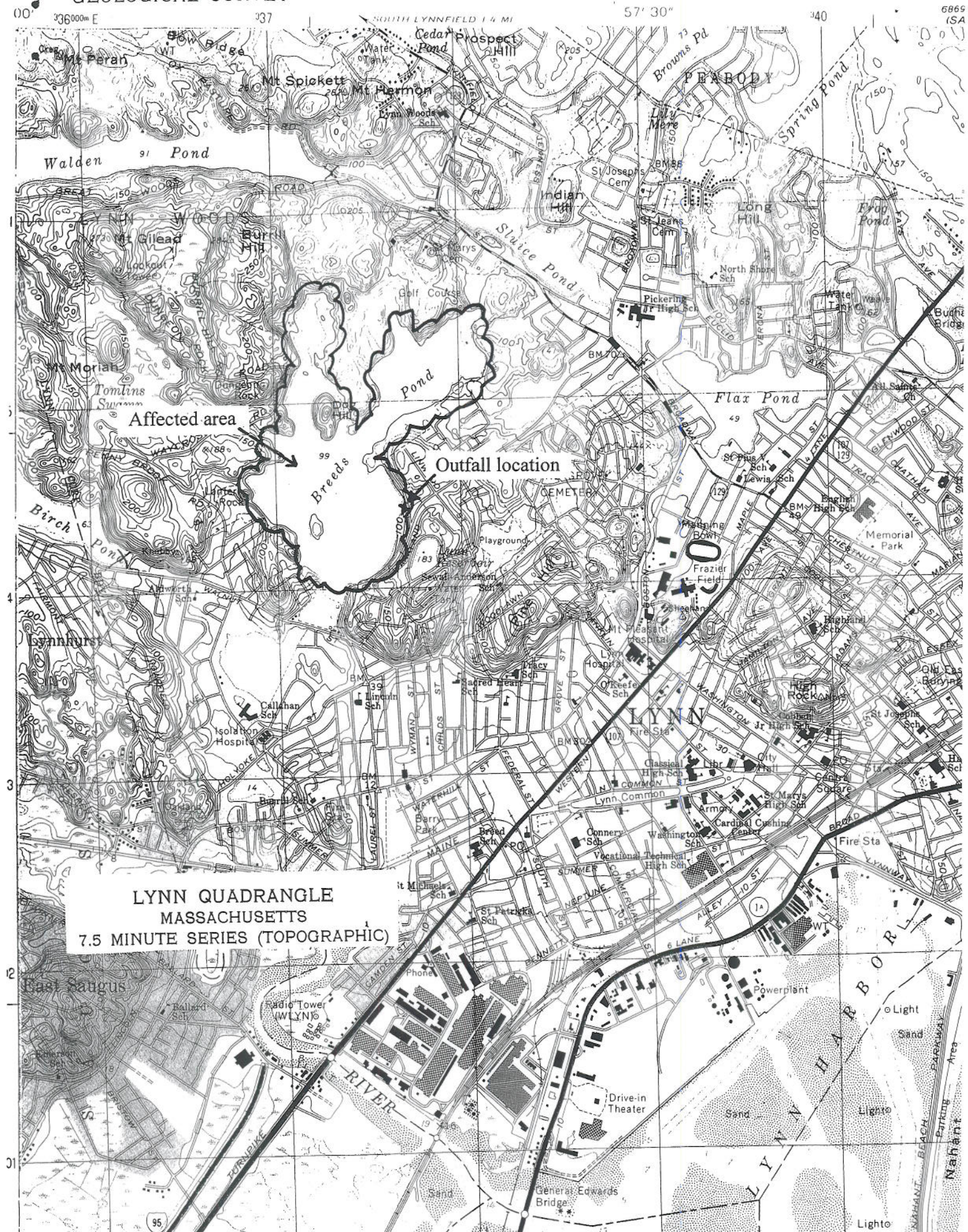
SEE ATTACHED

This Project Notification Form has been submitted to the MHC in compliance with 950 CMR 71.00.

Signature of Person submitting this form: Andrew Hall Date: 12/29/09
Name: Andrew Hall c/o Lynn Water & Sewer Commission
Address: 400 Parkland Avenue
City/Town/Zip: Lynn, MA 01905
Telephone: 781-596-2400 x204

REGULATORY AUTHORITY

950 CMR 71.00: M.G.L. c. 9, §§ 26-27C as amended by St. 1988, c. 254.



LOW
SERVICE
PUMPING
STATION
(NOT IN CONTRACT)

METER

COAGULATION
TANK
(4)

ALUM POLYMER

SUPERNATANT
RETURN



ON BOGERT ASSOCIATES
CONSULTING ENGINEERS

APPROVED *Wayne Eakins* DATE: DEC. 31, 19

