SePRO Lab
Water Diagnostics for Lakes & Ponds
SeSCRIPT*
16013 Watson Seed Farm Road, Whitakers, NC 27891

LABORATORY REPORT

Chain of Custody: eCOC17213

Customer Contact Information

Company Name: Water and Wetland	Contact Person: James Lacasse
Address: 134 Ferry St., South Grafton, MA 01560	E-mail Address: james@waterandwetland.com
	Phone: 888-493-8526

Waterbody Information

Waterbody:	Framingham Ponds - MA
Waterbody size:	
Depth Average:	

Sample ID	Sample Location	Test	Method	Results	Sampling Date / Time
CTM63205-1	Big Farm Pond	Turbidity (NTU)	EPA 180.1	2.7	05/27/2025
		Conductivity (µS/cm)	EPA 120.1	1080.2	
		Free Reactive Phosphorus (µg/L)	EPA 365.3	6.6	
		Chlorophyll a (µg/L)	EPA 445	<10	
		Total Phosphorus (µg/L)	EPA 365.3	33.5	
		Alkalinity (mg/L as CaCO3)	EPA 310.2	17	
		Total Hardness (mg/L as CaCO3)	EPA 130.2	94.7	
		Total Nitrate (mg/L) and Nitrite (mg/L)	Campbell et al 2004	0.05	
		Nitrite (mg/L)	Campbell et al 2004	<0.02	
		Nitrate (mg/L)	calculated	0.05	
		Total Kjeldahl Nitrogen (mg/L)	EPA 351.2	0.42	
		E. coli (CFU/100mL)	EPA 9223B	<1	
		Total Coliforms (CFU/100mL)	EPA 9223B	2.0	
		Total Nitrogen (mg/L)	calculated	0.47	
		pH	EPA 150.1	7.5	
CTM63206-1	Little Farm Pond	Turbidity (NTU)	EPA 180.1	3.5	05/27/2025
		Conductivity (µS/cm)	EPA 120.1	573.8	
		Free Reactive Phosphorus (µg/L)	EPA 365.3	10.5	
		Chlorophyll a (µg/L)	EPA 445	<10	
		Total Phosphorus (µg/L)	EPA 365.3	67.1	
		Alkalinity (mg/L as CaCO3)	EPA 310.2	12.5	
		Total Hardness (mg/L as CaCO3)	EPA 130.2	55.0	
		Total Nitrate (mg/L) and Nitrite (mg/L)	Campbell et al 2004	0.04	
		Nitrite (mg/L)	Campbell et al 2004	<0.02	
		Nitrate (mg/L)	calculated	0.04	
		Total Kjeldahl Nitrogen (mg/L)	EPA 351.2	0.46	
		E. coli (CFU/100mL)	EPA 9223B	54.8	
		Total Coliforms (CFU/100mL)	EPA 9223B	122.2	
		Total Nitrogen (mg/L)	calculated	0.5	
		pH	EPA 150.1	7	

CTM63207-1	Learned Pond	Turbidity (NTU)	EPA 180.1	2.2	05/27/2025
		Conductivity (µS/cm)	EPA 120.1	478.2	
		Free Reactive Phosphorus (µg/L)	EPA 365.3	6.2	
		Chlorophyll a (µg/L)	EPA 445	<10	
		Total Phosphorus (µg/L)	EPA 365.3	38.9	
		Alkalinity (mg/L as CaCO3)	EPA 310.2	<10	
		Total Hardness (mg/L as CaCO3)	EPA 130.2	15.0	
		Total Nitrate (mg/L) and Nitrite (mg/L)	Campbell et al 2004	0.06	
		Nitrite (mg/L)	Campbell et al 2004	<0.02	
		Nitrate (mg/L)	calculated	0.06	
		Total Kjeldahl Nitrogen (mg/L)	EPA 351.2	0.32	
		E. coli (CFU/100mL)	EPA 9223B	8.5	
		Total Coliforms (CFU/100mL)	EPA 9223B	51.2	
		Total Nitrogen (mg/L)	calculated	0.38	
		pH	EPA 150.1	7	
CTM63208-1	Gleason Pond	Turbidity (NTU)	EPA 180.1	2.8	05/27/2025
		Conductivity (µS/cm)	EPA 120.1	679.6	
		Free Reactive Phosphorus (µg/L)	EPA 365.3	8.6	
		Chlorophyll a (µg/L)	EPA 445	<10	
		Total Phosphorus (µg/L)	EPA 365.3	52.5	
		Alkalinity (mg/L as CaCO3)	EPA 310.2	<10	
		Total Hardness (mg/L as CaCO3)	EPA 130.2	30.3	
		Total Nitrate (mg/L) and Nitrite (mg/L)	Campbell et al 2004	0.07	
		Nitrite (mg/L)	Campbell et al 2004	<0.02	
		Nitrate (mg/L)	calculated	0.07	
		Total Kjeldahl Nitrogen (mg/L)	EPA 351.2	0.53	
		E. coli (CFU/100mL)	EPA 9223B	<1	
		Total Coliforms (CFU/100mL)	EPA 9223B	28.1	
		Total Nitrogen (mg/L)	calculated	0.6	
		pH	EPA 150.1	7.1	
CTM63209-1	Waushakum Pond	Turbidity (NTU)	EPA 180.1	2.4	05/27/2025
		Conductivity (µS/cm)	EPA 120.1	421.1	
		Free Reactive Phosphorus (µg/L)	EPA 365.3	6.4	
		Chlorophyll a (µg/L)	EPA 445	<10	
		Total Phosphorus (µg/L)	EPA 365.3	35.7	
		Alkalinity (mg/L as CaCO3)	EPA 310.2	<10	
		Total Hardness (mg/L as CaCO3)	EPA 130.2	46.8	
		Total Nitrate (mg/L) and Nitrite (mg/L)	Campbell et al 2004	0.11	
		Nitrite (mg/L)	Campbell et al 2004	<0.02	
		Nitrate (mg/L)	calculated	0.11	
		Total Kjeldahl Nitrogen (mg/L)	EPA 351.2	0.39	
		E. coli (CFU/100mL)	EPA 9223B	2.0	
		Total Coliforms (CFU/100mL)	EPA 9223B	9.5	
		Total Nitrogen (mg/L)	calculated	0.5	
		pH	EPA 150.1	7.2	
CTM63210-1	Sudbury River	Turbidity (NTU)	EPA 180.1	2.5	05/27/2025
		Conductivity (µS/cm)	EPA 120.1	402.7	
		Free Reactive Phosphorus (µg/L)	EPA 365.3	6.0	
		Chlorophyll a (µg/L)	EPA 445	<10	
		Total Phosphorus (µg/L)	EPA 365.3	46.5	
		Alkalinity (mg/L as CaCO3)	EPA 310.2	<10	
		Total Hardness (mg/L as CaCO3)	EPA 130.2	35.0	
		Total Nitrate (mg/L) and Nitrite (mg/L)	Campbell et al 2004	0.15	
		Nitrite (mg/L)	Campbell et al 2004	<0.02	
		Nitrate (mg/L)	calculated	0.15	
		Total Kjeldahl Nitrogen (mg/L)	EPA 351.2	0.42	
		E. coli (CFU/100mL)	EPA 9223B	26.2	
		Total Coliforms (CFU/100mL)	EPA 9223B	157.6	
		Total Nitrogen (mg/L)	calculated	0.57	
		pH	EPA 150.1	7.1	
CTM63211-1	Norton Pond	Turbidity (NTU)	EPA 180.1	3.3	05/27/2025
		Conductivity (µS/cm)	EPA 120.1	207.4	
		Free Reactive Phosphorus (µg/L)	EPA 365.3	12.1	

