Draft Massachusetts Integrated List of Waters for the Clean Water Act 2024/2026 Reporting Cycles

Appendix 19
French River Basin
Assessment and Listing Decision Summary

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Watershed Planning Program

The mission of the Watershed Planning Program (WPP) in the Massachusetts Department of Environmental Protection is to protect, enhance, and restore the quality and value of the waters of the Commonwealth. Guided by the federal Clean Water Act, WPP implements this mission statewide through five Sections that each have a different technical focus: (1) Surface Water Quality Standards; (2) Surface Water Quality Monitoring; (3) Data Management and Water Quality Assessment; (4) Total Maximum Daily Load; and (5) Nonpoint Source Management. Together with other MassDEP programs and state environmental agencies, WPP shares in the duty and responsibility to secure the environmental, recreational, and public health benefits of clean water for all people of the Commonwealth.

Acknowledgements

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Disclaimer

References to trade names, commercial products, manufacturers, or distributors in this report constituted neither endorsement nor recommendation by MassDEP.

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Notice of Availability

This report is available on the Massachusetts Department of Environmental Protection website.

Overview of Appendix Contents

This Integrated Report (IR) Appendix functions as a watershed-based Assessment and Listing Decision Summary that catalogs the most recent assessment decisions for each assessment unit (AU) that was updated as part of the 2024/2026 IR cycle.

The appendix begins with 2024/26 Cycle Impairment Changes, a comprehensive table summarizing all impairments that were either added, removed, changed, or unchanged between the 2022 and 2024/2026 reporting cycles. This table presents the overall impairment status at the waterbody scale, across all designated uses. The table does not detail use-specific impairment changes; those details are provided in subsequent sections of the appendix.

Following 2024/26 Cycle Impairment Changes, the appendix provides an individual section for each AU updated during the 2024/2026 cycle. Each AU section details the supporting data and rationale for each designated use attainment determination, including any associated impairment removal decisions. Changes in impairment status at the designated use level are documented in full within the corresponding Designated Use Attainment Decision. AUs where no usable data were available for the 2024/2026 IR cycle are included, but with the assessment information from the 2022 cycle is carried forward.

The following abbreviations are used when referencing designated uses:

- ALU - Aquatic Life Use
- FC - Fish Consumption Use
- SH - Shellfish Harvesting Use
- AES - Aesthetic Use
- PCR - Primary Contact Recreation Use
- SCR - Secondary Contact Recreation Use

When listing an impairment, parentheses and an asterisk (*) are utilized to denote “pollution” or non-pollutant impairments that do not require the development of a Total Maximum Daily Load (TMDL). Where applicable, further explanation of the ATTAINS impairment code is provided within square brackets [].

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2024/26 Cycle Impairment Changes

Waterbody	AU_ID	AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
Bartons Brook	MA42-08	3	3	None	--	Unchanged
Bouchard Pond	MA42003	4c	4c	(Non-Native Aquatic Plants*)	--	Unchanged
Buffum Pond	MA42004	4c	4c	(Non-Native Aquatic Plants*)	--	Unchanged
Buffumville Lake	MA42005	4a	4a	(Aquatic Plants (Macrophytes)*)	--	Added
Buffumville Lake	MA42005	4a	4a	(Non-Native Aquatic Plants*)	--	Unchanged
Buffumville Lake	MA42005	4a	4a	Mercury in Fish Tissue	33880	Unchanged
Burncoat Brook	MA42-07	5	5	Benthic Macroinvertebrates	--	Unchanged
Burncoat Brook	MA42-07	5	5	Escherichia Coli (E. Coli)	R1_MA_2024_04	Changed
Burncoat Pond	MA42007	3	3	None	--	Unchanged
Carbuncle Pond	MA42008	5	5	Harmful Algal Blooms	--	Unchanged
Cedar Meadow Pond	MA42009	4c	4c	(Fanwort*)	--	Unchanged
Cedar Meadow Pond	MA42009	4c	4c	(Non-Native Aquatic Plants*)	--	Unchanged
Dresser Hill Pond	MA42014	4a	4a	Turbidity	2360	Unchanged
Dutton Pond	MA42015	4a	4a	Nutrient/Eutrophication Biological Indicators	2354	Unchanged
Dutton Pond	MA42015	4a	4a	Phosphorus, Total	2354	Unchanged

Waterbody	AU_ID	AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
Easterbrook Pond	MA42017	3	3	None	--	Unchanged
French River	MA42-03	5	5	Mercury in Fish Tissue	--	Unchanged
French River	MA42-04	5	5	Mercury in Fish Tissue	--	Unchanged
French River	MA42-05	5	5	(Curly-leaf Pondweed*)	--	Unchanged
French River	MA42-05	5	5	(Flow Regime Modification*)	--	Unchanged
French River	MA42-05	5	5	(Non-Native Aquatic Plants*)	--	Unchanged
French River	MA42-05	5	5	Benthic Macroinvertebrates	--	Unchanged
French River	MA42-05	5	5	Escherichia Coli (E. Coli)	--	Added
French River	MA42-06	5	5	(Curly-leaf Pondweed*)	--	Unchanged
French River	MA42-06	5	5	Benthic Macroinvertebrates	--	Unchanged
French River	MA42-06	5	5	Cause Unknown [Sediment Screening Value (Exceedance)]	--	Unchanged
French River	MA42-06	5	5	Escherichia Coli (E. Coli)	--	Unchanged
French River	MA42-06	5	5	Nutrients	--	Unchanged
Gore Pond	MA42018	4a	4a	(Aquatic Plants (Macrophytes)*)	--	Added
Gore Pond	MA42018	4a	4a	(Non-Native Aquatic Plants*)	--	Unchanged
Gore Pond	MA42018	4a	4a	Algae	2361	Unchanged
Gore Pond	MA42018	4a	4a	Dissolved Oxygen	2361	Unchanged
Gore Pond	MA42018	4a	4a	Turbidity	2361	Unchanged

Waterbody	AU_ID	AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
Granite Reservoir	MA42019	4c	4c	(Non-Native Aquatic Plants*)	--	Unchanged
Greenville Pond	MA42023	4a	4a	(Water Chestnut*)	--	Unchanged
Greenville Pond	MA42023	4a	4a	Turbidity	2355	Unchanged
Greenville Pond West	MA42022	3	3	None	--	Unchanged
Grindstone Brook	MA42-18	5	4a	Escherichia Coli (E. Coli)	R1_MA_2024_04	Changed
Hayden Pond	MA42024	3	3	None	--	Unchanged
Henshaw Pond	MA42025	3	3	None	--	Unchanged
Hudson Pond	MA42029	4a	4a	(Aquatic Plants (Macrophytes)*)	--	Unchanged
Hudson Pond	MA42029	4a	4a	Nutrient/Eutrophication Biological Indicators	2363	Unchanged
Hultered Pond	MA42072	3	3	None	--	Unchanged
Jones Pond	MA42030	4a	4a	(Aquatic Plants (Macrophytes)*)	--	Unchanged
Jones Pond	MA42030	4a	4a	Nutrient/Eutrophication Biological Indicators	2364	Unchanged
Larner Pond	MA42068	4c	4c	(Aquatic Plants (Macrophytes)*)	--	Unchanged
Larner Pond	MA42068	4c	4c	(Non-Native Aquatic Plants*)	--	Unchanged
Little Nugget Lake	MA42032	3	3	None	--	Unchanged
Little River	MA42-13	5	5	Benthic Macroinvertebrates	--	Unchanged
Little River	MA42-13	5	5	Dissolved Oxygen	--	Unchanged
Little River	MA42-14	2	2	None	--	Unchanged

Waterbody	AU_ID	AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
Little River	MA42-21	2	2	None	--	Unchanged
Low Pond	MA42033	4c	4c	(Non-Native Aquatic Plants*)	--	Unchanged
Lowes Pond	MA42034	4a	4a	Nutrient/Eutrophication Biological Indicators	2366	Unchanged
Mckinstry Pond	MA42035	4a	4a	Nutrient/Eutrophication Biological Indicators	2367	Unchanged
Merino Pond	MA42036	3	3	None	--	Unchanged
Mill Brook	MA42-10	2	2	None	--	Unchanged
Mine Brook	MA42-16	3	3	None	--	Unchanged
Mosquito Pond	MA42060	4c	4c	(Aquatic Plants (Macrophytes)*)	--	Unchanged
New Pond	MA42037	3	3	None	--	Unchanged
Nipmuck Pond	MA42039	3	3	None	--	Unchanged
Packard Pond	MA42040	4c	4c	(Non-Native Aquatic Plants*)	--	Unchanged
Peter Pond	MA42042	3	3	None	--	Unchanged
Pierpoint Meadow Pond	MA42043	4c	4c	(Non-Native Aquatic Plants*)	--	Unchanged
Pikes Pond	MA42044	4a	4a	Turbidity	2371	Unchanged
Putnam Pond	MA42046	3	3	None	--	Unchanged
Robinson Pond	MA42047	3	3	None	--	Unchanged
Rochdale Pond	MA42048	4a	4a	Nutrient/Eutrophication Biological Indicators	2356	Unchanged
Sargent Pond	MA42049	5	5	(Non-Native Aquatic Plants*)	--	Unchanged
Sargent Pond	MA42049	5	5	Mercury in Fish Tissue	--	Unchanged

Waterbody	AU_ID	AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
Shepherd Pond	MA42051	4c	4c	(Aquatic Plants (Macrophytes)*)	--	Unchanged
Slaters Pond	MA42053	3	3	None	--	Unchanged
Snow Pond	MA42054	3	3	None	--	Unchanged
Stiles Reservoir	MA42055	3	3	None	--	Unchanged
Sucker Brook	MA42-15	5	5	Benthic Macroinvertebrates	--	Unchanged
Sucker Brook	MA42-15	5	5	Escherichia Coli (E. Coli)	R1_MA_2024_04	Changed
Town Meadow Brook	MA42-02	3	3	None	--	Unchanged
Unnamed Tributary	MA42-01	2	2	None	--	Unchanged
Unnamed Tributary	MA42-12	3	3	None	--	Unchanged
Unnamed Tributary	MA42-19	2	2	None	--	Unchanged
Unnamed Tributary	MA42-22	5	5	Benthic Macroinvertebrates	--	Unchanged
Unnamed Tributary	MA42-22	5	5	Dissolved Oxygen	--	Unchanged
Unnamed Tributary	MA42-22	5	5	Lack of a Coldwater Assemblage	--	Unchanged
Unnamed Tributary	MA42-22	5	5	Temperature	--	Unchanged
Wallis Pond	MA42062	4a	4a	(Aquatic Plants (Macrophytes)*)	--	Unchanged
Wallis Pond	MA42062	4a	4a	Dissolved Oxygen	2375	Unchanged

Waterbody	AU_ID	AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
Wallis Pond	MA42062	4a	4a	Nutrient/Eutrophication Biological Indicators	2375	Unchanged
Watson Millpond	MA42063	3	3	None	--	Unchanged
Webster Lake	MA42064	5	5	(Asian Clam*)	--	Unchanged
Webster Lake	MA42064	5	5	(Eurasian Water Milfoil, Myriophyllum Spicatum*)	--	Unchanged
Webster Lake	MA42064	5	5	(Fanwort*)	--	Unchanged
Webster Lake	MA42064	5	5	(Non-Native Aquatic Plants*)	--	Unchanged
Webster Lake	MA42064	5	5	Dissolved Oxygen	--	Unchanged
Webster Lake	MA42064	5	5	PFAS in Fish Tissue	--	Added
Wee Laddie Pond	MA42065	3	3	None	--	Unchanged
Wellington Brook	MA42-11	5	5	Escherichia Coli (E. Coli)	R1_MA_2024_04	Changed
Wellington Brook	MA42-11	5	5	Lack of a Coldwater Assemblage	--	Unchanged
Wellington Brook	MA42-11	5	5	Temperature	--	Unchanged

Bartons Brook (MA42-08)

Location:	Headwaters, outlet Stiles Reservoir, Leicester to mouth at inlet Greenville Pond West, Leicester.
AU Type:	RIVER
AU Size:	1.1 MILES
Classification/Qualifier:	B

No usable data were available for Bartons Brook (MA42-08) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
3	3	None	--	Unchanged

Bouchard Pond (MA42003)

Location:	Leicester.
AU Type:	FRESHWATER LAKE
AU Size:	2 ACRES
Classification/Qualifier:	B

No usable data were available for Bouchard Pond (MA42003) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
4c	4c	(Non-Native Aquatic Plants*)	--	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
(Non-Native Aquatic Plants*)	Introduction of Non-native Organisms (Accidental or Intentional) (Y)	X	--	--	--	--

Buffum Pond (MA42004)

Location:	Charlton/Oxford.
AU Type:	FRESHWATER LAKE
AU Size:	23 ACRES
Classification/Qualifier:	B

No usable data were available for Buffum Pond (MA42004) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
4c	4c	(Non-Native Aquatic Plants*)	--	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
(Non-Native Aquatic Plants*)	Introduction of Non-native Organisms (Accidental or Intentional) (Y)	X	--	--	--	--

Buffumville Lake (MA42005)

Location:	Charlton/Oxford.
AU Type:	FRESHWATER LAKE
AU Size:	199 ACRES
Classification/Qualifier:	B

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
4a	4a	(Aquatic Plants (Macrophytes)*)	--	Added
4a	4a	(Non-Native Aquatic Plants*)	--	Unchanged
4a	4a	Mercury in Fish Tissue	33880	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
(Aquatic Plants (Macrophytes)*)	Source Unknown (N)	--	--	X	X	X
(Non-Native Aquatic Plants*)	Introduction of Non-native Organisms (Accidental or Intentional) (Y)	X	--	--	--	--
Mercury in Fish Tissue	Atmospheric Deposition (Y)	--	X	--	--	--
Mercury in Fish Tissue	Source Unknown (N)	--	X	--	--	--

Recommendations

2024/26 Recommendations
2024/2026 IR [Harmful Algal Blooms, Medium] Follow-up monitoring should be conducted in Buffumville Lake (MA42005) to confirm if Harmful Algal Blooms are impairing the Recreational and Aesthetics uses. An Alert was identified based on visual identification of blooms with a duration extending >14 days in 2016 and 2022. Monitoring should include observational data and collection of cyanobacteria cell count data, as well as continued reporting of algal blooms to MDPH. This is of medium priority;

Designated Use Attainment Decisions

Fish Consumption

2024/26 Use Attainment	Alert
Not Supporting	NO

2024/26 Use Attainment Summary
The Fish Consumption Use for Buffumville Lake (MA42005) continues to be assessed as Not Supporting and the prior Mercury in Fish Tissue impairment is being carried forward. MDPH included a site-specific advisory for Buffumville Lake (referred to by MDPH as ''Buffomville Lake'') in their January 2025 Freshwater Fish Consumption Advisory List. The public should refer to the most recent MDPH Freshwater Fish Consumption Advisory List for the most up to date meal advice for sensitive and general populations.

Aesthetic

2024/26 Use Attainment	Alert
Not Supporting	YES

2024/26 Use Attainment Summary

The Aesthetics Use for Buffumville Lake (MA42005) is assessed as Not Supporting based on observations from the 2016 MAP2 macrophyte mapping survey, with an Aquatic Plants (Macrophytes) non-pollutant impairment being added. The prior Alert identified for Harmful Algal Blooms in this waterbody is being carried forward since C-HAB postings (blooms of 15 or more days in duration) were reported to MDPH for 2016 and 2022. MassDEP staff recorded aesthetics observations as part of the MAP2 lake monitoring project in summer 2016 at two stations in Charlton, for this Buffumville Lake AU; Buffumville Lake Beach, north of Oxford Road (W2593, MAP2L-013S, n=5) and at the deep hole index site, at the northern end of southern lobe (W2625, MAP2L-013, n=3). There were generally no persistent objectionable conditions (odors, deposits, growths, or turbidity) recorded at either station, or littoral zone duckweed recorded in ten shoreline plots (n=1), though field staff noted green water color at W2593. However, during the MAP2 macrophyte mapping survey in Aug 2016 (n=1), greater than 25% (43.7%) of the waterbody was determined to have an aquatic macrophyte biovolume >50%. During the period 2015 through 2022, C-HAB postings for Buffumville Lake were reported to MDPH for 15 days in 2016 (cell count), 14 days in 2017 (visual observations), and 15 days in 2022 (visual observations) and no blooms were reported in other years. Since no extended blooms (>20 days in duration) based on cell count data were reported in recent years, an impairment decision will not be made at this time based on C-HAB postings. However, this data is reflective of the existing Harmful Algal Blooms Alert for Buffumville Lake and a recommendation for follow-up sampling will be made.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
W2593	MassDEP	Water Quality	Little River/Buffumville Lake	[Buffumville Lake Beach, north of Oxford Road, Charlton]	42.122968	-71.911788
W2625	MassDEP	Water Quality	Little River/Buffumville Lake	[index site, northern end of southern lobe, Charlton]	42.116993	-71.909514

Aesthetic Observations

Aesthetics Summary Statements for MassDEP Stations (2011-2020) (MassDEP Undated 4)

[Note: scums of natural origins (e.g. pollen blankets or natural foams) are excluded.]

Station Code	Data Year	Field Sheet Count	Aesthetics Summary Statement
W2593	2016	5	Aesthetic observations were made by MassDEP field sampling crews at Station W2593 (MAP2L-013S) on Buffumville Lake (MA42005) during 5 site visits between May 2016 and Sep 2016. There were generally no persistent objectionable conditions (odors, deposits, growths, or turbidity) recorded, though field staff noted green water color (n=1). During the MAP2 littoral survey (n=1), duckweed was not noted in any of the 10 shoreline plots.

Station Code	Data Year	Field Sheet Count	Aesthetics Summary Statement
W2625	2016	3	Aesthetic observations were made by MassDEP field sampling crews at Station W2625 (MAP2L-013) on Buffumville Lake (MA42005) during 3 site visits between Jun 2016 and Sep 2016. There were generally no persistent objectionable conditions (odors, deposits, growths, or turbidity) recorded. During the MAP2 macrophyte mapping survey (n=1) in Aug 2016, greater than 25% (43.7%) of the waterbody was determined to have an aquatic macrophyte biovolume >50%. The observations from the MAP2 survey are indicative of an Aesthetics Use impairment.

MassDEP Aesthetics Observations (2011-2020) (MassDEP Undated 6)

Station Code	Waterbody	Data Year	Parameter	Result	Result Count	Total Field Sheet Count
W2593	Buffumville Lake	2016	Aesthetics Impaired?	No	5	5
W2593	Buffumville Lake	2016	Color	Greenish	1	5
W2593	Buffumville Lake	2016	Color	Light Yellow/Tan	2	5
W2593	Buffumville Lake	2016	Color	None	2	5
W2593	Buffumville Lake	2016	Objectionable Deposits	No	5	5
W2593	Buffumville Lake	2016	Odor	None	5	5
W2593	Buffumville Lake	2016	Scum	No	5	5
W2593	Buffumville Lake	2016	Turbidity	None	4	5
W2593	Buffumville Lake	2016	Turbidity	Slightly Turbid	1	5
W2625	Buffumville Lake	2016	Aesthetics Impaired?	No	3	3
W2625	Buffumville Lake	2016	Aquatic Plant Density, Overall	None	2	3
W2625	Buffumville Lake	2016	Aquatic Plant Density, Overall	NR	1	3
W2625	Buffumville Lake	2016	Color	Light Yellow/Tan	2	3
W2625	Buffumville Lake	2016	Color	None	1	3
W2625	Buffumville Lake	2016	Objectionable Deposits	No	3	3
W2625	Buffumville Lake	2016	Odor	None	3	3
W2625	Buffumville Lake	2016	Scum	No	3	3
W2625	Buffumville Lake	2016	Turbidity	None	1	3
W2625	Buffumville Lake	2016	Turbidity	Slightly Turbid	2	3

Algal Bloom Information

Cyanobacteria Harmful Algal Bloom (C-HAB) Summary Statements for 2015-2022 MDPH Data (Bailey, Logan April 26, 2023) (MassDEP Undated 1)

C-HAB Summary Statement
During the period 2015 through 2022, C-HAB postings for Buffumville Lake (MA42005) were reported to MDPH for 15 days in 2016 (cell count), 14 days in 2017 (visual observations), and 15 days in 2022 (visual observations). No blooms were reported in other years. Since no extended blooms (>20 days in duration) based on cell count data were reported in recent years, an impairment decision will not be made at this time based on C-HAB postings. However, an Alert is being identified for C-HABs in this waterbody and a recommendation for follow-up sampling will be made.

Cyanobacteria Harmful Algal Bloom (C-HAB) Data (2015-2022) Provided by MDPH (Bailey, Logan April 26, 2023) (MassDEP Undated 1)

Waterbody	Town	Posting Days 2015	Posting Days 2016	Posting Days 2017	Posting Days 2018	Posting Days 2019	Posting Days 2020	Posting Days 2021	Posting Days 2022
Buffumville Lake	Charlton		15	14					15

Primary Contact Recreation

2024/26 Use Attainment	Alert
Not Supporting	YES

2024/26 Use Attainment Summary
The Primary Contact Recreation Use for Buffumville Lake (MA42005) is assessed as Not Supporting. An Aquatic Plants (Macrophytes) impairment is being added (from the Aesthetics Use). The prior Alert identified for Harmful Algal Blooms in this waterbody is being carried forward since C-HAB postings (blooms of 15 or more days in duration) were reported to MDPH for 2016 and 2022. MassDEP staff collected *E. coli* bacteria samples in this Buffumville Lake AU at W2593/MAP2L-013S [Shoreline station at Buffumville Lake Beach, N of Oxford Rd, Charlton] from May-Sep 2016 (n=5). Analysis of this single year limited frequency *E. coli* dataset indicated 0% of intervals had GMs >126 CFU/100ml, no samples exceeded the 410 CFU/100ml STV, and the seasonal GM was 15 CFU/100ml. *E. coli* data from W2593 were indicative of good water quality conditions. During the period 2015 through 2022, C-HAB postings for Buffumville Lake were reported to MDPH for 15 days in 2016 (cell count), 14 days in 2017 (visual observations), and 15 days in 2022 (visual observations) and no blooms were reported in other years. Since no extended blooms (>20 days in duration) based on cell count data were reported in recent years, an impairment decision will not be made at this time based on C-HAB postings. However, this data is reflective of the existing Harmful Algal Blooms Alert for Buffumville Lake and a recommendation for follow-up sampling will be made. MassDEP also collected Secchi and cyanobacteria cell count data in 2016 at W2625/MAP2L-013 [Index-deep hole], and cyanobacteria cell count and cyanotoxins data in 2016 at W2593. Secchi depth data at station W2625 (station depth=5.1 m) indicated water clarity meeting the 1.2m (4ft) threshold (n=3, 2.47-3.43m). The cyanobacteria cell count did not exceed 70,000 cells/ml in any of the water samples (n=6). Analysis of microcystins samples from W2593 (n=3) indicated that the concentrations did not exceed the threshold of 8 µg/L.

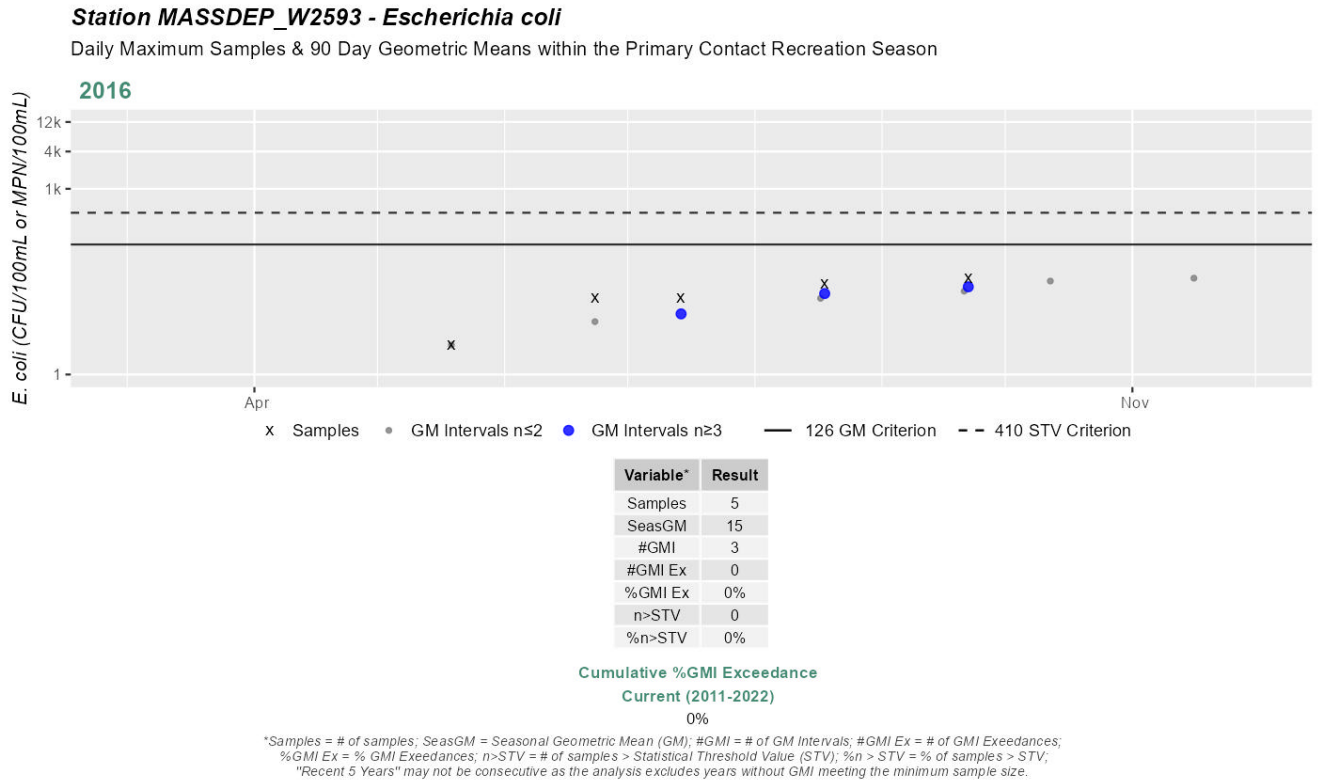
Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
W2593	MassDEP	Water Quality	Little River/Buffumville Lake	[Buffumville Lake Beach, north of Oxford Road, Charlton]	42.122968	-71.911788
W2625	MassDEP	Water Quality	Little River/Buffumville Lake	[index site, northern end of southern lobe, Charlton]	42.116993	-71.909514

Bacteria Data

Bacteria Data Collected by MassDEP (2011-2020) and External Data Providers (2011-2022) (90-day Interval Analysis)
(MassDEP Undated 6) (MassDEP Undated 4)
[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
W2593	MassDEP	E. coli	05/18/16	09/21/16	5	3	36	15



Other Indicators

Summary Statement for 2011-2022 Cyanobacteria Cell Count and Cyanotoxin Data, and Secchi Depth Data
(MassDEP Undated 6) (MassDEP Undated 4)

Data Year	Summary
2016	In Buffumville Lake (MA42005) in 2016, MassDEP collected Secchi and cyanobacteria cell count data at W2625 [MAP2L-013, Index-deep hole], and cyanobacteria cell count and cyanotoxin data at W2593 [MAP2L-013S, Shoreline]. At station W2625 (station depth=5.1 m) the Secchi depth measurements ranged from 2.47-3.43 m (n=3) indicating water clarity meeting the 1.2 m (4 ft) threshold. The cyanobacteria cell count did not exceed 70,000 cells/mL in any of the water samples (n=6). Analysis of microcystins samples from W2593 (n=3) indicated that the concentrations did not exceed the threshold of 8 µg/L.

MassDEP Cyanobacteria Cell Count Data Collected at Lakes and Impoundments (2016-2018) (MassDEP Undated 6) (MassDEP Undated 4)

Station Code	Waterbody	Station Type	Data Year	Sample Count	Count >70,000 cells/mL	Exceedance Date(s)
W2593	Buffumville Lake	Shoreline	2016	3	0	NA
W2625	Buffumville Lake	Index	2016	3	0	NA

Secondary Contact Recreation

2024/26 Use Attainment	Alert
Not Supporting	YES

2024/26 Use Attainment Summary

The Secondary Contact Recreation Use for Buffumville Lake (MA42005) is assessed as Not Supporting. An Aquatic Plants (Macrophytes) impairment is being added (from the Aesthetics Use). The prior Alert identified for Harmful Algal Blooms in this waterbody is being carried forward since C-HAB postings (blooms of 15 or more days in duration) were reported to MDPH for 2016 and 2022. MassDEP staff collected *E. coli* bacteria samples in this Buffumville Lake AU at W2593/MAP2L-013S [Shoreline station at Buffumville Lake Beach, N of Oxford Rd, Charlton] from May-Sep 2016 (n=5). Analysis of this single year limited frequency *E. coli* dataset indicated 0% of intervals had GMs >244 CFU/100ml, no samples exceeded the 794 CFU/100ml STV, and the overall GM was 15 CFU/100ml. *E. coli* data from W2593 were indicative of good water quality conditions. During the period 2015 through 2022, C-HAB postings for Buffumville Lake were reported to MDPH for 15 days in 2016 (cell count), 14 days in 2017 (visual observations), and 15 days in 2022 (visual observations) and no blooms were reported in other years. Since no extended blooms (>20 days in duration) based on cell count data were reported in recent years, an impairment decision will not be made at this time based on C-HAB postings. However, this data is reflective of the existing Harmful Algal Blooms Alert for Buffumville Lake and a recommendation for follow-up sampling will be made. MassDEP also collected cyanobacteria cell count data in 2016 at W2625/MAP2L-013 [Index-deep hole] and cyanobacteria cell count and cyanotoxins data in 2016 at W2593. The cyanobacteria cell count did not exceed 70,000 cells/ml in any of the water samples (n=6). Analysis of microcystins samples from W2593 (n=3) indicated that the concentrations did not exceed the threshold of 8 µg/L.

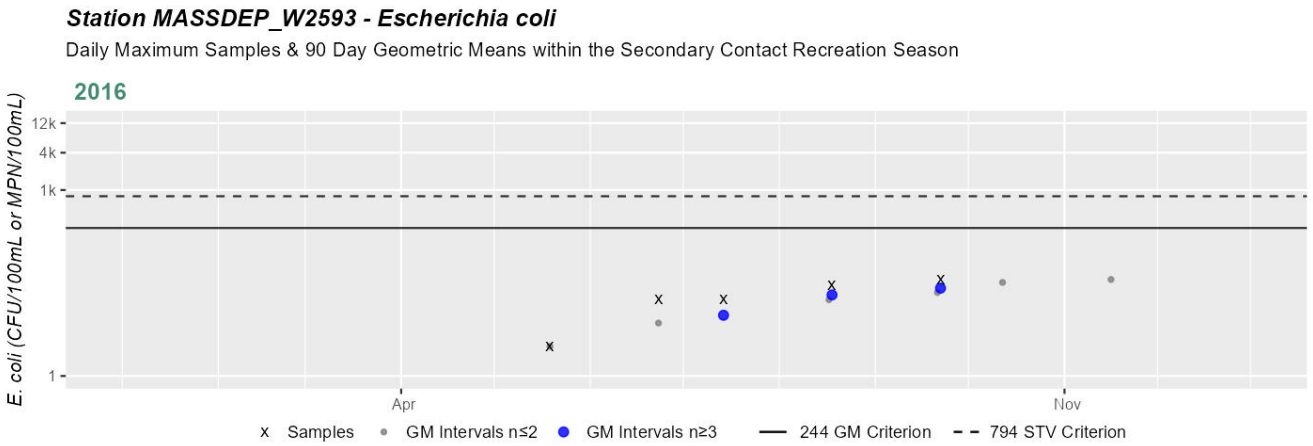
Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
W2593	MassDEP	Water Quality	Little River/Buffumville Lake	[Buffumville Lake Beach, north of Oxford Road, Charlton]	42.122968	-71.911788

Bacteria Data

Bacteria Data Collected by MassDEP (1997-2020) and External Data Providers (1997-2022) (90-day Interval Analysis)
(MassDEP Undated 6) (MassDEP Undated 3)
[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
W2593	MassDEP	E. coli	05/18/16	09/21/16	5	3	36	15



Variable*	Result
Samples	5
SeasGM	15
#GMI	3
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Current (2011-2022)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Burncoat Brook (MA42-07)

Location:	Headwaters, outlet Bouchard Pond, Leicester to mouth at confluence with Town Meadow Brook, Leicester (through former 2008 segment: Ballard Hill Pond MA42069).
AU Type:	RIVER
AU Size:	1 MILES
Classification/Qualifier:	B

Burncoat Brook (MA42-07)

Watershed Area: 4.49 square miles

Land Cover Type	Entire Basin	Proximal Subbasin (5 km radius)	Stream Buffer (100 m)	Proximal Stream Buffer
Land Cover Area (square miles)	4.48	4.18	1.95	1.89
Agriculture	4.7%	3.6%	0.6%	0.2%
Developed	10.3%	9.9%	7.6%	6.9%
Natural	72.2%	74.3%	72.9%	74.1%
Wetland	12.7%	12.2%	19%	18.8%
Impervious	3.9%	3.7%	3.2%	2.9%

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
5	5	Benthic Macroinvertebrates	--	Unchanged
5	5	Escherichia Coli (E. Coli)	R1_MA_2024_04	Changed

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
Benthic Macroinvertebrates	Source Unknown (N)	X	--	--	--	--
Escherichia Coli (E. Coli)	Source Unknown (N)	--	--	--	X	--

Supporting Information for Removed Impairments

2022 Removed Impairment	Removal Reason	Removal Comment
Escherichia Coli (E. Coli)	TMDL approved or established by EPA (4a)	Impairment covered under TMDL: Massachusetts Statewide TMDL for Pathogen-Impaired Waterbodies (Report CN 515.1, approved 2/13/2024, ATTAINS Action ID: R1_MA_2024_04)

Designated Use Attainment Decisions

Fish Consumption

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
The Fish Consumption Use for Burncoat Brook (MA42-07) is Not Assessed because fish toxics sampling was not conducted.

