WATER & WETLAND

LAKE, POND & WETLAND MANAGEMENT

June 19, 2023

Sudbury Conservation Commission
Attention: Ms. Lori Capone
275 Old Lancaster Road
Sudbury, MA 01776

Dear Ms. Capone and Conservation Commission Members,

Water & Wetland, LLC will be continuing the Hop Brook Ponds water chestnut control program during the 2023 season. This includes a continuation of the Clearcast (Imazamox) treatments, and affiliated surveys, water quality analysis, and reporting at Carding Millpond, Stearns Millpond, and Grist Millpond. Water & Wetland is a small firm, with a large amount of water chestnut control experience. I will be the dedicated project manager and will be on-site for both of the water chestnut treatments.

We have completed the required pre-treatment monitoring and I've included our "field notes," from these surveys, as well as the affiliated maps. Information discussing the surveys, water quality analysis, and treatments will all be included within the year-end report submitted to the Commission by December 1st. DEP signs have been made and will be placed at each pond prior to the first treatment, as well as neon signs noting the treatment and any affiliated water-use restrictions.

Special Condition number 2, within section 2 of the Order of Conditions reads that "Each year, prior to commencement of vegetation control, or other related site work other than monitoring, the applicant shall providence a plan to the Conservation Commission showing expected treatment areas. Based on up-to-date site conditions, the applicant shall also include a letter addressing potential impacts on non-target native vegetation, water quality, fish, invertebrate, and aquatic life that could result from that years' work." We are sending this information over to fulfill this condition. As part of the 2023 work, we do not anticipate negative impacts on non-target native vegetation, water quality, fish, invertebrate, and/or aquatic life. Instead, we anticipate an improvement in the overall ecosystem, as water chestnut limits biodiversity of native plant species, and dense water chestnut, like that observed within the Hop Brook Ponds, can limit oxygen exchange, thus lowering dissolved oxygen. By controlling the water chestnut in the three ponds, we anticipate increased open-water habitat for fish and wildlife, improved oxygen transfer, and additional sunlight to allow for native plants to recolonize. The foliar spray will follow all best management practices, including pairing the herbicide with the

approved surfactant, which acts as a sticking agent and helps the herbicide penetrate the target water chestnut plants. Additionally, the treatment will be performed using low-volume application methodology and will be conducted on a day without rain or high winds. These best management practices help limit any overspray. The concentrations of herbicide actually going into the water are so low that they will not impact any beneficial native submerged species such as thin-leaf pondweed, ribbon-leaf pondweed, etc. Scattered duckweed mixed in with water chestnut may be minimally impacted for a short duration, however this will rebound quickly. Duckweed, while native, also creates dense cover which limits biodiversity and oxygen exchange. All attempts will be made to limit any non-target impacts to duckweed at the surface of the ponds. This program is identical to that of past years and is consistent with the Notice of Intent narrative approved by the Conservation Commission. This year, we are starting slightly earlier to allow for the best chance of success.

We welcome any questions and look forward to working with the Sudbury Conservation Commission for many years to come, alongside Hop Brook Protection Association, to improve the health of these beautiful ponds, but controlling invasive water chestnut.

Sincerely,

Colin Gosselin
Co-Owner
c: 508-259-3153
o: 888-4WETLAN(D)
colin@waterandwetland.com
www.waterandwetland.com

enclosures: Pre-Treatment Field Notes and Maps, Water & Wetland Staff Bios, 2023 MA DEP BRP WM04 Permits

WATER & WETLAND
LAKE, POND & WETLAND MANAGEMENT

ENVIRONMENTAL SCIENTIST:
JAMES LACASSE
JAMES@WATERANDWETLAND.COM
C: (774) 276-6098

CALL/TEXT WITH ANY QUESTIONS!

FIELD NOTES SUMMARY

Customer: Hop Brook Protection Association
Waterbody: Carding Millpond
Site Location: Sudbury, MA
Date: 6/13/2023

Observations / Notes: On June 13th, Senior Environmental Scientist, James Lacasse, and Field Assistant, Grace Adams, completed a sight visit to Carding Millpond. The visit consisted of conducting a survey and collecting water quality data. Conditions during the visit were warm and partly cloudy.

Upon arrival, a survey was conducted using visual observation paired with a standard throw-rake and ArcGIS Field Maps and external GPS. A large majority of visible green vegetation from shoreline may appear to be water chestnut; however, upon closer inspection, it was actually a variety of different aquatic species. These species include watermeal, duckweed, filamentous/epiphytic algae, elodea, and waterlilies. Other species documented during the survey include curly leaf pondweed (invasive), thin-leaf pondweed, and coontail. The epiphytic algae was primarily on the thin leaf pondweed populations, which were present in varying densities. Filamentous algae was found in dense mats, as well as in the water column. There were scattered densities of water chestnut, ranging from sparse to dense. A majority of the individual plants were surrounded by watermeal and duckweed, making the water chestnut appear more widespread. The water chestnut was most dense in the southern coves, as well as around the island, and was accompanied by floating seeds (see attached map).

While on-site, basic water quality was collected using calibrated meters. The pH was 7.7, which is within standard range for fresh waters and considered neutral. The water temperature was consistent with other similar waterbodies we manage in the area, and the dissolved oxygen was sufficient to support fish and wildlife. The water clarity was also assessed, and deemed as above average, as visibility was to the bottom of the pond. The Secchi reading was 5ft 1 in. All other required water samples were collected from the pond and were preserved and transported to Alpha Labs for analysis. Results will be provided within the year-end report. If immediate attention is needed with regard to any of the water quality results, we will make you aware of this immediately upon receipt of the results.

As planned, two water chestnut treatments will be scheduled during the 2023 season, prior to the plants setting seed. The treatment will include the use of Clearcast (imazamox). We are planning to start treatments slightly earlier this year, which will hopefully provide for the best results possible.

We will notify HBPA and Conservation in advance of the treatment and will be closely monitoring the weather. Please contact us with any questions or concerns.