		Chlorophyll a (µg/L)	EPA 445	22.3	
		Total Phosphorus (µg/L)	EPA 365.3	66.1	
		Alkalinity (mg/L as CaCO3)	EPA 310.2	<10	
		Total Hardness (mg/L as CaCO3)	EPA 130.2	33.7	
		Total Nitrate (mg/L) and Nitrite (mg/L)	Campbell et al 2004	0.2	
		Nitrite (mg/L)	Campbell et al 2004	<0.02	
		Nitrate (mg/L)	calculated	0.2	
		Total Kjeldahl Nitrogen (mg/L)	EPA 351.2	0.54	
		E. coli (CFU/100mL)	EPA 9223B	6.2	
		Total Coliforms (CFU/100mL)	EPA 9223B	21.3	
		Total Nitrogen (mg/L)	calculated	0.74	
		pH	EPA 150.1	7.3	
CTM63212-1	Mohawk Pond	Turbidity (NTU)	EPA 180.1	2.8	05/27/2025
		Conductivity (µS/cm)	EPA 120.1	322.1	
		Free Reactive Phosphorus (µg/L)	EPA 365.3	5.8	
		Chlorophyll a (µg/L)	EPA 445	<10	
		Total Phosphorus (µg/L)	EPA 365.3	42.6	
		Alkalinity (mg/L as CaCO3)	EPA 310.2	<10	
		Total Hardness (mg/L as CaCO3)	EPA 130.2	36.1	
		Total Nitrate (mg/L) and Nitrite (mg/L)	Campbell et al 2004	0.51	
		Nitrite (mg/L)	Campbell et al 2004	<0.02	
		Nitrate (mg/L)	calculated	0.51	
		Total Kjeldahl Nitrogen (mg/L)	EPA 351.2	0.36	
		E. coli (CFU/100mL)	EPA 9223B	14.4	
		Total Coliforms (CFU/100mL)	EPA 9223B	80.5	
		Total Nitrogen (mg/L)	calculated	0.87	
		pH	EPA 150.1	7	

ANALYSIS STATEMENTS:
SAMPLE RECEIPT /HOLDING TIMES: All samples arrived in an acceptable condition and were analyzed within prescribed holding times in accordance with the SRTC Laboratory Sample Receipt Policy unless otherwise noted in the report.
PRESERVATION: Samples requiring preservation were verified prior to sample analysis and any qualifiers will be noted in the report.
QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.
COMMENTS: No significant observations were made unless noted in the report.
MEASUREMENT UNCERTAINTY: Uncertainty of measurement has been determined and is available upon request.

Laboratory Information
Date / Time Received: 05/28/25 12:00 PM
Date Results Sent: Monday, June 2, 2025

This entire report was reviewed and approved for release.