Aesthetic

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
No data are available, so the Aesthetics Use for Burncoat Brook (MA42-07) is Not Assessed.

Primary Contact Recreation

2024/26 Use Attainment	Alert
Not Supporting	NO

2024/26 Use Attainment Summary
The Primary Contact Recreation Use for Burncoat Brook (MA42-07) continues to be assessed as Not Supporting. The prior Escherichia Coli (E. Coli) impairment is being carried forward. No new data are available to evaluate the Primary Contact Recreation Use for this Burncoat Brook AU.

Secondary Contact Recreation

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary

No bacteria or other indicator data for Burncoat Brook (MA42-07) are available in the current IR window (2011-2022), so the Secondary Contact Recreation Use is Not Assessed. MassDEP staff collected *E. coli* bacteria samples about three-quarters of the way down this Burncoat Brook AU at W1164 [upstream of unnamed dirt Rd S off of Pine St, ~600 ft downstream of Ballard Hill Pond outlet, Leicester] from May-Sep 2004 (n=5). Analysis of this historic single year limited frequency *E. coli* dataset indicated 75% of intervals had GMs >244 CFU/100ml, 1 sample exceeded the 794 CFU/100ml STV, and the overall GM was 213 CFU/100ml. Historic *E. coli* data from W1164 were indicative of good water quality conditions. Since these data were collected prior to the current IR window (2011-2022) the Secondary Contact Recreation Use cannot be positively assessed using bacteria data.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
W1164	MassDEP	Water Quality	Burncoat Brook	[upstream of unnamed dirt road south off of Pine Street, approximately 600 feet downstream of Ballard Hill Pond outlet, Leicester]	42.223076	-71.923044

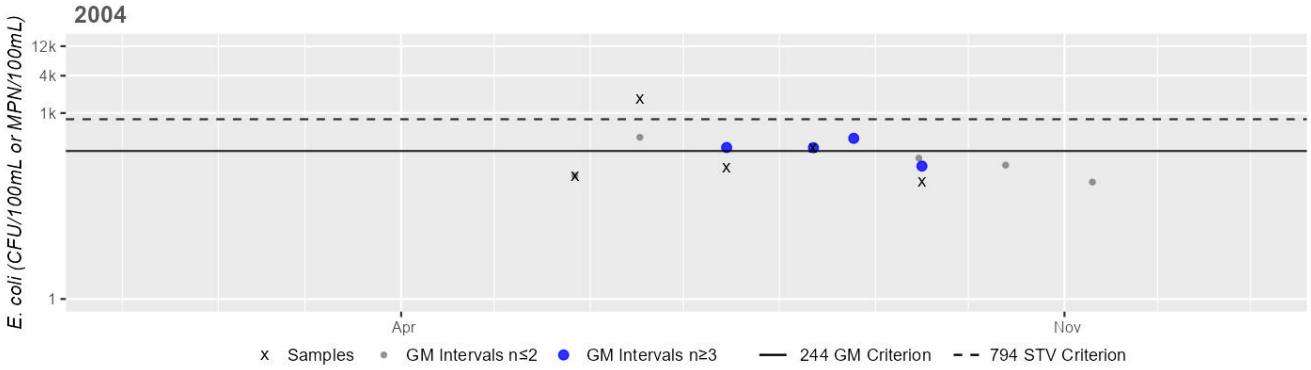
Bacteria Data

Bacteria Data Collected by MassDEP (1997-2020) and External Data Providers (1997-2022) (90-day Interval Analysis)
(MassDEP Undated 6) (MassDEP Undated 3)
[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
W1164	MassDEP	E. coli	05/26/04	09/15/04	5	77	1700	213

Station MASSDEP_W1164 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



Variable*	Result
Samples	5
SeasGM	213
#GMI	4
#GMI Ex	3
%GMI Ex	75%
n>STV	1
%n>STV	20%

Cumulative %GMI Exceedance
Historic (1997-2010)
75%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Burncoat Pond (MA42007)

Location:	Leicester/Spencer.
AU Type:	FRESHWATER LAKE
AU Size:	115 ACRES
Classification/Qualifier:	B

No usable data were available for Burncoat Pond (MA42007) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
3	3	None	--	Unchanged

Carbuncle Pond (MA42008)

Location:	Oxford.
AU Type:	FRESHWATER LAKE
AU Size:	11 ACRES
Classification/Qualifier:	B

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
5	5	Harmful Algal Blooms	--	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
Harmful Algal Blooms	Source Unknown (N)	--	--	X	X	X

Recommendations

2024/26 Recommendations
2024/26IR [Harmful Algal Blooms, Low] Follow-up monitoring should be conducted in Carbuncle Pond (MA42008), to confirm if Harmful Algal Blooms are impairing the Recreational and Aesthetics uses. Since the existing Harmful Algal Blooms impairment (first listed in the 2016IR) was based on visual observations, a recommendation is being made to confirm the impairment with cyanobacteria cell count data. Monitoring should include observational data and collection of cyanobacteria cell count data, as well as continued reporting of algal blooms to MDPH. This is of low priority;

Designated Use Attainment Decisions

Fish Consumption

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
The Fish Consumption Use for Carbuncle Pond (MA42008) is Not Assessed because fish toxics sampling was not conducted.

Aesthetic

2024/26 Use Attainment	Alert
Not Supporting	NO

2024/26 Use Attainment Summary
The Aesthetics Use for Carbuncle Pond (MA42008) will continue to be assessed as Not Supporting with the prior Harmful Algal Blooms impairment being carried forward. Since the existing Harmful Algal Blooms impairment was based on visual observations, a recommendation is being made to confirm the impairment with cyanobacteria cell count data. No new data are available to evaluate the Aesthetics Use for this Carbuncle Pond AU.

Algal Bloom Information

Cyanobacteria Harmful Algal Bloom (C-HAB) Summary Statements for 2015-2022 MDPH Data (Bailey, Logan April 26, 2023) (MassDEP Undated 1)

C-HAB Summary Statement
Since the existing Harmful Algal Blooms impairment for Carbuncle Pond (MA42008) was based on visual observations, a recommendation is being made to confirm the impairment with cyanobacteria cell count data.

Primary Contact Recreation

2024/26 Use Attainment	Alert
Not Supporting	NO

2024/26 Use Attainment Summary
The Primary Contact Recreation Use for Carbuncle Pond (MA42008) will continue to be assessed as Not Supporting with the prior Harmful Algal Blooms impairment being carried forward. Since the existing Harmful Algal Blooms impairment was based on visual observations, a recommendation is being made to confirm the impairment with cyanobacteria cell count data. No new data are available to evaluate the Primary Contact Recreation Use for this Carbuncle Pond AU.

Secondary Contact Recreation

2024/26 Use Attainment	Alert
Not Supporting	NO

2024/26 Use Attainment Summary

The Secondary Contact Recreation Use for Carbuncle Pond (MA42008) will continue to be assessed as Not Supporting with the prior Harmful Algal Blooms impairment being carried forward. Since the existing Harmful Algal Blooms impairment was based on visual observations, a recommendation is being made to confirm the impairment with cyanobacteria cell count data. No new data are available to evaluate the Secondary Contact Recreation Use for this Carbuncle Pond AU.

Cedar Meadow Pond (MA42009)

Location:	Leicester.
AU Type:	FRESHWATER LAKE
AU Size:	140 ACRES
Classification/Qualifier:	B

No usable data were available for Cedar Meadow Pond (MA42009) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
4c	4c	(Fanwort*)	--	Unchanged
4c	4c	(Non-Native Aquatic Plants*)	--	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
(Fanwort*)	Introduction of Non-native Organisms (Accidental or Intentional) (Y)	X	--	--	--	--
(Non-Native Aquatic Plants*)	Introduction of Non-native Organisms (Accidental or Intentional) (Y)	X	--	--	--	--

Dresser Hill Pond (MA42014)

Location:	Charlton.
AU Type:	FRESHWATER LAKE
AU Size:	8 ACRES
Classification/Qualifier:	B

No usable data were available for Dresser Hill Pond (MA42014) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
4a	4a	Turbidity	2360	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
Turbidity	Historical Source, No Longer Present (Y)	--	--	X	X	X

Dutton Pond (MA42015)

Location:	Leicester.
AU Type:	FRESHWATER LAKE
AU Size:	6 ACRES
Classification/Qualifier:	B

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
4a	4a	Nutrient/Eutrophication Biological Indicators	2354	Unchanged
4a	4a	Phosphorus, Total	2354	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
Nutrient/Eutrophication Biological Indicators	Historical Source, No Longer Present (Y)	X	--	X	X	X
Nutrient/Eutrophication Biological Indicators	Municipal Point Source Discharges (N)	X	--	X	X	X
Phosphorus, Total	Historical Source, No Longer Present (Y)	X	--	--	--	--
Phosphorus, Total	Municipal Point Source Discharges (N)	X	--	--	--	--

Recommendations

2024/26 Recommendations
2024/26IR [Aesthetics, Low] Additional aesthetics observations should be collected for Dutton Pond (MA42015) to assess the effectiveness of remediation that occurred in 2009 (relocation of the Leicester Water Supply District outfall from directly to Dutton Pond to Town Meadow Brook just downstream from the outlet of Dutton Pond) and evaluate the current conditions.

Designated Use Attainment Decisions

Fish Consumption

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
Fish toxics sampling has not been conducted, so the Fish Consumption Use for Dutton Pond (MA42015) is Not Assessed.

Aesthetic

2024/26 Use Attainment	Alert
Not Supporting	NO

2024/26 Use Attainment Summary
The Aesthetics Use for Dutton Pond (MA42015) will continue to be assessed as Not Supporting with the Nutrient/Eutrophication Biological Indicators impairment being carried forward. Since the Total Phosphorus impairment was redundantly duplicated across multiple uses for this waterbody, the Total Phosphorus impairment is being removed from the Aesthetics Use but will continue to be maintained under the Aquatic Life Use. The relocation of the Leicester Water Supply District outfall from directly to Dutton Pond to Town Meadow Brook just downstream from the outlet of Dutton Pond was completed in 2009. The Total Maximum Daily Load for Phosphorus for Selected French Basin Lakes, details target load allocations with both the current discharge location and a location bypassing Dutton Pond (MassDEP 2002). Aesthetics observations should be collected for Dutton Pond to assess the effectiveness of this remediation and evaluate the current conditions. No new data are available to evaluate the Aesthetics Use for this Dutton Pond AU.

Primary Contact Recreation

2024/26 Use Attainment	Alert
Not Supporting	NO

2024/26 Use Attainment Summary

The Primary Contact Recreation Use for Dutton Pond (MA42015) will continue to be assessed as Not Supporting with the Nutrient/Eutrophication Biological Indicators impairment being carried forward. Since the Total Phosphorus impairment was removed from the Aesthetics Use, it is also being removed from the Primary Contact Recreation Use. No new data are available to evaluate the Primary Contact Recreation Use for this Dutton Pond AU. The relocation of the Leicester Water Supply District outfall from directly to Dutton Pond to Town Meadow Brook just downstream from the outlet of Dutton Pond was completed in 2009. The Total Maximum Daily Load for Phosphorus for Selected French Basin Lakes, details target load allocations with both the current discharge location and a location bypassing Dutton Pond (MassDEP 2002). Water quality data should be collected for Dutton Pond to assess the effectiveness of this remediation and evaluate the current conditions. No new data are available to evaluate the Primary Contact Recreation Use for this Dutton Pond AU.

Secondary Contact Recreation

2024/26 Use Attainment	Alert
Not Supporting	NO

2024/26 Use Attainment Summary
The Secondary Contact Recreation Use for Dutton Pond (MA42015) continues to be assessed as Not Supporting. The prior Nutrient/Eutrophication Biological Indicators impairment (from the Aesthetics Use) is being carried forward. Since the Total Phosphorus impairment is being removed from the Aesthetics Use this cycle, this impairment is also being removed from the Secondary Contact Recreation Use. The relocation of the Leicester Water Supply District outfall from directly to Dutton Pond to Town Meadow Brook just downstream from the outlet of Dutton Pond was completed in 2009. The Total Maximum Daily Load for Phosphorus for selected French Basin Lakes, details target load allocations with both the current discharge location and a location bypassing Dutton Pond (MassDEP 2002). Water quality data should be collected for Dutton Pond to assess the effectiveness of this remediation and evaluate the current conditions. No new data are available to evaluate the Secondary Contact Recreation Use for this Dutton Pond AU.

Easterbrook Pond (MA42017)

Location:	Dudley.
AU Type:	FRESHWATER LAKE
AU Size:	5 ACRES
Classification/Qualifier:	B

No usable data were available for Easterbrook Pond (MA42017) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

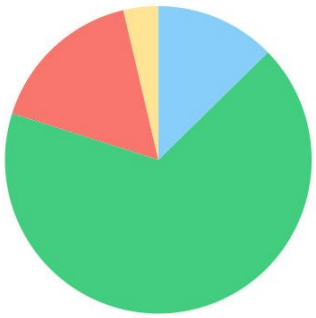
AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
3	3	None	--	Unchanged

French River (MA42-03)

Location:	Headwaters, outlet Greenville Pond, Leicester to the outlet of Thayers Pond, Oxford (excluding approximately 0.6 miles through Rochdale Pond segment MA42048) (through former 2008 segments: Texas Pond MA42058 and Thayers Pond MA42059).
AU Type:	RIVER
AU Size:	3.8 MILES
Classification/Qualifier:	B: WWF

French River (MA42-03)

Watershed Area: 24.20 square miles



Land Cover Type	Entire Basin	Proximal Subbasin (5 km radius)	Stream Buffer (100 m)	Proximal Stream Buffer
Land Cover Area (square miles)	24.20	5.31	10.25	2.11
Agriculture	3.7%	2.3%	1%	0.6%
Developed	16.4%	23.8%	13.2%	24.8%
Natural	67.2%	65.3%	67.4%	60.8%
Wetland	12.7%	8.6%	18.4%	13.7%
Impervious	6.2%	9.6%	5.4%	10.7%

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
5	5	Mercury in Fish Tissue	--	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
Mercury in Fish Tissue	Source Unknown (N)	--	X	--	--	--

Designated Use Attainment Decisions

Fish Consumption

2024/26 Use Attainment	Alert
Not Supporting	NO

2024/26 Use Attainment Summary
The Fish Consumption Use for this French River AU (MA42-03) continues to be assessed as Not Supporting, with the prior Mercury in Fish Tissue impairment being carried forward. MDPH included a site-specific advisory for the French River (referred to by MDPH as "Texas Pond (= Thayer Pond) and Thayer Pond – see Texas Pond") in their January 2025 Freshwater Fish Consumption Advisory List. The public should refer to the most recent MDPH Freshwater Fish Consumption Advisory List for the most up to date meal advice for sensitive and general populations.

Aesthetic

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
No data are available, so the Aesthetics Use for French River (MA42-03) is Not Assessed.

Primary Contact Recreation

2024/26 Use Attainment	Alert
Fully Supporting	NO

2024/26 Use Attainment Summary
The Primary Contact Recreation Use for the French River (MA42-03) continues to be assessed as Fully Supporting based on bacteria data collected in 2019 & 2020 at 1 station. French River Connection (FRC) staff/volunteers collected *E. coli* bacteria samples close to the downstream end of this French River AU at FRC_French16 [Rt. 56, Oxford] in 2019-2020 (n=9-17/yr). Analysis of this multi-year high frequency *E. coli* dataset indicated 1 out of 2 sufficient data yrs had intervals where >10% of the GMs were >126 CFU/100ml (2019, 13%), 1 yr had >10% of samples exceed the 410 CFU/100ml STV (2020, 22%), and cumulatively across years 11% of intervals had GMs >126 CFU/100ml. *E. coli* data collected from the French River were indicative of good water quality conditions.

Monitoring Stations

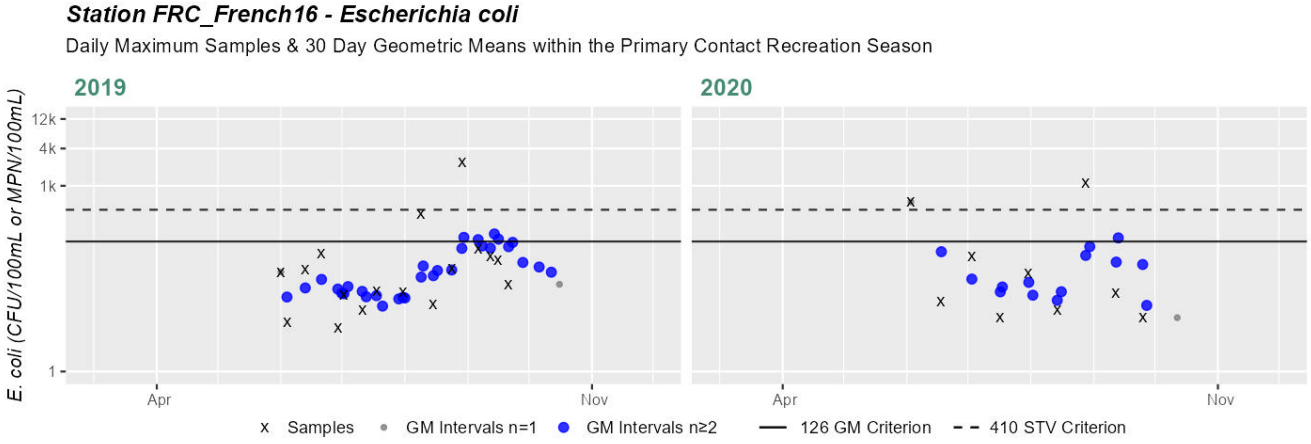
Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
FRC_French16	French River Connection	Water Quality	French River	Route 56, Oxford	42.162652	-71.887219

Bacteria Data

Bacteria Data Collected by MassDEP (2011-2020) and External Data Providers (2011-2022) (30-day Interval Analysis) (FRC 2020) (MassDEP Undated 2)

[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
FRC_French16	French River Connection	E. coli	06/01/19	09/21/19	17	5	2419	39
FRC_French16	French River Connection	E. coli	06/02/20	09/24/20	9	7	1119	39



Variable*	Result
Samples	17
SeasGM	39
#GMI	31
#GMI Ex	4
%GMI Ex	12%
n>STV	1
%n>STV	5%

Variable*	Result
Samples	9
SeasGM	39
#GMI	14
#GMI Ex	1
%GMI Ex	7%
n>STV	2
%n>STV	22%

Cumulative %GMI Exceedance
Current (2011-2022)
11%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Secondary Contact Recreation

2024/26 Use Attainment	Alert
Fully Supporting	NO

2024/26 Use Attainment Summary

The Secondary Contact Recreation Use for the French River (MA42-03) continues to be assessed as Fully Supporting based on bacteria data collected in 2019 & 2020 at 1 station. French River Connection (FRC) staff/volunteers collected *E. coli* bacteria samples close to the downstream end of this French River AU at FRC_French16 [Rt. 56, Oxford] in 2019-2020 (n=9-17/yr). Analysis of this multi-year high frequency *E. coli* dataset indicated 0 out of 2 sufficient data yrs had intervals where >10% of the GMs were >244 CFU/100ml, 1 yr had >10% of samples exceed the 794 CFU/100ml STV (2020, 11%), and cumulatively across years 0% of intervals had GMs >244 CFU/100ml. *E. coli* data collected from the French River were indicative of good water quality conditions.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
FRC_French16	French River Connection	Water Quality	French River	Route 56, Oxford	42.162652	-71.887219

Bacteria Data

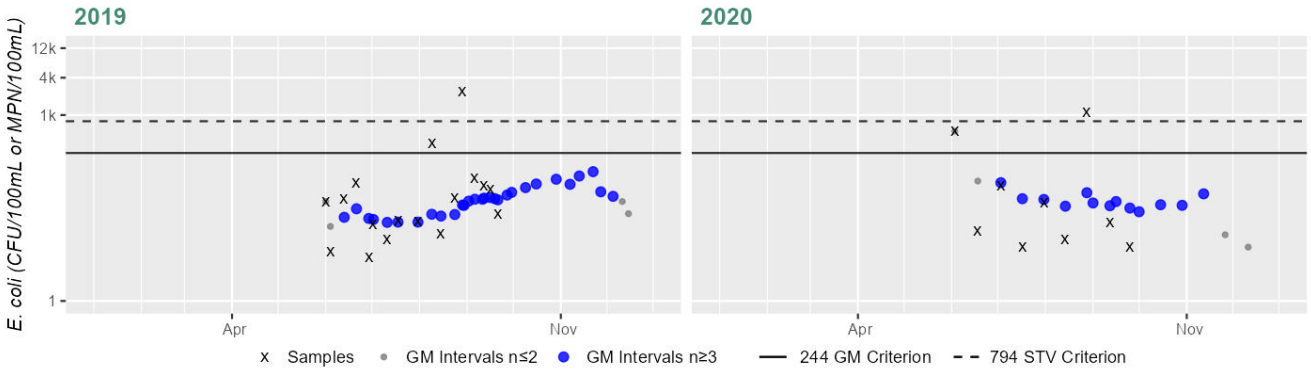
Bacteria Data Collected by MassDEP (1997-2020) and External Data Providers (1997-2022) (90-day Interval Analysis) (FRC 2020) (MassDEP Undated 1)

[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
FRC_French16	French River Connection	E. coli	06/01/19	09/21/19	17	5	2419	39
FRC_French16	French River Connection	E. coli	06/02/20	09/24/20	9	7	1119	39

Station FRC_French16 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



Variable*	Result
Samples	17
SeasGM	39
#GMI	29
#GMI Ex	0
%GMI Ex	0%
n>STV	1
%n>STV	5%

Variable*	Result
Samples	9
SeasGM	39
#GMI	13
#GMI Ex	0
%GMI Ex	0%
n>STV	1
%n>STV	11%

Cumulative %GMI Exceedance

Current (2011-2022)

0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

French River (MA42-04)

Location:	From dam (NATID: MA01946) just upstream of Clara Barton Road, Oxford, to dam (NATID: MA00108) at North Village, Webster/Dudley.
AU Type:	RIVER
AU Size:	9.6 MILES
Classification/Qualifier:	B: WWF

French River (MA42-04)

Watershed Area: 83.52 square miles

Land Cover Type	Entire Basin	Proximal Subbasin (5 km radius)	Stream Buffer (100 m)	Proximal Stream Buffer
Land Cover Area* (square miles)	83.44	16.11	34.95	7.64
Agriculture	2.9%	1%	1.2%	0.6%
Developed	16.2%	20.3%	12.8%	14.9%
Natural	69.8%	70.9%	69%	71.5%
Wetland	11%	7.8%	17%	13%
Impervious	6.1%	8.6%	5.2%	6.6%

**Land cover analysis only includes watershed area within Massachusetts.*

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
5	5	Mercury in Fish Tissue	--	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
Mercury in Fish Tissue	Source Unknown (N)	--	X	--	--	--

Designated Use Attainment Decisions

Fish Consumption

2024/26 Use Attainment	Alert

Not Supporting	NO

2024/26 Use Attainment Summary
The Fish Consumption Use for this French River AU (MA42-04) continues to be assessed as Not Supporting with the prior Mercury in Fish Tissue impairment being carried forward. MDPH included a site-specific advisory for the French River (referred to by MDPH as ''French River (Between the Hodges Village Dam in Oxford and the North Webster Village Pond Dam in Webster)'') in their January 2025 Freshwater Fish Consumption Advisory List. The public should refer to the most recent MDPH Freshwater Fish Consumption Advisory List for the most up to date meal advice for sensitive and general populations.

Aesthetic

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
No data are available, so the Aesthetics Use for French River (MA42-04) is Not Assessed.

Primary Contact Recreation

2024/26 Use Attainment	Alert
Fully Supporting	NO

2024/26 Use Attainment Summary
The Primary Contact Recreation Use for the French River (MA42-04) continues to be assessed as Fully Supporting based on bacteria data collected in 2019 & 2020 at 3 stations. French River Connection (FRC) staff/volunteers collected *E. coli* bacteria samples in this French River AU from 2019-2020 at 3 stations. Samples were collected from the following stations/sample years from upstream to downstream: the upstream end of the AU at FRC_French12 [Clara Barton Rd, Oxford] in 2019-2020 (n=9-17/yr), halfway down the AU at FRC_French14 [Dudley Rd, Oxford] in 2019-2020 (n=9-17/yr), and a little further downstream at FRC_French15 [Harwood St, Oxford] in 2019-2020 (n=9-17/yr). Analysis of the multi-year high frequency *E. coli* dataset from these stations indicated that generally none of the sufficient data yrs had intervals where >10% of the GMs were >126 CFU/100ml (with the exception of FRC_French15 with 23% in 2020), no yrs had >10% samples exceed the 410 CFU/100ml STV and cumulatively (per station) across years usually 0% of the intervals had GMs >126 CFU/100ml (with the exception of FRC_French15 with 7% cumulative). Overall, the *E. coli* data collected in the French River are indicative of good water quality conditions.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
FRC_French12	French River Connection	Water Quality	French River	Clara Barton Road, Oxford	42.154835	-71.882514

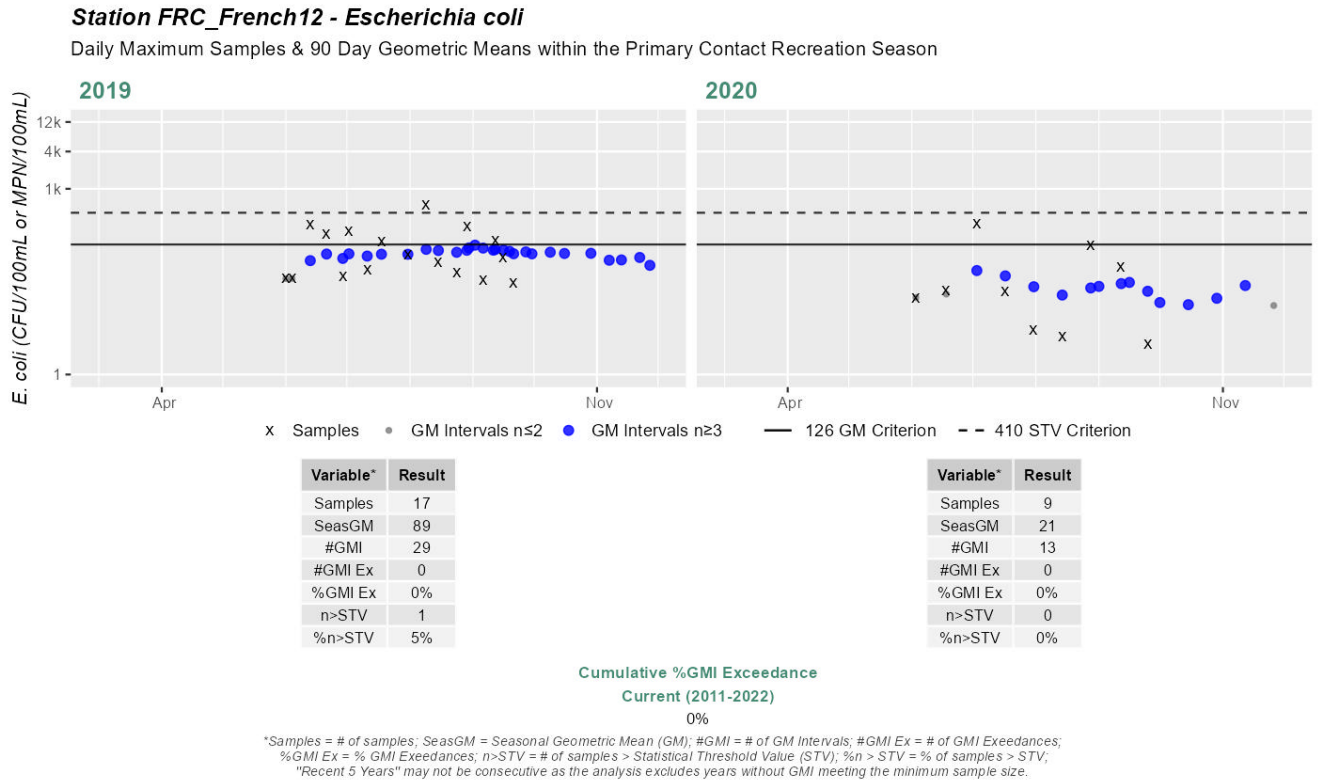
Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
FRC_French14	French River Connection	Water Quality	French River	Dudley Road, Oxford	42.107183	-71.883204
FRC_French15	French River Connection	Water Quality	French River	Harwood Street, Oxford	42.091509	-71.880146

Bacteria Data

Bacteria Data Collected by MassDEP (2011-2020) and External Data Providers (2011-2022) (90-day Interval Analysis) (FRC 2020) (MassDEP Undated 2)

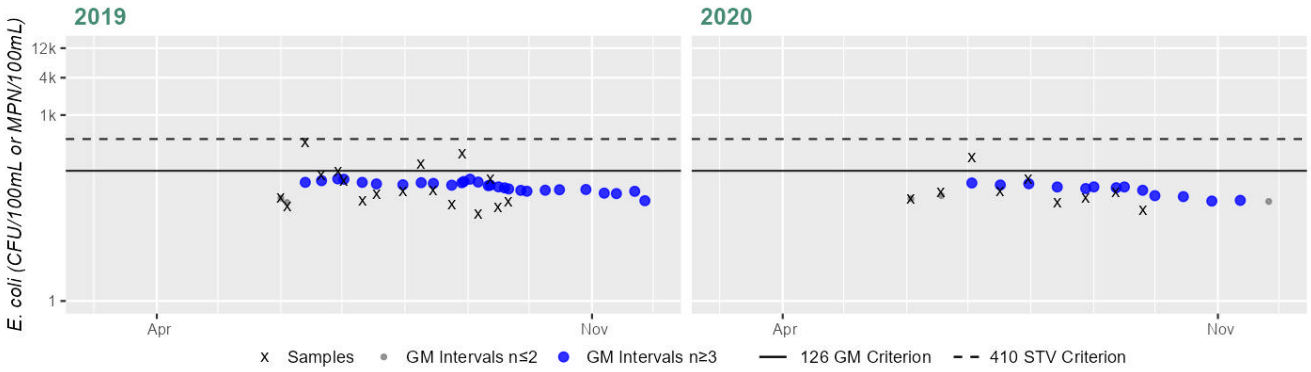
[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
FRC_French12	French River Connection	E. coli	06/01/19	09/21/19	17	30	547	89
FRC_French12	French River Connection	E. coli	06/02/20	09/24/20	9	3	275	21
FRC_French14	French River Connection	E. coli	06/01/19	09/21/19	17	25	365	69
FRC_French14	French River Connection	E. coli	06/02/20	09/24/20	9	29	204	58
FRC_French15	French River Connection	E. coli	06/01/19	09/21/19	17	37	344	96
FRC_French15	French River Connection	E. coli	06/02/20	09/24/20	9	36	307	102



Station FRC_French14 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Primary Contact Recreation Season



Variable*	Result
Samples	17
SeasGM	69
#GMI	29
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

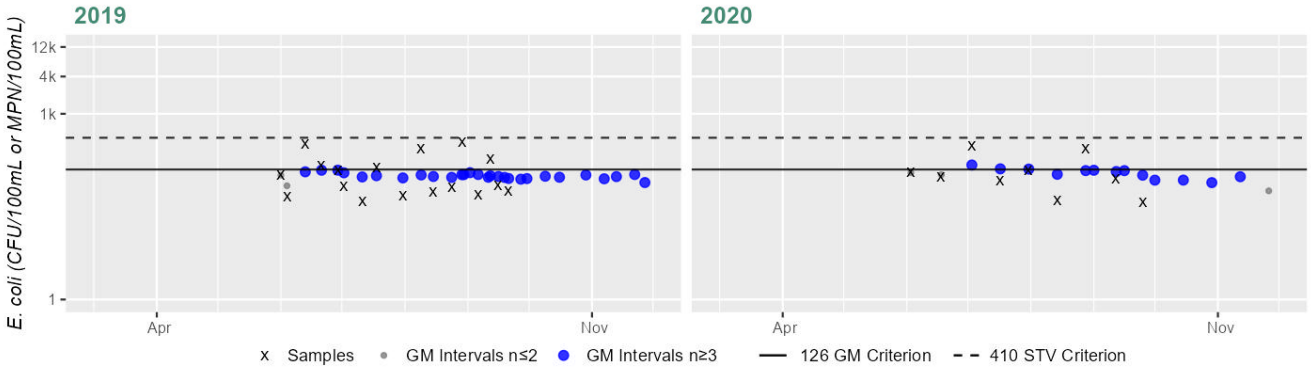
Variable*	Result
Samples	9
SeasGM	58
#GMI	13
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Current (2011-2022)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Station FRC_French15 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Primary Contact Recreation Season



Variable*	Result
Samples	17
SeasGM	96
#GMI	29
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Variable*	Result
Samples	9
SeasGM	102
#GMI	13
#GMI Ex	3
%GMI Ex	23%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Current (2011-2022)
7%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Secondary Contact Recreation

2024/26 Use Attainment	Alert
Fully Supporting	NO

2024/26 Use Attainment Summary

The Secondary Contact Recreation Use for the French River (MA42-04) continues to be assessed as Fully Supporting based on a re-evaluation of bacteria data collected in 2004, 2019 & 2020 at 4 stations. French River Connection (FRC) and MassDEP staff/volunteers collected *E. coli* bacteria samples in both the historic (1997-2010) & the current IR window (2011-2022) in this French River AU from 2004-2020 at 4 stations. Samples were collected from the following stations/sample years from upstream to downstream: the upstream end of the AU at FRC_French12 [Clara Barton Rd, Oxford] in 2019-2020 (n=9-17/yr), and W1165 [SE of the Clara Barton Rd/Rt. 56 junction, ~300 ft downstream of powerlines, Oxford] from May-Sep 2004 (n=5), halfway down the AU at FRC_French14 [Dudley Rd, Oxford] in 2019-2020 (n=9-17/yr), and a little further downstream at FRC_French15 [Harwood St, Oxford] in 2019-2020 (n=9-17/yr). Analysis of the multi-year high frequency *E. coli* dataset from these stations indicated that none of the sufficient data yrs had intervals where >10% of the GMs were >244 CFU/100ml, no yrs had >10% samples exceed the 794 CFU/100ml STV and cumulatively (per station) across years 0% of the intervals had GMs >244 CFU/100ml. Overall, the *E. coli* data collected in both the historic & the current IR window for the French River are all indicative of good water quality conditions.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
FRC_French12	French River Connection	Water Quality	French River	Clara Barton Road, Oxford	42.154835	-71.882514
FRC_French14	French River Connection	Water Quality	French River	Dudley Road, Oxford	42.107183	-71.883204
FRC_French15	French River Connection	Water Quality	French River	Harwood Street, Oxford	42.091509	-71.880146
W1165	MassDEP	Water Quality	French River	[southeast of the Clara Barton Road/Route 56 junction, approximately 300 feet downstream of powerlines, Oxford]	42.153773	-71.878893