Depth	Temperature (℃)	Dissolved Oxygen (mg/L)
Surface	24.3	8.93
1 Foot	23.8	8.62
2 Feet	23.5	8.80
3 Feet	23.2	8.72
4 Feet	21.9	8.65
Bottom	21.6	8.37

Secchi disk depth (feet)	5ft 6in (to the bottom)

Photos

Photo 1	Photo 2	Photo 3
		

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Upton, MA
(888) 4WETLAN(D)
www.waterandwetland.com

Photo 4	Photo 5	Photo 6
		

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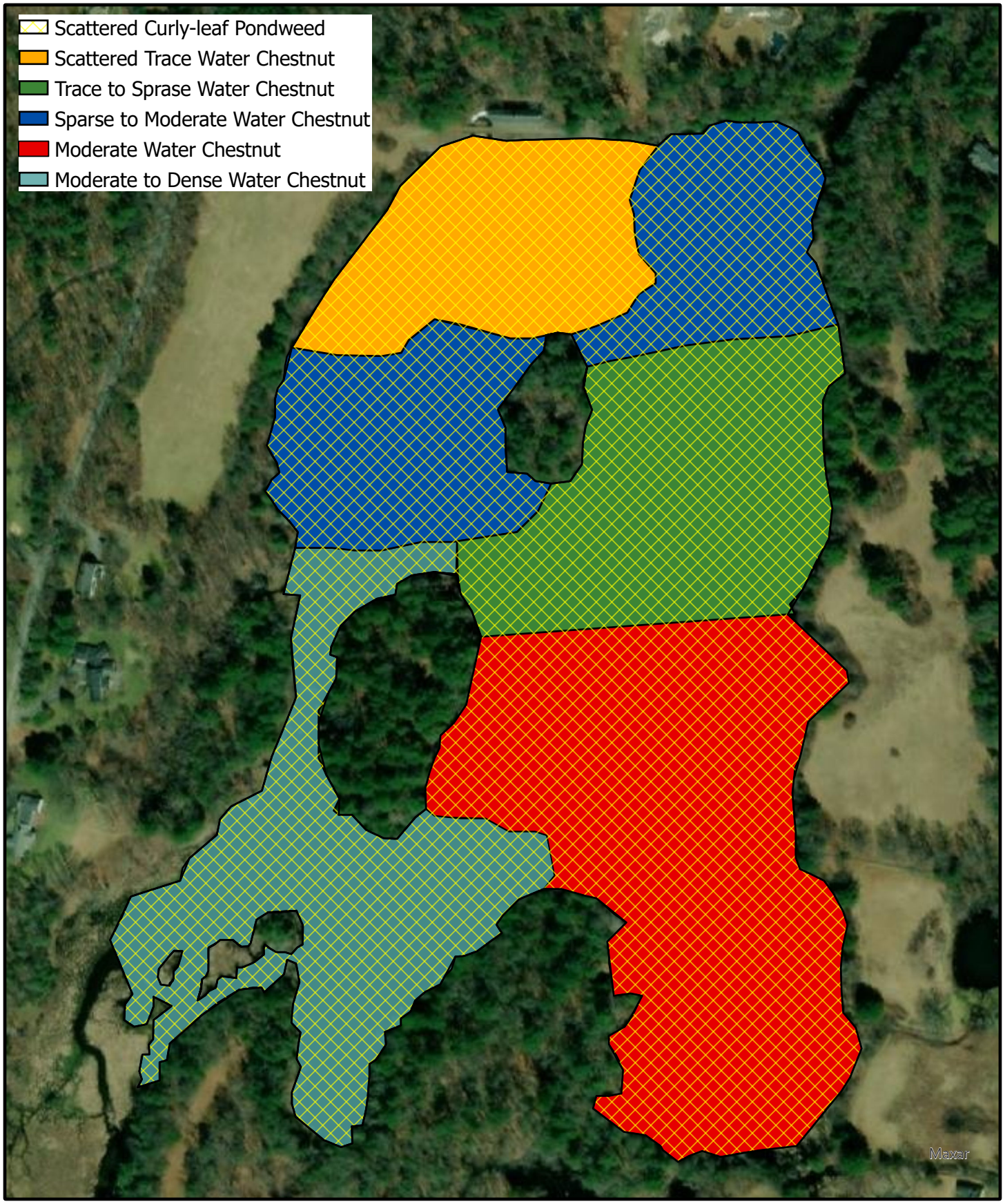


WATER & WETLAND
LAKE, POND & WETLAND MANAGEMENT

Carding Millpond
Invasive Species Distribution
Sudbury, MA

Survey Date
6/12/2023

Map Date
6/13/2023

N

WATER & WETLAND
LAKE, POND & WETLAND MANAGEMENT

ENVIRONMENTAL SCIENTIST:
JAMES LACASSE
JAMES@WATERANDWETLAND.COM
C: (774) 276-6098

CALL/TEXT WITH ANY QUESTIONS!

FIELD NOTES SUMMARY

Customer: Hop Brook Protection Association
Waterbody: Grist Millpond
Site Location: Sudbury, MA
Date: 6/13/2023

Observations / Notes: On June 13th, Senior Environmental Scientist, James Lacasse, and Field Assistant, Grace Adams, completed a sight visit to Grist Millpond. The visit consisted of conducting a survey and collecting water quality data. Conditions during the visit were warm and partly cloudy.

Upon arrival, a survey was conducted using visual observation paired with a standard throw-rake and ArcGIS Field Maps and external GPS. There was a significant reduction in the water chestnut density as a result of last year's treatment, with an estimated 20-30% coverage of water chestnut remaining. The green vegetation from the shoreline should not be assumed as all water chestnut, as the majority was duckweed and filamentous algae. Elodea was documented in dense densities and forming surface mats in some areas. Waterlilies, curly-leaf pondweed (invasive), thin-leaf pondweed, ribbon-leaf pondweed, and watermeal were also documented during the survey. Dense densities of filamentous algae were documented on the surface and within the water column. The new boat launch is greatly appreciated. This will make launching the airboat for water chestnut treatments much easier and will allow for even better flexibility due to weather conditions as we are not at the mercy of the crane company's availability.

While on-site, basic water quality was collected using calibrated meters. The pH was 7.7, which is within standard range for fresh waters and considered neutral. The water temperature was consistent with other similar waterbodies we manage in the area, and the dissolved oxygen was sufficient to support fish and wildlife. The water clarity was also assessed, and deemed as above average, as visibility was to the bottom of the pond. The Secchi reading was 5ft 1 in. All other required water samples were collected from the pond and were preserved and transported to Alpha Labs for analysis. Results will be provided within the year-end report. If immediate attention is needed with regard to any of the water quality results, we will make you aware of this immediately upon receipt of the results.

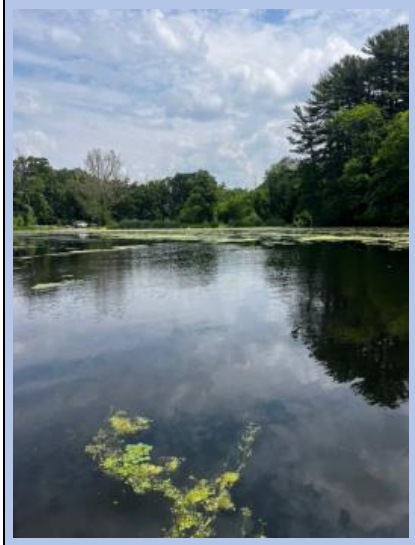
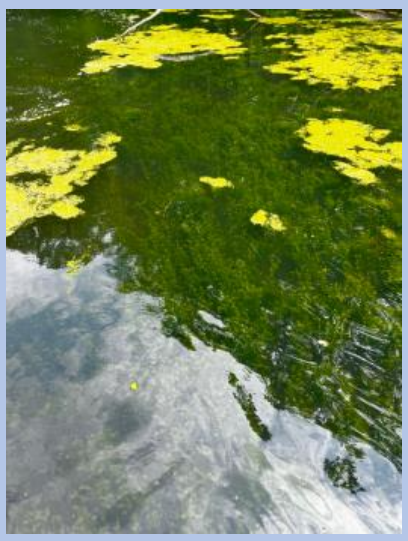
As planned, two water chestnut treatments will be scheduled during the 2023 season, prior to the plants setting seed. The treatment will include the use of Clearcast (imazamox). We are planning to start treatments slightly earlier this year, which will hopefully provide for the best results possible.