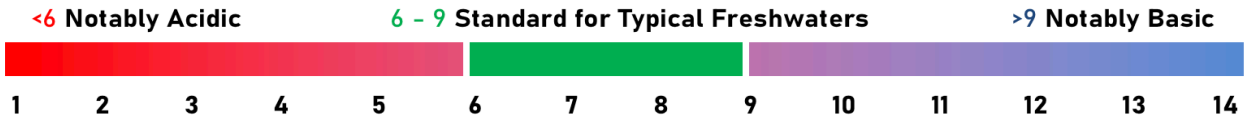
Reviewed By: Laboratory Manager

SePRO Lab
Water Diagnostics for Lakes & Ponds

Water Quality Analysis Explanation

These water quality parameters are essential to document the condition of a water body and design custom treatment prescriptions to achieve the desired management objective.

pH: Measure of how acidic or basic the water is (pH 7 is considered neutral).



Hardness: Measure of the concentration of divalent cations, primarily consisting of calcium and magnesium in typical freshwaters.
0-60 mg/L as CaCO3 soft; 61-120 mg/L as CaCO3 moderately hard; 121-180 mg/L as CaCO3 hard; > 181 mg/L as CaCO3 very hard

Alkalinity: Measure of the buffering capacity of water, primarily consisting of carbonate, bicarbonate, and hydroxide in typical freshwaters. Waters with lower levels are more susceptible to pH shifts.
< 50 mg/L as CaCO3 low buffered; 51-100 mg/L as CaCO3 moderately buffered; 101-200 mg/L as CaCO3 buffered; > 200 mg/L as CaCO3 high buffered

Conductivity: Measure of the waters ability to transfer an electrical current, increases with more dissolved ions.
< 50 µS/cm relatively low concentration may not provide sufficient dissolved ions for ecosystem health; 50-1500 µS/cm typical freshwaters; > 1500 µS/cm may be stressful to some freshwater organisms, though not uncommon in many areas

Phosphorus: Essential nutrient often correlating to growth of algae in freshwaters.

Total Phosphorus (TP): is the measure of all phosphorus in a sample as measured by persulfate strong digestion and includes: inorganic, oxidizable organic and polyphosphates. This includes what is readily available, potential to become available and stable forms. *<12 µg/L oligotrophic; 12-24 µg/L mesotrophic; 25-96 µg/L eutrophic; > 96 µg/L hypereutrophic*

Free Reactive Phosphorus (FRP): is the measure of inorganic dissolved reactive phosphorus (PO4-3, HPO4-2, etc). This form is readily available in the water column for algae growth.

Nitrogen: Essential nutrient that can enhance growth of algae.

Total N is all nitrogen in the sample (organic N+ and Ammonia) determined by the sum of the measurements for Total Kjeldahl Nitrogen (TKN) and ionic forms.

Nitrites and Nitrates are the sum of total oxidized nitrogen, often readily free for algae uptake.
< 1 mg/L typical freshwater; 1-10 mg/L potentially harmful; >10 mg/L possible toxicity, above many regulated guidelines

Chlorophyll a: primary light-harvesting pigment found in algae and a measure of the algal productivity and water quality in a system.
0-2.6µg/L oligotrophic; 2.7-20 µg/L mesotrophic; 21-56 µg/L eutrophic; > 56 µg/L hypereutrophic

Turbidity: Measurement of water clarity. Suspended particulates (algae, clay, silt, dead organic matter) are the common constituents impacting turbidity.
< 10 NTU drinking water standards and typical trout waters; 10-50 NTU moderate; > 50 NTU potential impact to aquatic life.

WATER & WETLAND
LAKE POND & WETLAND MANAGEMENT

BIOLOGIST:
Brian O Leary
(o): (888)493-8526
BrianO@waterandwetland.com
Call/Email with any questions!

FIELD NOTES SUMMARY

Customer: City of Framingham
Pond Name: Gleason Pond
Site Location: Framingham, MA
Date: 5/27/25

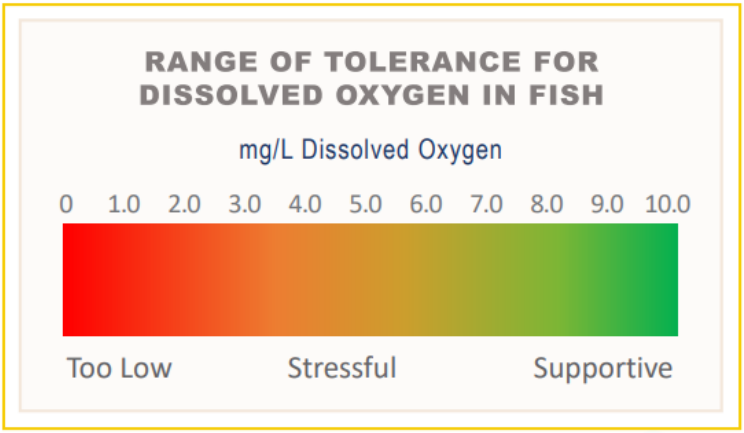
On 5/27/25, Aquatic Field Biologist, Brian O'Leary, and Field Biologist, Drew Felter, made a visit to Gleason Pond. The following services were completed during the visit:

Upon arrival to the site, a survey was conducted using visual observation paired with a standard throw-rake and handheld GPS/ArcGIS Field Maps, as applicable. Plants documented during the survey are documented in the table below. (*) denotes an invasive species. Invasive species are non-native to the ecosystem and are likely to cause economic harm, environmental harm, or harm to human health.