Bacteria Data

Bacteria Data Collected by MassDEP (1997-2020) and External Data Providers (1997-2022) (90-day Interval Analysis) (FRC 2020) (MassDEP Undated 1) (MassDEP Undated 6) (MassDEP Undated 3)

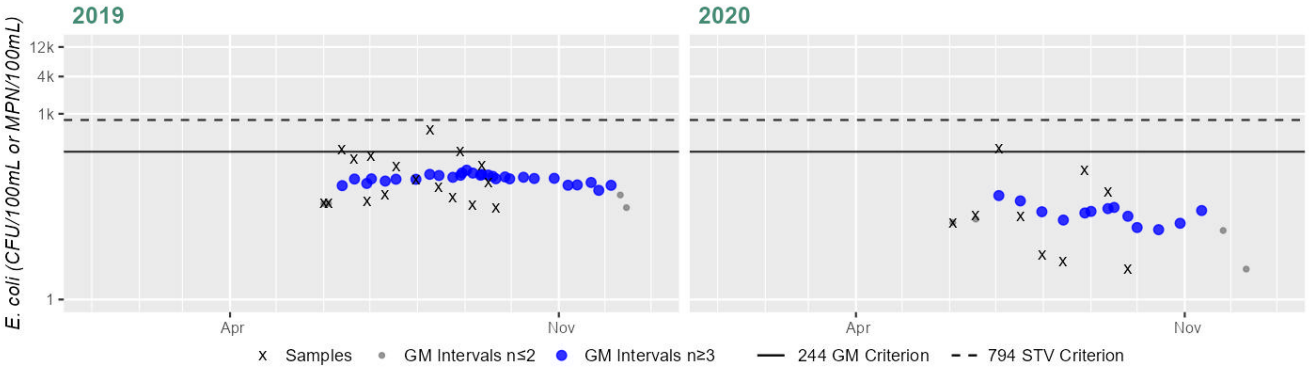
[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
FRC_French12	French River Connection	E. coli	06/01/19	09/21/19	17	30	547	89
FRC_French12	French River Connection	E. coli	06/02/20	09/24/20	9	3	275	21

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
FRC_French14	French River Connection	E. coli	06/01/19	09/21/19	17	25	365	69
FRC_French14	French River Connection	E. coli	06/02/20	09/24/20	9	29	204	58
FRC_French15	French River Connection	E. coli	06/01/19	09/21/19	17	37	344	96
FRC_French15	French River Connection	E. coli	06/02/20	09/24/20	9	36	307	102
W1165	MassDEP	E. coli	05/26/04	09/15/04	5	26	310	103

Station FRC_French12 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



Variable*	Result
Samples	17
SeasGM	89
#GMI	29
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

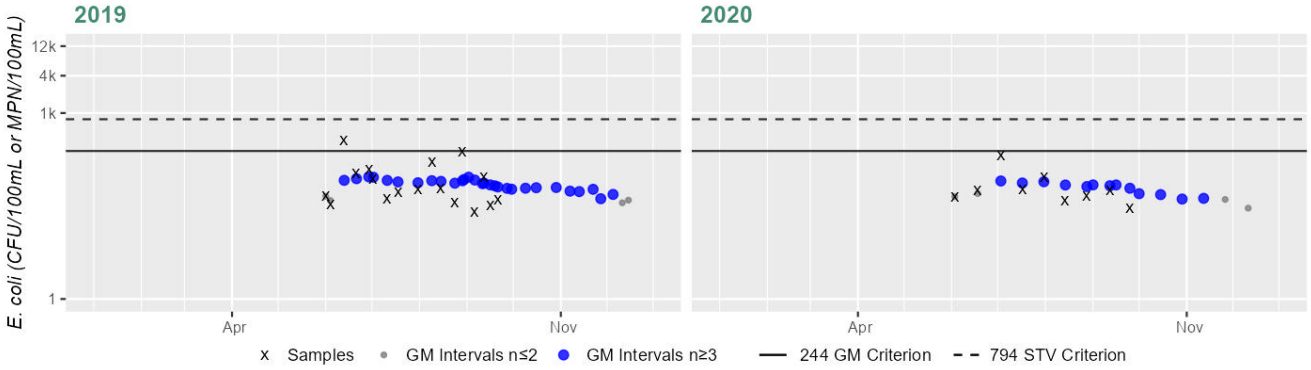
Variable*	Result
Samples	9
SeasGM	21
#GMI	13
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Current (2011-2022)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Station FRC_French14 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



Variable*	Result
Samples	17
SeasGM	69
#GMI	29
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

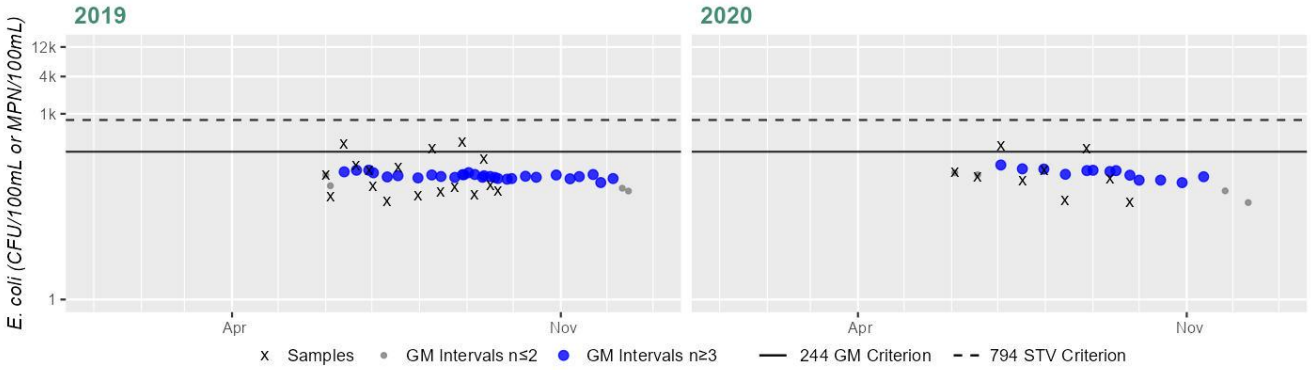
Variable*	Result
Samples	9
SeasGM	58
#GMI	13
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Current (2011-2022)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Station FRC_French15 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



Variable*	Result
Samples	17
SeasGM	96
#GMI	29
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

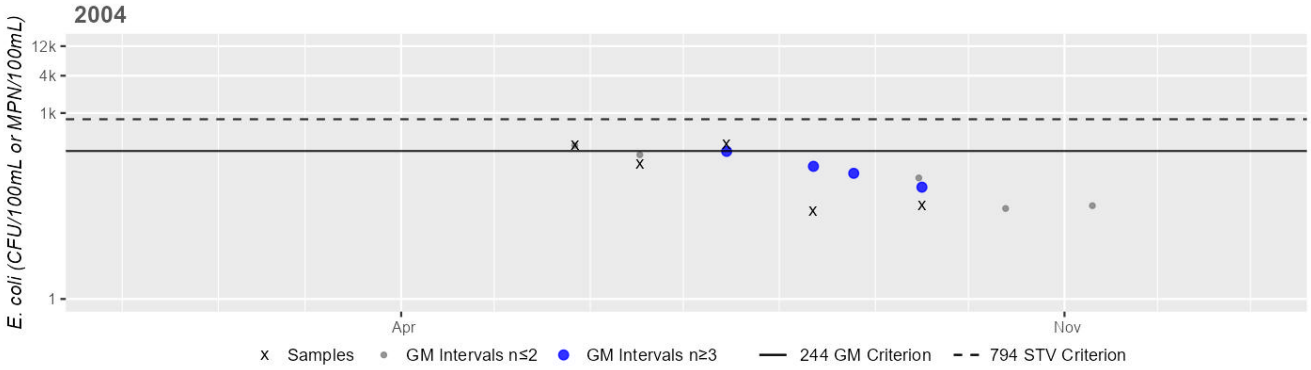
Variable*	Result
Samples	9
SeasGM	102
#GMI	13
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Current (2011-2022)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Station MASSDEP_W1165 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



Variable*	Result
Samples	5
SeasGM	103
#GMI	4
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Historic (1997-2010)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

French River (MA42-05)

Location:	Dam (NATID: MA00108) at North Village, Webster/Dudley to Webster WWTP outfall (NPDES: MA0100439), Webster/Dudley.
AU Type:	RIVER
AU Size:	2.4 MILES
Classification/Qualifier:	B: WWF

French River (MA42-05)

Watershed Area: 91.69 square miles

Land Cover Type	Entire Basin	Proximal Subbasin (5 km radius)	Stream Buffer (100 m)	Proximal Stream Buffer
Land Cover Area* (square miles)	91.61	13.45	38.35	7.11
Agriculture	3.1%	2%	1.5%	1.7%
Developed	17.1%	28%	13.2%	18.1%
Natural	69.1%	63.7%	68.7%	70.8%
Wetland	10.7%	6.3%	16.6%	9.4%
Impervious	6.7%	12.8%	5.4%	8.3%

**Land cover analysis only includes watershed area within Massachusetts.*

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
5	5	(Curly-leaf Pondweed*)	--	Unchanged
5	5	(Flow Regime Modification*)	--	Unchanged
5	5	(Non-Native Aquatic Plants*)	--	Unchanged
5	5	Benthic Macroinvertebrates	--	Unchanged
5	5	Escherichia Coli (E. Coli)	--	Added

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
(Curly-leaf Pondweed*)	Introduction of Non-native Organisms (Accidental or Intentional) (Y)	X	--	--	--	--
(Flow Regime Modification*)	Impacts from Hydrostructure Flow Regulation/Modification (Y)	X	--	--	--	--
(Non-Native Aquatic Plants*)	Introduction of Non-native Organisms (Accidental or Intentional) (Y)	X	--	--	--	--
Benthic Macroinvertebrates	Impacts from Hydrostructure Flow Regulation/Modification (Y)	X	--	--	--	--
Escherichia Coli (E. Coli)	Source Unknown (N)	--	--	--	X	--

Designated Use Attainment Decisions

Fish Consumption

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
The Fish Consumption Use for French River (MA42-05) was Not Assessed because fish toxics sampling was not conducted.

Aesthetic

2024/26 Use Attainment	Alert
Fully Supporting	NO

2024/26 Use Attainment Summary

The Aesthetics Use for French River (MA42-05) is assessed as Fully Supporting based on the general lack of objectionable conditions noted by MassDEP staff during their surveys conducted at two sampling stations during the summers of 2011-2013. Aesthetic observations were made by MassDEP field sampling crews at two sampling stations along this French River AU from up to downstream as follows: halfway down the AU near Oxford Avenue/Pleasant St, Dudley/Webster (near USGS flow gaging station #01125000 (W0602) between 2011 and 2013 (n=12) and close to the downstream end of the AU ~200 feet downstream from Brandon Road, Webster (W2235) during the summer of 2011 (n=8). There were generally no persistent objectionable conditions (odors, deposits, growths, or turbidity) recorded at either station, though minor to moderate trash was noted on two occasions in 2012 at station W0602, including "floatables" and "shopping carts".

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
W0602	MassDEP	Water Quality	French River	[Oxford Avenue/Pleasant Street, Dudley/Webster (near USGS flow gaging station #01125000)]	42.050945	-71.885074
W2235	MassDEP	Water Quality	French River	[approximately 200 feet downstream from Brandon Road, Webster]	42.042520	-71.887472

Aesthetic Observations

Aesthetics Summary Statements for MassDEP Stations (2011-2020) (MassDEP Undated 4)
[Note: scums of natural origins (e.g. pollen blankets or natural foams) are excluded.]

Station Code	Data Year	Field Sheet Count	Aesthetics Summary Statement
W0602	2011	5	Aesthetic observations were made by MassDEP field sampling crews at Station W0602 on French River (MA42-05) during 5 site visits between Mar 2011 and Oct 2011. There were generally no persistent objectionable conditions (odors, deposits, growths, or turbidity) recorded, though field staff noted objectionable deposits (n=4).
W0602	2012	6	Aesthetic observations were made by MassDEP field sampling crews at Station W0602 on French River (MA42-05) during 6 site visits between Jan 2012 and Nov 2012. There were generally no persistent objectionable conditions (odors, deposits, growths, or turbidity) recorded, though field staff noted objectionable deposits (n=4).
W0602	2013	1	Aesthetic observations were made by MassDEP field sampling crews at Station W0602 on French River (MA42-05) during 1 site visit on Apr 24, 2013. There were generally no persistent objectionable conditions (odors, deposits, growths, or turbidity) recorded. However, aesthetic observations are limited (n<3).
W2235	2011	8	Aesthetic observations were made by MassDEP field sampling crews at Station W2235 on French River (MA42-05) during 8 site visits between May 2011 and Oct 2011. There were generally no persistent objectionable conditions (odors, deposits, growths, or turbidity) recorded.

Observations of Filamentous/Film Algae at MassDEP Stations (2011-2020) (MassDEP Undated 6) (MassDEP Undated 4)

Station Code	Data Year	Field Sheet Count	Field Sheet Count w/ Film & Filamentous Algae Observations	Dense/ Very Dense Film/ Filamentous Algae
W0602	2011	5	0	0
W0602	2012	6	2	2
W0602	2013	1	0	0
W2235	2011	8	4	0

MassDEP Aesthetics Observations (2011-2020) (MassDEP Undated 6)

Station Code	Waterbody	Data Year	Parameter	Result	Result Count	Total Field Sheet Count
W0602	French River	2011	Aquatic Plant Density, Overall	Unobservable	5	5
W0602	French River	2011	Color	Light Yellow/Tan	2	5
W0602	French River	2011	Color	None	1	5
W0602	French River	2011	Color	Reddish	2	5
W0602	French River	2011	Objectionable Deposits	Unobservable	5	5
W0602	French River	2011	Odor	Musty (Basement)	1	5
W0602	French River	2011	Odor	None	4	5
W0602	French River	2011	Periphyton Density, Filamentous	Unobservable	5	5
W0602	French River	2011	Periphyton Density, Film	Unobservable	5	5
W0602	French River	2011	Scum	Yes	5	5
W0602	French River	2011	Turbidity	Slightly Turbid	1	5
W0602	French River	2011	Turbidity	Unobservable	4	5
W0602	French River	2012	Aquatic Plant Density, Overall	Sparse	1	6
W0602	French River	2012	Aquatic Plant Density, Overall	Unobservable	5	6
W0602	French River	2012	Color	Light Yellow/Tan	3	6
W0602	French River	2012	Color	None	1	6
W0602	French River	2012	Color	Reddish	2	6
W0602	French River	2012	Objectionable Deposits	Unobservable	4	6
W0602	French River	2012	Objectionable Deposits	Yes	2	6
W0602	French River	2012	Odor	None	4	6
W0602	French River	2012	Odor	Other (Eutrophic)	2	6
W0602	French River	2012	Periphyton Density, Filamentous	Moderate	1	6
W0602	French River	2012	Periphyton Density, Filamentous	Sparse	1	6
W0602	French River	2012	Periphyton Density, Filamentous	Unobservable	4	6
W0602	French River	2012	Periphyton Density, Film	Unobservable	4	6
W0602	French River	2012	Periphyton Density, Film	Very Dense	2	6

Station Code	Waterbody	Data Year	Parameter	Result	Result Count	Total Field Sheet Count
W0602	French River	2012	Scum	Yes	6	6
W0602	French River	2012	Turbidity	None	1	6
W0602	French River	2012	Turbidity	Slightly Turbid	2	6
W0602	French River	2012	Turbidity	Unobservable	3	6
W0602	French River	2013	Aesthetics Impaired?	NR	1	1
W0602	French River	2013	Aquatic Plant Density, Overall	Unobservable	1	1
W0602	French River	2013	Color	None	1	1
W0602	French River	2013	Objectionable Deposits	Unobservable	1	1
W0602	French River	2013	Odor	None	1	1
W0602	French River	2013	Periphyton Density, Filamentous	Unobservable	1	1
W0602	French River	2013	Periphyton Density, Film	Unobservable	1	1
W0602	French River	2013	Scum	Yes	1	1
W0602	French River	2013	Turbidity	None	1	1
W2235	French River	2011	Aquatic Plant Density, Overall	None	4	8
W2235	French River	2011	Aquatic Plant Density, Overall	NR	1	8
W2235	French River	2011	Aquatic Plant Density, Overall	Unobservable	3	8
W2235	French River	2011	Color	Light Yellow/Tan	4	8
W2235	French River	2011	Color	None	3	8
W2235	French River	2011	Color	NR	1	8
W2235	French River	2011	Objectionable Deposits	No	6	8
W2235	French River	2011	Objectionable Deposits	Unobservable	1	8
W2235	French River	2011	Objectionable Deposits	Yes	1	8
W2235	French River	2011	Odor	None	7	8
W2235	French River	2011	Odor	NR	1	8
W2235	French River	2011	Periphyton Density, Filamentous	None	4	8
W2235	French River	2011	Periphyton Density, Filamentous	NR	1	8
W2235	French River	2011	Periphyton Density, Filamentous	Unobservable	3	8
W2235	French River	2011	Periphyton Density, Film	Moderate	1	8
W2235	French River	2011	Periphyton Density, Film	None	3	8
W2235	French River	2011	Periphyton Density, Film	NR	1	8
W2235	French River	2011	Periphyton Density, Film	Unobservable	3	8
W2235	French River	2011	Scum	No	3	8
W2235	French River	2011	Scum	Yes	5	8
W2235	French River	2011	Turbidity	None	6	8
W2235	French River	2011	Turbidity	Slightly Turbid	2	8

Primary Contact Recreation

2024/26 Use Attainment	Alert
Not Supporting	NO

2024/26 Use Attainment Summary

The Primary Contact Recreation Use for the French River (MA42-05) is assessed as Not Supporting. An Escherichia Coli (E. Coli) impairment is being added. French River Connection (FRC) and MassDEP staff/volunteers collected *E. coli* bacteria samples in this French River AU from 2011-2020 at 2 stations/combined stations. Samples were collected from the following stations/sample years from upstream to downstream: halfway down the AU at W0602 [Oxford Avenue/Pleasant St, Dudley/Webster (near USGS flow gaging station #01125000)] in 2011-2013 (n=1-4/yr) and three-quarters of the way down the AU at FRC_French4 & W2235 [~200 ft downstream from Brandon Rd, Webster & Brandon Rd, Dudley] in 2011 and 2019-2020 (n=7-17/yr). The available *E. coli* data at W0602 are too limited to assess according to the 2024 CALM. Analysis of the multi-year moderate frequency *E. coli* dataset from FRC_French4 & W2235 indicated 2 out of 3 sufficient data yrs had intervals where >20% of the GMs were >126 CFU/100ml (2011 and 2019, 56 & 38%), 1 yr had ≥2 samples exceed the 410 CFU/100ml STV (2019, n=2), and cumulatively across years 31% of intervals had GMs >126 CFU/100ml. *E. coli* data from combined station FRC_French4 & W2235 are indicative of an *E. coli* impairment.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
FRC_French4	French River Connection	Water Quality	French River	Brandon Road, Dudley	42.042582	-71.887444
W0602	MassDEP	Water Quality	French River	[Oxford Avenue/Pleasant Street, Dudley/Webster (near USGS flow gaging station #01125000)]	42.050945	-71.885074
W2235	MassDEP	Water Quality	French River	[approximately 200 feet downstream from Brandon Road, Webster]	42.042520	-71.887472

Bacteria Data

Bacteria Data Collected by MassDEP (2011-2020) and External Data Providers (2011-2022) (90-day Interval Analysis) (FRC 2020) (MassDEP Undated 2) (MassDEP Undated 6) (MassDEP Undated 4)

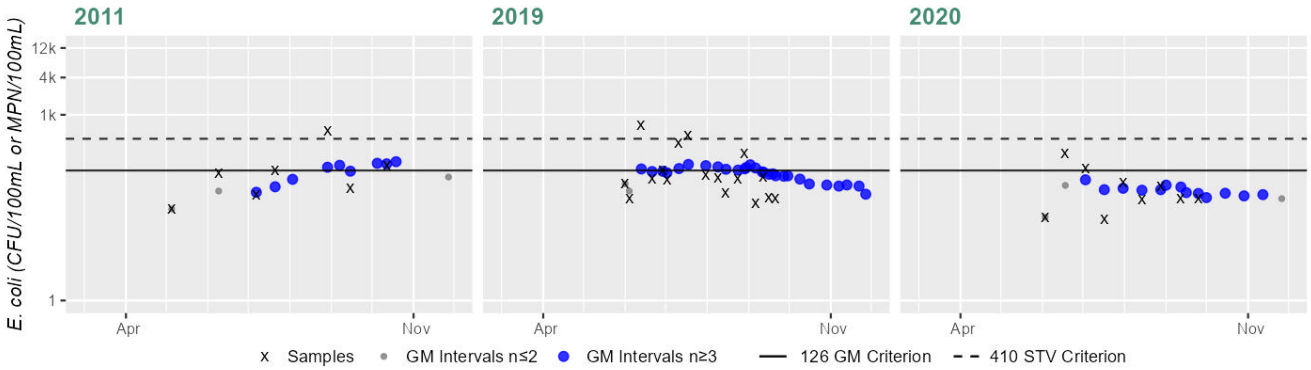
[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
FRC_French4	French River Connection	E. coli	06/01/19	09/21/19	17	37	686	107
FRC_French4	French River Connection	E. coli	06/02/20	09/24/20	9	20	235	57
W0602	MassDEP	E. coli	04/27/11	10/26/11	4	14	96	33
W0602	MassDEP	E. coli	05/29/12	09/26/12	3	35	228	76
W0602	MassDEP	E. coli	04/24/13	04/24/13	1	21	21	21

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
W2235	MassDEP	E. coli	05/05/11	10/12/11	7	30	548	102

Station FRC_French4 & MASSDEP_W2235 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Primary Contact Recreation Season



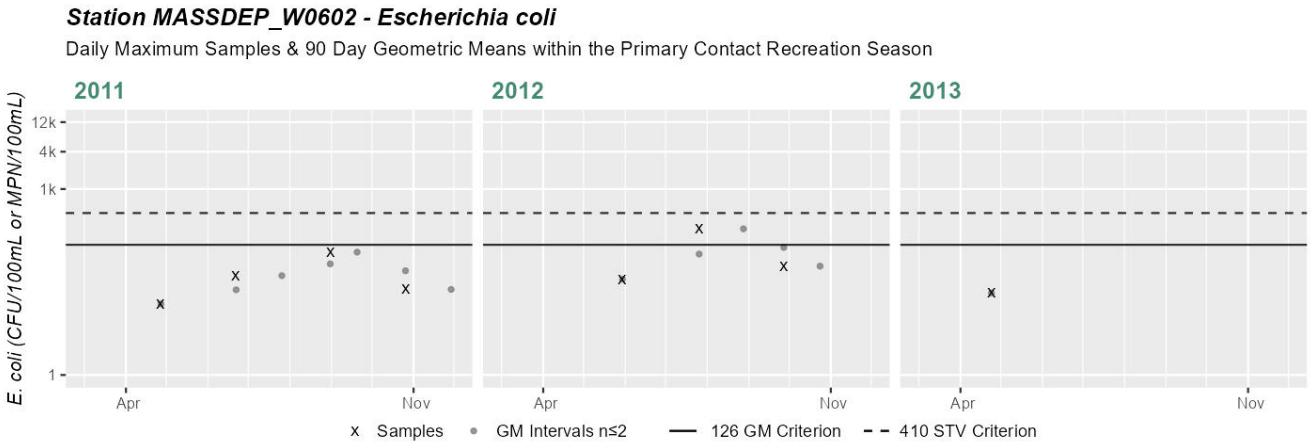
Variable*	Result
Samples	7
SeasGM	102
#GMI	9
#GMI Ex	5
%GMI Ex	55%
n>STV	1
%n>STV	14%

Variable*	Result
Samples	17
SeasGM	107
#GMI	29
#GMI Ex	11
%GMI Ex	37%
n>STV	2
%n>STV	11%

Variable*	Result
Samples	9
SeasGM	57
#GMI	13
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Current (2011-2022)
31%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*



Variable*	Result
Samples	4
SeasGM	33
#GMI	0
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Variable*	Result
Samples	3
SeasGM	76
#GMI	0
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Variable*	Result
Samples	1
SeasGM	21
#GMI	0
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Current (2011-2022)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Secondary Contact Recreation

2024/26 Use Attainment	Alert
Fully Supporting	NO

2024/26 Use Attainment Summary
The Secondary Contact Recreation Use for the French River (MA42-05) continues to be assessed as Fully Supporting based on a re-evaluation of bacteria data collected in 2011, 2019 & 2020 at 1 combined station. French River Connection (FRC) and MassDEP staff/volunteers collected *E. coli* bacteria samples in both the historic (1997-2010) & the current IR window (2011-2022) in this French River AU from 2007-2020 at 2 stations/combined stations. Samples were collected from the following stations/sample years from upstream to downstream: halfway down the AU at W0602 [Oxford Avenue/Pleasant St, Dudley/Webster (near USGS flow gaging station #01125000)] in 2007-2010 (historic n=2-6/yr) and 2011-2013 (current n=1-6/yr); and three-quarters of the way down the AU at combined station "FRC_French4 & W2235" [~200 ft downstream from Brandon Rd, Webster & Brandon Rd, Dudley] in 2011 and 2019-2020 (n=7-17/yr). The available *E. coli* data at W0602 are too limited to assess according to the 2024 CALM. However, analysis of the multi-year moderate frequency *E. coli* dataset from FRC_French4 & W2235 indicated 0 out of 3 sufficient data yrs had intervals where >20% of the GMs were >244 CFU/100ml, 0 yrs had ≥2 samples exceed the 794 CFU/100ml STV, and cumulatively across years 0% of intervals had GMs >244 CFU/100ml. *E. coli* data from combined station "FRC_French4 & W2235" were indicative of good water quality conditions.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
FRC_French4	French River Connection	Water Quality	French River	Brandon Road, Dudley	42.042582	-71.887444
W0602	MassDEP	Water Quality	French River	[Oxford Avenue/Pleasant Street, Dudley/Webster (near USGS flow gaging station #01125000)]	42.050945	-71.885074
W2235	MassDEP	Water Quality	French River	[approximately 200 feet downstream from Brandon Road, Webster]	42.042520	-71.887472

Bacteria Data

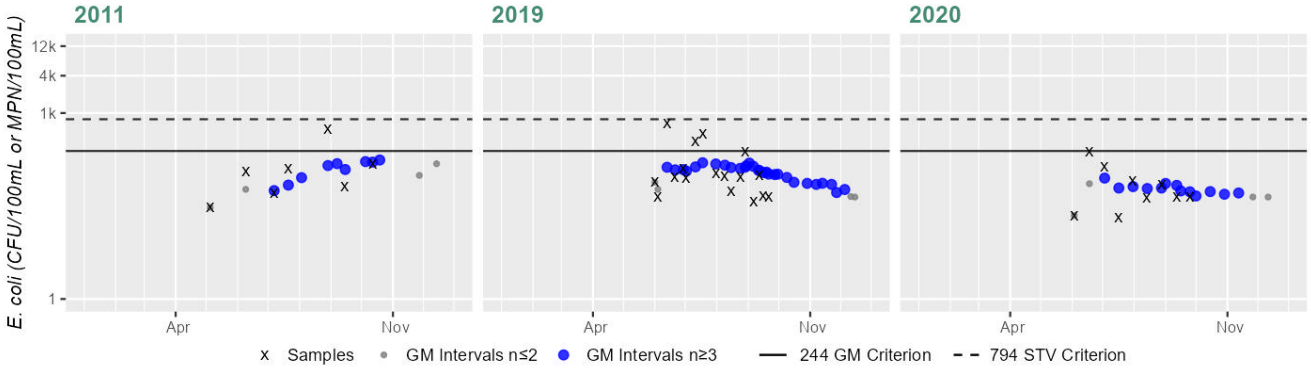
Bacteria Data Collected by MassDEP (1997-2020) and External Data Providers (1997-2022) (90-day Interval Analysis) (FRC 2020) (MassDEP Undated 1) (MassDEP Undated 6) (MassDEP Undated 3)

[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
FRC_French4	French River Connection	E. coli	06/01/19	09/21/19	17	37	686	107
FRC_French4	French River Connection	E. coli	06/02/20	09/24/20	9	20	235	57
W0602	MassDEP	E. coli	08/29/07	10/17/07	2	15	133	44
W0602	MassDEP	E. coli	01/30/08	11/19/08	6	4	1120	71
W0602	MassDEP	E. coli	02/24/09	10/28/09	5	15	166	38
W0602	MassDEP	E. coli	02/23/10	11/17/10	4	11	816	103
W0602	MassDEP	E. coli	03/23/11	10/26/11	5	2	96	19
W0602	MassDEP	E. coli	01/25/12	11/14/12	6	26	228	46
W0602	MassDEP	E. coli	04/24/13	04/24/13	1	21	21	21
W2235	MassDEP	E. coli	05/05/11	10/12/11	7	30	548	102

Station FRC_French4 & MASSDEP_W2235 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



Variable*	Result
Samples	7
SeasGM	102
#GMI	9
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Variable*	Result
Samples	17
SeasGM	107
#GMI	29
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

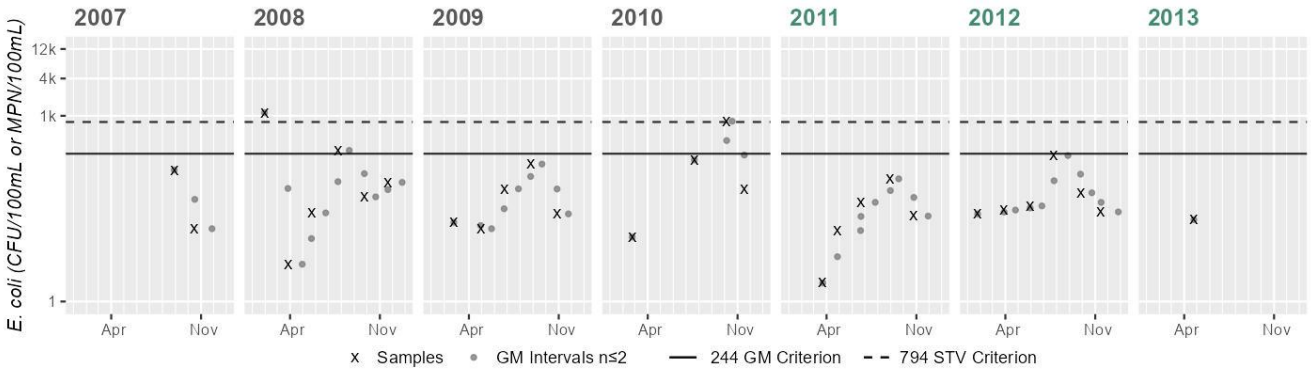
Variable*	Result
Samples	9
SeasGM	57
#GMI	13
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Current (2011-2022)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Station MASSDEP_W0602 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



Variable*	Result
Samples	2
SeasGM	44
#GMI	0
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Variable*	Result
Samples	6
SeasGM	71
#GMI	0
#GMI Ex	0
%GMI Ex	0%
n>STV	1
%n>STV	16%

Variable*	Result
Samples	5
SeasGM	38
#GMI	0
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Variable*	Result
Samples	4
SeasGM	103
#GMI	0
#GMI Ex	0
%GMI Ex	0%
n>STV	1
%n>STV	25%

Variable*	Result
Samples	5
SeasGM	19
#GMI	0
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Variable*	Result
Samples	6
SeasGM	46
#GMI	0
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Variable*	Result
Samples	1
SeasGM	21
#GMI	0
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Historic (1997-2010)
0%

Cumulative %GMI Exceedance
Current (2011-2022)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

French River (MA42-06)

Location:	Webster WWTP outfall (NPDES: MA0100439), Webster/Dudley to state line, Dudley, MA/Thompson,CT.
AU Type:	RIVER
AU Size:	1 MILES
Classification/Qualifier:	B: WWF

French River (MA42-06)

Watershed Area: 93.45 square miles

Land Cover Type	Entire Basin	Proximal Subbasin (5 km radius)	Stream Buffer (100 m)	Proximal Stream Buffer
Land Cover Area* (square miles)	93.18	11.00	38.93	5.87
Agriculture	3%	1.3%	1.5%	1%
Developed	17.3%	31.6%	13.3%	19.5%
Natural	69%	61.8%	68.7%	72.1%
Wetland	10.6%	5.3%	16.5%	7.4%
Impervious	6.8%	14.9%	5.5%	9.5%

**Land cover analysis only includes watershed area within Massachusetts.*

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
5	5	(Curly-leaf Pondweed*)	--	Unchanged
5	5	Benthic Macroinvertebrates	--	Unchanged
5	5	Cause Unknown [Sediment Screening Value (Exceedance)]	--	Unchanged
5	5	Escherichia Coli (E. Coli)	--	Unchanged
5	5	Nutrients	--	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
(Curly-leaf Pondweed*)	Introduction of Non-native Organisms (Accidental or Intentional) (Y)	X	--	--	--	--
Benthic Macroinvertebrates	Dam or Impoundment (Y)	X	--	--	--	--
Benthic Macroinvertebrates	Municipal Point Source Discharges (Y)	X	--	--	--	--
Benthic Macroinvertebrates	Unspecified Urban Stormwater (Y)	X	--	--	--	--
Cause Unknown [Sediment Screening Value (Exceedance)]	Contaminated Sediments (Y)	X	--	--	--	--
Escherichia Coli (E. Coli)	Source Unknown (N)	--	--	--	X	--
Nutrients	Dam or Impoundment (Y)	X	--	--	--	--
Nutrients	Municipal Point Source Discharges (Y)	X	--	--	--	--
Nutrients	Unspecified Urban Stormwater (Y)	X	--	--	--	--

Designated Use Attainment Decisions

Fish Consumption

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
The Fish Consumption Use for French River (MA42-06) was Not Assessed because fish toxics sampling was not conducted recently.