We will notify HBPA and Conservation in advance of the treatment and will be closely monitoring the weather. Please contact us with any questions or concerns.

Depth	Temperature (℃)	Dissolved Oxygen (mg/L)
Surface	22.6	9.88
1 Foot	23.1	9.39
2 Feet	22.1	7.48
3 Feet	22.2	7.41
Bottom	22..0	7.03

Secchi disk depth (feet)	3ft 7in (to the bottom)

Photos

Photo 1	Photo 2	Photo 3
		

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Upton, MA
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Photo 4

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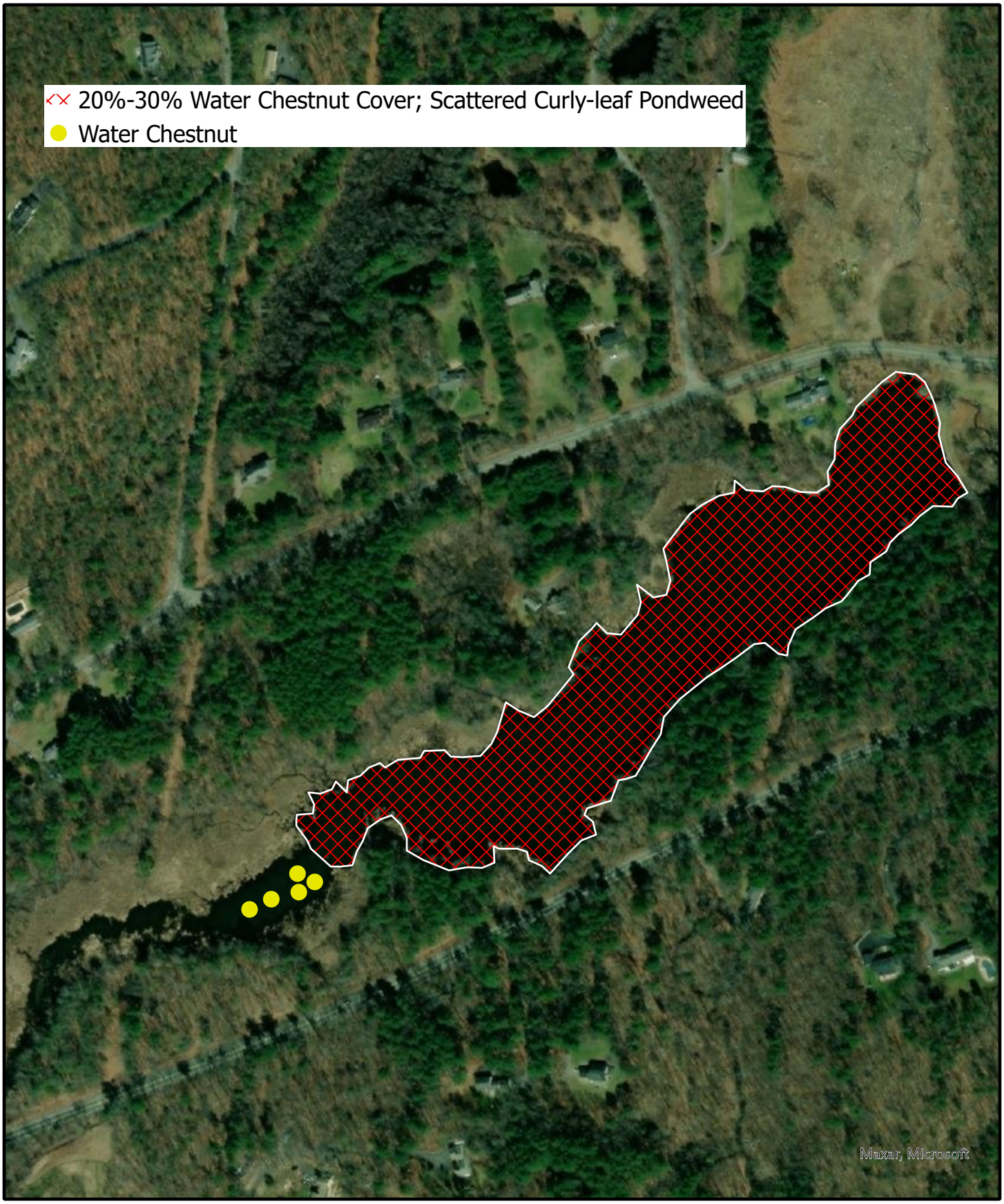

WATER & WETLAND
LAKE, POND & WETLAND MANAGEMENT

Grist Millpond
Invasive Species Distribution
Sudbury, MA

Survey Date
6/12/2023

Map Date
6/13/2023

N

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LAKE, POND & WETLAND MANAGEMENT

ENVIRONMENTAL SCIENTIST:
JAMES LACASSE
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C: (774) 276-6098

CALL/TEXT WITH ANY QUESTIONS!

FIELD NOTES SUMMARY

Customer: Hop Brook Protection Association
Waterbody: Stearns Millpond
Site Location: Sudbury, MA
Date: 6/13/2023

Observations / Notes: On June 13th, Senior Environmental Scientist, James Lacasse, and Field Assistant, Grace Adams, completed a sight visit to Stearns Millpond. The visit consisted of conducting a survey and collecting water quality data. Conditions during the visit were warm and partly cloudy.

Upon arrival, a survey was conducted using visual observation paired with a standard throw-rake and ArcGIS Field Maps and external GPS. Two invasive species were documented during the survey, water chestnut and curly-leaf pondweed. These species were found scattered throughout the pond in trace to moderate densities. It is important to note that the dots (GPS points) representing water chestnut on the attached map indicate individual plants or extremely small areas, rather than large populations. These populations were isolated from one another. Several native species were documented during the survey including elodea, ribbon-leaf pondweed, thin-leaf pondweed, duckweed, watermeal, and waterlilies. Elodea, ribbon-leaf pondweed, thin-leaf pondweed, and duckweed were the most dominant native species in the pond. Filamentous algae and epiphytic algae were observed with the epiphytic algae primarily documented on native species.