Species Identified	
Common Name	**Latin Name**
Robbin's Pondweed	*Potamogeton robbinsii*
Waterlilies	*Nymphaeaceae*
Curly-leaf Pondweed*	*Potamogeton crispus*
Benthic Algae	
Snailseed Pondweed	*Potamogeton bicupulatus*
Thin-leaf Pondweed	*Potamogeton pusillus*
Coontail	*Ceratophyllum demersum*
Bladderwort	*Utricularia sp.*

WATER & WETLAND
LAKE, POND & WETLAND MANAGEMENT

While on-site, dissolved oxygen (DO) and temperature readings were collected using a calibrated YSI meter with optical sensor. Dissolved oxygen is the amount of oxygen in water that is available to aquatic organisms. DO is necessary to support fish spawning, growth, and activity. Tolerance varies by species, but the figure below provides a general range of fish tolerance (Source: epa.gov). Dissolved oxygen can be affected by many outside factors, such as: temperature, time of day, and pollution. Dissolved oxygen levels are typically lowest early in the morning. Healthy water should generally have concentrations of about 6.5-8+ mg/L.



Results from the visit are included in the table below:

Temperature & Dissolved Oxygen		
Depth (ft)	Surface Temp (°C)	Surface DO (mg/L)
Surface	19.0	7.50
1	17.1	7.17
2	16.7	7.53
3	16.11	6.73
4	15.88	5.94

A Secchi disk is a disk with alternating black and white quadrants. It is lowered into the water of a lake until it can no longer be seen by the observer. This depth of disappearance, called the Secchi depth, is a measure of the transparency of the water.

Secchi Disk Clarity	
Secchi Disk Depth (Feet)	3 feet 9 inches

Water Quality Parameters
WQ Baseline Plus Bundle = Alkalinity, Chlorophyll A, Conductivity, Hardness, Nitrates & Nitrites, Nitrogen - Total (Kjeldahl), pH, Phosphorus - Free Reactive (Water), Phosphorus - Total (water), Turbidity
Microbial Bacteria (total coliforms & E. coli)

Additional samples were collected from the contracted locations. The samples were properly preserved, and shipped on-ice via FedEx Overnight, or transported directly to the most appropriate lab. The lab will analyze the samples for the contracted/required parameters which are listed in the table above. Results will be provided upon

receipt from the lab or in the year end-summary report, as applicable. Any concerning results will immediately be brought to the attention of the Client.

Additional Notes from the Biologist
The site visit consisted of completing a survey and collecting basic water quality data in addition to samples. The survey for Gleason Pond was conducted starting at 10:00 AM on Tuesday, May 27th, 2025. Scarce patches of immature curly-leaf pondweed, thin-leaf pondweed, and snailseed pondweed were found growing in the littoral zone towards the pond's western and northern edges. Waterlilies were in abundant populations around the pond's perimeter with larger concentrations towards the pond's northern and western edge. These four species were the most prominent species throughout the waterbody. Scattered, dense patches of Robbins pondweed were also found throughout the littoral zone. Benthic algae was prominent but no significant surface algal blooms were present. No water chestnut was noted during the survey, although it is still early in the season for this plant to develop. Similar to previous years, based on the 2025 survey, treatment of curly-leaf pondweed may be warranted, given that this species is invasive. Water chestnut should be hand-pulled later in the season, prior to seeds dropping (typically in mid-August). This could either be accomplished by volunteers, or Water & Wetland could provide a crew to hand-pull the invasive water chestnut.

As always, we will notify you prior to any upcoming visits, as applicable. Please feel free to reach out to us directly with any questions.