Aesthetic

2024/26 Use Attainment	Alert
Fully Supporting	NO

2024/26 Use Attainment Summary

The Aesthetics Use for French River (MA42-06) is assessed as Fully Supporting based on the general lack of objectionable conditions in the river noted by MassDEP staff during surveys conducted between 2011-2013. Aesthetic observations were made by MassDEP field sampling crews at the downstream end of this French River AU, downstream of the Perryville Dam and Webster-Dudley WWTP near Perryville Road bridge (W0075) between 2011 and 2013 (n=21 site visits). There were generally no persistent objectionable conditions (odors, deposits, growths, or turbidity) recorded.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
W0075	MassDEP	Water Quality	French River	[downstream of the Perryville Dam and downstream of the Webster-Dudley WWTP, Perryville Rd. bridge, Webster]	42.024700	-71.884182

Aesthetic Observations

Aesthetics Summary Statements for MassDEP Stations (2011-2020) (MassDEP Undated 4)

[Note: scums of natural origins (e.g. pollen blankets or natural foams) are excluded.]

Station Code	Data Year	Field Sheet Count	Aesthetics Summary Statement
W0075	2011	13	Aesthetic observations were made by MassDEP field sampling crews at Station W0075 on French River (MA42-06) during 13 site visits between Mar 2011 and Oct 2011. There were some objectionable conditions recorded, including effluent odor (n=3). Field staff also noted objectionable deposits (n=2). These conditions are indicative of an Alert status.
W0075	2012	6	Aesthetic observations were made by MassDEP field sampling crews at Station W0075 on French River (MA42-06) during 6 site visits between Jan 2012 and Nov 2012. There were generally no persistent objectionable conditions (odors, deposits, growths, or turbidity) recorded, though field staff noted objectionable deposits (n=3).
W0075	2013	2	Aesthetic observations were made by MassDEP field sampling crews at Station W0075 on French River (MA42-06) during 2 site visits between Feb 2013 and Apr 2013. There were generally no persistent objectionable conditions (odors, deposits, growths, or turbidity) recorded. However, aesthetic observations are limited (n<3).

Observations of Filamentous/Film Algae at MassDEP Stations (2011-2020) (MassDEP Undated 6) (MassDEP Undated 4)

Station Code	Data Year	Field Sheet Count	Field Sheet Count w/ Film & Filamentous Algae Observations	Dense/ Very Dense Film/ Filamentous Algae
W0075	2011	13	4	0
W0075	2012	6	1	0
W0075	2013	2	1	0

MassDEP Aesthetics Observations (2011-2020) (MassDEP Undated 6)

Station Code	Waterbody	Data Year	Parameter	Result	Result Count	Total Field Sheet Count
W0075	French River	2011	Aquatic Plant Density, Overall	NR	1	13
W0075	French River	2011	Aquatic Plant Density, Overall	Sparse	4	13
W0075	French River	2011	Aquatic Plant Density, Overall	Unobservable	8	13
W0075	French River	2011	Color	Light Yellow/Tan	9	13
W0075	French River	2011	Color	None	2	13
W0075	French River	2011	Color	Reddish	2	13
W0075	French River	2011	Objectionable Deposits	No	4	13
W0075	French River	2011	Objectionable Deposits	Unobservable	7	13
W0075	French River	2011	Objectionable Deposits	Yes	2	13
W0075	French River	2011	Odor	Effluent (Treated)	3	13
W0075	French River	2011	Odor	Musty (Basement)	2	13
W0075	French River	2011	Odor	None	6	13
W0075	French River	2011	Odor	Other (Eutrophic)	2	13
W0075	French River	2011	Periphyton Density, Filamentous	None	4	13
W0075	French River	2011	Periphyton Density, Filamentous	NR	1	13
W0075	French River	2011	Periphyton Density, Filamentous	Unobservable	8	13
W0075	French River	2011	Periphyton Density, Film	None	4	13
W0075	French River	2011	Periphyton Density, Film	NR	1	13
W0075	French River	2011	Periphyton Density, Film	Unobservable	8	13
W0075	French River	2011	Scum	Yes	13	13
W0075	French River	2011	Turbidity	Moderately Turbid	2	13
W0075	French River	2011	Turbidity	None	6	13
W0075	French River	2011	Turbidity	Slightly Turbid	2	13
W0075	French River	2011	Turbidity	Unobservable	3	13
W0075	French River	2012	Aquatic Plant Density, Overall	None	2	6
W0075	French River	2012	Aquatic Plant Density, Overall	Sparse	1	6
W0075	French River	2012	Aquatic Plant Density, Overall	Unobservable	3	6
W0075	French River	2012	Color	Light Yellow/Tan	2	6
W0075	French River	2012	Color	None	1	6
W0075	French River	2012	Color	Reddish	3	6
W0075	French River	2012	Objectionable Deposits	Unobservable	3	6
W0075	French River	2012	Objectionable Deposits	Yes	3	6
W0075	French River	2012	Odor	Effluent (Treated)	1	6
W0075	French River	2012	Odor	Fishy	1	6
W0075	French River	2012	Odor	None	4	6

Station Code	Waterbody	Data Year	Parameter	Result	Result Count	Total Field Sheet Count
W0075	French River	2012	Periphyton Density, Filamentous	None	1	6
W0075	French River	2012	Periphyton Density, Filamentous	Unobservable	5	6
W0075	French River	2012	Periphyton Density, Film	Sparse	1	6
W0075	French River	2012	Periphyton Density, Film	Unobservable	5	6
W0075	French River	2012	Scum	No	1	6
W0075	French River	2012	Scum	Yes	5	6
W0075	French River	2012	Turbidity	None	1	6
W0075	French River	2012	Turbidity	Slightly Turbid	2	6
W0075	French River	2012	Turbidity	Unobservable	3	6
W0075	French River	2013	Aesthetics Impaired?	NR	2	2
W0075	French River	2013	Aquatic Plant Density, Overall	Sparse	1	2
W0075	French River	2013	Aquatic Plant Density, Overall	Unobservable	1	2
W0075	French River	2013	Color	None	2	2
W0075	French River	2013	Objectionable Deposits	No	1	2
W0075	French River	2013	Objectionable Deposits	Unobservable	1	2
W0075	French River	2013	Odor	Effluent (Treated)	1	2
W0075	French River	2013	Odor	None	1	2
W0075	French River	2013	Periphyton Density, Filamentous	None	1	2
W0075	French River	2013	Periphyton Density, Filamentous	Unobservable	1	2
W0075	French River	2013	Periphyton Density, Film	None	1	2
W0075	French River	2013	Periphyton Density, Film	Unobservable	1	2
W0075	French River	2013	Scum	Yes	2	2
W0075	French River	2013	Turbidity	None	1	2
W0075	French River	2013	Turbidity	Unobservable	1	2

Primary Contact Recreation

2024/26 Use Attainment	Alert
Not Supporting	NO

2024/26 Use Attainment Summary

The Primary Contact Recreation Use for the French River (MA42-06) continues to be assessed as Not Supporting. The prior Escherichia Coli (E. Coli) impairment is being carried forward based on bacteria data not meeting the threshold at 1 station in 2019 & 2020. French River Connection (FRC) and MassDEP staff/volunteers collected *E. coli* bacteria samples in this French River AU from 2011-2020 at 2 stations right at the downstream end of the AU: W0075 [downstream of the Perryville Dam and downstream of the Webster-Dudley WWTP, Perryville Rd. bridge, Webster] in 2011-2013 (n=1-11/yr) and FRC_French1 [State Line, Webster] in 2019-2020 (n=9-17/yr). Analysis of the single year (2011) moderate frequency *E. coli* dataset from W0075 indicated 18% of intervals had GMs >126 CFU/100ml though only 1 sample exceeded the 410 CFU/100ml STV, with a seasonal GM of 80 CFU/100ml. However, analysis of the multi-year high frequency *E. coli* dataset from FRC_French1 indicated 2 out of 2 sufficient data yrs had intervals where >10% of the GMs were >126 CFU/100ml (2019 and 2020, 39 & 21%), 1 yr had >10% of samples exceed the 410 CFU/100ml STV (2019, 12%), and cumulatively across years 33% of intervals had GMs >126 CFU/100ml. While *E. coli* data from W0075 were indicative of good water quality conditions, *E. coli* data from FRC_French1 are indicative of an *E. coli* impairment.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
FRC_French1	French River Connection	Water Quality	French River	State Line, Webster	42.024370	-71.883948
W0075	MassDEP	Water Quality	French River	[downstream of the Perryville Dam and downstream of the Webster-Dudley WWTP, Perryville Rd. bridge, Webster]	42.024700	-71.884182

Bacteria Data

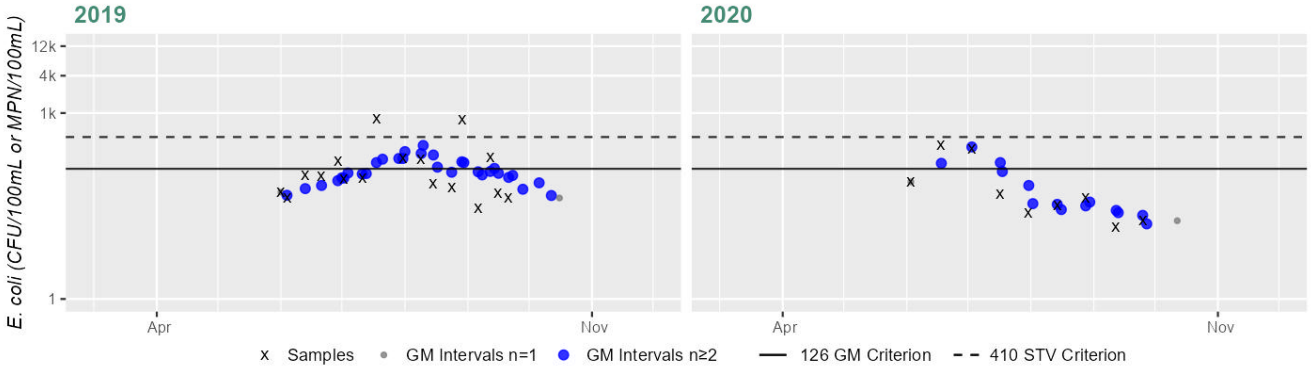
Bacteria Data Collected by MassDEP (2011-2020) and External Data Providers (2011-2022) (30-day Interval Analysis) (FRC 2020) (MassDEP Undated 2) (MassDEP Undated 6) (MassDEP Undated 4)

[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
FRC_French1	French River Connection	E. coli	06/01/19	09/21/19	17	28	816	106
FRC_French1	French River Connection	E. coli	06/02/20	09/24/20	9	14	307	51
W0075	MassDEP	E. coli	04/27/11	10/26/11	11	28	687	80
W0075	MassDEP	E. coli	05/29/12	09/26/12	3	140	488	214
W0075	MassDEP	E. coli	04/24/13	04/24/13	1	20	20	19

Station FRC_French1 - Escherichia coli

Daily Maximum Samples & 30 Day Geometric Means within the Primary Contact Recreation Season



Variable*	Result
Samples	17
SeasGM	106
#GMI	31
#GMI Ex	12
%GMI Ex	38%
n>STV	2
%n>STV	11%

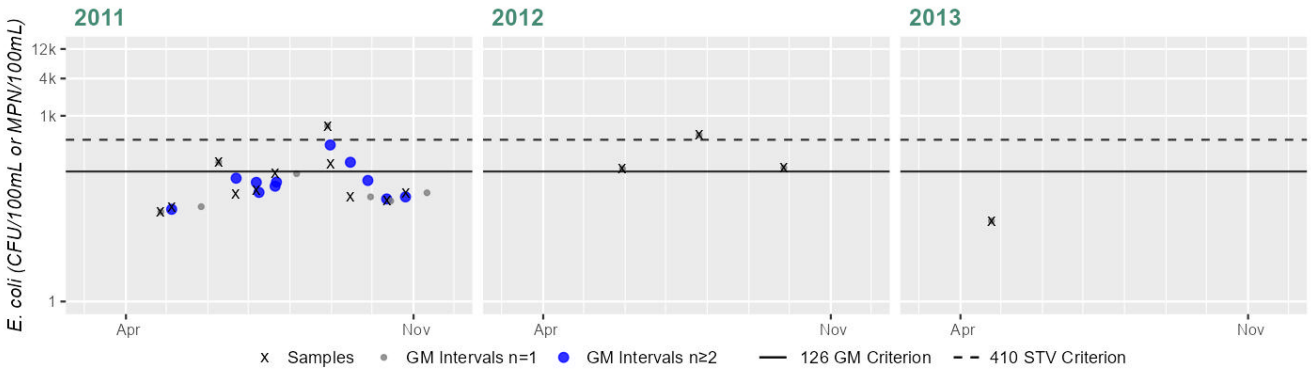
Variable*	Result
Samples	9
SeasGM	51
#GMI	14
#GMI Ex	3
%GMI Ex	21%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Current (2011-2022)
33%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Station MASSDEP_W0075 - Escherichia coli

Daily Maximum Samples & 30 Day Geometric Means within the Primary Contact Recreation Season



Variable*	Result
Samples	11
SeasGM	80
#GMI	11
#GMI Ex	2
%GMI Ex	18%
n>STV	1
%n>STV	9%

Variable*	Result
Samples	3
SeasGM	214
#GMI	0
#GMI Ex	0
%GMI Ex	0%
n>STV	1
%n>STV	33%

Variable*	Result
Samples	1
SeasGM	20
#GMI	0
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Current (2011-2022)
18%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Secondary Contact Recreation

2024/26 Use Attainment	Alert
Fully Supporting	NO

2024/26 Use Attainment Summary

The Secondary Contact Recreation Use for the French River (MA42-06) continues to be assessed as Fully Supporting based on a re-evaluation of bacteria data collected in 2011, 2019 & 2020 at 2 stations. French River Connection (FRC) and MassDEP staff/volunteers collected *E. coli* bacteria samples in both the historic (1997-2010) & the current IR window (2011-2022) in this French River AU from 2009-2020 at 2 stations right at the downstream end of the AU: W0075 [downstream of the Perryville Dam and downstream of the Webster-Dudley WWTP, Perryville Rd. bridge, Webster] in 2009-2010 (historic n=4-5/yr) and 2011-2013 (current n=2-12/yr) and FRC_French1 [State Line, Webster] in 2019-2020 (n=9-17/yr). Analysis of the single year (2011) moderate frequency *E. coli* dataset from W0075 indicated 0% of intervals had GMs >244 CFU/100ml and no samples exceeded the 794 CFU/100ml STV, with a seasonal GM of 80 CFU/100ml. Analysis of the multi-year high frequency *E. coli* dataset from FRC_French1 indicated 0 out of 2 sufficient data yrs had intervals where >10% of the GMs were >244 CFU/100ml, 0 yrs had >10% of samples exceed the 794 CFU/100ml STV, and cumulatively across years 0% of intervals had GMs >244 CFU/100ml. *E. coli* data from W0075 and FRC_French1 were indicative of good water quality conditions.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
FRC_French1	French River Connection	Water Quality	French River	State Line, Webster	42.024370	-71.883948
W0075	MassDEP	Water Quality	French River	[downstream of the Perryville Dam and downstream of the Webster-Dudley WWTP, Perryville Rd. bridge, Webster]	42.024700	-71.884182

Bacteria Data

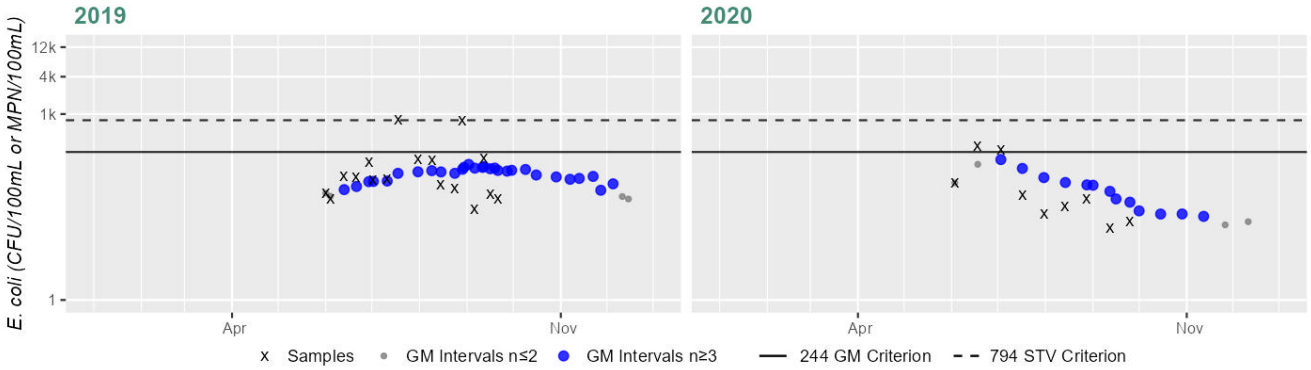
Bacteria Data Collected by MassDEP (1997-2020) and External Data Providers (1997-2022) (90-day Interval Analysis) (FRC 2020) (MassDEP Undated 1) (MassDEP Undated 6) (MassDEP Undated 3)

[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
FRC_French1	French River Connection	E. coli	06/01/19	09/21/19	17	28	816	106
FRC_French1	French River Connection	E. coli	06/02/20	09/24/20	9	14	307	51
W0075	MassDEP	E. coli	02/24/09	10/28/09	5	13	130	58
W0075	MassDEP	E. coli	02/23/10	11/17/10	4	31	816	274
W0075	MassDEP	E. coli	03/23/11	10/26/11	12	28	687	80
W0075	MassDEP	E. coli	01/25/12	11/14/12	6	31	488	135
W0075	MassDEP	E. coli	02/27/13	04/24/13	2	20	53	32

Station FRC_French1 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



Variable*	Result
Samples	17
SeasGM	106
#GMI	29
#GMI Ex	0
%GMI Ex	0%
n>STV	1
%n>STV	5%

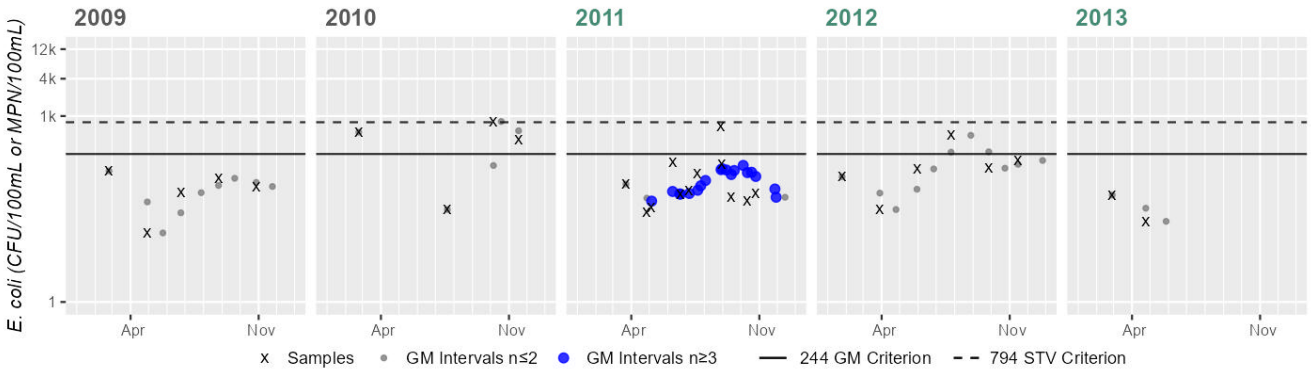
Variable*	Result
Samples	9
SeasGM	51
#GMI	13
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Current (2011-2022)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Station MASSDEP_W0075 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



Variable*	Result
Samples	5
SeasGM	58
#GMI	0
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Variable*	Result
Samples	4
SeasGM	274
#GMI	0
#GMI Ex	0
%GMI Ex	0%
n>STV	1
%n>STV	25%

Variable*	Result
Samples	12
SeasGM	80
#GMI	19
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Variable*	Result
Samples	6
SeasGM	135
#GMI	0
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Variable*	Result
Samples	2
SeasGM	32
#GMI	0
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Historic (1997-2010)
0%

Cumulative %GMI Exceedance
Current (2011-2022)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Gore Pond (MA42018)

Location:	Dudley/Charlton.
AU Type:	FRESHWATER LAKE
AU Size:	169 ACRES
Classification/Qualifier:	B

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
4a	4a	(Aquatic Plants (Macrophytes)*)	--	Added
4a	4a	(Non-Native Aquatic Plants*)	--	Unchanged
4a	4a	Algae	2361	Unchanged
4a	4a	Dissolved Oxygen	2361	Unchanged
4a	4a	Turbidity	2361	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
(Aquatic Plants (Macrophytes)*)	Agriculture (N)	--	--	X	X	X
(Aquatic Plants (Macrophytes)*)	Discharges from Municipal Separate Storm Sewer Systems (MS4) (Y)	--	--	X	X	X
(Aquatic Plants (Macrophytes)*)	Rural (Residential Areas) (N)	--	--	X	X	X
(Non-Native Aquatic Plants*)	Introduction of Non-native Organisms (Accidental or Intentional) (Y)	X	--	--	--	--
Algae	Agriculture (N)	X	--	X	X	X
Algae	Discharges from Municipal Separate Storm Sewer Systems (MS4) (Y)	X	--	X	X	X

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
Algae	Historical Source, No Longer Present (Y)	X	--	X	X	X
Algae	Rural (Residential Areas) (N)	X	--	X	X	X
Dissolved Oxygen	Discharges from Municipal Separate Storm Sewer Systems (MS4) (Y)	X	--	--	--	--
Dissolved Oxygen	Historical Source, No Longer Present (Y)	X	--	--	--	--
Dissolved Oxygen	Rural (Residential Areas) (N)	X	--	--	--	--
Turbidity	Agriculture (N)	X	--	X	X	X
Turbidity	Discharges from Municipal Separate Storm Sewer Systems (MS4) (Y)	X	--	X	X	X
Turbidity	Historical Source, No Longer Present (Y)	X	--	X	X	X
Turbidity	Rural (Residential Areas) (N)	X	--	X	X	X

Designated Use Attainment Decisions

Fish Consumption

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
Fish toxics sampling has not been conducted, so the Fish Consumption Use for Gore Pond (MA42018) is Not Assessed

Aesthetic

2024/26 Use Attainment	Alert
Not Supporting	NO

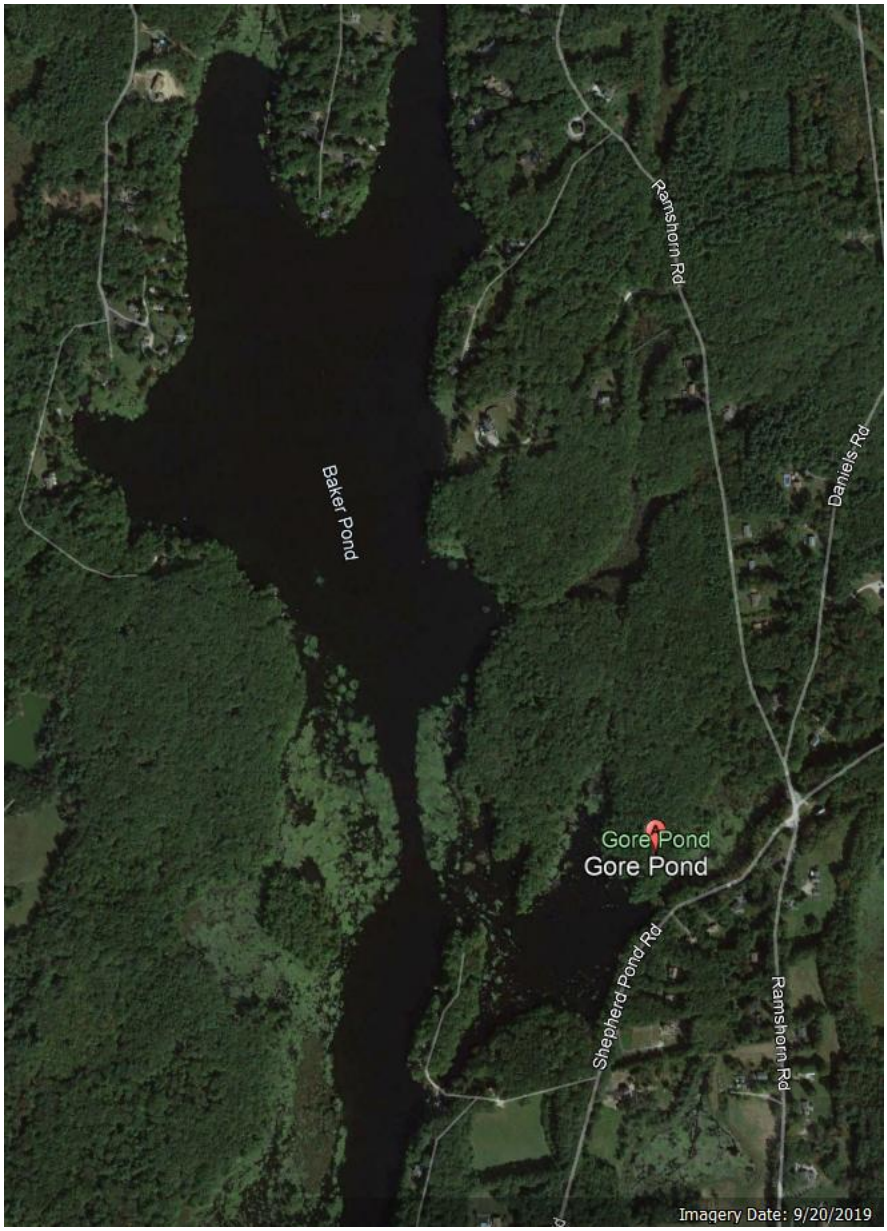
2024/26 Use Attainment Summary

The Aesthetics Use for Gore Pond (MA42018) will continue to be assessed as Not Supporting with the prior Algae and Turbidity impairments being carried forward. Since the Non-Native Aquatic Plants impairment was redundantly duplicated across multiple uses for this waterbody, the Non-Native Aquatic Plants impairment is being removed from the Aesthetics Use but will continue to be maintained under the Aquatic Life Use. Since MassDEP staff noted that approximately 40-45% of the pond was covered with dense or very dense aquatic plants during a July 1999 synoptic survey (MassDEP 1999) and Google Earth images from September 2017 and September 2019 (Google Earth Pro Undated) show dense coverage areas of plants especially over the southern half of the AU, an Aquatic Plants (Macrophytes) non-pollutant impairment is being added in the place of the Non-Native Aquatic Plants impairment at this time. No new data are available to evaluate the Aesthetics Use for this Gore Pond AU.

Aesthetic Observations

Gore Pond (MA42018) Google Earth Imagery: Pond Outline (2024) Followed by Imagery from 2017 and 2019 Showing Dense/Very Dense Vegetation Covering >25% of the Pond's Surface (Google Earth Pro Undated)


Ramshorn Rd
Baker Pond
Daniels Rd
Gore Pond
Gore Pond
Shepherd Pond Rd
Ramshorn Rd
Imagery Date: 9/12/2017



Primary Contact Recreation

2024/26 Use Attainment	Alert
Not Supporting	NO

2024/26 Use Attainment Summary

The Primary Contact Recreation Use for Gore Pond (MA42018) continues to be assessed as Not Supporting. The prior Algae and Turbidity impairments (from the Aesthetics Use) are being carried forward. An Aquatic Plants (Macrophytes) impairment is being added (from the Aesthetics Use). Since the Non-Native Aquatic Plants impairment is being removed from the Aesthetics Use this cycle, this impairment is also being removed from the Primary Contact Recreation Use. No new data are available to evaluate the Primary Contact Recreation Use for this Gore Pond AU.

Secondary Contact Recreation

2024/26 Use Attainment	Alert
Not Supporting	NO

2024/26 Use Attainment Summary
The Secondary Contact Recreation Use for Gore Pond (MA42018) continues to be assessed as Not Supporting. The prior Algae and Turbidity impairments (from the Aesthetics Use) are being carried forward. An Aquatic Plants (Macrophytes) impairment is being added (from the Aesthetics Use). Since the Non-Native Aquatic Plants impairment is being removed from the Aesthetics Use this cycle, this impairment is also being removed from the Secondary Contact Recreation Use. No new data are available to evaluate the Secondary Contact Recreation Use for this Gore Pond AU.

Granite Reservoir (MA42019)

Location:	Charlton. (also known as South Charlton Reservoir)
AU Type:	FRESHWATER LAKE
AU Size:	207 ACRES
Classification/Qualifier:	B

No usable data were available for Granite Reservoir (MA42019) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
4c	4c	(Non-Native Aquatic Plants*)	--	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
(Non-Native Aquatic Plants*)	Introduction of Non-native Organisms (Accidental or Intentional) (Y)	X	--	--	--	--

Greenville Pond (MA42023)

Location:	Leicester.
AU Type:	FRESHWATER LAKE
AU Size:	31 ACRES
Classification/Qualifier:	B

No usable data were available for Greenville Pond (MA42023) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
4a	4a	(Water Chestnut*)	--	Unchanged
4a	4a	Turbidity	2355	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
(Water Chestnut*)	Introduction of Non-native Organisms (Accidental or Intentional) (Y)	X	--	--	--	--
Turbidity	Discharges from Municipal Separate Storm Sewer Systems (MS4) (Y)	--	--	X	X	X
Turbidity	Municipal Point Source Discharges (Y)	--	--	X	X	X
Turbidity	Rural (Residential Areas) (N)	--	--	X	X	X

Greenville Pond West (MA42022)

Location:	Leicester.
AU Type:	FRESHWATER LAKE
AU Size:	6 ACRES
Classification/Qualifier:	B

No usable data were available for Greenville Pond West (MA42022) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

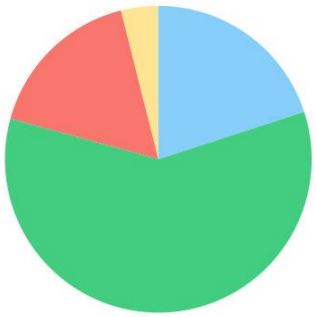
AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
3	3	None	--	Unchanged

Grindstone Brook (MA42-18)

Location:	Headwaters outlet Henshaw Pond, Leicester to mouth at inlet Rochdale Pond, Leicester.
AU Type:	RIVER
AU Size:	2.3 MILES
Classification/Qualifier:	B

Grindstone Brook (MA42-18)

Watershed Area: 2.98 square miles



Land Cover Type	Entire Basin	Proximal Subbasin (5 km radius)	Stream Buffer (100 m)	Proximal Stream Buffer
Land Cover Area (square miles)	2.98	2.84	1.26	1.20
Agriculture	3.9%	4%	2.7%	2.7%
Developed	16.8%	14.7%	8.2%	6.5%
Natural	59.3%	60.4%	61.2%	61.7%
Wetland	20%	20.8%	27.8%	29.1%
Impervious	6.1%	5.4%	3.3%	2.5%

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
5	4a	Escherichia Coli (E. Coli)	R1_MA_2024_04	Changed

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
Escherichia Coli (E. Coli)	Source Unknown (N)	--	--	--	X	X

Supporting Information for Removed Impairments

2022 Removed Impairment	Removal Reason	Removal Comment
Escherichia Coli (E. Coli)	TMDL approved or established by EPA (4a)	Impairment covered under TMDL: Massachusetts Statewide TMDL for Pathogen-Impaired Waterbodies (Report CN 515.1, approved 2/13/2024, ATTAINS Action ID: R1_MA_2024_04)

Designated Use Attainment Decisions

Fish Consumption

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
The Fish Consumption Use for Grindstone Brook (MA42-18) was Not Assessed because fish toxics sampling was not conducted.

Aesthetic

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
No data are available, so the Aesthetics Use for Grindstone Brook (MA42-18) is Not Assessed.

Primary Contact Recreation

2024/26 Use Attainment	Alert
Not Supporting	NO

2024/26 Use Attainment Summary
The Primary Contact Recreation Use for Grindstone Brook (MA42-18) continues to be assessed as Not Supporting. The prior Escherichia Coli (E. Coli) impairment is being carried forward. No new data are available to evaluate the Primary Contact Recreation Use for this Grindstone Brook AU.