While on-site, basic water quality was collected using calibrated meters. The pH was 8, which is within standard range for fresh waters and considered neutral leaning towards basic. The water temperature was consistent with other similar waterbodies we manage in the area, and the dissolved oxygen was sufficient to support fish and wildlife. The water clarity was also assessed, and deemed as above average, as visibility was to the bottom of the pond. The Secchi reading was 2ft 9 in. (bottom) All other required water samples were collected from the pond and were preserved and transported to Alpha Labs for analysis. Results will be provided within the year-end report. If immediate attention is needed with regard to any of the water quality results, we will make you aware of this immediately upon receipt of the results.

As planned, two water chestnut treatments will be scheduled during the 2023 season, prior to the plants setting seed. The treatment will include the use of Clearcast (imazamox). We are planning to start treatments slightly earlier this year, which will hopefully provide for the best results possible.

We will notify HBPA and Conservation in advance of the treatment and will be closely monitoring the weather. Please contact us with any questions or concerns.

Depth	Temperature (℃)	Dissolved Oxygen (mg/L)
Surface	23.9	9.58
1 Foot	23.3	8.78
2 Feet	23.0	8.59
Bottom	22.1	7.76

Secchi disk depth (feet)	2ft 9in (to the bottom)

Photos

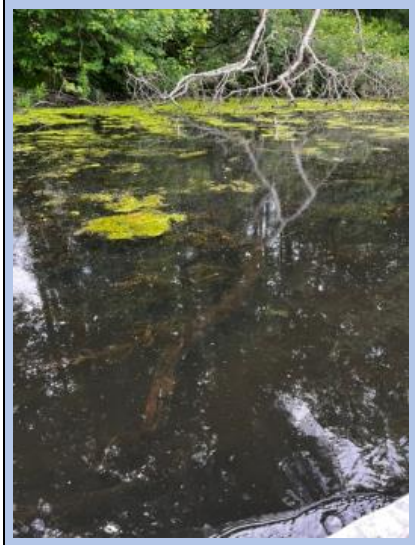
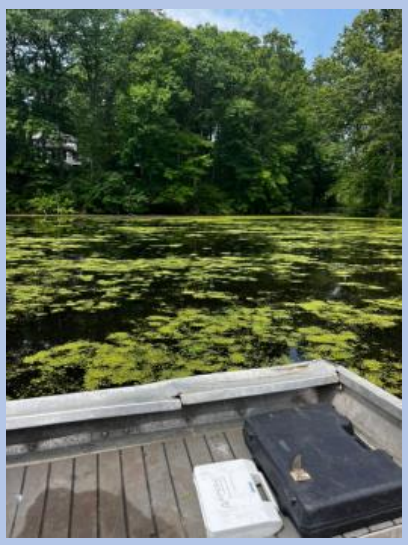
Photo 1	Photo 2	Photo 3
		

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Photo 4

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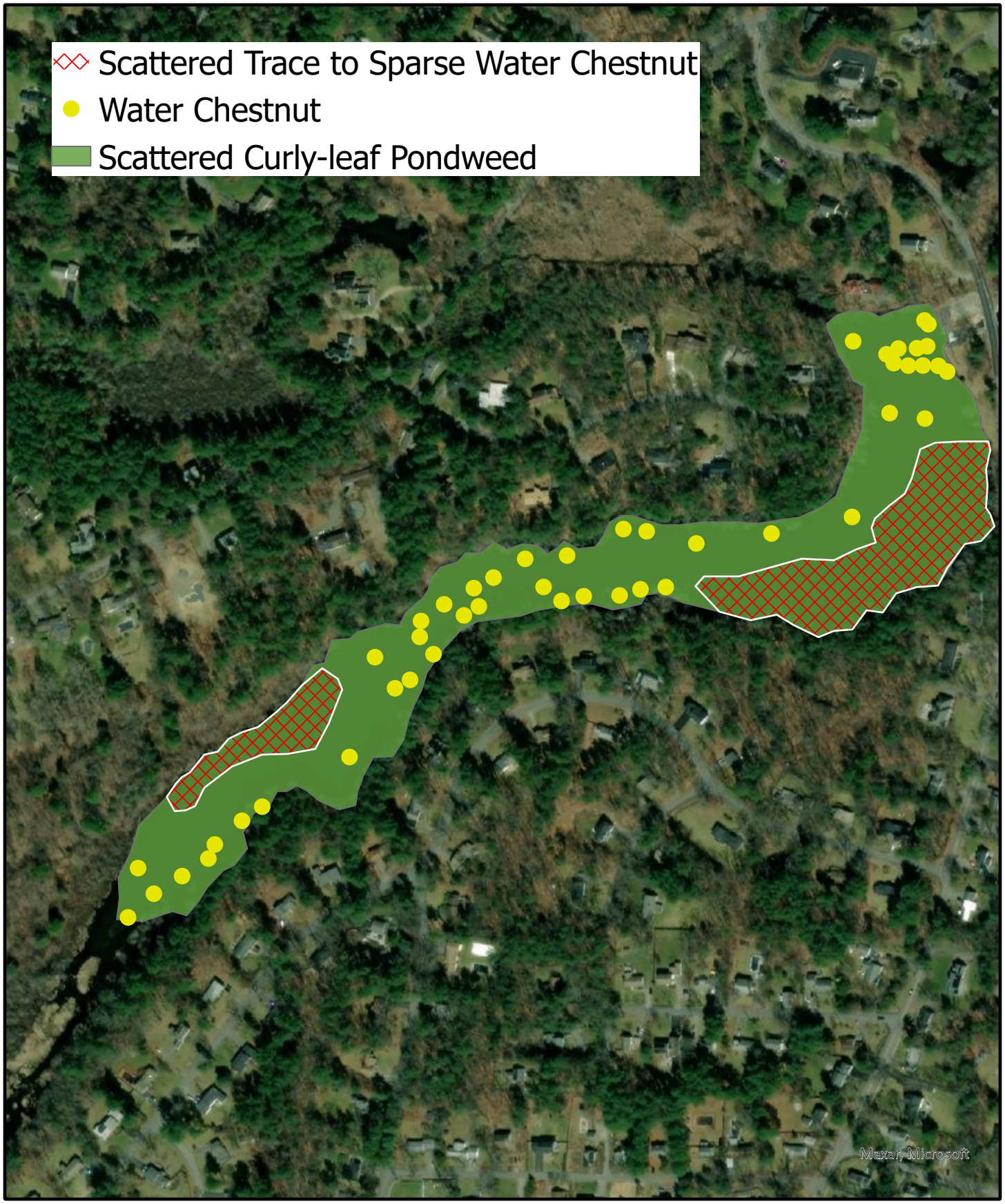