WATER & WETLAND
LAKE, POND & WETLAND MANAGEMENT

Photo 1	Photo 2	Photo 3

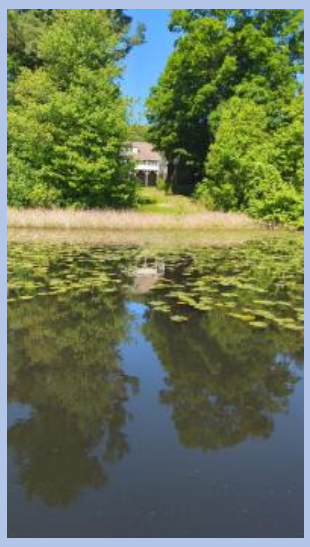



Photo 4	**Photo 5**	**Photo 6**
		

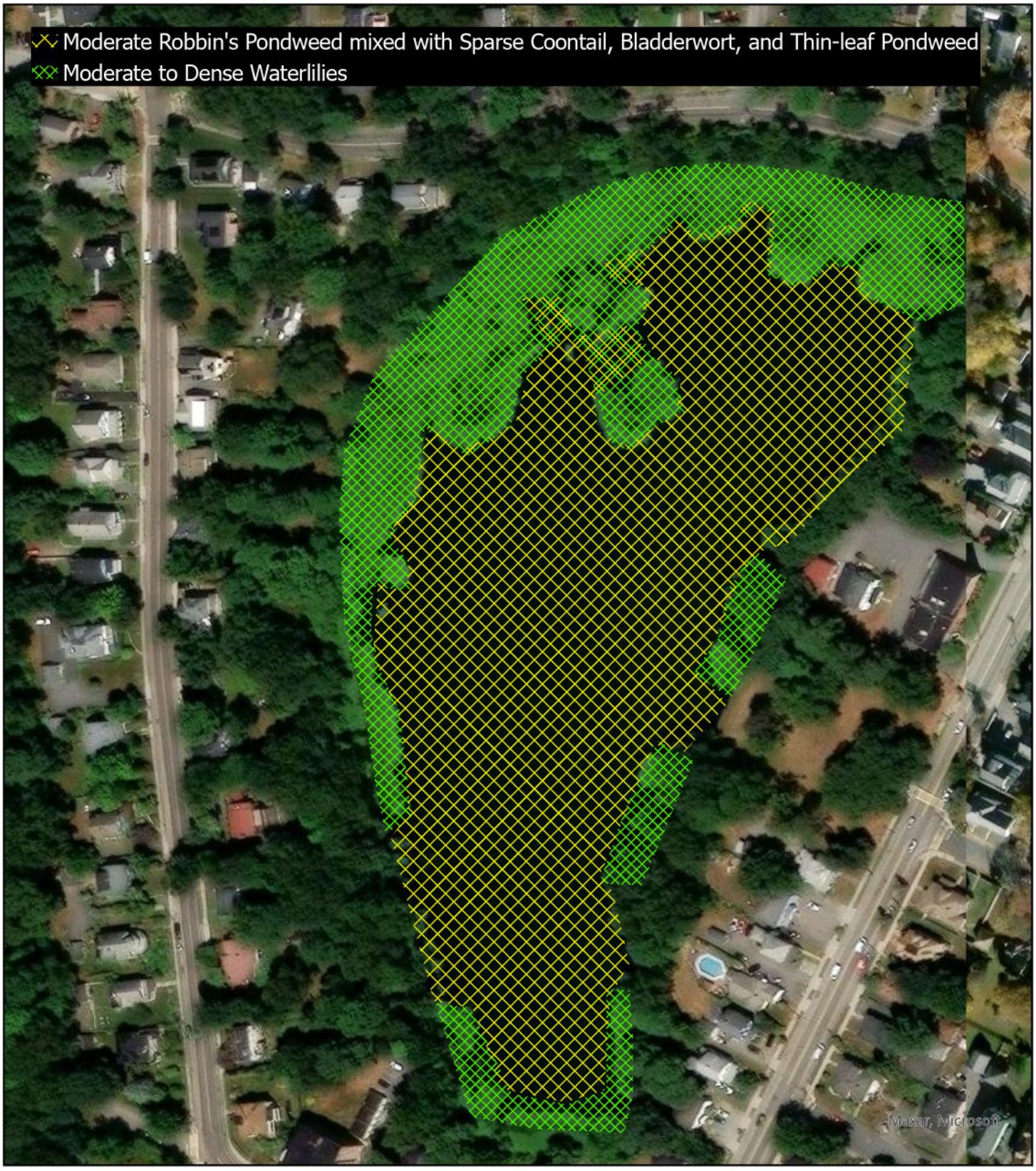
Water & Wetland, LLC
Upton, MA
(888) 4WETLAN(D)
www.waterandwetland.com

WATER & WETLAND
a Jones Lake Management Partner

Gleason Pond
Invasive Species Distribution
Framingham, MA

Survey Date:
05/27/2025

N



WATER & WETLAND
a Jones Lake Management Partner

Gleason Pond
Native Species Assemblage
Framingham, MA

Survey Date:
05/27/2025

N

WATER & WETLAND
LAKE POND & WETLAND MANAGEMENT

BIOLOGIST:
Brian O Leary
(o): (888)493-8526
BrianO@waterandwetland.com
Call/Email with any questions!

FIELD NOTES SUMMARY

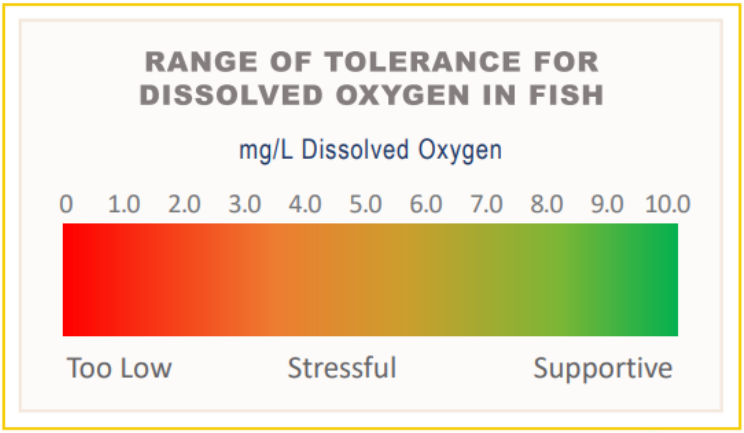
Customer: The City of Framingham
Pond Name: Mohawk Pond
Site Location: Framingham, MA
Date: 5/27/25

On 5/27/25, Aquatic Field Biologist, Brian O'Leary, and Field Biologist, Drew Felter, made a visit to Mohawk Pond. The following services were completed during the visit:

Upon arrival to the site, a survey was conducted using visual observation paired with a standard throw-rake and handheld GPS/ArcGIS Field Maps, as applicable. Plants documented during the survey are documented in the table below. (*) denotes an invasive species. Invasive species are non-native to the ecosystem and are likely to cause economic harm, environmental harm, or harm to human health.

Species Identified	
Common Name	**Latin Name**
Filamentous Algae	
Benthic Algae	
Variable Milfoil*	*Myriophyllum heterophyllum*
Cattails	*Typha sp.*

While on-site, dissolved oxygen (DO) and temperature readings were collected using a calibrated YSI meter with optical sensor. Dissolved oxygen is the amount of oxygen in water that is available to aquatic organisms. DO is necessary to support fish spawning, growth, and activity. Tolerance varies by species, but the figure below provides a general range of fish tolerance (Source: epa.gov). Dissolved oxygen can be affected by



WATER & WETLAND
LAKE POND & WETLAND MANAGEMENT

BIOLOGIST:
Brian O Leary
(o): (888)493-8526
BrianO@waterandwetland.com
Call/Email with any questions!