Secondary Contact Recreation

2024/26 Use Attainment	Alert
Not Supporting	NO

2024/26 Use Attainment Summary
The Secondary Contact Recreation Use for Grindstone Brook (MA42-18) is assessed as Not Supporting. A new impairment for Escherichia Coli (E. Coli) is being added based on a re-evaluation of historic data collected at 1 station in 2004. MassDEP staff historically collected *E. coli* bacteria samples close to the downstream end of this Grindstone Brook AU at W1177 [Huntoon Highway (Rt. 56) crossing, Leicester] from May-Sep 2004 (n=5). Analysis of this historic single year limited frequency *E. coli* dataset indicated 100% of intervals had GMs >244 CFU/100ml, 2 samples exceeded the 794 CFU/100ml STV, and the overall GM was 563 CFU/100ml. Historic *E. coli* data from W1177 are indicative of an *E. coli* impairment.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
W1177	MassDEP	Water Quality	Grindstone Brook	[Huntoon Highway (Route 56) crossing, Leicester]	42.205449	-71.903454

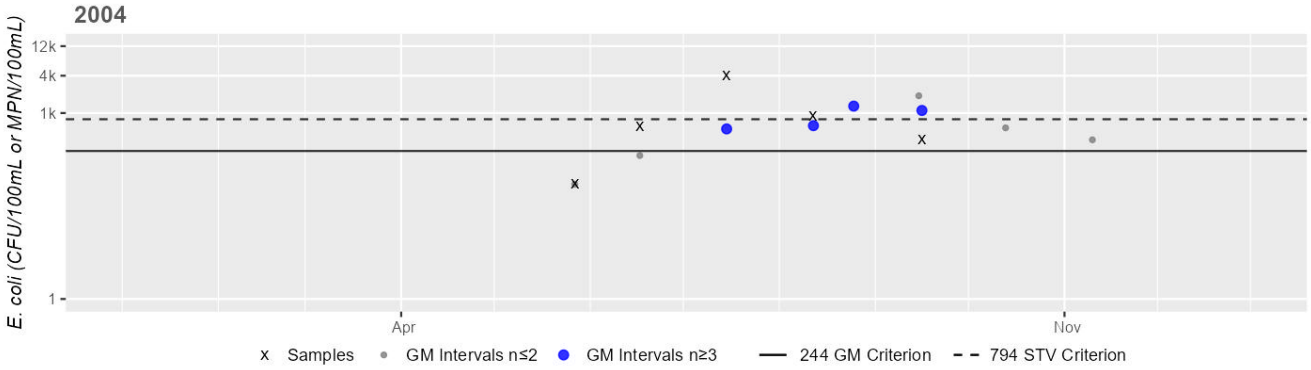
Bacteria Data

Bacteria Data Collected by MassDEP (1997-2020) and External Data Providers (1997-2022) (90-day Interval Analysis)
(MassDEP Undated 6) (MassDEP Undated 3)
[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
W1177	MassDEP	E. coli	05/26/04	09/15/04	5	71	4000	563

Station MASSDEP_W1177 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



Variable*	Result
Samples	5
SeasGM	563
#GMI	4
#GMI Ex	4
%GMI Ex	100%
n>STV	2
%n>STV	40%

Cumulative %GMI Exceedance
Historic (1997-2010)
100%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Hayden Pond (MA42024)

Location:	Dudley.
AU Type:	FRESHWATER LAKE
AU Size:	44 ACRES
Classification/Qualifier:	B

No usable data were available for Hayden Pond (MA42024) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
3	3	None	--	Unchanged

Henshaw Pond (MA42025)

Location:	Leicester.
AU Type:	FRESHWATER LAKE
AU Size:	37 ACRES
Classification/Qualifier:	A: PWS, ORW

No usable data were available for Henshaw Pond (MA42025) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
3	3	None	--	Unchanged

Hudson Pond (MA42029)

Location:	Oxford/Sutton.
AU Type:	FRESHWATER LAKE
AU Size:	15 ACRES
Classification/Qualifier:	B

No usable data were available for Hudson Pond (MA42029) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
4a	4a	(Aquatic Plants (Macrophytes)*)	--	Unchanged
4a	4a	Nutrient/Eutrophication Biological Indicators	2363	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
(Aquatic Plants (Macrophytes)*)	Agriculture (Y)	--	--	X	X	X
(Aquatic Plants (Macrophytes)*)	Commercial Districts (Shopping/Office Complexes) (N)	--	--	X	X	X
(Aquatic Plants (Macrophytes)*)	Rural (Residential Areas) (Y)	--	--	X	X	X
Nutrient/Eutrophication Biological Indicators	Agriculture (Y)	--	--	X	X	X
Nutrient/Eutrophication Biological Indicators	Commercial Districts (Industrial Parks) (N)	--	--	X	X	X
Nutrient/Eutrophication Biological Indicators	Commercial Districts (Shopping/Office Complexes) (N)	--	--	X	X	X

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
Nutrient/Eutrophication Biological Indicators	Rural (Residential Areas) (Y)	--	--	X	X	X

Hultered Pond (MA42072)

Location:	Charlton (formerly reported as 2000 segment: Hultered Pond MA 41023).
AU Type:	FRESHWATER LAKE
AU Size:	4 ACRES
Classification/Qualifier:	B

No usable data were available for Hultered Pond (MA42072) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
3	3	None	--	Unchanged

Jones Pond (MA42030)

Location:	Charlton/Spencer.
AU Type:	FRESHWATER LAKE
AU Size:	30 ACRES
Classification/Qualifier:	B

No usable data were available for Jones Pond (MA42030) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
4a	4a	(Aquatic Plants (Macrophytes)*)	--	Unchanged
4a	4a	Nutrient/Eutrophication Biological Indicators	2364	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
(Aquatic Plants (Macrophytes)*)	Agriculture (Y)	--	--	X	X	X
(Aquatic Plants (Macrophytes)*)	Discharges from Municipal Separate Storm Sewer Systems (MS4) (Y)	--	--	X	X	X
(Aquatic Plants (Macrophytes)*)	Rural (Residential Areas) (Y)	--	--	X	X	X
Nutrient/Eutrophication Biological Indicators	Agriculture (Y)	--	--	X	X	X
Nutrient/Eutrophication Biological Indicators	Discharges from Municipal Separate Storm Sewer Systems (MS4) (Y)	--	--	X	X	X
Nutrient/Eutrophication Biological Indicators	Rural (Residential Areas) (Y)	--	--	X	X	X

Larner Pond (MA42068)

Location:	Dudley.
AU Type:	FRESHWATER LAKE
AU Size:	27 ACRES
Classification/Qualifier:	B

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
4c	4c	(Aquatic Plants (Macrophytes)*)	--	Unchanged
4c	4c	(Non-Native Aquatic Plants*)	--	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
(Aquatic Plants (Macrophytes)*)	Agriculture (Y)	--	--	X	X	X
(Aquatic Plants (Macrophytes)*)	Discharges from Municipal Separate Storm Sewer Systems (MS4) (Y)	--	--	X	X	X
(Aquatic Plants (Macrophytes)*)	Rural (Residential Areas) (Y)	--	--	X	X	X
(Non-Native Aquatic Plants*)	Introduction of Non-native Organisms (Accidental or Intentional) (Y)	X	--	--	--	--

Designated Use Attainment Decisions

Fish Consumption

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
Fish toxics sampling has not been conducted, so the Fish Consumption Use for Larner Pond (MA42068) is Not Assessed.

Aesthetic

2024/26 Use Attainment	Alert
Not Supporting	NO

2024/26 Use Attainment Summary
The Aesthetics Use for Larner Pond (MA42068) will continue to be assessed as Not Supporting with the Aquatic Plants (Macrophytes) impairment being carried forward. Since the Non-Native Plants impairment was redundantly duplicated across multiple uses for this waterbody, the Non-Native Plants impairment is being removed from the Aesthetics Use but will continue to be maintained under the Aquatic Life Use. No new data are available to evaluate the Aesthetics Use for this Larner Pond AU.

Primary Contact Recreation

2024/26 Use Attainment	Alert
Not Supporting	NO

2024/26 Use Attainment Summary
The Primary Contact Recreation Use for Larner Pond (MA42068) continues to be assessed as Not Supporting. The prior Aquatic Plants (Macrophytes) impairment (from the Aesthetics Use) is being carried forward. Since the Non-Native Aquatic Plants impairment is being removed from the Aesthetics Use this cycle, this impairment is also being removed from the Primary Contact Recreation Use. No new data are available to evaluate the Primary Contact Recreation Use for Larner Pond.

Secondary Contact Recreation

2024/26 Use Attainment	Alert
Not Supporting	NO

2024/26 Use Attainment Summary

The Secondary Contact Recreation Use for Larner Pond (MA42068) continues to be assessed as Not Supporting. The prior Aquatic Plants (Macrophytes) impairment (from the Aesthetics Use) is being carried forward. Since the Non-Native Aquatic Plants impairment is being removed from the Aesthetics Use this cycle, this impairment is also being removed from the Secondary Contact Recreation Use. No new data are available to evaluate the Secondary Contact Recreation Use for this Larner Pond AU.

Little Nugget Lake (MA42032)

Location:	Charlton.
AU Type:	FRESHWATER LAKE
AU Size:	13 ACRES
Classification/Qualifier:	B

No usable data were available for Little Nugget Lake (MA42032) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
3	3	None	--	Unchanged

Little River (MA42-13)

Location:	Outlet Pikes Pond, Charlton to inlet Buffumville Lake, Charlton (formerly part of 2008 segment: Little River MA42-09).
AU Type:	RIVER
AU Size:	3.5 MILES
Classification/Qualifier:	B

Little River (MA42-13)

Watershed Area: 10.84 square miles

Land Cover Type	Entire Basin	Proximal Subbasin (5 km radius)	Stream Buffer (100 m)	Proximal Stream Buffer
Land Cover Area (square miles)	10.84	5.73	4.33	2.25
Agriculture	3.4%	1.9%	2.7%	1.6%
Developed	12.3%	15.3%	9.9%	13.2%
Natural	71.9%	71.1%	66.2%	64.5%
Wetland	12.4%	11.7%	21.2%	20.6%
Impervious	4.3%	5.4%	4.2%	5.7%

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
5	5	Benthic Macroinvertebrates	--	Unchanged
5	5	Dissolved Oxygen	--	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
Benthic Macroinvertebrates	Source Unknown (N)	X	--	--	--	--
Dissolved Oxygen	Source Unknown (N)	X	--	--	--	--

Designated Use Attainment Decisions

Fish Consumption

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
The Fish Consumption Use for Little River (MA42-13) was Not Assessed because fish toxics sampling was not conducted.

Aesthetic

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
No data are available, so the Aesthetics Use for Little River (MA42-13) is Not Assessed.

Primary Contact Recreation

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
No bacteria or other indicator data for the Little River (MA42-13) are available, so the Primary Contact Recreation Use is Not Assessed.

Secondary Contact Recreation

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
No bacteria or other indicator data for the Little River (MA42-13) are available in the current IR window (2011-2022), so the Secondary Contact Recreation Use is Not Assessed. MassDEP staff collected *E. coli* bacteria samples close to the downstream end of this Little River AU at W1167 [Turner Rd crossing, Charlton] from May-Sep 2004 (n=5). Analysis of this historic single year limited frequency *E. coli* dataset indicated 0% of intervals had GMs >244 CFU/100ml, no samples exceeded the 794 CFU/100ml STV, and the overall GM was 58 CFU/100ml. Historic *E. coli* data from W1167 were indicative of good water quality conditions. Since these data were collected prior to the current IR window (2011-2022) the Secondary Contact Recreation Use cannot be positively assessed using bacteria data.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
W1167	MassDEP	Water Quality	Little River	[Turner Road crossing, Charlton]	42.138662	-71.911948

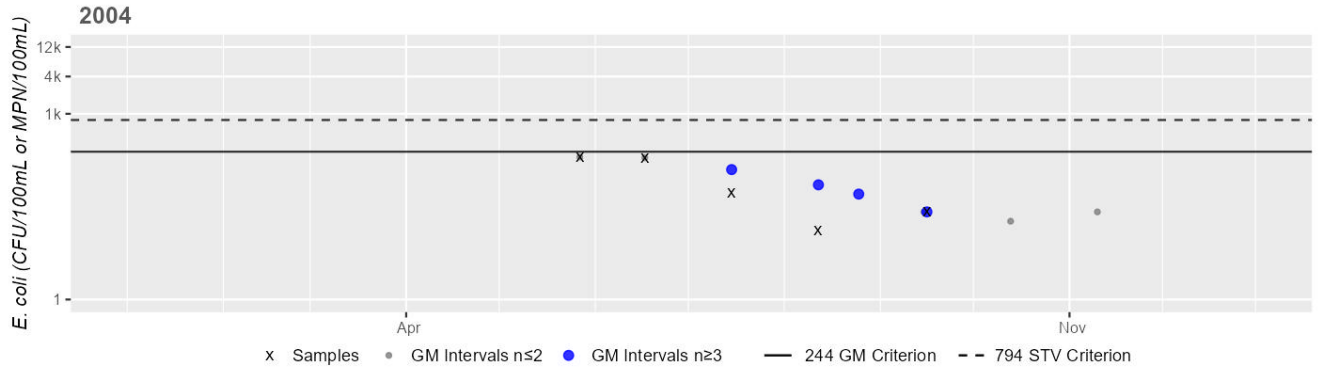
Bacteria Data

Bacteria Data Collected by MassDEP (1997-2020) and External Data Providers (1997-2022) (90-day Interval Analysis)
(MassDEP Undated 6) (MassDEP Undated 3)
[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
W1167	MassDEP	E. coli	05/26/04	09/15/04	5	13	200	58

Station MASSDEP_W1167 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



Variable*	Result
Samples	5
SeasGM	58
#GMI	4
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Historic (1997-2010)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Little River (MA42-14)

Location:	Outlet Buffum Pond, Oxford to mouth at confluence with French River, Oxford (formerly part of 2008 segment: Little River MA42-09).
AU Type:	RIVER
AU Size:	1.3 MILES
Classification/Qualifier:	B

Little River (MA42-14)

Watershed Area: 27.21 square miles

Land Cover Type	Entire Basin	Proximal Subbasin (5 km radius)	Stream Buffer (100 m)	Proximal Stream Buffer
Land Cover Area (square miles)	27.21	10.03	11.31	4.35
Agriculture	3.1%	2.1%	1.8%	0.7%
Developed	13.4%	13.7%	10.8%	11.5%
Natural	71.9%	73.9%	69.9%	72.6%
Wetland	11.6%	10.3%	17.5%	15.2%
Impervious	4.5%	4.2%	4.1%	3.8%

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
2	2	None	--	Unchanged

Designated Use Attainment Decisions

Fish Consumption

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
The Fish Consumption Use for Little River (MA42-14) was Not Assessed because fish toxics sampling was not conducted recently.

Aesthetic

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
No data are available, so the Aesthetics Use for Little River (MA42-14) is Not Assessed.

Primary Contact Recreation

2024/26 Use Attainment	Alert
Fully Supporting	NO

2024/26 Use Attainment Summary
The Primary Contact Recreation Use for the Little River (MA42-14) continues to be assessed as Fully Supporting based on bacteria data collected in 2019 & 2020 at 1 station. French River Connection (FRC) staff/volunteers collected *E. coli* bacteria samples at the downstream end of this Little River AU at FRC_French13 [Little River, Oxford] in 2019-2020 (n=9-17/yr). Analysis of this multi-year high frequency *E. coli* dataset indicated 0 out of 2 sufficient data yrs had intervals where >10% of the GMs were >126 CFU/100ml, 0 yrs had >10% of samples exceed the 410 CFU/100ml STV, and cumulatively across years 0% of intervals had GMs >126 CFU/100ml. *E. coli* data from FRC_French13 were indicative of good water quality conditions.

Monitoring Stations

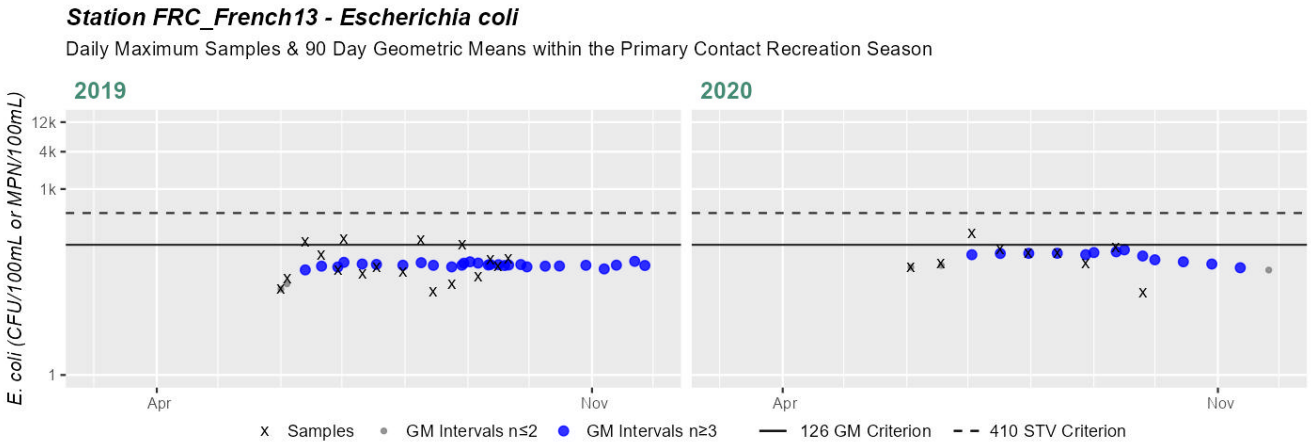
Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
FRC_French13	French River Connection	Water Quality	Little River	Little River, Oxford	42.110470	-71.883447

Bacteria Data

Bacteria Data Collected by MassDEP (2011-2020) and External Data Providers (2011-2022) (90-day Interval Analysis) (FRC 2020) (MassDEP Undated 2)

[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
FRC_French13	French River Connection	E. coli	06/01/19	09/21/19	17	22	155	58
FRC_French13	French River Connection	E. coli	06/02/20	09/24/20	9	21	193	76



Variable*	Result
Samples	17
SeasGM	58
#GMI	29
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Variable*	Result
Samples	9
SeasGM	76
#GMI	13
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Current (2011-2022)
0%

*Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.

Secondary Contact Recreation

2024/26 Use Attainment	Alert
Fully Supporting	NO

2024/26 Use Attainment Summary
The Secondary Contact Recreation Use for the Little River (MA42-14) continues to be assessed as Fully Supporting based on a re-evaluation of bacteria data collected in 2019 & 2020 at 1 station. French River Connection (FRC) staff/volunteers collected *E. coli* bacteria samples at the downstream end of this Little River AU at FRC_French13 [Little River, Oxford] in 2019-2020 (n=9-17/yr). Analysis of this multi-year high frequency *E. coli* dataset indicated 0 out of 2 sufficient data yrs had intervals where >10% of the GMs were >244 CFU/100ml, 0 yrs had >10% of samples exceed the 794 CFU/100ml STV, and cumulatively across years 0% of intervals had GMs >244 CFU/100ml. *E. coli* data from FRC_French13 were indicative of good water quality conditions.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
FRC_French13	French River Connection	Water Quality	Little River	Little River, Oxford	42.110470	-71.883447

Bacteria Data

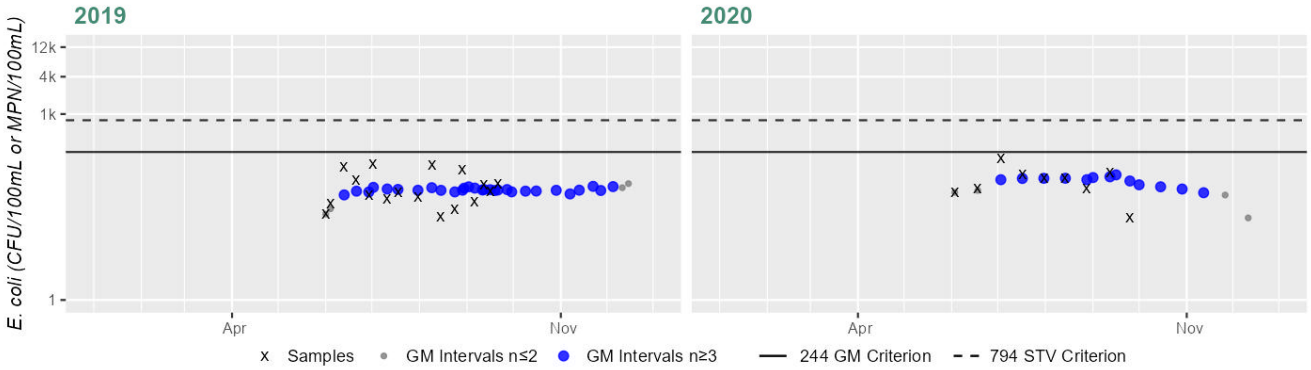
Bacteria Data Collected by MassDEP (1997-2020) and External Data Providers (1997-2022) (90-day Interval Analysis) (FRC 2020) (MassDEP Undated 1)

[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
FRC_French13	French River Connection	E. coli	06/01/19	09/21/19	17	22	155	58
FRC_French13	French River Connection	E. coli	06/02/20	09/24/20	9	21	193	76

Station FRC_French13 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



Variable*	Result
Samples	17
SeasGM	58
#GMI	29
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Variable*	Result
Samples	9
SeasGM	76
#GMI	13
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Current (2011-2022)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Little River (MA42-21)

Location:	Outlet Jones Pond, Charlton to mouth at inlet Pikes Pond, Charlton (excluding the approximately 0.1 mile through Wee Laddie Pond segment MA42065 and the approximately 0.1 mile through Little Nugget Lake segment MA42032).
AU Type:	RIVER
AU Size:	1.7 MILES
Classification/Qualifier:	B

Little River (MA42-21)

Watershed Area: 5.11 square miles

Land Cover Type	Entire Basin	Proximal Subbasin (5 km radius)	Stream Buffer (100 m)	Proximal Stream Buffer
Land Cover Area (square miles)	5.11	4.73	2.31	2.19
Agriculture	6%	6.1%	4.2%	4.5%
Developed	11.5%	11%	10.3%	10.1%
Natural	69.4%	69.7%	65.5%	65.5%
Wetland	13%	13.2%	19.9%	20%
Impervious	4.4%	4.4%	4.6%	4.6%

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
2	2	None	--	Unchanged

Designated Use Attainment Decisions

Fish Consumption

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
The Fish Consumption Use for Little River (MA42-21) was Not Assessed because fish toxics sampling was not conducted.

Aesthetic

2024/26 Use Attainment	Alert
Fully Supporting	NO

2024/26 Use Attainment Summary
The Aesthetics Use for Little River (MA42-21) is assessed as Fully Supporting. Aesthetic observations were made by MassDEP field sampling crews close to the downstream end of this Little River AU upstream from the Massachusetts Turnpike (Rt. 90), Charlton (W2201) during the summer of 2011 (n=6). There were generally no noted objectionable conditions (odors, deposits, growths, or turbidity) recorded.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
W2201	MassDEP	Water Quality	Little River	[approximately 650 feet upstream from the Massachusetts Turnpike (Route 90), Charlton]	42.164267	-71.948856

Aesthetic Observations

Aesthetics Summary Statements for MassDEP Stations (2011-2020) (MassDEP Undated 4)
[Note: scums of natural origins (e.g. pollen blankets or natural foams) are excluded.]

Station Code	Data Year	Field Sheet Count	Aesthetics Summary Statement
W2201	2011	6	Aesthetic observations were made by MassDEP field sampling crews at Station W2201 on Little River (MA42-21) during 6 site visits between May 2011 and Oct 2011. There were generally no persistent objectionable conditions (odors, deposits, growths, or turbidity) recorded.

Observations of Filamentous/Film Algae at MassDEP Stations (2011-2020) (MassDEP Undated 6) (MassDEP Undated 4)

Station Code	Data Year	Field Sheet Count	Field Sheet Count w/ Film & Filamentous Algae Observations	Dense/ Very Dense Film/ Filamentous Algae
W2201	2011	6	6	2

MassDEP Aesthetics Observations (2011-2020) (MassDEP Undated 6)

Station Code	Waterbody	Data Year	Parameter	Result	Result Count	Total Field Sheet Count
W2201	Little River	2011	Aquatic Plant Density, Overall	None	6	6
W2201	Little River	2011	Color	Brownish	2	6
W2201	Little River	2011	Color	Light Yellow/Tan	4	6

Station Code	Waterbody	Data Year	Parameter	Result	Result Count	Total Field Sheet Count
W2201	Little River	2011	Objectionable Deposits	No	5	6
W2201	Little River	2011	Objectionable Deposits	Unobservable	1	6
W2201	Little River	2011	Odor	None	6	6
W2201	Little River	2011	Periphyton Density, Filamentous	None	6	6
W2201	Little River	2011	Periphyton Density, Film	Dense	2	6
W2201	Little River	2011	Periphyton Density, Film	None	4	6
W2201	Little River	2011	Scum	No	3	6
W2201	Little River	2011	Scum	Yes	3	6
W2201	Little River	2011	Turbidity	None	6	6

Primary Contact Recreation

2024/26 Use Attainment	Alert
Fully Supporting	NO

2024/26 Use Attainment Summary

The Primary Contact Recreation Use for the Little River (MA42-21) continues to be assessed as Fully Supporting based on bacteria data collected in 2011 at 1 station. MassDEP staff collected *E. coli* bacteria samples close to the downstream end of this Little River AU at W2201 [~650 ft upstream from the MA Turnpike (Rt. 90), Charlton] from May-Oct 2011 (n=6). Analysis of this single year limited frequency *E. coli* dataset indicated 0% of intervals had GMs >126 CFU/100ml, no samples exceeded the 410 CFU/100ml STV, and the seasonal GM was 48 CFU/100ml. *E. coli* data from W2201 were indicative of good water quality conditions.

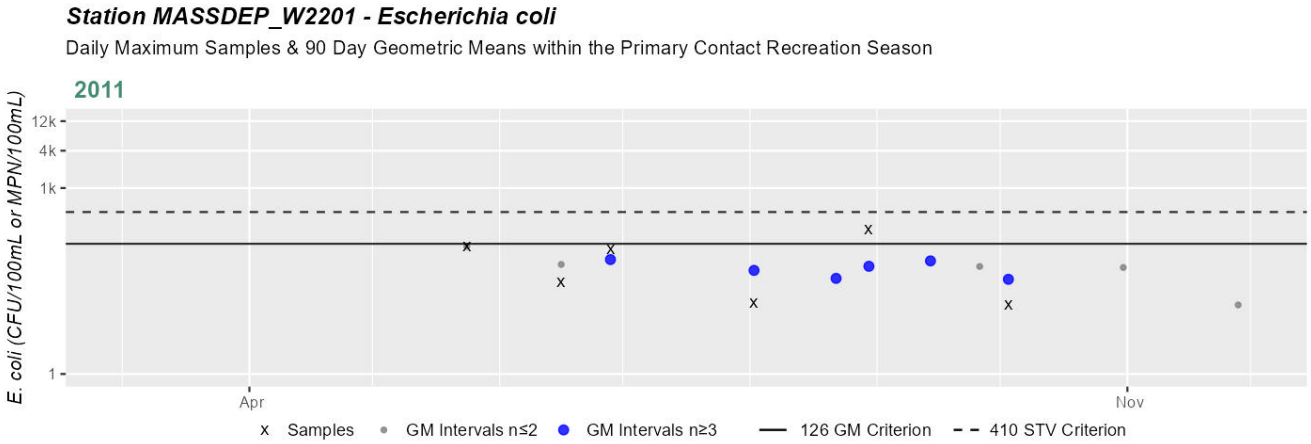
Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
W2201	MassDEP	Water Quality	Little River	[approximately 650 feet upstream from the Massachusetts Turnpike (Route 90), Charlton]	42.164267	-71.948856

Bacteria Data

Bacteria Data Collected by MassDEP (2011-2020) and External Data Providers (2011-2022) (90-day Interval Analysis)
(MassDEP Undated 6) (MassDEP Undated 4)
[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
W2201	MassDEP	E. coli	05/24/11	10/03/11	6	13	210	48



Variable*	Result
Samples	6
SeasGM	48
#GMI	6
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Current (2011-2022)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Secondary Contact Recreation

2024/26 Use Attainment	Alert
Fully Supporting	NO

2024/26 Use Attainment Summary
The Secondary Contact Recreation Use for the Little River (MA42-21) continues to be assessed as Fully Supporting based on a re-evaluation of bacteria data collected in 2011 at 1 station. MassDEP staff collected *E. coli* bacteria samples close to the downstream end of this Little River AU at W2201 [~650 ft upstream from the MA Turnpike (Rt. 90), Charlton] from May-Oct 2011 (n=6). Analysis of this single year limited frequency *E. coli* dataset indicated 0% of intervals had GMs >244 CFU/100ml, no samples exceeded the 794 CFU/100ml STV, and the overall GM was 48 CFU/100ml. *E. coli* data from W2201 were indicative of good water quality conditions.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
W2201	MassDEP	Water Quality	Little River	[approximately 650 feet upstream from the Massachusetts Turnpike (Route 90), Charlton]	42.164267	-71.948856

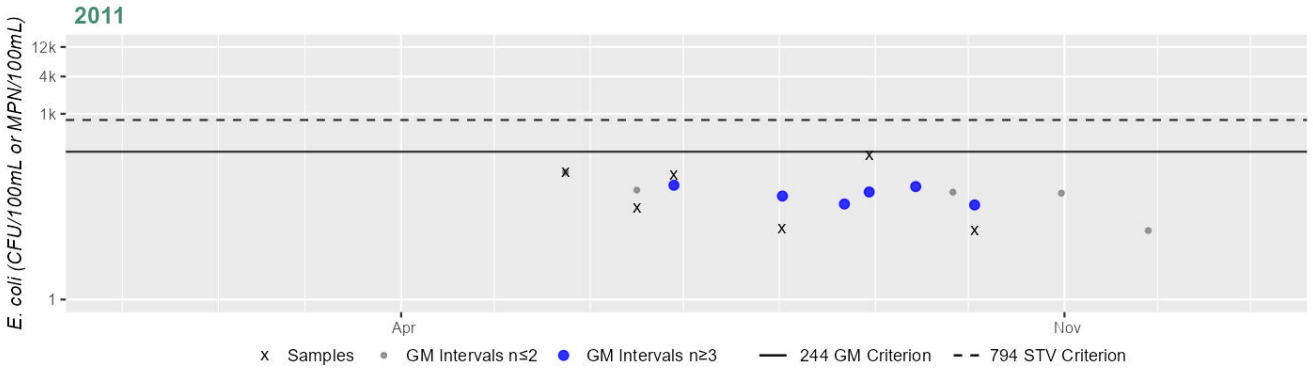
Bacteria Data

Bacteria Data Collected by MassDEP (1997-2020) and External Data Providers (1997-2022) (90-day Interval Analysis)
(MassDEP Undated 6) (MassDEP Undated 3)
[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
W2201	MassDEP	E. coli	05/24/11	10/03/11	6	13	210	48

Station MASSDEP_W2201 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



Variable*	Result
Samples	6
SeasGM	48
#GMI	6
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Current (2011-2022)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Low Pond (MA42033)

Location:	Dudley.
AU Type:	FRESHWATER LAKE
AU Size:	4 ACRES
Classification/Qualifier:	B

No usable data were available for Low Pond (MA42033) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
4c	4c	(Non-Native Aquatic Plants*)	--	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
(Non-Native Aquatic Plants*)	Introduction of Non-native Organisms (Accidental or Intentional) (Y)	X	--	--	--	--

Lowes Pond (MA42034)

Location:	Oxford.
AU Type:	FRESHWATER LAKE
AU Size:	33 ACRES
Classification/Qualifier:	B

No usable data were available for Lowes Pond (MA42034) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
4a	4a	Nutrient/Eutrophication Biological Indicators	2366	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
Nutrient/Eutrophication Biological Indicators	Agriculture (Y)	--	--	X	X	X
Nutrient/Eutrophication Biological Indicators	Discharges from Municipal Separate Storm Sewer Systems (MS4) (Y)	--	--	X	X	X
Nutrient/Eutrophication Biological Indicators	Rural (Residential Areas) (Y)	--	--	X	X	X

Mckinstry Pond (MA42035)

Location:	Oxford.
AU Type:	FRESHWATER LAKE
AU Size:	16 ACRES
Classification/Qualifier:	B

No usable data were available for Mckinstry Pond (MA42035) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
4a	4a	Nutrient/Eutrophication Biological Indicators	2367	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
Nutrient/Eutrophication Biological Indicators	Discharges from Municipal Separate Storm Sewer Systems (MS4) (Y)	--	--	X	X	X
Nutrient/Eutrophication Biological Indicators	Rural (Residential Areas) (Y)	--	--	X	X	X

Merino Pond (MA42036)

Location:	Dudley.
AU Type:	FRESHWATER LAKE
AU Size:	75 ACRES
Classification/Qualifier:	B

No usable data were available for Merino Pond (MA42036) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

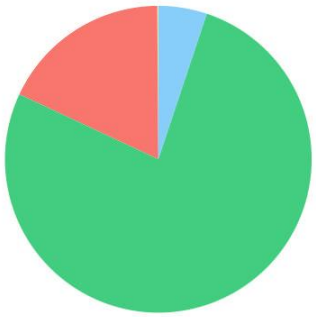
AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
3	3	None	--	Unchanged

Mill Brook (MA42-10)

Location:	Headwaters, outlet Webster Lake, Webster to mouth at confluence with French River, Webster.
AU Type:	RIVER
AU Size:	1.2 MILES
Classification/Qualifier:	B

Mill Brook (MA42-10)

Watershed Area: 10.77 square miles



Land Cover Type	Entire Basin	Proximal Subbasin (5 km radius)	Stream Buffer (100 m)	Proximal Stream Buffer
Land Cover Area* (square miles)	10.69	8.22	5.79	4.56
Agriculture	0.1%	0%	0.2%	0%
Developed	17.9%	17.6%	14.2%	13.8%
Natural	76.8%	77.1%	78.5%	78.8%
Wetland	5.1%	5.3%	7.1%	7.3%
Impervious	8.3%	8.2%	7%	6.7%

**Land cover analysis only includes watershed area within Massachusetts.*

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
2	2	None	--	Unchanged

Recommendations

2024/26 Recommendations
2024/26 [Aesthetics, Low] Additional monitoring should be conducted for Mill Brook (MA42-10) in particular in the area of the French River Connection stations “Nursery” {FRC_French8} and “Bigelow” {FRC_French7}, to confirm if high turbidity, trash/debris, sheens or odors are still a concern for this Mill Brook AU. Alerts for these issues were first based on observations made by the French River Connection at these stations in 2006-2008. This is of low priority; 2024/26 [Bacteria, Medium] Additional monitoring should be conducted for Mill Brook (MA42-10) in particular in the area of the French River Connection stations “Nursery” {FRC_French8} and “Bigelow” {FRC_French7}, to confirm if Mill Brook should be impaired for Escherichia coli (E. coli). Based on data collected in 2019-2020 an Alert was identified since the cumulative GM interval exceedance was well above 10% in the brook near Bigelow Road and >10% of samples exceeded the STV at both stations during one sample year. This is of medium priority;

Designated Use Attainment Decisions

Fish Consumption

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
The Fish Consumption Use for Mill Brook (MA42-10) was Not Assessed because fish toxics sampling was not conducted.