WATER & WETLAND
LAKE, POND & WETLAND MANAGEMENT

Stearns Millpond
Invasive Species Distribution
Sudbury, MA

Survey Date
6/12/2023

Map Date
6/13/2023

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WATER & WETLAND

LAKE, POND & WETLAND MANAGEMENT

Massachusetts Applicator Licenses

COMMONWEALTH OF MASSACHUSETTS

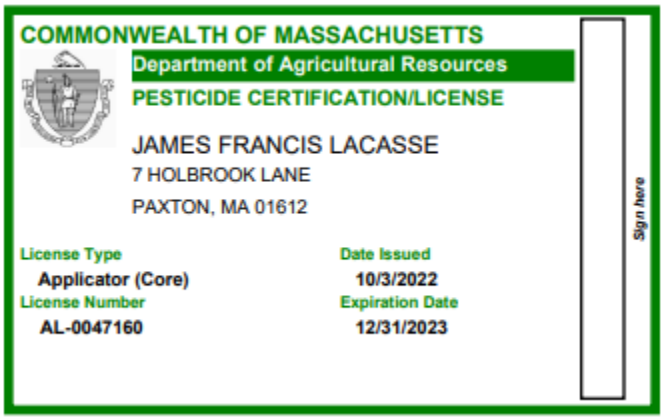
Department of Agricultural Resources

PESTICIDE CERTIFICATION/LICENSE

COLIN J GOSSELIN
115 SOUTH ST
UPTON, MA 01568

License Type: Commercial
Date Issued: 12/14/2022
License Number: CC-0052476
Expiration Date: 12/31/2023
Category/Subcategory: 39

Sign here



COMMONWEALTH OF MASSACHUSETTS

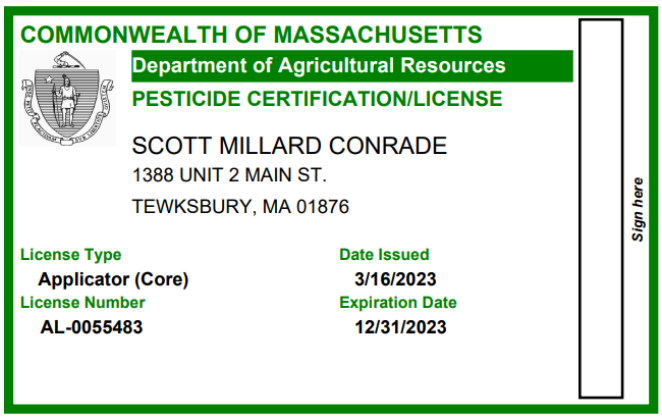
Department of Agricultural Resources

PESTICIDE CERTIFICATION/LICENSE

JAMES FRANCIS LACASSE
7 HOLBROOK LANE
PAXTON, MA 01612

License Type: Applicator (Core)
Date Issued: 10/3/2022
License Number: AL-0047160
Expiration Date: 12/31/2023

Sign here



COMMONWEALTH OF MASSACHUSETTS

Department of Agricultural Resources

PESTICIDE CERTIFICATION/LICENSE

SCOTT MILLARD CONRADE
1388 UNIT 2 MAIN ST.
TEWKSBURY, MA 01876

License Type: Applicator (Core)
Date Issued: 3/16/2023
License Number: AL-0055483
Expiration Date: 12/31/2023

Sign here

COLIN GOSSELIN

DIRECTOR OF OPERATIONS/ AQUATIC BIOLOGIST

PERSONAL PROFILE

Colin has been working in the aquatic / invasive species field since 2006. He is a licensed aquatics applicator in MA, RI, and CT. As Director of Operations for Water & Wetland, Colin oversees and is on site for all projects.

SCIENTIFIC FOCUS

- **Invasive Species ID**
- **Invasive Species Management Plans**
- **Water Quality Programs**
- **GIS/GPS Mapping**
- **Invasive Species Control**
- **Phragmites Management**
- **Fountains & Aeration Installation, Service and Design**

CONTACT INFORMATION

Mobile: (508) 259-3153
Office: (888) 493-8526
Email: Colin@waterandwetland.com
Office Address: 115 South St.
Upton, MA 01568

www.waterandwetland.com

WATER & WETLAND
LAKE, POND & WETLAND MANAGEMENT

CAREER SUMMARY

Director of Operations / Aquatic Biologist

WATER & WETLAND, LLC | JUNE 2020 - PRESENT

- Oversees and project manages all projects, including: aquatic & upland surveys, invasive species control treatments, water quality programs, permitting and more
- Maintains equipment such as: airboats, other treatment boats, pumping systems, backpack sprayers, UTV's
- Project design / alternatives analysis
- Effectively communicates project progress / development with customers, regulatory agencies, etc.

Project Manager / Aquatic Biologist

SOLITUDE LAKE MANAGEMENT | 2006 - JUNE 2020

- Biological surveys and aquatic vegetation mapping
- Reporting and Invasive Species Management Plans
- Water quality monitoring
- Invasive species treatments and other management
- Directing crew and project coordination
- GPS/GIS mapping
- Maintenance of equipment
- Permitting and regulatory compliance
- Communication of project progress with customers and regulatory agencies

ACADEMIC HISTORY

Plymouth State University - Plymouth, NH

B.S. IN ENVIRONMENTAL PLANNING, 2009

- Completed in May 2009
- Focus on sustainability in the environment, GIS mapping
- Senior year internship with Town Engineer, Danvers, MA with focus on sewer mapping, oversight of stormwater projects, culverts, etc.

PROFESSIONAL AFFILIATIONS

- NALMS - North American Lake Management Society
- NEAB - New England Association of Environmental Biologist
- NEAPMS - Northeast Aquatic Plant Management Society
- APMS - Aquatic Plant Management Society

JOE ONORATO

DIRECTOR OF BUSINESS DEVELOPMENT / AQUATIC SPECIALIST

PERSONAL PROFILE

As Director of Business Development for Water & Wetland, Joe specializes in working directly with customers on their specific project goals. He is involved with all of Water & Wetland's projects from start to finish.