FIELD NOTES SUMMARY

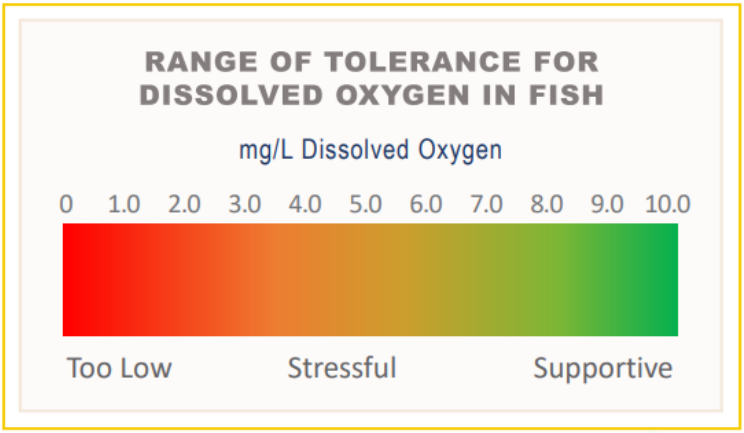
Customer: City of Framingham
Pond Name: Norton Pond
Site Location: Framingham, MA
Date: 5/27/25

On 5/27/25, Aquatic Field Biologist, Brian O'Leary, and Field Biologist, Drew Felter, made a visit to Norton Pond. The following services were completed during the visit:

Upon arrival to the site, a survey was conducted using visual observation paired with a standard throw-rake and handheld GPS/ArcGIS Field Maps, as applicable. Plants documented during the survey are documented in the table below. (*) denotes an invasive species. Invasive species are non-native to the ecosystem and are likely to cause economic harm, environmental harm, or harm to human health.

Species Identified	
Common Name	**Latin Name**
Duckweed	*Lemna*
Filamentous Algae	
Benthic Algae	
Marsh seed box	*Ludwigia palustris*

While on-site, dissolved oxygen (DO) and temperature readings were collected using a calibrated YSI meter with optical sensor. Dissolved oxygen is the amount of oxygen in water that is available to aquatic organisms. DO is necessary to support fish spawning, growth, and activity. Tolerance varies by species, but the figure below provides a general range of fish tolerance (Source: epa.gov). Dissolved oxygen can be affected by



many outside factors, such as: temperature, time of day, and pollution. Dissolved oxygen levels are typically lowest early in the morning. Healthy water should generally have concentrations of about 6.5-8+ mg/L.

Results from the visit are included in the table below:

Temperature & Dissolved Oxygen		
Depth (Ft)	Surface Temp (°C)	Surface DO (mg/L)
Surface	19.11	11.63
1	16.78	11.63
2	15.89	11.55
3	15.38	8.05

Secchi Disk Clarity	
Secchi Disk Depth (Feet)	4 feet 3 inches

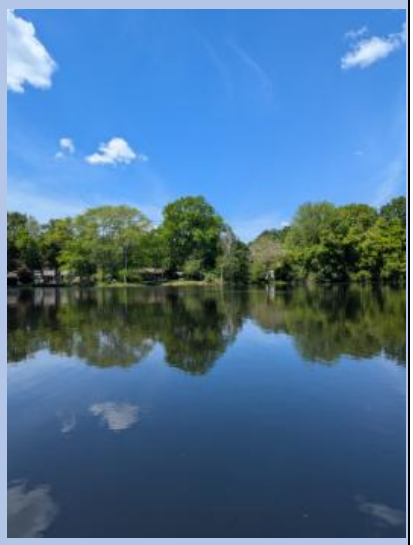
A Secchi disk is a disk with alternating black and white quadrants. It is lowered into the water of a lake until it can no longer be seen by the observer. This depth of disappearance, called the Secchi depth, is a measure of the transparency of the water.

Water Quality Parameters
WQ Baseline Plus Bundle = Alkalinity, Chlorophyll A, Conductivity, Hardness, Nitrates & Nitrites, Nitrogen - Total (Kjeldahl), pH, Phosphorus - Free Reactive (Water), Phosphorus - Total (water), Turbidity
Microbial Bacteria (total coliforms & E. coli)

Additional samples were collected from the contracted locations. The samples were properly preserved, and shipped on-ice via FedEx Overnight, or transported directly to the most appropriate lab. The lab will analyze the samples for the contracted/required parameters which are listed in the table above. Results will be provided upon receipt from the lab or in the year end-summary report, as applicable. Any concerning results will immediately be brought to the attention of the Client.

Additional Notes from the Biologist
The site visit consisted of collecting basic water quality data, collecting samples, and completing a survey. The survey of Norton Pond was conducted starting at 11:00 AM on Tuesday, May 27th, 2025. Scattered densities of duckweed lined the entire perimeter of the pond along with small patches which potted the pond's mid-section. A handful of filamentous algae patches were observed within the duckweed patches. Large, dense patches of marsh seedbox dominated the northern edges of the pond's shallow depths. We recommend monitoring throughout the season and treating as necessary to maintain healthy pond conditions.