Aesthetic

2024/26 Use Attainment	Alert
Not Assessed	YES

2024/26 Use Attainment Summary
No data are available to assess the status of the Aesthetics Use for Mill Brook (MA42-10), so it is Not Assessed. The former Alerts identified for turbidity, trash/debris, sheens and odors, based on observations made by the French River Connection (FRC) at 2 stations “Nursery” (FRC_French8) and “Bigelow” (FRC_French7) in 2006, 2007 and 2008 (MassDEP 2009) are being carried forward. Recommendations will be made for additional monitoring to confirm if high turbidity, trash/debris, sheens or odors are still a concern for this Mill Brook AU.

Primary Contact Recreation

2024/26 Use Attainment	Alert
Fully Supporting	YES

2024/26 Use Attainment Summary

The Primary Contact Recreation Use for Mill Brook (MA42-10) continues to be assessed as Fully Supporting based on bacteria data collected in 2019 & 2020 at 2 stations, however an Alert for Escherichia Coli (E. Coli) is being identified. The former Alerts identified for turbidity, trash/debris, sheens and odors are being removed from the Primary Contact Recreation Use but will continue to be maintained under the Aesthetics Use. French River Connection (FRC) staff/volunteers collected *E. coli* bacteria samples in this Mill Brook AU from 2019-2020 at 2 stations. Samples were collected from the following stations/sample years from upstream to downstream: about a quarter of the way down the AU at FRC_French8 [Mill Brook Nursery, Webster] in 2019-2020 (n=9-15/yr), and about three-quarters of the way down the AU at FRC_French7 [Mill Brook Bigelow, Webster] in 2019-2020 (n=9-17/yr). Analysis of the multi-year high frequency *E. coli* datasets from these stations indicated that generally none of the sufficient data yrs had intervals where >10% of the GMs were >126 CFU/100ml (with the exception of FRC_French7 with 52% in 2019); both stations had just 1 yr when >10% of samples exceeded the 410 CFU/100ml STV (i.e. 11% in 2020 at FRC_French8 and 24% in 2019 at FRC_French7 respectively) and cumulatively across years at FRC_French8 0% of intervals had GMs >126 CFU/100ml, though at FRC_French7 35% of intervals had GMs >126 CFU/100ml. Overall, the *E. coli* data collected in Mill Brook were indicative of good water quality conditions. However, since the cumulative GM interval exceedance was well above 10% in the brook near Bigelow Road and >10% of samples exceed the STV at both stations during one sample year, an Alert for *E. coli* is being identified. Recommendations will be made for additional monitoring to confirm if Mill Brook should be impaired for Escherichia Coli (E. Coli).

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
FRC_French7	French River Connection	Water Quality	Mill Brook	Mill Brook Bigelow, Webster	42.066887	-71.875485
FRC_French8	French River Connection	Water Quality	Mill Brook	Mill Brook Nursery, Webster	42.062538	-71.863994

Bacteria Data

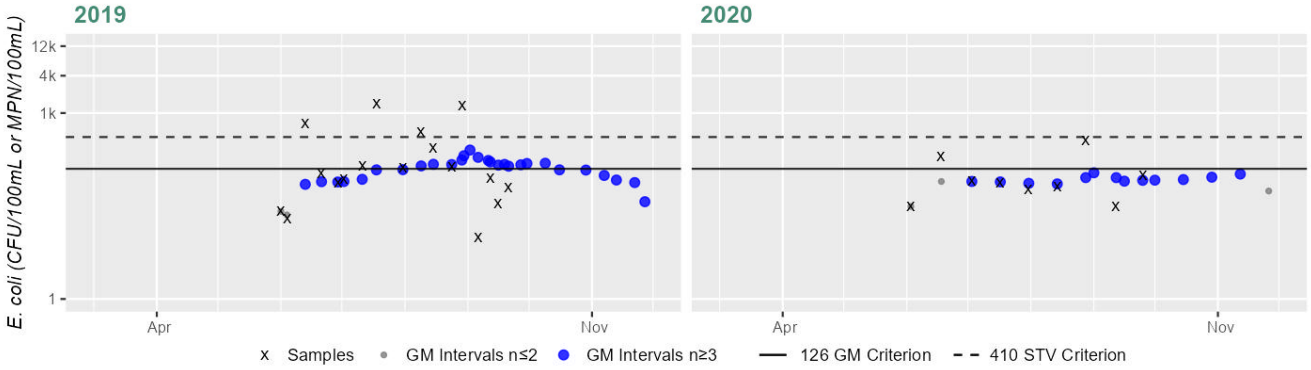
Bacteria Data Collected by MassDEP (2011-2020) and External Data Providers (2011-2022) (90-day Interval Analysis) (FRC 2020) (MassDEP Undated 2)

[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
FRC_French7	French River Connection	E. coli	06/01/19	09/21/19	17	9	1413	121
FRC_French7	French River Connection	E. coli	06/02/20	09/24/20	9	30	365	81
FRC_French8	French River Connection	E. coli	06/01/19	09/21/19	15	2	85	9
FRC_French8	French River Connection	E. coli	06/02/20	09/24/20	9	1	980	16

Station FRC_French7 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Primary Contact Recreation Season



Variable*	Result
Samples	17
SeasGM	121
#GMI	29
#GMI Ex	15
%GMI Ex	51%
n>STV	4
%n>STV	23%

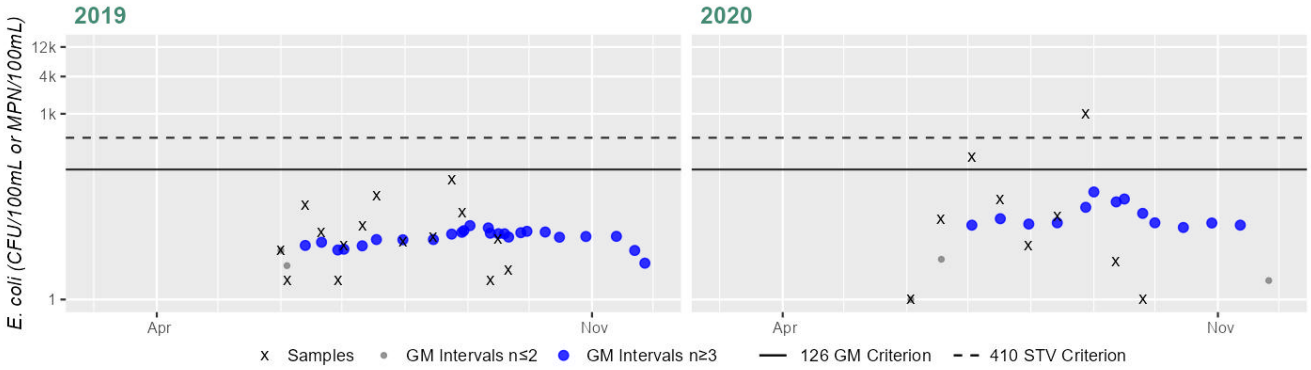
Variable*	Result
Samples	9
SeasGM	81
#GMI	13
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Current (2011-2022)
35%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Station FRC_French8 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Primary Contact Recreation Season



Variable*	Result
Samples	15
SeasGM	9
#GMI	25
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Variable*	Result
Samples	9
SeasGM	16
#GMI	13
#GMI Ex	0
%GMI Ex	0%
n>STV	1
%n>STV	11%

Cumulative %GMI Exceedance
Current (2011-2022)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Secondary Contact Recreation

2024/26 Use Attainment	Alert
Fully Supporting	NO

2024/26 Use Attainment Summary

The Secondary Contact Recreation Use for Mill Brook (MA42-10) continues to be assessed as Fully Supporting based on a re-evaluation of bacteria data collected in 2019 & 2020 at 2 stations. The former Alerts identified for turbidity, trash/debris, sheens and odors are being removed from the Secondary Contact Recreation Use but will continue to be maintained under the Aesthetics Use. French River Connection (FRC) staff/volunteers collected *E. coli* bacteria samples in this Mill Brook AU from 2019-2020 at 2 stations. Samples were collected from the following stations/sample years from upstream to downstream: about a quarter of the way down the AU at FRC_French8 [Mill Brook Nursery, Webster] in 2019-2020 (n=9-15/yr), and about three-quarters of the way down the AU at FRC_French7 [Mill Brook Bigelow, Webster] in 2019-2020 (n=9-17/yr). Analysis of the multi-year high frequency *E. coli* datasets from these stations indicated that none of the sufficient data yrs had intervals where >10% of the GMs were >244 CFU/100ml, both stations had just 1 yr when >10% of samples exceeded the 410 CFU/100ml STV (i.e. 11% in 2020 at FRC_French8 and 12% in 2019 at FRC_French7 respectively) and cumulatively (per station) across years 0-2% of the intervals had GMs >244 CFU/100ml. Overall, the *E. coli* data collected in Mill Brook are indicative of good water quality conditions.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
FRC_French7	French River Connection	Water Quality	Mill Brook	Mill Brook Bigelow, Webster	42.066887	-71.875485
FRC_French8	French River Connection	Water Quality	Mill Brook	Mill Brook Nursery, Webster	42.062538	-71.863994

Bacteria Data

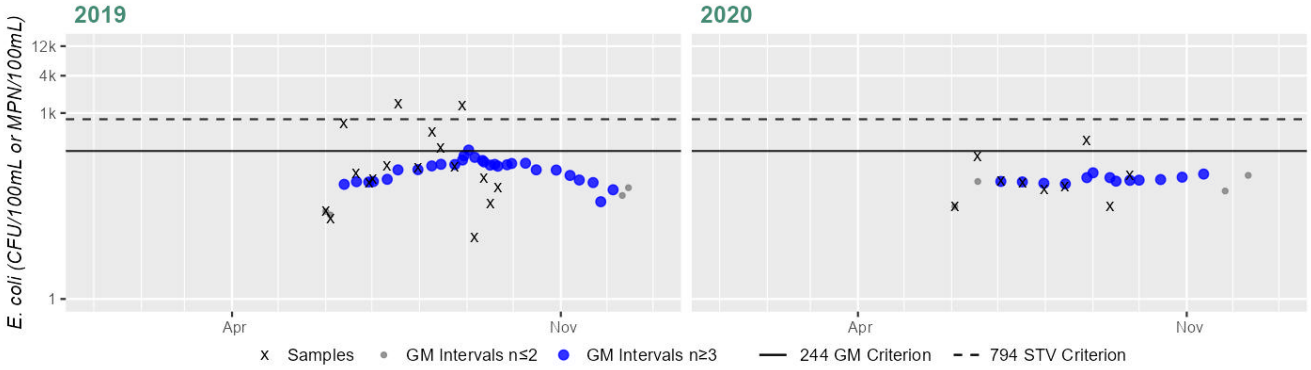
Bacteria Data Collected by MassDEP (1997-2020) and External Data Providers (1997-2022) (90-day Interval Analysis) (FRC 2020) (MassDEP Undated 1)

[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
FRC_French7	French River Connection	E. coli	06/01/19	09/21/19	17	9	1413	121
FRC_French7	French River Connection	E. coli	06/02/20	09/24/20	9	30	365	81
FRC_French8	French River Connection	E. coli	06/01/19	09/21/19	15	2	85	9
FRC_French8	French River Connection	E. coli	06/02/20	09/24/20	9	1	980	16

Station FRC_French7 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



Variable*	Result
Samples	17
SeasGM	121
#GMI	29
#GMI Ex	1
%GMI Ex	3%
n>STV	2
%n>STV	11%

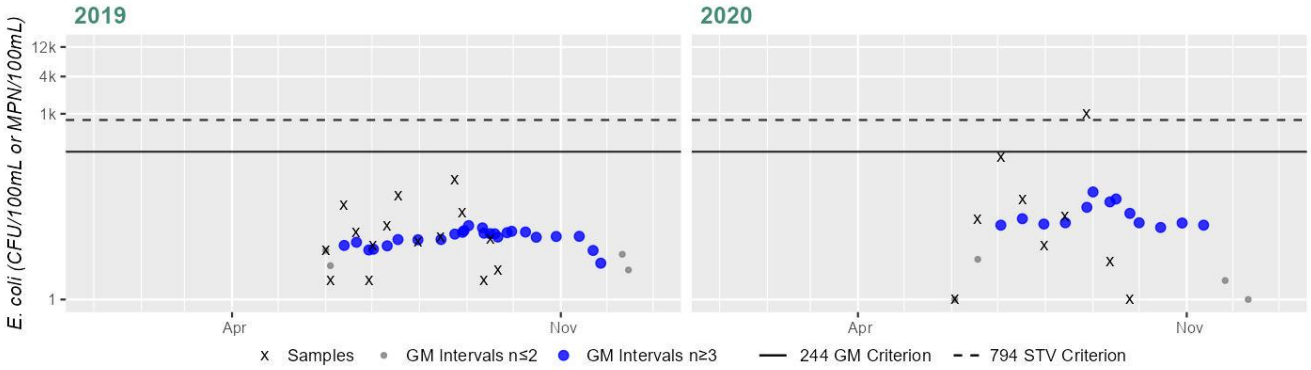
Variable*	Result
Samples	9
SeasGM	81
#GMI	13
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Current (2011-2022)
2%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Station FRC_French8 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



Variable*	Result
Samples	15
SeasGM	9
#GMI	25
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Variable*	Result
Samples	9
SeasGM	16
#GMI	13
#GMI Ex	0
%GMI Ex	0%
n>STV	1
%n>STV	11%

Cumulative %GMI Exceedance
Current (2011-2022)
0%

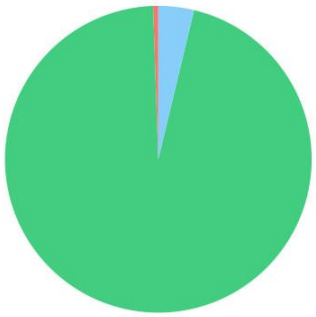
**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Mine Brook (MA42-16)

Location:	Headwaters (perennial portion), Webster to mouth at inlet Club Pond, Webster.
AU Type:	RIVER
AU Size:	1.4 MILES
Classification/Qualifier:	B

Mine Brook (MA42-16)

Watershed Area: 1.04 square miles



Land Cover Type	Entire Basin	Proximal Subbasin (5 km radius)	Stream Buffer (100 m)	Proximal Stream Buffer
Land Cover Area (square miles)	1.04	1.04	0.46	0.46
Agriculture	0%	0%	0%	0%
Developed	0.5%	0.5%	0.7%	0.7%
Natural	95.7%	95.7%	94.1%	94.1%
Wetland	3.7%	3.7%	5.2%	5.2%
Impervious	0.1%	0.1%	0.2%	0.2%

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
3	3	None	--	Unchanged

Designated Use Attainment Decisions

Fish Consumption

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
The Fish Consumption Use for Mine Brook (MA42-16) was Not Assessed because fish toxics sampling was not conducted.

Aesthetic

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
No data are available, so the Aesthetics Use for Mine Brook (MA42-16) is Not Assessed.

Primary Contact Recreation

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
No bacteria or other indicator data for Mine Brook (MA42-16) are available, so the Primary Contact Recreation Use is Not Assessed.

Secondary Contact Recreation

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
No bacteria or other indicator data for Mine Brook (MA42-16) are available in the current IR window (2011-2022), so the Secondary Contact Recreation Use is Not Assessed. MassDEP staff collected *E. coli* bacteria samples close to the downstream end of this Mine Brook AU in 2004 at 2 stations. Samples were collected from the following stations/sample years from upstream to downstream: W1343 [~30 ft upstream/E of Mine Brook Rd, Webster] from Aug-Sep 2004 (n=2) and W1184 [in pooled area on downstream/W side of Mine Brook Rd, Webster] from May-Jul 2004 (n=3). The historic *E.* coli data at W1343 are too limited to assess according to the 2024 CALM. Analysis of the historic single year limited frequency *E. coli* dataset from W1184 indicated 0% of intervals had GMs >244 CFU/100ml, no samples exceeded the 794 CFU/100ml STV, and the overall GM was 8 CFU/100ml. Historic *E. coli* data from W1184 were indicative of good water quality conditions, however since these data were collected prior to the current IR window (2011-2022) the Secondary Contact Recreation Use cannot be positively assessed using bacteria data.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
W1184	MassDEP	Water Quality	Mine Brook	[in pooled area on downstream/west side of Mine Brook Road, Webster]	42.062083	-71.846848
W1343	MassDEP	Water Quality	Mine Brook	[approximately 30 feet upstream/east of Mine Brook Road, Webster]	42.062168	-71.846650

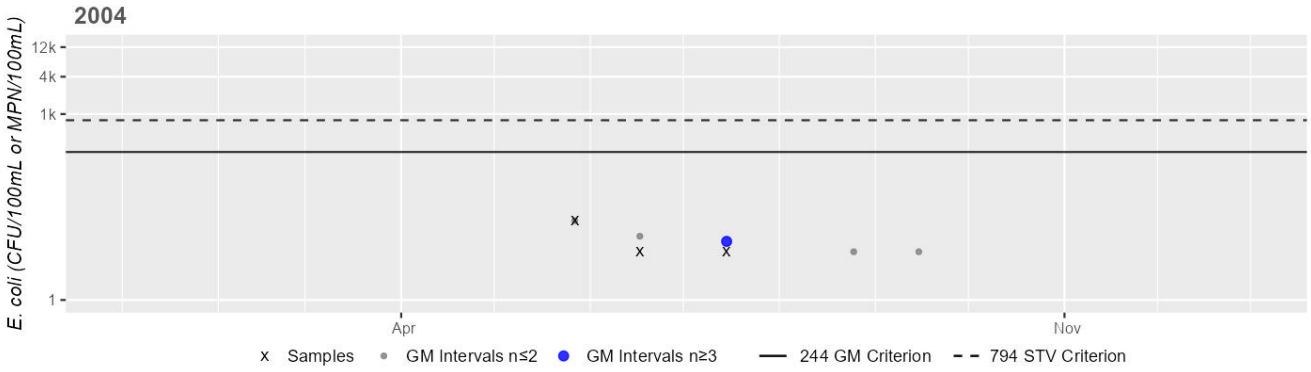
Bacteria Data

Bacteria Data Collected by MassDEP (1997-2020) and External Data Providers (1997-2022) (90-day Interval Analysis)
(MassDEP Undated 6) (MassDEP Undated 3)
[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
W1184	MassDEP	E. coli	05/26/04	07/14/04	3	6	19	8
W1343	MassDEP	E. coli	08/11/04	09/15/04	2	6	6	6

Station MASSDEP_W1184 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



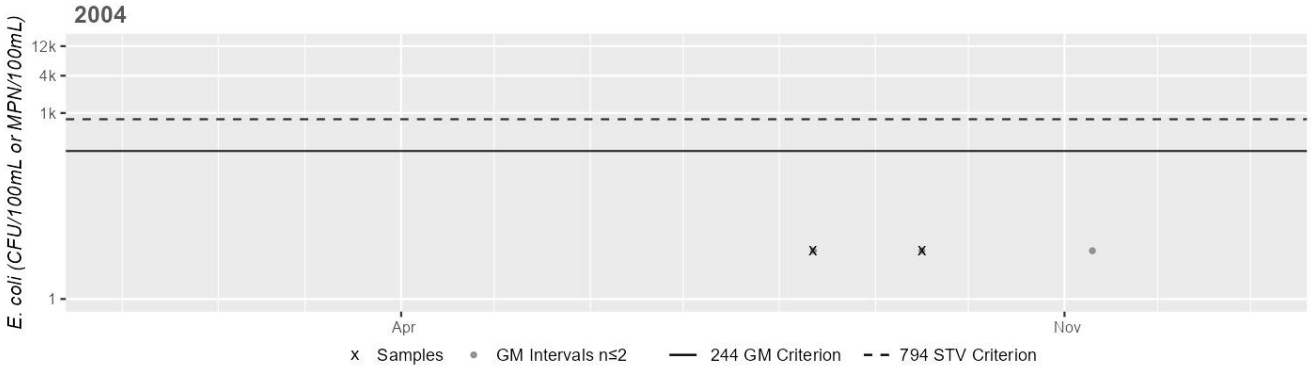
Variable*	Result
Samples	3
SeasGM	8
#GMI	1
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Historic (1997-2010)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Station MASSDEP_W1343 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



Variable*	Result
Samples	2
SeasGM	6
#GMI	0
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Historic (1997-2010)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Mosquito Pond (MA42060)

Location:	Dudley.
AU Type:	FRESHWATER LAKE
AU Size:	11 ACRES
Classification/Qualifier:	B

No usable data were available for Mosquito Pond (MA42060) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
4c	4c	(Aquatic Plants (Macrophytes)*)	--	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
(Aquatic Plants (Macrophytes)*)	Agriculture (Y)	--	--	X	X	X
(Aquatic Plants (Macrophytes)*)	Discharges from Municipal Separate Storm Sewer Systems (MS4) (Y)	--	--	X	X	X
(Aquatic Plants (Macrophytes)*)	Rural (Residential Areas) (Y)	--	--	X	X	X

New Pond (MA42037)

Location:	Dudley.
AU Type:	FRESHWATER LAKE
AU Size:	33 ACRES
Classification/Qualifier:	B

No usable data were available for New Pond (MA42037) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
3	3	None	--	Unchanged

Nipmuck Pond (MA42039)

Location:	Webster.
AU Type:	FRESHWATER LAKE
AU Size:	20 ACRES
Classification/Qualifier:	B

No usable data were available for Nipmuck Pond (MA42039) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
3	3	None	--	Unchanged

Packard Pond (MA42040)

Location:	Dudley.
AU Type:	FRESHWATER LAKE
AU Size:	6 ACRES
Classification/Qualifier:	B

No usable data were available for Packard Pond (MA42040) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
4c	4c	(Non-Native Aquatic Plants*)	--	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
(Non-Native Aquatic Plants*)	Introduction of Non-native Organisms (Accidental or Intentional) (Y)	X	--	--	--	--

Peter Pond (MA42042)

Location:	Dudley.
AU Type:	FRESHWATER LAKE
AU Size:	42 ACRES
Classification/Qualifier:	B

No usable data were available for Peter Pond (MA42042) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
3	3	None	--	Unchanged

Pierpoint Meadow Pond (MA42043)

Location:	Dudley/Charlton.
AU Type:	FRESHWATER LAKE
AU Size:	95 ACRES
Classification/Qualifier:	B

No usable data were available for Pierpoint Meadow Pond (MA42043) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
4c	4c	(Non-Native Aquatic Plants*)	--	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
(Non-Native Aquatic Plants*)	Introduction of Non-native Organisms (Accidental or Intentional) (Y)	X	--	--	--	--

Pikes Pond (MA42044)

Location:	Charlton.
AU Type:	FRESHWATER LAKE
AU Size:	28 ACRES
Classification/Qualifier:	B

No usable data were available for Pikes Pond (MA42044) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
4a	4a	Turbidity	2371	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
Turbidity	Agriculture (Y)	--	--	X	X	X
Turbidity	Discharges from Municipal Separate Storm Sewer Systems (MS4) (N)	--	--	X	X	X
Turbidity	Historical Source, No Longer Present (Y)	--	--	X	X	X
Turbidity	Rural (Residential Areas) (Y)	--	--	X	X	X

Putnam Pond (MA42046)

Location:	Charlton.
AU Type:	FRESHWATER LAKE
AU Size:	20 ACRES
Classification/Qualifier:	B

No usable data were available for Putnam Pond (MA42046) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
3	3	None	--	Unchanged

Robinson Pond (MA42047)

Location:	Oxford.
AU Type:	FRESHWATER LAKE
AU Size:	99 ACRES
Classification/Qualifier:	B

No usable data were available for Robinson Pond (MA42047) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
3	3	None	--	Unchanged

Rochdale Pond (MA42048)

Location:	Leicester.
AU Type:	FRESHWATER LAKE
AU Size:	43 ACRES
Classification/Qualifier:	B: WWF

No usable data were available for Rochdale Pond (MA42048) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
4a	4a	Nutrient/Eutrophication Biological Indicators	2356	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
Nutrient/Eutrophication Biological Indicators	Agriculture (Y)	X	--	X	X	X
Nutrient/Eutrophication Biological Indicators	Discharges from Municipal Separate Storm Sewer Systems (MS4) (N)	X	--	X	X	X
Nutrient/Eutrophication Biological Indicators	Municipal Point Source Discharges (Y)	X	--	X	X	X
Nutrient/Eutrophication Biological Indicators	Rural (Residential Areas) (Y)	X	--	X	X	X
Nutrient/Eutrophication Biological Indicators	Source Unknown (N)	X	--	X	X	X

Sargent Pond (MA42049)

Location:	Leicester.
AU Type:	FRESHWATER LAKE
AU Size:	65 ACRES
Classification/Qualifier:	B

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
5	5	(Non-Native Aquatic Plants*)	--	Unchanged
5	5	Mercury in Fish Tissue	--	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
(Non-Native Aquatic Plants*)	Introduction of Non-native Organisms (Accidental or Intentional) (Y)	X	--	--	--	--
Mercury in Fish Tissue	Atmospheric Deposition (N)	--	X	--	--	--
Mercury in Fish Tissue	Source Unknown (N)	--	X	--	--	--

Designated Use Attainment Decisions

Fish Consumption

2024/26 Use Attainment	Alert
Not Supporting	NO

2024/26 Use Attainment Summary

The Fish Consumption Use for Sargent Pond (MA42049) continues to be assessed as Not Supporting and the prior Mercury in Fish Tissue impairment is being carried forward. MDPH included a site-specific advisory for Sargent Pond in their January 2025 Freshwater Fish Consumption Advisory List. The public should refer to the most recent MDPH Freshwater Fish Consumption Advisory List for the most up to date meal advice for sensitive and general populations.

Aesthetic

2024/26 Use Attainment	Alert
Fully Supporting	NO

2024/26 Use Attainment Summary

The Aesthetics Use for Sargent Pond (MA42049) is assessed as Fully Supporting. Aesthetic observations were made by MassDEP field sampling crews as part of the MAP2 lake monitoring project during the summer of 2016 at two stations in Leicester for this Sargent Pond AU; at the deep hole index site, southern end of southern lobe W2640/MAP2L-044 (n=3) and in the southern lobe of pond, west of the cemetery, north of Rt. 9 (Main St) W2594/MAP2L-044S (n=5). There were generally no persistent objectionable conditions (odors, deposits, growths, or turbidity) recorded at either station, though field staff noted minor trash at W2594 on two occasions. During the MAP2 littoral survey (n=1), duckweed was not noted in any of the 10 shoreline plots and during the MAP2 macrophyte mapping survey (n=1) in Aug 2016, less than 25% (20.7%) of the waterbody was determined to have an aquatic macrophyte biovolume >50%.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
W2594	MassDEP	Water Quality	Sargent Pond	[southern lobe of pond, west of the cemetery, north of Route 9 (Main Street), Leicester]	42.245406	-71.916153
W2640	MassDEP	Water Quality	Sargent Pond	[index site, southern end of southern lobe, Leicester]	42.245392	-71.916730

Aesthetic Observations

Aesthetics Summary Statements for MassDEP Stations (2011-2020) (MassDEP Undated 4)
[Note: scums of natural origins (e.g. pollen blankets or natural foams) are excluded.]

Station Code	Data Year	Field Sheet Count	Aesthetics Summary Statement
W2594	2016	5	Aesthetic observations were made by MassDEP field sampling crews at Station W2594 (MAP2L-044S) on Sargent Pond (MA42049) during 5 site visits between May 2016 and Sep 2016. There were generally no persistent objectionable conditions (odors, deposits, growths, or turbidity) recorded, though field staff noted objectionable deposits (n=2). During the MAP2 littoral survey (n=1), duckweed was not noted in any of the 10 shoreline plots.
W2640	2016	3	Aesthetic observations were made by MassDEP field sampling crews at Station W2640 (MAP2L-044) on Sargent Pond (MA42049) during 3 site visits between Jun 2016 and Sep 2016. There were generally no persistent objectionable conditions (odors, deposits, growths, or turbidity) recorded. During the MAP2 macrophyte mapping survey (n=1) in Aug 2016, less than 25% (20.7%) of the waterbody was determined to have an aquatic macrophyte biovolume >50%.

MassDEP Aesthetics Observations (2011-2020) (MassDEP Undated 6)

Station Code	Waterbody	Data Year	Parameter	Result	Result Count	Total Field Sheet Count
W2594	Sargent Pond	2016	Aesthetics Impaired?	No	5	5
W2594	Sargent Pond	2016	Color	Brownish	1	5
W2594	Sargent Pond	2016	Color	Light Yellow/Tan	2	5
W2594	Sargent Pond	2016	Color	None	2	5
W2594	Sargent Pond	2016	Objectionable Deposits	No	3	5
W2594	Sargent Pond	2016	Objectionable Deposits	Yes	2	5
W2594	Sargent Pond	2016	Odor	None	5	5
W2594	Sargent Pond	2016	Scum	No	5	5
W2594	Sargent Pond	2016	Turbidity	None	4	5
W2594	Sargent Pond	2016	Turbidity	Slightly Turbid	1	5
W2640	Sargent Pond	2016	Aesthetics Impaired?	No	3	3
W2640	Sargent Pond	2016	Aquatic Plant Density, Overall	None	1	3
W2640	Sargent Pond	2016	Aquatic Plant Density, Overall	NR	2	3
W2640	Sargent Pond	2016	Aquatic Plant Density, Whole Lake	Sparse	1	1
W2640	Sargent Pond	2016	Color	Light Yellow/Tan	2	3
W2640	Sargent Pond	2016	Color	None	1	3
W2640	Sargent Pond	2016	Duckweed Density, Whole Lake	None	1	1
W2640	Sargent Pond	2016	Objectionable Deposits	No	2	3
W2640	Sargent Pond	2016	Objectionable Deposits	Yes	1	3
W2640	Sargent Pond	2016	Odor	None	3	3
W2640	Sargent Pond	2016	Scum	No	2	3
W2640	Sargent Pond	2016	Scum	Yes	1	3
W2640	Sargent Pond	2016	Turbidity	None	1	3
W2640	Sargent Pond	2016	Turbidity	Slightly Turbid	2	3

Primary Contact Recreation

2024/26 Use Attainment	Alert
Fully Supporting	NO

2024/26 Use Attainment Summary
The Primary Contact Recreation Use for Sargent Pond (MA42049) is assessed as Fully Supporting based on bacteria data collected in 2016 at 1 station. MassDEP staff collected *E. coli* bacteria samples in this Sargent Pond AU at W2594/MAP2L-044S [shoreline station at southern lobe of pond, W of the cemetery, N of Rt. 9 (Main St), Leicester] from May-Sep 2016 (n=5). Analysis of this single year limited frequency *E. coli* dataset indicated 0% of intervals had GMs >126 CFU/100ml, no samples exceeded the 410 CFU/100ml STV, and the seasonal GM was 7 CFU/100ml. *E. coli* data from W2594 were indicative of good water quality conditions. MassDEP also collected Secchi and cyanobacteria cell count data in 2016 at W2640/MAP2L-044 [Index-deep hole] and cyanobacteria cell count and cyanotoxins data at in 2016 at W2594. Secchi depth data at station W2640 (station depth=4.1 m) indicated water clarity meeting the 1.2m (4ft) threshold (n=3, 1.4-3.7 m). The cyanobacteria cell count did not exceed 70,000 cells/ml in any of the water samples at W2640 (n=6). Analysis of microcystins samples from W2594 (n=3) indicated that the concentrations did not exceed the threshold of 8 µg/L.

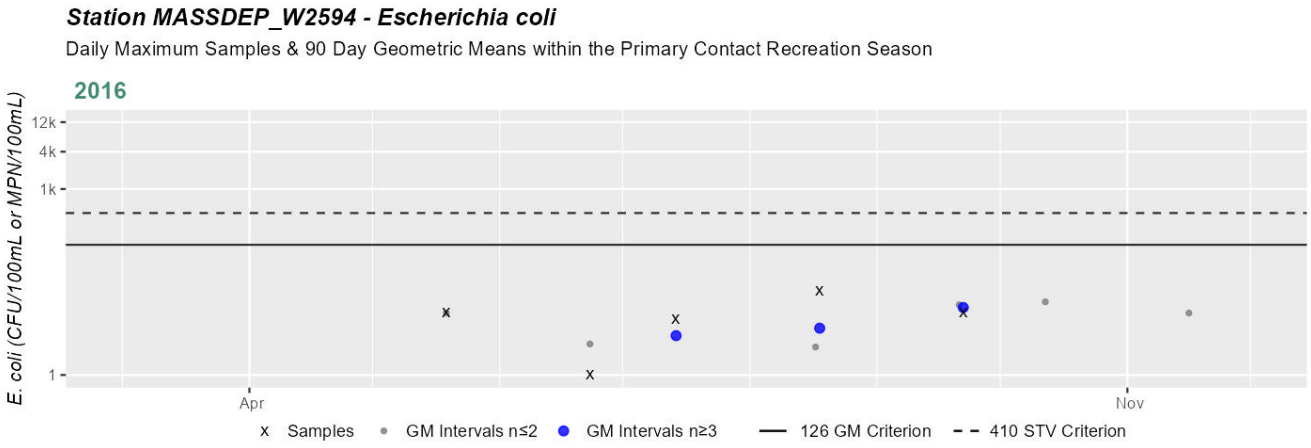
Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
W2594	MassDEP	Water Quality	Sargent Pond	[southern lobe of pond, west of the cemetery, north of Route 9 (Main Street), Leicester]	42.245406	-71.916153
W2640	MassDEP	Water Quality	Sargent Pond	[index site, southern end of southern lobe, Leicester]	42.245392	-71.916730

Bacteria Data

Bacteria Data Collected by MassDEP (2011-2020) and External Data Providers (2011-2022) (90-day Interval Analysis)
(MassDEP Undated 6) (MassDEP Undated 4)
[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
W2594	MassDEP	E. coli	05/18/16	09/21/16	5	1	23	7



Variable*	Result
Samples	5
SeasGM	7
#GMI	3
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Current (2011-2022)
0%

*Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.