FOCUS

- **Understanding Customer Goals**
- **Project Design / Alternatives Analysis**
- **Ensuring Proper Communication**
- **Coordination of Project with Operations**
- **Fountains & Aeration Systems**
- **Phragmites Management**
- **Ensuring Regulatory Compliance**

CONTACT INFORMATION

Mobile: (508) 250-6238
Office: (888) 493-8526
Email: Joe@waterandwetland.com
Office Address: 115 South St.
Upton, MA 01568

www.waterandwetland.com

WATER & WETLAND
LAKE, POND & WETLAND MANAGEMENT

CAREER SUMMARY

Director of Bus. Dev. / Aquatic Specialist

WATER & WETLAND, LLC | JUNE 2020 - PRESENT

- Focuses on client management and project design
- Coordinates project implementation and scheduling with Director of Operations
- Presents management options / alternatives analysis to Customers including: municipalities, homeowners associations, lake associations, golf course superintendents, property owners, land trusts, etc.
- Works with herbicide / algaecide manufacturers to properly dose projects
- Works with fountain and aeration manufacturers to properly size aeration systems and fountains for specific waterbodies

Bus. Dev. Consultant / Aquatic Specialist

SOLITUDE LAKE MANAGEMENT | MAY 2016 - JUNE 2020

- Project design and pricing
- Offering best solution for full suite of lake management offerings, including: mechanical, manual and chemical options
- Design of water quality monitoring programs
- Conflict resolution
- Project coordination with Operations
- Growth of revenue YOY, including specific categories such as fountains & aeration, erosion control

ACADEMIC HISTORY

Roger Williams University - Bristol, RI

B.S. IN LEGAL STUDIES, 2004

- Completed in May 2004
- Magna Cum Laude - 3.68 GPA
- Focus on Legal Studies and Spanish with an additional concentration on Life Sciences

PROFESSIONAL SPEAKING ENGAGEMENTS

- "Pond Management Strategies for Homeowners Associations," Condo Associations Institute 2018
- "Mosquito Management in Ponds," Condo Associations Institute Connecticut 2018
- "Pond Management for the Golf Course Industry," New England Turfgrass Association 2019

JAMES LACASSE

SENIOR ENVIRONMENTAL SCIENSTIST/
PROJECT MANAGER

PERSONAL PROFILE

As a Senior Environmental Engineer/Project Manager for Water & Wetland, James specializes in completing projects from design through implementation. This includes everything from developing management plans, through permitting, to treatments, surveys, water quality, fountains / aeration, and reporting.

FOCUS

- **Invasive Species ID**
- **Invasive Species Management Plans**
- **Water Quality Programs**
- **GIS/GPS Mapping**
- **Invasive Species Control**
- **Phragmites Management**
- **Fountains & Aeration Installation, Service and Design**

CONTACT INFORMATION

Mobile: (774) 276-6098
Office: (888) 493-8526
Email: James@waterandwetland.com
Office Address: 115 South St.
Upton, MA 01568

www.waterandwetland.com

WATER & WETLAND
LAKE, POND & WETLAND MANAGEMENT

CAREER SUMMARY

Senior Environmental Scientist
WATER & WETLAND, LLC | MAY 2021 - PRESENT

- Oversees and manages projects, including: aquatic & upland surveys, invasive species control treatments, water quality programs, permitting and more
- Maintains equipment such as: airboats, other treatment boats, pumping systems, backpack sprayers, UTV's
- Project design / alternatives analysis
- Effectively communicates project progress / development with customers, regulatory agencies, etc.
- Prepares and files both Town and State permits
- Installs, maintains, and troubleshoots aeration systems and fountains

Environmental Scientist
SOLITUDE LAKE MANAGEMENT | MAY 2016 - JUNE 2020

- Biological surveys and aquatic vegetation mapping
- Reporting and Invasive Species Management Plans
- Water quality monitoring
- Invasive species treatments and other management
- Directing crew and project coordination
- GPS/GIS mapping
- Permitting and regulatory compliance
- Communication of project progress with customers and regulatory agencies

Field Chemist/Environmental Spec. II
TRIUMVIRATE ENVIRONMENTAL | 2015-2016

- Maintain Research Compliance, Chemical Inventory, Laboratory and Chemical Moves
- Site Remediation and Consulting
- Transportation of Hazardous Material, Emergency Response Planning
- Team Management and Task Management
- Licensing and Permitting: Air Emissions, Wastewater, Storm Water, Biosafety, Flammable Storage

Biologist Assistant/Field Associate
AQUATIC CONTROL TECHNOLOGY, INC. | 2012-2014

- Worked as a Summer intern, assisting with the management of waterbodies throughout New England.

ACADEMIC HISTORY

University of Rhode Island - Kingston, RI
B.S. IN ENVIRONMENTAL SCIENCE, 2015

SCOTT CONRADE

AQUATIC BIOLOGIST/
PROJECT MANAGER

PERSONAL PROFILE

As an Aquatic Biologist/Project Manager for Water and Wetland, Scott specializes in completing projects from conception through implementation. This includes everything from management plans, permitting, treatments, surveys, water quality, fountains/aeration, and reporting.

FOCUS

- **Aquatic Vegetation ID**
- Invasive Species ID
- Water Quality Programs
- GIS/GPS Mapping
- Invasive Species Control
- Fountains & Aeration Installation, Service and design
- New technologies & Innovative treatments

CONTACT INFORMATION

Mobile: (607)267-7103
Office: (888) 493-8526
Email: Scott@waterandwetland.com
Office Address: 115 South St.
Upton, MA 01568

www.waterandwetland.com

WATER & WETLAND
LAKE, POND & WETLAND MANAGEMENT

CAREER SUMMARY

Aquatic Biologist

WATER & WETLAND, LLC | MARCH 2023 - PRESENT

- Oversees and manages projects, including aquatics & upland surveys, invasive species control treatments, water quality and more.
- Maintains and designs innovative treatment equipment.
- Installs, maintains, and troubleshoots aeration and fountain systems.
- Prepare and file town and state permits.
- Effectively communicate and develop projects with shareholders and regulatory officials.
- Oversee new technologies and their applicatablity to the company

Aquatic Biologist

AQUATECHNEX, LLC | FEBRUARY 2021 - FEBRUARY 2023

- Removal of invasive and nussance aquatic vegetation from lakes, ponds, streams, and wetland
- Complex aquatic vegetation surveys utilizing new technologies such as hydroacoustic mapping software and underwater drones
- water quality monitoring
- Removal of excess nutrients using nutrient inactivation technologies
- GPS/GIS mapping
- Permitting and regulatory compliance
- Communication of project progress with federal, state and private customers
- Maintain equipment and design treatment systems as necessary

Aquatic Biologist

SOLITUDE LAKE MANAGEMENT - NY | SEPTEMBER 2017 - AUGUST2020

- Aquatic invasive species removal treatments and other management
- Permitting and Regulator Compliance
- Aquatic vegetation identification and mapping
- Water quality monitoring
- Herbicide monitoring programs
- GPS/GIS Mapping
- Directing crews and project coordination
- Maintaining equipment and troubleshooting problems in the field
- Install, maintain, and troubleshoot aeration systems and fountains

Aquatic Technician

ALLIED BIOLOGICAL | 2015-2016

- Worked as a seasonal employee, helping with treatments and surveys, as well as maintaining equipment, while working toward his degree.