As always, we will notify you prior to any upcoming visits, as applicable. Please feel free to reach out to us directly with any questions.

Photo 1	Photo 2	Photo 3
		

Water & Wetland, LLC
Upton, MA
(888) 4WETLAN(D)
www.waterandwetland.com

WATER & WETLAND
LAKE, POND & WETLAND MANAGEMENT

Norton Pond
Vegetation Assemblage
Framingham, MA

Survey Date
5/27/2025

Map Date
6/3/2025

N

WATER & WETLAND
LAKE POND & WETLAND MANAGEMENT

BIOLOGIST:
Brian O Leary
(o): (888)493-8526
BrianO@waterandwetland.com
Call/Email with any questions!

FIELD NOTES SUMMARY

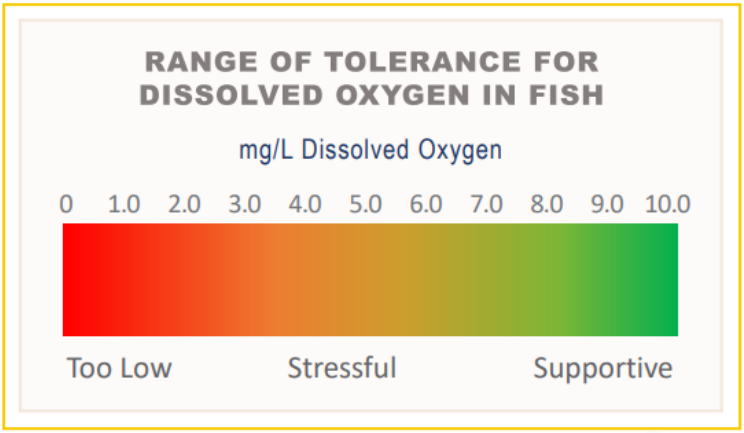
Customer: City of Framingham
Pond Name: Waushakum Pond
Site Location: Framingham/Ashland, MA
Date: 5/27/25

On 5/27/25, Field Biologist, Drew Felter, and Aquatic Field Biologist, Brian O'Leary, made a visit to Waushakum Pond. The following services were completed during the visit:

Upon arrival to the site, a survey was conducted using visual observation paired with a standard throw-rake and handheld GPS/ArcGIS Field Maps, as applicable. Plants documented during the survey are documented in the table below. (*) denotes an invasive species. Invasive species are non-native to the ecosystem and are likely to cause economic harm, environmental harm, or harm to human health.

Species Identified	
Common Name	**Latin Name**
Cattails	*Typha sp.*
Filamentous Algae	
Waterlilies	*Nymphaeaceae*
Elodea	*Elodea canadensis*
Curly-leaf Pondweed*	*Potamogeton crispus*
Benthic Algae	
Thin-leaf Pondweed	*Potamogeton pusillus*
Coontail	*Ceratophyllum demersum*
Microscopic Algae	
Clasping-leaf Pondweed	*Potamogeton perfoliatis*
Variable Milfoil*	*Myriophyllum heterophyllum*

WATER & WETLAND
LAKE, POND & WETLAND MANAGEMENT



While on-site, dissolved oxygen (DO) and temperature readings were collected using a calibrated YSI meter with optical sensor. Dissolved oxygen is the amount of oxygen in water that is available to aquatic organisms. DO is necessary to support fish spawning, growth, and activity. Tolerance varies by species, but the figure below provides a general range of fish tolerance (Source: epa.gov). Dissolved oxygen can be affected by many outside factors, such as: temperature, time of day, and pollution. Dissolved oxygen levels are typically lowest early in the morning. Healthy water should generally have concentrations of about 6.5-8+ mg/L.

Results from the visit are included in the table below:

	Temperature & Dissolved Oxygen	
Depth (ft)	Surface Temp (°C)	Surface DO (mg/L)
Surface	17.6	9.11
1	17.6	9.19
2	16.7	9.48
3	16.38	9.27
4	16.2	9.33
5	15.7	8.76
6	15.2	8.58
7	15.1	8.62

Secchi Disk Clarity	
Secchi Disk Depth (Feet)	7 feet 1 inches

A Secchi disk is a disk with alternating black and white quadrants. It is lowered into the water of a lake until it can no longer be seen by the observer. This depth of disappearance, called the Secchi depth, is a measure of the transparency of the water.

Water Quality Parameters
WQ Baseline Plus Bundle = Alkalinity, Chlorophyll A, Conductivity, Hardness, Nitrates & Nitrites, Nitrogen - Total (Kjeldahl), pH, Phosphorus - Free Reactive (Water), Phosphorus - Total (water), Trubidity
Microbial Bacteria (total coliforms & E. coli)

Additional samples were collected from the contracted locations. The samples were properly preserved, and shipped on-ice via FedEx Overnight, or transported directly to the most appropriate lab. The lab will analyze the samples for the contracted/required parameters which are listed in the table above. Results will be provided upon receipt from the lab or in the year end-summary report, as applicable. Any concerning results will immediately be brought to the attention of the Client.