Other Indicators

Summary Statement for 2011-2022 Cyanobacteria Cell Count and Cyanotoxin Data, and Secchi Depth Data (MassDEP Undated 6) (MassDEP Undated 4)

Data Year	Summary
2016	In Sargent Pond (MA42049) in 2016, MassDEP collected Secchi and cyanobacteria cell count data at W2640 [MAP2L-044, Index-deep hole], and cyanobacteria cell count and cyanotoxin data at W2594 [MAP2L-044S, Shoreline]. At station W2640 (station depth=4.1 m) the Secchi depth measurements ranged from 1.4-3.7 m (n=3) indicating water clarity meeting the 1.2 m (4 ft) threshold. The cyanobacteria cell count did not exceed 70,000 cells/mL in any of the water samples (n=6). Analysis of microcystins samples from W2594 (n=3) indicated that the concentrations did not exceed the threshold of 8 µg/L.

MassDEP Cyanobacteria Cell Count Data Collected at Lakes and Impoundments (2016-2018) (MassDEP Undated 6) (MassDEP Undated 4)

Station Code	Waterbody	Station Type	Data Year	Sample Count	Count >70,000 cells/mL	Exceedance Date(s)
W2594	Sargent Pond	Shoreline	2016	3	0	NA
W2640	Sargent Pond	Index	2016	3	0	NA

Secondary Contact Recreation

2024/26 Use Attainment	Alert
Fully Supporting	NO

2024/26 Use Attainment Summary
The Secondary Contact Recreation Use for Sargent Pond (MA42049) is assessed as Fully Supporting, based on a re-evaluation of bacteria data collected in 2016 at 1 station. MassDEP staff collected *E. coli* bacteria samples in this Sargent Pond AU at W2594/MAP2L-044S [southern lobe of pond, W of the cemetery, N of Rt. 9 (Main St), Leicester] from May-Sep 2016 (n=5). Analysis of the single year limited frequency *E. coli* dataset from W2594 indicated 0% of intervals had GMs >244 CFU/100ml, no samples exceeded the 794 CFU/100ml STV, and the overall GM was 7 CFU/100ml. *E. coli* data from W2594 were indicative of good water quality conditions. MassDEP also collected cyanobacteria cell count data in 2016 at W2640/MAP2L-044 [Index-deep hole] and cyanobacteria cell count and cyanotoxins data in 2016 at W2594. The cyanobacteria cell count did not exceed 70,000 cells/ml in any of the water samples (n=6). Analysis of microcystins samples from W2594 (n=3) indicated that the concentrations did not exceed the threshold of 8 µg/L.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
W2594	MassDEP	Water Quality	Sargent Pond	[southern lobe of pond, west of the cemetery, north of Route 9 (Main Street), Leicester]	42.245406	-71.916153

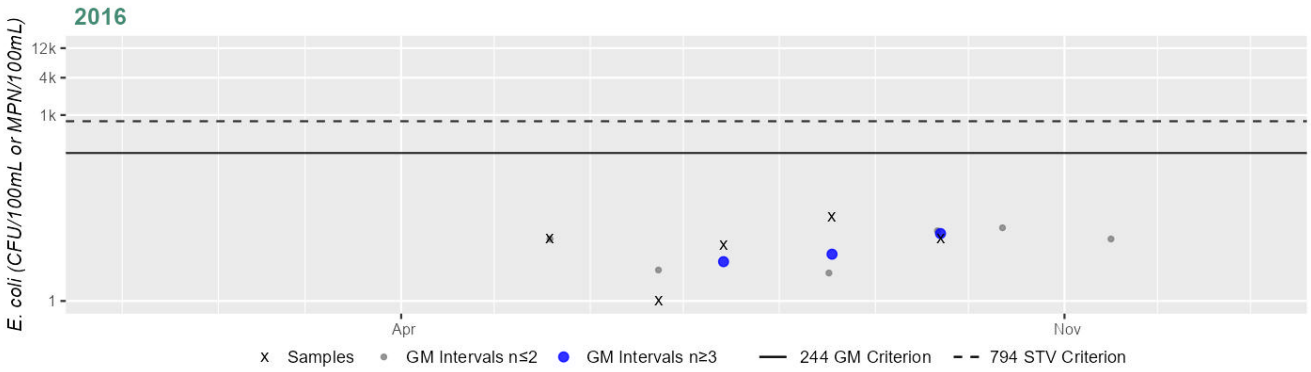
Bacteria Data

Bacteria Data Collected by MassDEP (1997-2020) and External Data Providers (1997-2022) (90-day Interval Analysis)
(MassDEP Undated 6) (MassDEP Undated 3)
[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
W2594	MassDEP	E. coli	05/18/16	09/21/16	5	1	23	7

Station MASSDEP_W2594 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



Variable*	Result
Samples	5
SeasGM	7
#GMI	3
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Current (2011-2022)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Shepherd Pond (MA42051)

Location:	Dudley.
AU Type:	FRESHWATER LAKE
AU Size:	16 ACRES
Classification/Qualifier:	B

No usable data were available for Shepherd Pond (MA42051) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
4c	4c	(Aquatic Plants (Macrophytes)*)	--	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
(Aquatic Plants (Macrophytes)*)	Agriculture (Y)	--	--	X	X	X
(Aquatic Plants (Macrophytes)*)	Discharges from Municipal Separate Storm Sewer Systems (MS4) (N)	--	--	X	X	X
(Aquatic Plants (Macrophytes)*)	Rural (Residential Areas) (Y)	--	--	X	X	X

Slaters Pond (MA42053)

Location:	Oxford.
AU Type:	FRESHWATER LAKE
AU Size:	105 ACRES
Classification/Qualifier:	B

No usable data were available for Slaters Pond (MA42053) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
3	3	None	--	Unchanged

Snow Pond (MA42054)

Location:	Charlton.
AU Type:	FRESHWATER LAKE
AU Size:	1 ACRES
Classification/Qualifier:	B

No usable data were available for Snow Pond (MA42054) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
3	3	None	--	Unchanged

Stiles Reservoir (MA42055)

Location:	Spencer/Leicester.
AU Type:	FRESHWATER LAKE
AU Size:	309 ACRES
Classification/Qualifier:	B

No usable data were available for Stiles Reservoir (MA42055) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
3	3	None	--	Unchanged

Sucker Brook (MA42-15)

Location:	Headwaters, outlet Nipmuck Pond, Webster to mouth at inlet Club Pond, Webster.
AU Type:	RIVER
AU Size:	1.7 MILES
Classification/Qualifier:	B

Sucker Brook (MA42-15)

Watershed Area: 2.57 square miles

Land Cover Type	Entire Basin	Proximal Subbasin (5 km radius)	Stream Buffer (100 m)	Proximal Stream Buffer
Land Cover Area (square miles)	2.57	2.57	1.06	1.06
Agriculture	0%	0%	0%	0%
Developed	10.3%	10.3%	10.2%	10.2%
Natural	83.4%	83.4%	78.8%	78.8%
Wetland	6.3%	6.3%	11%	11%
Impervious	3.9%	3.9%	3.8%	3.8%

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
5	5	Benthic Macroinvertebrates	--	Unchanged
5	5	Escherichia Coli (E. Coli)	R1_MA_2024_04	Changed

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
Benthic Macroinvertebrates	Source Unknown (N)	X	--	--	--	--
Escherichia Coli (E. Coli)	Source Unknown (N)	--	--	--	X	--

Supporting Information for Removed Impairments

2022 Removed Impairment	Removal Reason	Removal Comment
Escherichia Coli (E. Coli)	TMDL approved or established by EPA (4a)	Impairment covered under TMDL: Massachusetts Statewide TMDL for Pathogen-Impaired Waterbodies (Report CN 515.1, approved 2/13/2024, ATTAINS Action ID: R1_MA_2024_04)

Designated Use Attainment Decisions

Fish Consumption

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
The Fish Consumption Use for Sucker Brook (MA42-15) was Not Assessed because fish toxics sampling was not conducted recently.

Aesthetic

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
No data are available, so the Aesthetics Use for Sucker Brook (MA42-15) is Not Assessed.

Primary Contact Recreation

2024/26 Use Attainment	Alert
Not Supporting	NO

2024/26 Use Attainment Summary
The Primary Contact Recreation Use for Sucker Brook (MA42-15) continues to be assessed as Not Supporting. The prior Escherichia Coli (E. Coli) impairment is being carried forward. No new data are available to evaluate the Primary Contact Recreation Use for this Sucker Brook AU.

Secondary Contact Recreation

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary

No bacteria or other indicator data for Sucker Brook (MA42-15) are available in the current IR window (2011-2022), so the Secondary Contact Recreation Use is Not Assessed. MassDEP staff collected *E. coli* bacteria samples close to the downstream end of this Sucker Brook AU at W1178 [Sutton Rd crossing, Webster] from May-Sep 2004 (n=5). Analysis of this historic single year limited frequency *E. coli* dataset from W1178 indicated 0% of intervals had GMs >244 CFU/100ml, no samples exceeded the 794 CFU/100ml STV, and the overall GM was 149 CFU/100ml. Historic *E. coli* data from W1178 were indicative of good water quality conditions, however since these data were collected prior to the current IR window (2011-2022) the Secondary Contact Recreation Use cannot be positively assessed using bacteria data.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
W1178	MassDEP	Water Quality	Sucker Brook	[Sutton Road crossing, Webster]	42.069862	-71.853354

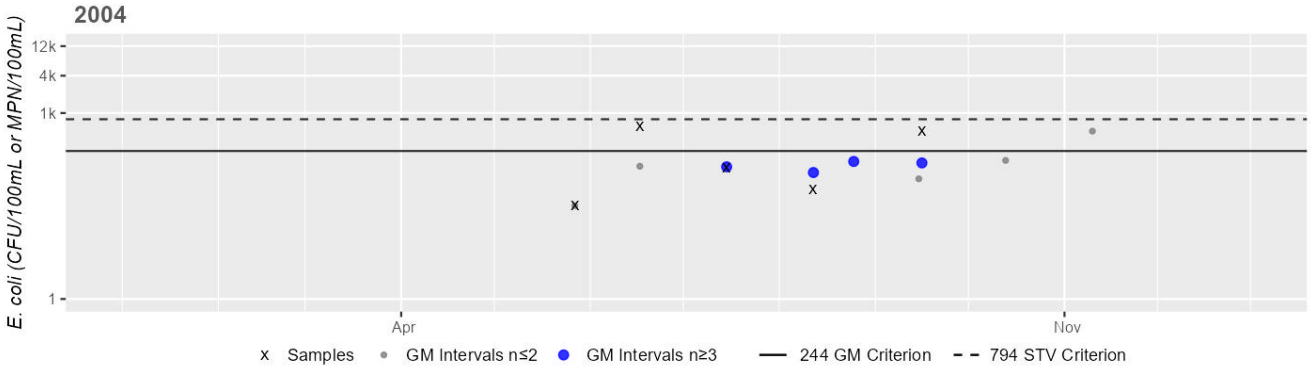
Bacteria Data

Bacteria Data Collected by MassDEP (1997-2020) and External Data Providers (1997-2022) (90-day Interval Analysis)
(MassDEP Undated 6) (MassDEP Undated 3)
[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
W1178	MassDEP	E. coli	05/26/04	09/15/04	5	32	600	149

Station MASSDEP_W1178 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



Variable*	Result
Samples	5
SeasGM	149
#GMI	4
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Historic (1997-2010)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Town Meadow Brook (MA42-02)

Location:	Headwaters, outlet Dutton Pond, Leicester to mouth at inlet Greenville Pond, Leicester.
AU Type:	RIVER
AU Size:	1.9 MILES
Classification/Qualifier:	B: WWF

No usable data were available for Town Meadow Brook (MA42-02) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
3	3	None	--	Unchanged

Unnamed Tributary (MA42-01)

Location:	Unnamed tributary to Town Meadow Brook, outlet Sargent Pond, Leicester to inlet Dutton Pond, Leicester.
AU Type:	RIVER
AU Size:	0.5 MILES
Classification/Qualifier:	B: WWF, HQW

No usable data were available for Unnamed Tributary (MA42-01) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
2	2	None	--	Unchanged

Unnamed Tributary (MA42-12)

Location:	Unnamed tributary to Wellington Brook, perennial portion from Depot Road, Oxford to confluence with Wellington Brook, Oxford.
AU Type:	RIVER
AU Size:	0.2 MILES
Classification/Qualifier:	B

No usable data were available for Unnamed Tributary (MA42-12) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
3	3	None	--	Unchanged

Unnamed Tributary (MA42-19)

Location:	Unnamed tributary to the French River on the 1982 USGS quad as 'Lowes Brook', from the outlet of Lowes Pond, Oxford to mouth at confluence with French River, Oxford.
AU Type:	RIVER
AU Size:	1.3 MILES
Classification/Qualifier:	B

Unnamed Tributary (MA42-19)

Watershed Area: 8.60 square miles

Land Cover Type	Entire Basin	Proximal Subbasin (5 km radius)	Stream Buffer (100 m)	Proximal Stream Buffer
Land Cover Area (square miles)	8.60	5.87	3.07	2.11
Agriculture	4%	4.2%	1.9%	2.4%
Developed	17.1%	21.8%	13.7%	18.1%
Natural	67.8%	64%	65.9%	59.8%
Wetland	11.1%	10%	18.5%	19.7%
Impervious	6.7%	9%	5.7%	7.8%

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
2	2	None	--	Unchanged

Recommendations

2024/26 Recommendations
2024/26IR [Aesthetics, Low] Additional monitoring should be conducted for Unnamed Tributary (locally known as Lowes Brook) (MA42-19) in particular in the area of the French River Connection station {State Street crossing, Oxford}, to confirm if trash/debris, dark murky water and turbidity are still a concern for this Unnamed Tributary AU. An Alert was initially raised over these issues by French River Connection (FRC) volunteers at this station during their monitoring in 2007 and 2008. This is of low priority; 2024/26IR [Bacteria, Low] Additional monitoring should be conducted for Unnamed Tributary (MA42-19) in particular in the area of the French River Connection station {FRC_French11}, to confirm if this Unnamed Tributary AU should be impaired for Escherichia Coli (E. Coli). Based on data collected in 2019-2020 an Alert was identified since the cumulative GM interval exceedance was well above 10% and >10% of samples exceeded the STV in 2020. This is of medium priority;

Designated Use Attainment Decisions

Fish Consumption

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
The Fish Consumption Use for Unnamed Tributary (locally known as Lowes Brook) (MA42-19) was Not Assessed because fish toxics sampling was not conducted.

Aesthetic

2024/26 Use Attainment	Alert
Not Assessed	YES

2024/26 Use Attainment Summary
No recent data are available to evaluate the Aesthetics Use of this Unnamed Tributary AU (locally known as Lowes Brook) (MA42-19) so it is Not Assessed. The Alert raised over aesthetic issues (minor trash/debris, dark murky water, and turbidity) noted by French River Connection (FRC) volunteers at State Street crossing in Oxford, during their monitoring in 2007 and 2008 (MassDEP 2009) is being carried forward. Recommendations will be made for additional monitoring to confirm if high turbidity, trash/debris, sheens or odors are still a concern for this Unnamed Tributary AU.

Primary Contact Recreation

2024/26 Use Attainment	Alert

Fully Supporting	YES

2024/26 Use Attainment Summary

The Primary Contact Recreation Use for Unnamed Tributary (locally known as Lowes Brook) (MA42-19) continues to be assessed as Fully Supporting based on bacteria data collected in 2019 & 2020 at 1 station. An Alert for Escherichia Coli (E. Coli) is being identified. French River Connection (FRC) staff/volunteers collected *E. coli* bacteria samples a third of the way down the AU at FRC_French11 [Lowe's Brook, Webster] in 2019-2020 (n=9-17/yr). Analysis of this multi-year high frequency *E. coli* dataset indicated 1 out of 2 sufficient data yrs had intervals where >10% of the GMs were >126 CFU/100ml (2020, 100%), 1 yr had >10% of samples exceed the 410 CFU/100ml STV (2020, 22%), and cumulatively across years 30% of intervals had GMs >126 CFU/100ml. *E. coli* data from FRC_French11 were indicative of good water quality conditions. However, since the cumulative GM interval exceedance was well above 10% and >10% of samples exceed the STV in 2020, an Alert for *E. coli* is being identified. Recommendations will be made for additional monitoring to confirm if this Unnamed Tributary AU should be impaired for Escherichia Coli (E. Coli).

Monitoring Stations

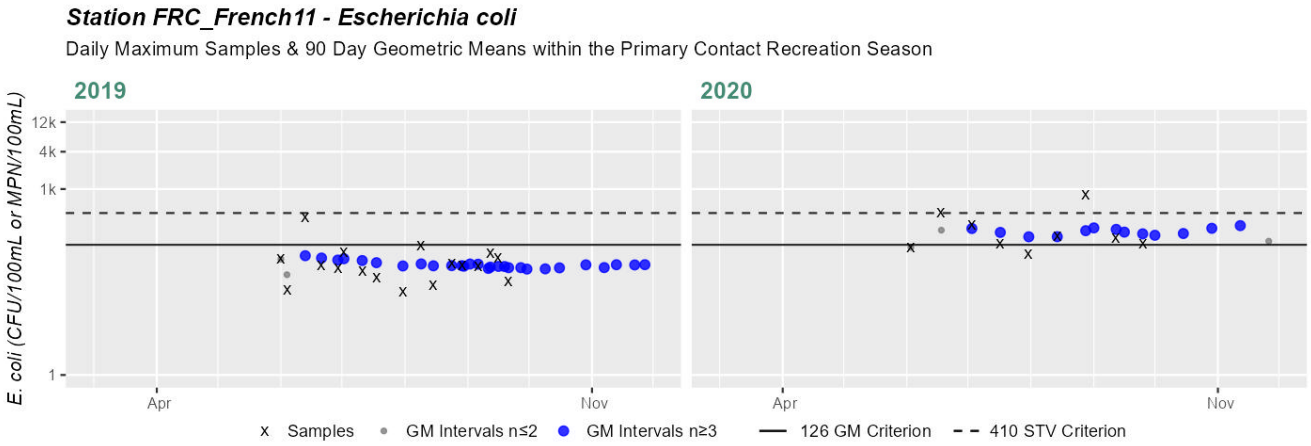
Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
FRC_French11	French River Connection	Water Quality	Lowe's Brook; Mill Brook	Lowe's Brook, Webster	42.104027	-71.866313

Bacteria Data

Bacteria Data Collected by MassDEP (2011-2020) and External Data Providers (2011-2022) (90-day Interval Analysis) (FRC 2020) (MassDEP Undated 2)

[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
FRC_French11	French River Connection	E. coli	06/01/19	09/21/19	17	21	344	58
FRC_French11	French River Connection	E. coli	06/02/20	09/24/20	9	88	816	195



Variable*	Result
Samples	17
SeasGM	58
#GMI	29
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Variable*	Result
Samples	9
SeasGM	195
#GMI	13
#GMI Ex	13
%GMI Ex	100%
n>STV	2
%n>STV	22%

Cumulative %GMI Exceedance
Current (2011-2022)
30%

*Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.

Secondary Contact Recreation

2024/26 Use Attainment	Alert
Fully Supporting	NO

2024/26 Use Attainment Summary
The Secondary Contact Recreation Use for Unnamed Tributary (locally known as Lowes Brook) (MA42-19) continues to be assessed as Fully Supporting based on a re-evaluation of bacteria data collected in 2004, 2019 & 2020 at 1 station. French River Connection (FRC) and MassDEP staff/volunteers collected *E. coli* bacteria samples in both the historic (1997-2010) & the current IR window (2011-2022) in this Unnamed Tributary AU from 2004-2020 at 2 stations. Samples were collected from the following stations/sample years from upstream to downstream: a third of the way down the AU at FRC_French11 [Lowe's Brook, Webster] in 2019-2020 (n=9-17/yr) and W1175 [Main St (Rt. 12) crossing of unnamed French River tributary locally known as Lowes Brook, Oxford] from May-Sep 2004 (n=5). Analysis of the multi-year high frequency *E. coli* dataset from FRC_French11 indicated 0 out of 2 sufficient data yrs had intervals where >10% of the GMs were >244 CFU/100ml, 1 yr had >10% of samples exceed the 794 CFU/100ml STV (2020, 11%), and cumulatively across years 2% of intervals had GMs >244 CFU/100ml. Overall, the *E. coli* data collected in both the historic & the current IR window for this Unnamed Tributary are all indicative of good water quality conditions.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
FRC_French11	French River Connection	Water Quality	Lowe's Brook; Mill Brook	Lowe's Brook, Webster	42.104027	-71.866313
W1175	MassDEP	Water Quality	Unnamed Tributary	[Main Street (Route 12) crossing of unnamed French River tributary locally known as Lowes Brook, Oxford]	42.103260	-71.866933

Bacteria Data

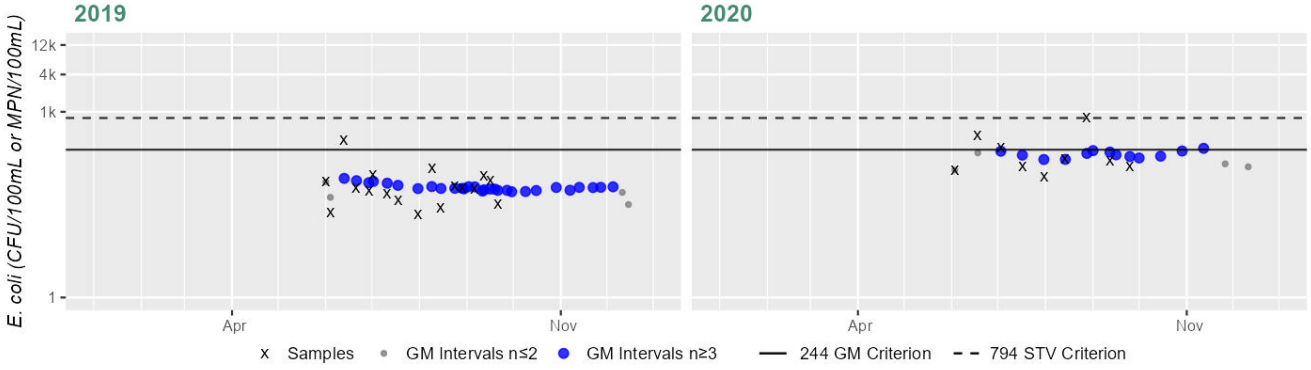
Bacteria Data Collected by MassDEP (1997-2020) and External Data Providers (1997-2022) (90-day Interval Analysis) (FRC 2020) (MassDEP Undated 1) (MassDEP Undated 6) (MassDEP Undated 3)

[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
FRC_French11	French River Connection	E. coli	06/01/19	09/21/19	17	21	344	58
FRC_French11	French River Connection	E. coli	06/02/20	09/24/20	9	88	816	195
W1175	MassDEP	E. coli	05/26/04	09/15/04	5	71	150	99

Station FRC_French11 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



Variable*	Result
Samples	17
SeasGM	58
#GMI	29
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Variable*	Result
Samples	9
SeasGM	195
#GMI	13
#GMI Ex	1
%GMI Ex	7%
n>STV	1
%n>STV	11%

Cumulative %GMI Exceedance

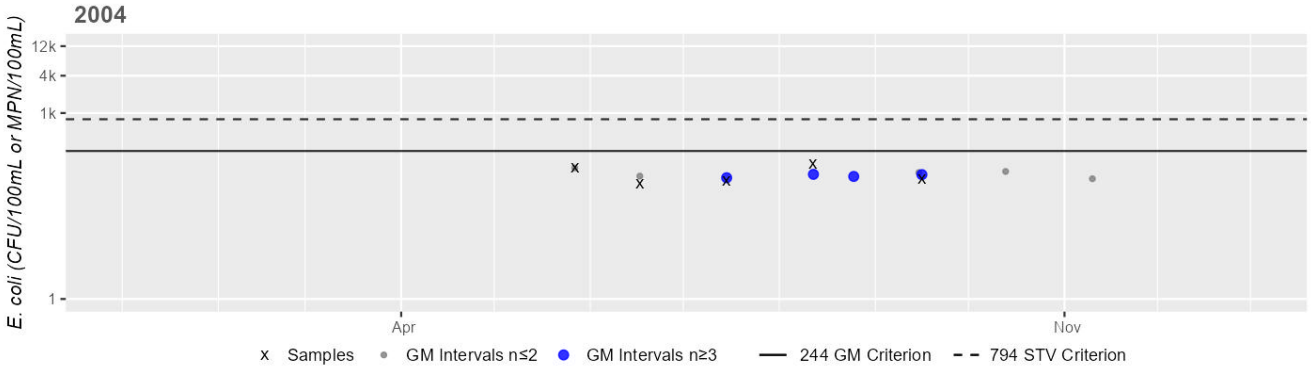
Current (2011-2022)

2%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Station MASSDEP_W1175 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



Variable*	Result
Samples	5
SeasGM	99
#GMI	4
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Historic (1997-2010)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Unnamed Tributary (MA42-22)

Location:	Unnamed tributary to South Fork, locally known as 'Potters Brook', from outlet of Granite Reservoir dam (NATID: MA00105), Charlton to mouth at confluence with South Fork, Charlton (includes former 2018/20 segment: Unnamed Tributary MA42-20).
AU Type:	RIVER
AU Size:	1.3 MILES
Classification/Qualifier:	B

Unnamed Tributary (MA42-22)

Watershed Area: 8.56 square miles

Land Cover Type	Entire Basin	Proximal Subbasin (5 km radius)	Stream Buffer (100 m)	Proximal Stream Buffer
Land Cover Area (square miles)	8.56	6.93	3.77	3.08
Agriculture	3.2%	3%	1.3%	0.8%
Developed	12.2%	11.5%	9.8%	9%
Natural	70.3%	70.6%	71.9%	72.8%
Wetland	14.3%	14.9%	17%	17.4%
Impervious	4.3%	4%	3.6%	3.3%

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
5	5	Benthic Macroinvertebrates	--	Unchanged
5	5	Dissolved Oxygen	--	Unchanged
5	5	Lack of a Coldwater Assemblage	--	Unchanged
5	5	Temperature	--	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
Benthic Macroinvertebrates	Source Unknown (N)	X	--	--	--	--

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
Dissolved Oxygen	Source Unknown (N)	X	--	--	--	--
Lack of a Coldwater Assemblage	Dam or Impoundment (Y)	X	--	--	--	--
Temperature	Dam or Impoundment (Y)	X	--	--	--	--

Designated Use Attainment Decisions

Fish Consumption

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
The Fish Consumption Use for Unnamed Tributary (MA42-22) was Not Assessed because fish toxics sampling was not conducted.

Aesthetic

2024/26 Use Attainment	Alert
Fully Supporting	NO

2024/26 Use Attainment Summary
The Aesthetics Use for this Unnamed Tributary (locally known as Potters Brook) (MA42-22) is assessed as Fully Supporting. Aesthetic observations were made by MassDEP field sampling crews at the upstream end of this Unnamed Tributary AU downstream from the outlet of Granite Reservoir, Charlton (W2187) during the summer of 2011 (n=6). There were generally no noted objectionable conditions (odors, deposits, growths, or turbidity) recorded.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
W2187	MassDEP	Water Quality	Unnamed Tributary	[unnamed tributary eventually to South Fork, approximately 140 feet downstream from outlet of Granite Reservoir, Charlton]	42.104548	-71.928798

Aesthetic Observations

Aesthetics Summary Statements for MassDEP Stations (2011-2020) (MassDEP Undated 4)

[Note: scums of natural origins (e.g. pollen blankets or natural foams) are excluded.]

Station Code	Data Year	Field Sheet Count	Aesthetics Summary Statement
W2187	2011	6	Aesthetic observations were made by MassDEP field sampling crews at Station W2187 on Unnamed Tributary (MA42-22) during 6 site visits between May 2011 and Oct 2011. There were generally no persistent objectionable conditions (odors, deposits, growths, or turbidity) recorded.

Observations of Filamentous/Film Algae at MassDEP Stations (2011-2020) (MassDEP Undated 6) (MassDEP Undated 4)

Station Code	Data Year	Field Sheet Count	Field Sheet Count w/ Film & Filamentous Algae Observations	Dense/ Very Dense Film/ Filamentous Algae
W2187	2011	6	5	0

MassDEP Aesthetics Observations (2011-2020) (MassDEP Undated 6)

Station Code	Waterbody	Data Year	Parameter	Result	Result Count	Total Field Sheet Count
W2187	Unnamed Tributary	2011	Aquatic Plant Density, Overall	None	5	6
W2187	Unnamed Tributary	2011	Aquatic Plant Density, Overall	Unobservable	1	6
W2187	Unnamed Tributary	2011	Color	Light Yellow/Tan	2	6
W2187	Unnamed Tributary	2011	Color	NR	4	6
W2187	Unnamed Tributary	2011	Objectionable Deposits	No	5	6
W2187	Unnamed Tributary	2011	Objectionable Deposits	Unobservable	1	6
W2187	Unnamed Tributary	2011	Odor	Fishy	1	6
W2187	Unnamed Tributary	2011	Odor	None	5	6
W2187	Unnamed Tributary	2011	Periphyton Density, Filamentous	None	4	6
W2187	Unnamed Tributary	2011	Periphyton Density, Filamentous	Sparse	1	6
W2187	Unnamed Tributary	2011	Periphyton Density, Filamentous	Unobservable	1	6
W2187	Unnamed Tributary	2011	Periphyton Density, Film	None	4	6

Station Code	Waterbody	Data Year	Parameter	Result	Result Count	Total Field Sheet Count
W2187	Unnamed Tributary	2011	Periphyton Density, Film	Sparse	1	6
W2187	Unnamed Tributary	2011	Periphyton Density, Film	Unobservable	1	6
W2187	Unnamed Tributary	2011	Scum	No	3	6
W2187	Unnamed Tributary	2011	Scum	Yes	3	6
W2187	Unnamed Tributary	2011	Turbidity	None	4	6
W2187	Unnamed Tributary	2011	Turbidity	NR	1	6
W2187	Unnamed Tributary	2011	Turbidity	Slightly Turbid	1	6

Primary Contact Recreation

2024/26 Use Attainment	Alert
Fully Supporting	NO

2024/26 Use Attainment Summary

The Primary Contact Recreation Use for Unnamed Tributary (locally known as Potters Brook) (MA42-22) continues to be assessed as Fully Supporting based on bacteria data collected in 2011 at 1 station. MassDEP staff collected *E. coli* bacteria samples at the upstream end of this Unnamed Tributary AU at W2187 [~140 ft downstream from outlet of Granite Reservoir, Charlton] from May-Oct 2011 (n=6). Analysis of this single year limited frequency *E. coli* dataset indicated 0% of intervals had GMs >126 CFU/100ml, no samples exceeded the 410 CFU/100ml STV, and the seasonal GM was 8 CFU/100ml. *E. coli* data from W2187 were indicative of good water quality conditions.