ACADEMIC HISTORY

State University of New York College at Oneonta- Oneonta, NY

B.S. IN ENVIRONMENTAL SCIENCE, MAY 2017

Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs

Department of Environmental Protection
100 Cambridge Street 9th Floor Boston, MA 02114 • 617-292-5500

Maura T. Healey
Governor

Kimberley Driscoll
Lieutenant Governor

Rebecca L. Tepper
Secretary

Gary Moran
Acting Commissioner

License No.: **WM04-0000705**

LICENSE TO APPLY CHEMICALS FOR CONTROL OF NUISANCE AQUATIC VEGETATION

Applicant: COLIN J GOSSELIN
Name of Waterbody: GRIST MILL POND
Location of Waterbody: SUDBURY
Project Proponent: HOP BROOK PROTECTION ASSOCIATION

AUTHORITY FOR ISSUANCE

Pursuant to the authority granted to the Department of Environmental Protection, by Massachusetts G.L.c. 111, s5E, the following license is hereby issued to **COLIN GOSSELIN, WATER AND WETLAND** (hereinafter called the "licensee"), authorizing the application of chemicals for the control of nutrients, algae or aquatic plants to **GRIST MILL POND, SUDBURY**; such authorization being expressly conditional on compliance by the licensee with all terms and conditions of the license hereinafter set forth. This license shall become effective on the date of the Director's signature and shall expire on the **12/31/2023**.

Sincerely,

Stephanie Moura

License Effective Date: **01/24/2023**

License No.: **WM04-0000705**

Director, Division of Wetlands and Waterways
Department of Environmental Protection

License No.: **WM04-0000705**

A. Application Condition(s)

Chemical Information

Product Brand Name/Trade Name	Chemical Form (dry/liquid)	Total Weight/Volume Applied	Units of Measurement (lbs/gallons)	Acres Treated	Application Rate	Planned Maximum Concentration (ppm)
Clearcast	liquid	47.37	gal	47.37	1 gal/acre	

Treatment Method: The treatment program will consist of three treatments separated by 2-4 weeks. The initial treatment will be performed using an airboat to apply the product via foliar application in order for the product to fall onto the plant at the water's surface (July). The remainder of the treatments will consist of using an air boat or large jon boat, using a foliar application method.

B. Application Report

By December 31st of the year of this treatment, the licensee shall submit a written report to the Department certifying the treatment date, application rate and the total weight/volume for each chemical used in the treatment, in accordance with requirements of Section I.A. of this license.
Please send the report to the Massachusetts Department of Environmental Protection (David.W.Wong@mass.gov).

C. Modification of Application Conditions

The licensee shall not apply chemicals in a manner contrary to, or inconsistent with, the application conditions set forth in Section I.A. of this license without the prior written approval of the Department.

General Conditions

A. The licensee is hereby notified that chemical treatments to control aquatic nuisances in public or private lakes and ponds of the Commonwealth involve the alteration of wetland resource areas protected under both Massachusetts G.L.c. 131, s40, the Wetlands Protection Act and 310 CMR 10.00, Massachusetts Wetlands Protection Regulations.

B. The licensee is hereby notified that issuance of this license does not in any way constitute the Department's approval of the chemical treatment as it related to the provisions of the Wetlands Protection Act.

License No.: **WM04-0000705**

C. The licensee shall obtain either a final Order of Conditions or a negative Determination of Applicability from the **SUDBURY** Conservation Commission(s) prior to application of chemicals authorized under this license.

D. Shoreline areas of the lake or pond must be posted with signs warning the general public of any water use restrictions stated on the chemical label minimum for one week. This is especially important at bathing beaches and other areas of common access. These signs shall clearly state that the chemical treatment is being conducted pursuant to a license issued by the Department of Environmental Protection, "DEP". A new sign shall be posted for each treatment event.

E. The Department may require the licensee to cease application of chemicals to a body of water at any time following the issuance of a license if the Department determines that the chemical treatment will be ineffective, or will result in unreasonable restrictions on current water uses, or will produce unnecessary adverse side effects on nontarget flora or fauna.

F. Chemical applications shall be performed in accordance with the manufacturer's label directions, existing pesticide use laws, and any conditions imposed by other local or state agencies.

G. Chemical treatments to water using general use pesticides shall only be performed by an applicator currently licensed by the Massachusetts Department of Agricultural Resources Pesticide Program in the aquatics category. Chemical treatments to Bordering Vegetated Wetlands (310 CMR 10.55(2)(a)) and Salt Marsh (310 CMR 10.32(2)) using general use pesticides and techniques that insure chemicals are not applied to water shall only be performed by an applicator currently licensed in Massachusetts Department of Agricultural Resources Pesticide Program. Chemical treatments using restricted use pesticides shall only be performed by an applicator currently certified by the Massachusetts Department of Agricultural Resources Pesticide Program.

H. Issuance of this license does not release the licensee from liability resulting from the use of chemicals or from negligent or reckless application of chemicals specified in Section I.A of this license.

I. Electronic notification of treatment must be made to the Massachusetts Division of Fisheries and Wildlife (jason.stolarski@mass.gov, jason.carmignani@mass.gov). Notification that the treatment was performed shall be made within 24 hours of treatment. The notification message should include waterbody, town, license number and chemicals used.

J. No chemical treatment shall be conducted while a Massachusetts Department of Public Health advisory is in effect.

K. In general, less than 1/3 of the lake area and less than ½ of the littoral zone should be targeted for herbicide treatment when native plants (particularly low growth forms) are dominant.

License No.: **WM04-0000705**

Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
Department of Environmental Protection
100 Cambridge Street 9th Floor Boston, MA 02114 • 617-292-5500

Maura T. Healey
Governor

Kimberley Driscoll
Lieutenant Governor

Rebecca L. Tepper
Secretary

Gary Moran
Acting Commissioner

License No.: **WM04-0000704**

LICENSE TO APPLY CHEMICALS FOR CONTROL OF NUISANCE AQUATIC VEGETATION

Applicant: COLIN J GOSSELIN
Name of Waterbody: STEARNS MILL POND
Location of Waterbody: SUDBURY
Project Proponent: HOP BROOK PROTECTION ASSOCIATION

AUTHORITY FOR ISSUANCE

Pursuant to the authority granted to the Department of Environmental Protection, by Massachusetts G.L.c. 111, s5E, the following license is hereby issued to **COLIN GOSSELIN, WATER AND WETLAND** (hereinafter called the "licensee"), authorizing the application of chemicals for the control of nutrients, algae or aquatic plants to **STEARNS MILL POND, SUDBURY**; such authorization being expressly conditional on compliance by the licensee with all terms and conditions of the license hereinafter set forth. This license shall become effective on the date of the Director's signature and shall expire on the **12/31/2023**.