Additional Notes from the Biologist
The site visit consisted of collecting basic water quality data in addition to water samples and completing a survey. The survey of Waushakum Pond was carried out starting at 8:30 AM on May 27th, 2025. Similar to previous years, two invasive species were documented during the survey, which included curly-leaf pondweed and variable milfoil. Curly-leaf pondweed was the dominant invasive species noted as it was found throughout the majority of the littoral zone. Variable milfoil was found in an isolated population, as it observed in the early stages of growth. We have noted a slight delay in aquatic growth during the 2025 season, which we attribute the elongated winter/ice-out, in combination with the excessive rain events which occurred in Spring, causing subpar growing conditions. We anticipate the variable milfoil to grow in historical locations within the near future. Waterlilies dotted some of the pond's perimeter in scattered densities, concentrating towards the pond's southwestern edge. Dense patches of filamentous algae accompanied this waterlily concentration. Scattered patches of benthic algae were present throughout the littoral zone. In addition, dense, scattered pockets of curly-leaf pondweed and thin-leaf pondweed accompanied each other on the pond's perimeter and throughout the littoral zone, as noted above. Concentrations became visibly denser when moving towards the pond's eastern edge. With the abundance of pollen in the air, it is difficult to distinguish microscopic algae vs pollen counts, as this was noted on roughly 35-40% of the pond's surface. Dense stands of clasping-leaf pondweed were found along the pond's perimeter, reaching nuisance-level densities on the pond's southeastern perimeter, continuing to grow in large densities towards the beach. Small, scarce patches of coontail were found towards the pond's eastern perimeter. Water clarity proved average at the time of visit. Water quality samples were collected and shipped to the laboratory for further analysis. Only triclopyr herbicide is allowed for use in Waushakum Pond for nuisance/invasive aquatic weed control. Triclopyr works somewhat slowly but will impact both milfoil and curly-leaf pondweed. We also anticipate some impacts to the nuisance densities of native species. Our plan is to target the usual amount of acreage in Framingham. Areas will include the densest areas of nuisance and invasive species.

As always, we will notify you prior to any upcoming visits, as applicable. Please feel free to reach out to us directly with any questions.

Photo 1	Photo 2	Photo 3
		
Photo 4	**Photo 5**	**Photo 6**
		

Water & Wetland, LLC
Upton, MA
(888) 4WETLAN(D)
www.waterandwetland.com

WATER & WETLAND
a Jones Lake Management Partner

Waushakum Pond Vegetation Assemblage Framingham/Ashland, MA

Survey Date: 05/27/2025

N

many outside factors, such as: temperature, time of day, and pollution. Dissolved oxygen levels are typically lowest early in the morning. Healthy water should generally have concentrations of about 6.5-8+ mg/L.

Results from the visit are included in the table below:

Temperature & Dissolved Oxygen		
Depth (ft)	**Surface Temp (°C)**	**Surface DO (mg/L)**
Surface	16.5	14.02
1	13.01	14.92
2 (Bottom)	12.88	14.61

Secchi Disk Clarity	
Secchi Disk Depth (Feet)	2 feet 5 inches (to bottom)

A Secchi disk is a disk with alternating black and white quadrants. It is lowered into the water of a lake until it can no longer be seen by the observer. This depth of disappearance, called the Secchi depth, is a measure of the transparency of the water.

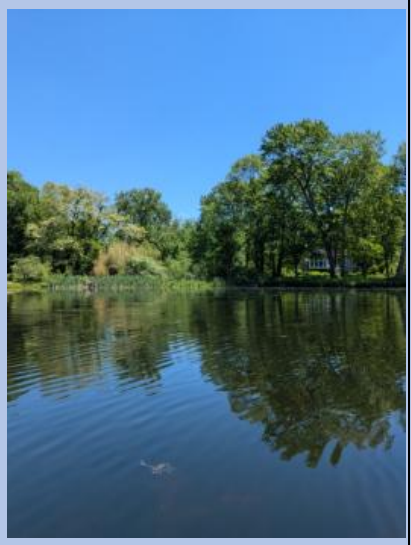
Water Quality Parameters
WQ Baseline Plus Bundle = Alkalinity, Chlorophyll A, Conductivity, Hardness, Nitrates & Nitrites, Nitrogen - Total (Kjeldahl), pH, Phosphorus - Free Reactive (Water), Phosphorus - Total (water), Turbidity
Microbial Bacteria (total coliforms & E. coli)

Additional samples were collected from the contracted locations. The samples were properly preserved, and shipped on-ice via FedEx Overnight, or transported directly to the most appropriate lab. The lab will analyze the samples for the contracted/required parameters which are listed in the table above. Results will be provided upon receipt from the lab or in the year end-summary report, as applicable. Any concerning results will immediately be brought to the attention of the Client.

Additional Notes from the Biologist
The site visit consisted of conducting a survey and collecting basic water quality data in addition to water samples. The survey for Mohawk Pond was conducted at 11:40 AM on Tuesday, May 27th, 2025. A few small, isolated patches of variable milfoil were observed towards the western side of the pond. Small, scattered patches of filamentous algae dotted the pond, with a larger mat being observed at the northern edge of the pond. A patch of cattails was observed at the same location. Benthic algae dominated the littoral zone with 75-80% coverage.

Based on the survey data, we recommend treating the pond for invasive variable milfoil and algae populations.

As always, we will notify you prior to any upcoming visits, as applicable. Please feel free to reach out to us directly with any questions.

Photo 1	Photo 2	Photo 3
		

Water & Wetland, LLC
Upton, MA
(888) 4WETLAN(D)
www.waterandwetland.com

WATER & WETLAND
a Jones Lake Management Partner

Mohawk Pond
Invasive Species Distribution
Framingham, MA

Survey Date:
05/27/2025

N