Sincerely,

Stephanie Moura

License Effective Date: **01/24/2023**

License No.: **WM04-0000704**

Director, Division of Wetlands and Waterways
Department of Environmental Protection

License No.: **WM04-0000704**

A. Application Condition(s)

Chemical Information

Product Brand Name/Trade Name	Chemical Form (dry/liquid)	Total Weight/Volume Applied	Units of Measurement (lbs/gallons)	Acres Treated	Application Rate	Planned Maximum Concentration (ppm)
Clearcast	liquid	67.5	gal	67.5	1 gal/acre	

Treatment Method: The treatment program will consist of three treatments separated by 2-4 weeks. The initial treatment will be performed using an airboat to apply the product via foliar application in order for the product to fall onto the plant. The remainder of the treatments will consist of using an air boat or large jon boat, again using a foliar application method. We anticipate a significant decrease in water chestnut after each treatment, but permitted for three whole pond treatments in the event that a treatment is not effective.

B. Application Report

By December 31st of the year of this treatment, the licensee shall submit a written report to the Department certifying the treatment date, application rate and the total weight/volume for each chemical used in the treatment, in accordance with requirements of Section I.A. of this license.
Please send the report to the Massachusetts Department of Environmental Protection (David.W.Wong@mass.gov).

C. Modification of Application Conditions

The licensee shall not apply chemicals in a manner contrary to, or inconsistent with, the application conditions set forth in Section I.A. of this license without the prior written approval of the Department.

General Conditions

A. The licensee is hereby notified that chemical treatments to control aquatic nuisances in public or private lakes and ponds of the Commonwealth involve the alteration of wetland resource areas protected under both Massachusetts G.L.c. 131, s40, the Wetlands Protection Act and 310 CMR 10.00, Massachusetts Wetlands Protection Regulations.

B. The licensee is hereby notified that issuance of this license does not in any way constitute the Department's approval of the chemical treatment as it related to the provisions of the Wetlands Protection Act.

License No.: **WM04-0000704**

C. The licensee shall obtain either a final Order of Conditions or a negative Determination of Applicability from the **SUDBURY** Conservation Commission(s) prior to application of chemicals authorized under this license.

D. Shoreline areas of the lake or pond must be posted with signs warning the general public of any water use restrictions stated on the chemical label minimum for one week. This is especially important at bathing beaches and other areas of common access. These signs shall clearly state that the chemical treatment is being conducted pursuant to a license issued by the Department of Environmental Protection, "DEP". A new sign shall be posted for each treatment event.

E. The Department may require the licensee to cease application of chemicals to a body of water at any time following the issuance of a license if the Department determines that the chemical treatment will be ineffective, or will result in unreasonable restrictions on current water uses, or will produce unnecessary adverse side effects on nontarget flora or fauna.

F. Chemical applications shall be performed in accordance with the manufacturer's label directions, existing pesticide use laws, and any conditions imposed by other local or state agencies.

G. Chemical treatments to water using general use pesticides shall only be performed by an applicator currently licensed by the Massachusetts Department of Agricultural Resources Pesticide Program in the aquatics category. Chemical treatments to Bordering Vegetated Wetlands (310 CMR 10.55(2)(a)) and Salt Marsh (310 CMR 10.32(2)) using general use pesticides and techniques that insure chemicals are not applied to water shall only be performed by an applicator currently licensed in Massachusetts Department of Agricultural Resources Pesticide Program. Chemical treatments using restricted use pesticides shall only be performed by an applicator currently certified by the Massachusetts Department of Agricultural Resources Pesticide Program.

H. Issuance of this license does not release the licensee from liability resulting from the use of chemicals or from negligent or reckless application of chemicals specified in Section I.A of this license.

I. Electronic notification of treatment must be made to the Massachusetts Division of Fisheries and Wildlife (jason.stolarski@mass.gov, jason.carmignani@mass.gov). Notification that the treatment was performed shall be made within 24 hours of treatment. The notification message should include waterbody, town, license number and chemicals used.

J. No chemical treatment shall be conducted while a Massachusetts Department of Public Health advisory is in effect.

K. In general, less than 1/3 of the lake area and less than ½ of the littoral zone should be targeted for herbicide treatment

when native plants (particularly low growth forms) are dominant.

Commonwealth of Massachusetts
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Maura T. Healey
Governor

Kimberley Driscoll
Lieutenant Governor

Rebecca L. Tepper
Secretary

Gary Moran
Acting Commissioner

License No.: **WM04-0000706**

LICENSE TO APPLY CHEMICALS FOR CONTROL OF NUISANCE AQUATIC VEGETATION

Applicant: COLIN J GOSSELIN
Name of Waterbody: CARDING MILL POND
Location of Waterbody: SUDBURY
Project Proponent: HOP BROOK PROTECTION ASSOCIATION

AUTHORITY FOR ISSUANCE

Pursuant to the authority granted to the Department of Environmental Protection, by Massachusetts G.L.c. 111, s5E, the following license is hereby issued to **COLIN GOSSELIN, WATER AND WETLAND** (hereinafter called the "licensee"), authorizing the application of chemicals for the control of nutrients, algae or aquatic plants to **CARDING MILL POND, SUDBURY**; such authorization being expressly conditional on compliance by the licensee with all terms and conditions of the license hereinafter set forth. This license shall become effective on the date of the Director's signature and shall expire on the **12/31/2023**.

Sincerely,

Stephanie Moura

License Effective Date: **01/24/2023**

License No.: **WM04-0000706**

Director, Division of Wetlands and Waterways
Department of Environmental Protection

License No.: **WM04-0000706**

A. Application Condition(s)

Chemical Information

Product Brand Name/Trade Name	Chemical Form (dry/liquid)	Total Weight/Volume Applied	Units of Measurement (lbs/gallons)	Acres Treated	Application Rate	Planned Maximum Concentration (ppm)
Clearcast	liquid	117	gal	117 acres	1 gal/acre	

Treatment Method: The treatment program will consist of three treatments separated by 2-4 weeks. The initial treatment will be performed using an airboat to apply the product via foliar application in order for the product to fall onto the plant. The remainder of the treatments will consist of using an air boat or large jon boat, again using a foliar application method. We anticipate a significant decrease in water chestnut after each treatment, but permitted for three whole pond treatments in the event that a treatment is not effective.

B. Application Report

By December 31st of the year of this treatment, the licensee shall submit a written report to the Department certifying the treatment date, application rate and the total weight/volume for each chemical used in the treatment, in accordance with requirements of Section I.A. of this license.
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B. The licensee is hereby notified that issuance of this license does not in any way constitute the Department's approval of the chemical treatment as it related to the provisions of the Wetlands Protection Act.

License No.: **WM04-0000706**

C. The licensee shall obtain either a final Order of Conditions or a negative Determination of Applicability from the **SUDBURY** Conservation Commission(s) prior to application of chemicals authorized under this license.

D. Shoreline areas of the lake or pond must be posted with signs warning the general public of any water use restrictions stated on the chemical label minimum for one week. This is especially important at bathing beaches and other areas of common access. These signs shall clearly state that the chemical treatment is being conducted pursuant to a license issued by the Department of Environmental Protection, "DEP". A new sign shall be posted for each treatment event.

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