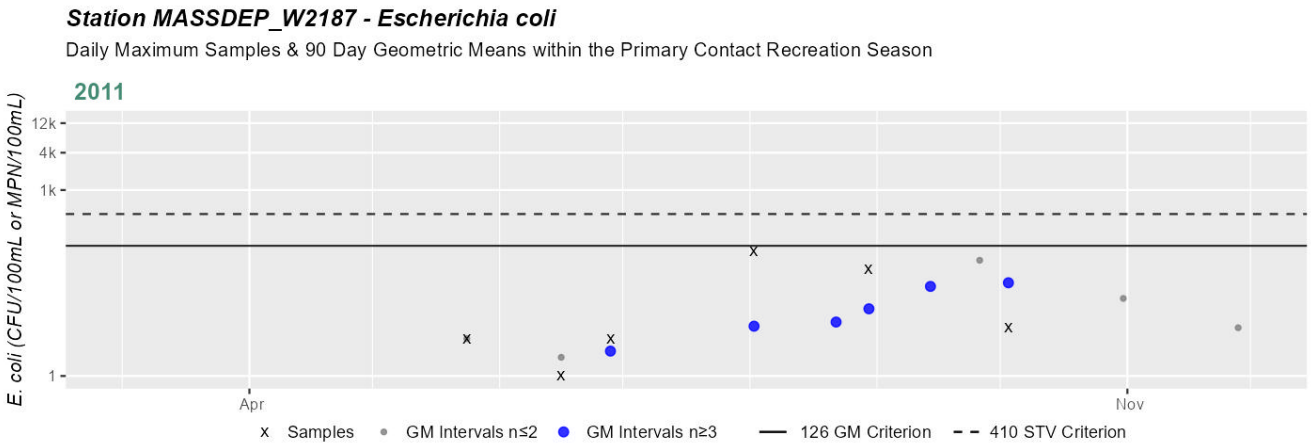
Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
W2187	MassDEP	Water Quality	Unnamed Tributary	[unnamed tributary eventually to South Fork, approximately 140 feet downstream from outlet of Granite Reservoir, Charlton]	42.104548	-71.928798

Bacteria Data

Bacteria Data Collected by MassDEP (2011-2020) and External Data Providers (2011-2022) (90-day Interval Analysis)
(MassDEP Undated 6) (MassDEP Undated 4)
[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
W2187	MassDEP	E. coli	05/24/11	10/03/11	6	1	102	8



Variable*	Result
Samples	6
SeasGM	8
#GMI	6
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Current (2011-2022)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Secondary Contact Recreation

2024/26 Use Attainment	Alert
Fully Supporting	NO

2024/26 Use Attainment Summary

The Secondary Contact Recreation Use for Unnamed Tributary (locally known as Potters Brook) (MA42-22) continues to be assessed as Fully Supporting based on a re-evaluation of bacteria data collected in 2004 & 2011 at 2 stations. MassDEP staff collected *E. coli* bacteria samples in both the historic (1997-2010) & the current IR window (2011-2022) in this Unnamed Tributary AU from 2004-2011 at 2 stations. Samples were collected from the following stations/sample years from upstream to downstream: at the upstream end of the AU at W2187 [~140 ft downstream from outlet of Granite Reservoir, Charlton] from May-Oct 2011 (n=6), and close to the downstream end of the AU at W1179 [at the Potter Village Rd crossing, Charlton] from May-Sep 2004 (n=5). Analysis of the single year limited frequency *E. coli* dataset from W2187 indicated 0% of intervals had GMs >244 CFU/100ml, no samples exceeded the 794 CFU/100ml STV, and the overall GM was 8 CFU/100ml. Overall, the *E. coli* data collected in both the historic & the current IR window for the Unnamed Tributary are all indicative of good water quality conditions.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
W1179	MassDEP	Water Quality	Unnamed Tributary	[unnamed tributary to South Fork at the Potter Village Road crossing, Charlton]	42.094555	-71.918077
W2187	MassDEP	Water Quality	Unnamed Tributary	[unnamed tributary eventually to South Fork, approximately 140 feet downstream from outlet of Granite Reservoir, Charlton]	42.104548	-71.928798

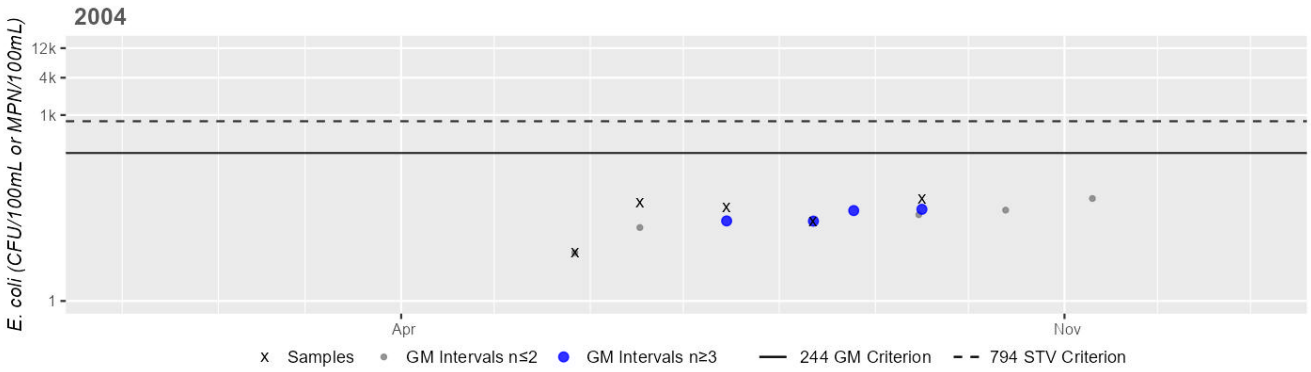
Bacteria Data

Bacteria Data Collected by MassDEP (1997-2020) and External Data Providers (1997-2022) (90-day Interval Analysis)
(MassDEP Undated 6) (MassDEP Undated 3)
[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
W1179	MassDEP	E. coli	05/26/04	09/15/04	5	6	45	22
W2187	MassDEP	E. coli	05/24/11	10/03/11	6	1	102	8

Station MASSDEP_W1179 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



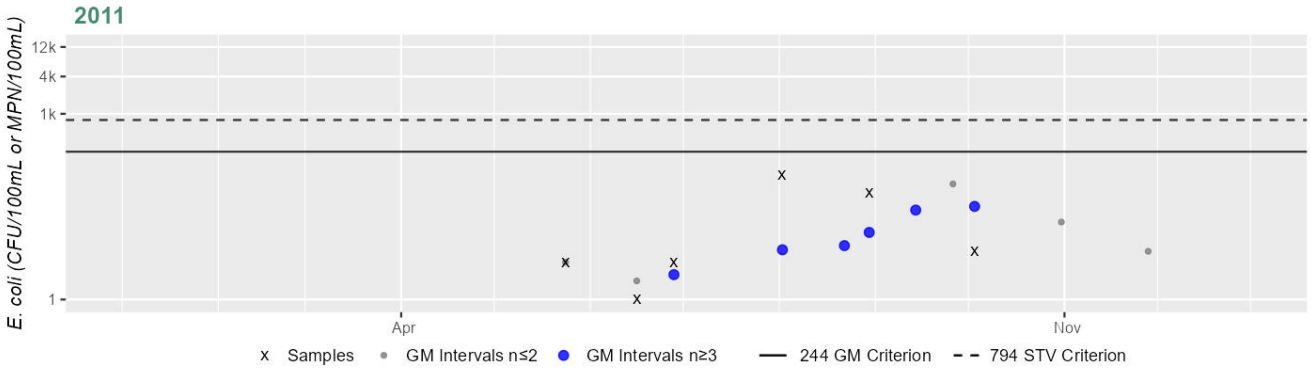
Variable*	Result
Samples	5
SeasGM	22
#GMI	4
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Historic (1997-2010)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Station MASSDEP_W2187 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



Variable*	Result
Samples	6
SeasGM	8
#GMI	6
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Current (2011-2022)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Wallis Pond (MA42062)

Location:	Dudley.
AU Type:	FRESHWATER LAKE
AU Size:	24 ACRES
Classification/Qualifier:	B

No usable data were available for Wallis Pond (MA42062) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
4a	4a	(Aquatic Plants (Macrophytes)*)	--	Unchanged
4a	4a	Dissolved Oxygen	2375	Unchanged
4a	4a	Nutrient/Eutrophication Biological Indicators	2375	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
(Aquatic Plants (Macrophytes)*)	Agriculture (Y)	X	--	X	X	X
(Aquatic Plants (Macrophytes)*)	Discharges from Municipal Separate Storm Sewer Systems (MS4) (Y)	X	--	X	X	X
(Aquatic Plants (Macrophytes)*)	Rural (Residential Areas) (Y)	X	--	X	X	X
Dissolved Oxygen	Agriculture (Y)	X	--	--	--	--
Dissolved Oxygen	Discharges from Municipal Separate Storm Sewer Systems (MS4) (Y)	X	--	--	--	--
Dissolved Oxygen	Rural (Residential Areas) (Y)	X	--	--	--	--
Nutrient/Eutrophication Biological Indicators	Agriculture (Y)	X	--	X	X	X

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
Nutrient/Eutrophication Biological Indicators	Discharges from Municipal Separate Storm Sewer Systems (MS4) (Y)	X	--	X	X	X
Nutrient/Eutrophication Biological Indicators	Rural (Residential Areas) (Y)	X	--	X	X	X

Watson Millpond (MA42063)

Location:	Spencer.
AU Type:	FRESHWATER LAKE
AU Size:	2 ACRES
Classification/Qualifier:	B

No usable data were available for Watson Millpond (MA42063) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
3	3	None	--	Unchanged

Webster Lake (MA42064)

Location:	Webster.
AU Type:	FRESHWATER LAKE
AU Size:	1275 ACRES
Classification/Qualifier:	B

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
5	5	(Asian Clam*)	--	Unchanged
5	5	(Eurasian Water Milfoil, Myriophyllum Spicatum*)	--	Unchanged
5	5	(Fanwort*)	--	Unchanged
5	5	(Non-Native Aquatic Plants*)	--	Unchanged
5	5	Dissolved Oxygen	--	Unchanged
5	5	PFAS in Fish Tissue	--	Added

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
(Asian Clam*)	Introduction of Non-native Organisms (Accidental or Intentional) (Y)	X	--	--	--	--
(Eurasian Water Milfoil, Myriophyllum Spicatum*)	Introduction of Non-native Organisms (Accidental or Intentional) (Y)	X	--	--	--	--
(Fanwort*)	Introduction of Non-native Organisms (Accidental or Intentional) (Y)	X	--	--	--	--
(Non-Native Aquatic Plants*)	Introduction of Non-native Organisms (Accidental or Intentional) (Y)	X	--	--	--	--
Dissolved Oxygen	Source Unknown (N)	X	--	--	--	--

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
PFAS in Fish Tissue	Source Unknown (N)	--	X	--	--	--

Recommendations

2024/26 Recommendations
2024/2026 IR [Harmful Algal Blooms, Low] Follow-up monitoring should be conducted in Webster Lake (MA42064) to confirm if Harmful Algal Blooms are impairing the Recreational and Aesthetics uses. An Alert was identified based on visual identification of blooms with a duration extending >14 days in 2022. Monitoring should include observational data and collection of cyanobacteria cell count data, as well as continued reporting of algal blooms to MDPH. This is of low priority;

Designated Use Attainment Decisions

Fish Consumption

2024/26 Use Attainment	Alert
Not Supporting	NO

2024/26 Use Attainment Summary
The Fish Consumption Use for Webster Lake (MA42064) is assessed as Not Supporting with a new impairment being added for PFAS in Fish Tissue. Fish toxics sampling was conducted in Webster Lake at station F0073 (PFAS Study ID 38) on 07/26/2022 as part of a MassDEP-funded project evaluating 40 PFAS analytes in selected fresh waters. MDPH issued a site-specific advisory for PFAS in Webster Lake (referred to by MDPH as ''Webster Lake (Chaubunagungamaug)'') in their May 2024 Freshwater Fish Consumption Advisory List and retained it in the January 2025 list. The public should refer to the most recent MDPH Freshwater Fish Consumption Advisory List for the most up to date meal advice for sensitive and general populations. No source of PFAS has been identified at this time.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
F0073	MassDEP	Fish Toxics	Webster Lake	[Webster (impounded by Webster Lake Dam, NAT ID: MA02924)]	42.040126	-71.845984

Fish Tissue Data

Summary of Fish Tissue Data and Resulting Fish Consumption Advisories (MA DPH 2025) **(**MassDEP 2023) (MassDEP Undated 5)

Summary
Fish toxics sampling was conducted in Webster Lake (MA42064) at station F0073 (PFAS Study ID 38) on 07/26/2022 as part of a MassDEP-funded project evaluating 40 PFAS analytes in selected fresh waters. Because of elevated PFAS measured in fish filets, MA DPH issued site specific fish consumption advisories for Webster Lake (referred to by MA DPH as ''Webster Lake (Chaubunagungamaug)'') in their May 2024 Freshwater Fish Consumption Advisory List and retained them in the January 2025 list. The site specific DPH advisories are indicative of a Fish Consumption Use impairment for PFAS in Fish Tissue for Webster Lake (MA42064).

MassDEP 2022 PFAS in Fish Tissue Data for Massachusetts Surface Waters (MassDEP 2023) (MassDEP Undated 5) (MA DPH 2023)

[ng/g = ppb. All PFBA, PFBS, and HFPO-DA (Genx) concentrations <MDL. ND indicates that the PFAS analyte was not detected in any of the composite samples (i.e., it was <MDL). Means weighted by the number of fish in the contributing composites were calculated for any PFAS analyte – waterbody – species combination where an analyte was detected in at least one sample; if a sample did not have the analyte detected, the concentration for that sample was set to ½*MDL for the purposes of calculating a mean. Data are highlighted red per the fish consumption advisory thresholds summarized in Table 4.2 of MA DPH's 2023 Technical Support Document for the evaluation of PFAS in recreational waterbodies.]

[Species List: BB = brown bullhead, LMB = largemouth bass, P = pumpkinseed]

Station Code	PFAS Study ID	Sample Date	Species	Mean PFHxS ng/g	Mean PFNA ng/g	Mean PFOA ng/g	Mean PFOS ng/g	Analytes with ≥ 1 Sample Qualified
F0073	38	07/26/2022	BB	ND	ND	ND	0.88	
F0073	38	07/26/2022	LMB	ND	ND	ND	6.60	
F0073	38	07/26/2022	P	ND	0.13	0.18	4.71	PFNA & PFOA

Aesthetic

2024/26 Use Attainment	Alert
Fully Supporting	YES

2024/26 Use Attainment Summary

The Aesthetics Use for Webster Lake (MA42064) is assessed as Fully Supporting based on the observations from the 2016 MAP2 macrophyte mapping survey. An Alert is being identified for Harmful Algal Blooms in this waterbody since C-HAB postings (blooms of >15 days in duration) were reported to MDPH for 2022. Aesthetic observations were made by MassDEP field sampling crews as part of the MAP2 lake monitoring project during the summer of 2016 at two stations in Webster for this Webster Lake AU: at the deep hole index site W1295/MAP2L-029 (n=3) and at Memorial Beach Park, northwestern portion of lake (locally 'North Pond'), east of Memorial Beach Drive W2465/MAP2L-029S (n=4). There were generally no persistent objectionable conditions (odors, deposits, growths, or turbidity) recorded at either station. During the MAP2 littoral survey (n=1), duckweed was not noted in any of the 10 shoreline plots and during the MAP2 macrophyte mapping survey in August (n=1), less than 25% (8.3%) of the waterbody was determined to have an aquatic macrophyte biovolume >50%. During the period 2015 through 2022, C-HAB postings for Webster Lake were reported to MDPH based on visual observations for 20 days in 2022, although no blooms were reported in other years. Since no extended blooms (>20 days in duration) based on cell count data were reported in recent years, an impairment decision will not be made at this time based on C-HAB postings, but an Alert is being identified for Harmful Algal Blooms and a recommendation for follow-up sampling will be made.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
W1295	MassDEP	Water Quality	Webster Lake	[deep hole, Webster]	42.053639	-71.848078
W2465	MassDEP	Water Quality	Webster Lake	[Memorial Beach Park, northwestern portion of lake (locally 'North Pond'), east of Memorial Beach Drive, Webster]	42.053556	-71.855654

Aesthetic Observations

Aesthetics Summary Statements for MassDEP Stations (2011-2020) (MassDEP Undated 4)
[Note: scums of natural origins (e.g. pollen blankets or natural foams) are excluded.]

Station Code	Data Year	Field Sheet Count	Aesthetics Summary Statement
W1295	2016	3	Aesthetic observations were made by MassDEP field sampling crews at Station W1295 (MAP2L-029) on Webster Lake (MA42064) during 3 site visits between Jul 2016 and Sep 2016. There were generally no persistent objectionable conditions (odors, deposits, growths, or turbidity) recorded. During the MAP2 macrophyte mapping survey (n=1) in Aug 2016, less than 25% (8.3%) of the waterbody was determined to have an aquatic macrophyte biovolume >50%.

Station Code	Data Year	Field Sheet Count	Aesthetics Summary Statement
W2465	2016	4	Aesthetic observations were made by MassDEP field sampling crews at Station W2465 (MAP2L-029S) on Webster Lake (MA42064) during 4 site visits between May 2016 and Sep 2016. There were generally no persistent objectionable conditions (odors, deposits, growths, or turbidity) recorded. During the MAP2 littoral survey (n=1), duckweed was not noted in any of the 10 shoreline plots.

MassDEP Aesthetics Observations (2011-2020) (MassDEP Undated 6)

Station Code	Waterbody	Data Year	Parameter	Result	Result Count	Total Field Sheet Count
W1295	Webster Lake	2016	Aesthetics Impaired?	No	3	3
W1295	Webster Lake	2016	Aquatic Plant Density, Overall	None	3	3
W1295	Webster Lake	2016	Color	Light Yellow/Tan	1	3
W1295	Webster Lake	2016	Color	None	2	3
W1295	Webster Lake	2016	Objectionable Deposits	No	3	3
W1295	Webster Lake	2016	Odor	None	3	3
W1295	Webster Lake	2016	Scum	No	3	3
W1295	Webster Lake	2016	Turbidity	None	1	3
W1295	Webster Lake	2016	Turbidity	Slightly Turbid	2	3
W2465	Webster Lake	2016	Aesthetics Impaired?	No	4	4
W2465	Webster Lake	2016	Color	Light Yellow/Tan	1	4
W2465	Webster Lake	2016	Color	None	3	4
W2465	Webster Lake	2016	Objectionable Deposits	No	3	4
W2465	Webster Lake	2016	Objectionable Deposits	Yes	1	4
W2465	Webster Lake	2016	Odor	None	4	4
W2465	Webster Lake	2016	Scum	No	4	4
W2465	Webster Lake	2016	Turbidity	None	3	4
W2465	Webster Lake	2016	Turbidity	NR	1	4

Algal Bloom Information

Cyanobacteria Harmful Algal Bloom (C-HAB) Summary Statements for 2015-2022 MDPH Data (Bailey, Logan April 26, 2023) (MassDEP Undated 1)

C-HAB Summary Statement
During the period 2015 through 2022, C-HAB postings for Webster Lake (MA42064) were reported to MDPH based on visual observations for 20 days in 2022. No blooms were reported in other years. Since no extended blooms (>20 days in duration) based on cell count data were reported in recent years, an impairment decision will not be made at this time based on C-HAB postings. However, an Alert is being identified for C-HABs in this waterbody and a recommendation for follow-up sampling will be made.

Cyanobacteria Harmful Algal Bloom (C-HAB) Data (2015-2022) Provided by MDPH (Bailey, Logan April 26, 2023) (MassDEP Undated 1)

Waterbody	Town	Posting Days 2015	Posting Days 2016	Posting Days 2017	Posting Days 2018	Posting Days 2019	Posting Days 2020	Posting Days 2021	Posting Days 2022
Webster Lake	Webster								20

Primary Contact Recreation

2024/26 Use Attainment	Alert
Fully Supporting	YES

2024/26 Use Attainment Summary

The Primary Contact Recreation Use for Webster Lake (MA42064) is assessed as Fully Supporting based on bacteria data collected at 1 station in 2016. An Alert is being identified for Harmful Algal Blooms in this waterbody since C-HAB postings (blooms of >15 days in duration) were reported to MDPH for 2022. MassDEP staff collected *E. coli* bacteria samples in this Webster Lake AU at W2465/MAP2L-029S [Memorial Beach Park, northwestern portion of lake (locally 'N Pond'), E of Memorial Beach Drive, Webster] from May-Sep 2016 (n=4). Analysis of this single year limited frequency *E. coli* dataset indicated 0% of intervals had GMs >126 CFU/100ml, no samples exceeded the 410 CFU/100ml STV, and the seasonal GM was 11 CFU/100ml. *E. coli* data from W2465 were indicative of good water quality conditions. Surface water sampling was also conducted in this Webster Lake AU at two stations on 07/26/2022 as part of a 2022 MassDEP funded project with ERG evaluating 40 PFAS analytes in selected fresh waters: Station W2465 (PFAS Study ID 38B), Memorial Beach Park and Station W3303 (PFAS Study ID 38). The concentrations of the seven analytes with individual toxicity criteria (PFOA, PFOS, PFNA, PFHxS, PFBA, PFBS, HFPO-DA/GenX) were all less than the 90 ng/L (ppt) recreational screening value at both stations. During the period 2015 through 2022, C-HAB postings for Webster Lake were reported to MDPH based on visual observations for 20 days in 2022, although no blooms were reported in other years. Since no extended blooms (>20 days in duration) based on cell count data were reported in recent years, an impairment decision will not be made at this time based on C-HAB postings, but an Alert is being identified for Harmful Algal Blooms and a recommendation for follow-up sampling will be made. MassDEP also collected Secchi and cyanobacteria cell count data in 2016 at W1295/MAP2L-029 [Index-deep hole] and cyanobacteria cell count and cyanotoxins data at the shoreline station W2465. Secchi depth data at station W1295 (station depth=13.5 m) indicated water clarity meeting the 1.2m (4ft) threshold (n=3, 3.2-5.5 m). The cyanobacteria cell count did not exceed 70,000 cells/ml in any of the water samples (n=6). Analysis of microcystins samples from W2465 (n=3) indicated that the concentrations did not exceed the threshold of 8 µg/L.

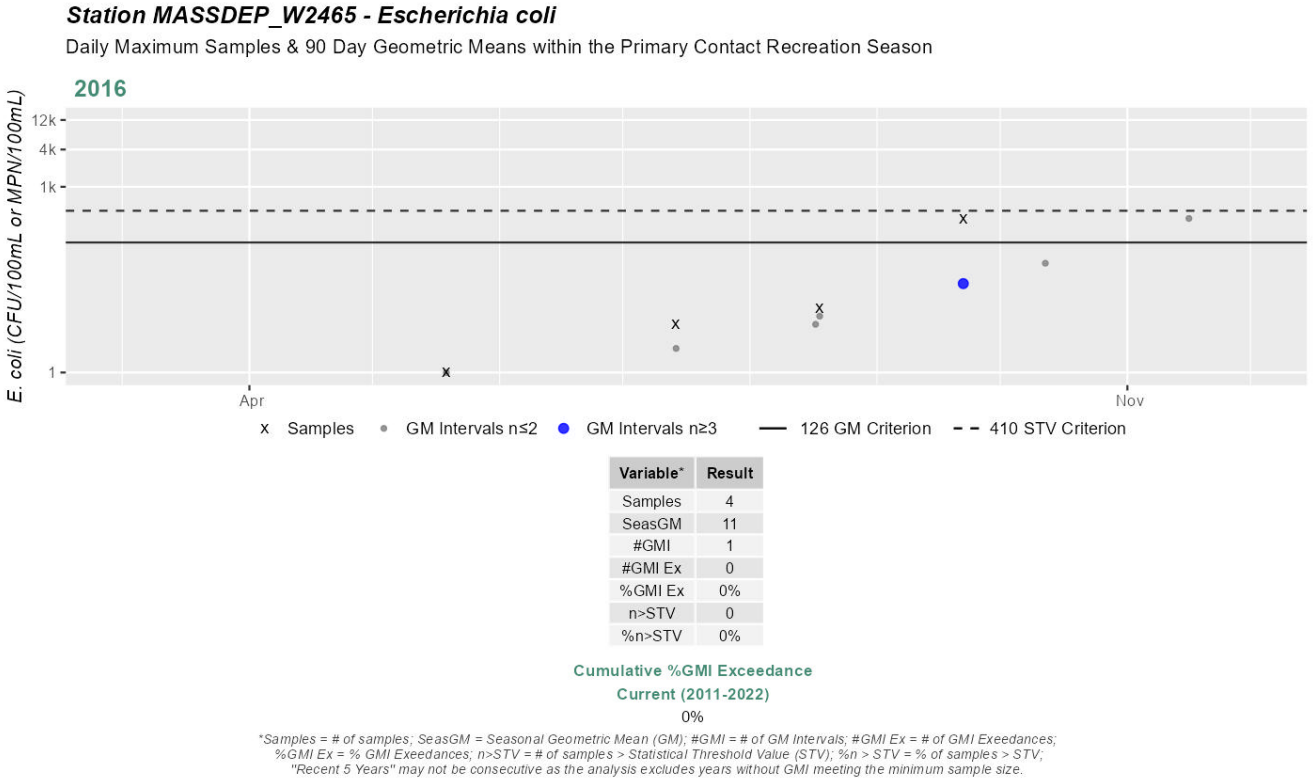
Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
W1295	MassDEP	Water Quality	Webster Lake	[deep hole, Webster]	42.053639	-71.848078
W2465	MassDEP	Water Quality	Webster Lake	[Memorial Beach Park, northwestern portion of lake (locally 'North Pond'), east of Memorial Beach Drive, Webster]	42.053556	-71.855654
W3303	MassDEP	Water Quality	Webster Lake	[the default location representing co-located water/fish PFAS sampling, Webster]	42.040126	-71.845984

Bacteria Data

Bacteria Data Collected by MassDEP (2011-2020) and External Data Providers (2011-2022) (90-day Interval Analysis)
(MassDEP Undated 6) (MassDEP Undated 4)
[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
W2465	MassDEP	E. coli	05/18/16	09/21/16	4	1	308	11



Variable*	Result
Samples	4
SeasGM	11
#GMI	1
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Current (2011-2022)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Other Indicators

Summary Statement(s) for MassDEP 2022 PFAS in Water Column Data (MassDEP 2023) (MassDEP Undated 4)

Summary
Surface water sampling was conducted in Webster Lake (MA42064) at station W2465 (PFAS Study ID 38B), Memorial Beach Park, on 07/26/2022 as part of a 2022 MassDEP funded project with ERG evaluating 40 PFAS analytes in selected fresh waters. The concentrations of the seven analytes with individual toxicity criteria (PFOA, PFOS, PFNA, PFHxS, PFBA, PFBS, HFPO-DA/GenX) were all less than the 90 ng/L (ppt) recreational screening value.
Surface water sampling was conducted in Webster Lake (MA42064) at station W3303 (PFAS Study ID 38) on 07/26/2022 as part of a 2022 MassDEP funded project with ERG evaluating 40 PFAS analytes in selected fresh waters. The concentrations of the seven analytes with individual toxicity criteria (PFOA, PFOS, PFNA, PFHxS, PFBA, PFBS, HFPO-DA/GenX) were all less than the 90 ng/L (ppt) recreational screening value.

MassDEP 2022 PFAS in Water Column Data for Massachusetts Surface Waters (MassDEP 2023) (MassDEP Undated 4)

[HFPO-DA is also known as GenX; the ∑PFAS6 equals the sum of PFOA, PFOS, PFNA, PFHxS, PFDA, PFHpA (not all shown individually here); * indicates the ∑PFAS6 concentration was qualified since data for one or more individual PFAS6 analytes were qualified; b = blank contamination qualifier, d = qualifier indicating precision of field duplicates did not meet project data quality objectives; j = 'estimated' value qualifier; ## = censored data.]

Station Code	PFAS Study ID	Sample Date	PFOA ng/L	PFOS ng/L	PFNA ng/L	PFHxS ng/L	PFBA ng/L	PFBS ng/L	HFPO-DA ng/L	∑PFAS6 ng/L
W2465	38B	07/26/2022	3.4	<0.51	0.51j	0.75j	<2	1.8j	<2	7.4*
W3303	38	07/26/2022	4	2.5j	0.65j	0.72j	<2.1	1.6j	<2.1	10.0*

Summary Statement for 2011-2022 Cyanobacteria Cell Count and Cyanotoxin Data, and Secchi Depth Data (MassDEP Undated 6) (MassDEP Undated 4)

Data Year	Summary
2016	In Webster Lake (MA42064) in 2016, MassDEP collected Secchi and cyanobacteria cell count data at W1295 [MAP2L-029, Index-deep hole], and cyanobacteria cell count and cyanotoxin data at W2465 [MAP2L-029S, Shoreline]. At station W1295 (station depth=13.5 m) the Secchi depth measurements ranged from 3.2-5.5 m (n=3) indicating water clarity meeting the 1.2 m (4 ft) threshold. The cyanobacteria cell count did not exceed 70,000 cells/mL in any of the water samples (n=6). Analysis of microcystins samples from W2465 (n=3) indicated that the concentrations did not exceed the threshold of 8 µg/L.

MassDEP Cyanobacteria Cell Count Data Collected at Lakes and Impoundments (2016-2018) (MassDEP Undated 6) (MassDEP Undated 4)

Station Code	Waterbody	Station Type	Data Year	Sample Count	Count >70,000 cells/mL	Exceedance Date(s)
W1295	Webster Lake	Index	2016	3	0	NA
W2465	Webster Lake	Shoreline	2016	3	0	NA

Secondary Contact Recreation

2024/26 Use Attainment	Alert
Fully Supporting	YES

2024/26 Use Attainment Summary

The Secondary Contact Recreation Use for Webster Lake (MA42064) is assessed as Fully Supporting based on a re-evaluation of bacteria data collected at 1 station in 2016. An Alert is being identified for Harmful Algal Blooms in this waterbody since C-HAB postings (blooms of >15 days in duration) were reported to MDPH for 2022. MassDEP staff collected *E. coli* bacteria samples in this Webster Lake AU at W2465/MAP2L-029S [Memorial Beach Park, northwestern portion of lake (locally 'N Pond'), E of Memorial Beach Drive, Webster] from May-Sep 2016 (n=4). Analysis of this single year limited frequency *E. coli* dataset indicated 0% of intervals had GMs >244 CFU/100ml, no samples exceeded the 794 CFU/100ml STV, and the overall GM was 11 CFU/100ml. *E. coli* data from W2465 were indicative of good water quality conditions. During the period 2015 through 2022, C-HAB postings for Webster Lake were reported to MDPH based on visual observations for 20 days in 2022, although no blooms were reported in other years. Since no extended blooms (>20 days in duration) based on cell count data were reported in recent years, an impairment decision will not be made at this time based on C-HAB postings, but an Alert is being identified for Harmful Algal Blooms and a recommendation for follow-up sampling will be made. MassDEP also collected cyanobacteria cell count data in 2016 at W1295/MAP2L-029 [Index-deep hole] and cyanobacteria cell count and cyanotoxins data in 2016 at W2465. The cyanobacteria cell count did not exceed 70,000 cells/ml in any of the water samples (n=6). Analysis of microcystins samples from W2465 (n=3) indicated that the concentrations did not exceed the threshold of 8 µg/L.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
W2465	MassDEP	Water Quality	Webster Lake	[Memorial Beach Park, northwestern portion of lake (locally 'North Pond'), east of Memorial Beach Drive, Webster]	42.053556	-71.855654

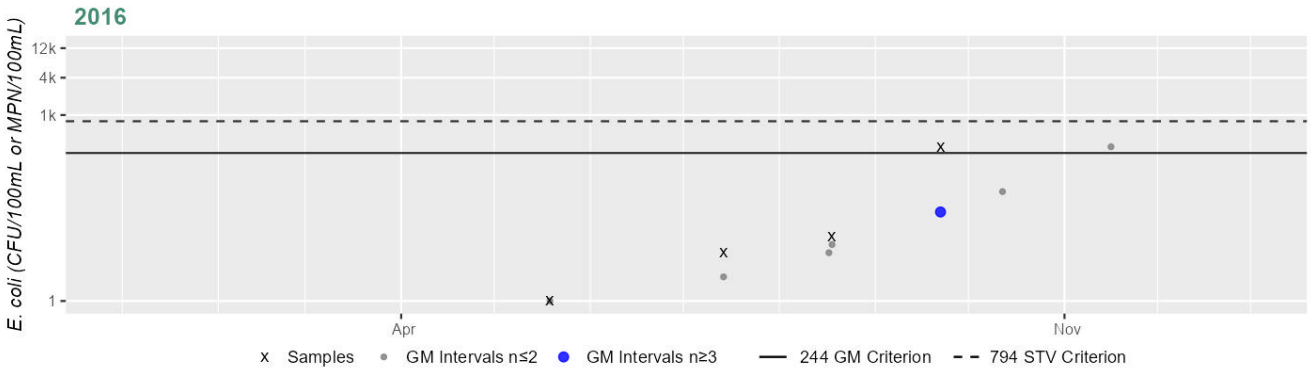
Bacteria Data

Bacteria Data Collected by MassDEP (1997-2020) and External Data Providers (1997-2022) (90-day Interval Analysis)
(MassDEP Undated 6) (MassDEP Undated 3)
[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
W2465	MassDEP	E. coli	05/18/16	09/21/16	4	1	308	11

Station MASSDEP_W2465 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



Variable*	Result
Samples	4
SeasGM	11
#GMI	1
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Current (2011-2022)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Wee Laddie Pond (MA42065)

Location:	Charlton.
AU Type:	FRESHWATER LAKE
AU Size:	6 ACRES
Classification/Qualifier:	B

No usable data were available for Wee Laddie Pond (MA42065) for the 2024/26 Integrated Reporting cycle, therefore its category, use attainments, impairments, associated actions, and sources remain unchanged from the previous cycle.

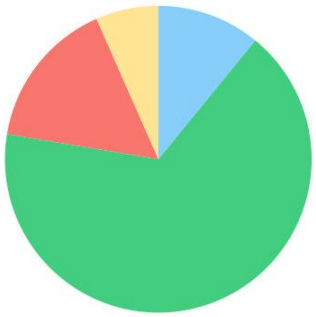
AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
3	3	None	--	Unchanged

Wellington Brook (MA42-11)

Location:	Headwaters south of Cedar Street, Auburn to mouth at confluence with French River, Oxford.
AU Type:	RIVER
AU Size:	3.4 MILES
Classification/Qualifier:	B

Wellington Brook (MA42-11)

Watershed Area: 3.60 square miles



Land Cover Type	Entire Basin	Proximal Subbasin (5 km radius)	Stream Buffer (100 m)	Proximal Stream Buffer
Land Cover Area (square miles)	3.60	3.60	1.28	1.28
Agriculture	6.6%	6.6%	1.4%	1.4%
Developed	15.8%	15.8%	12.2%	12.2%
Natural	66.7%	66.7%	63.7%	63.7%
Wetland	10.9%	10.9%	22.6%	22.6%
Impervious	5.4%	5.4%	4.2%	4.2%

AU Category 2022	AU Category 2024/26	Impairment	ATTAINS Action ID	Impairment Change Summary
5	5	Escherichia Coli (E. Coli)	R1_MA_2024_04	Changed
5	5	Lack of a Coldwater Assemblage	--	Unchanged
5	5	Temperature	--	Unchanged

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
Escherichia Coli (E. Coli)	Source Unknown (N)	--	--	--	X	--
Lack of a Coldwater Assemblage	Baseflow Depletion from Groundwater Withdrawals (N)	X	--	--	--	--

Impairment	Source (Confirmed Y/N)	ALU	FC	AES	PCR	SCR
Lack of a Coldwater Assemblage	Dam or Impoundment (Y)	X	--	--	--	--
Temperature	Baseflow Depletion from Groundwater Withdrawals (N)	X	--	--	--	--
Temperature	Dam or Impoundment (Y)	X	--	--	--	--

Supporting Information for Removed Impairments

2022 Removed Impairment	Removal Reason	Removal Comment
Escherichia Coli (E. Coli)	TMDL approved or established by EPA (4a)	Impairment covered under TMDL: Massachusetts Statewide TMDL for Pathogen-Impaired Waterbodies (Report CN 515.1, approved 2/13/2024, ATTAINS Action ID: R1_MA_2024_04)

Designated Use Attainment Decisions

Fish Consumption

2024/26 Use Attainment	Alert
Not Assessed	NO

2024/26 Use Attainment Summary
The Fish Consumption Use for Wellington Brook (MA42-11) was Not Assessed because fish toxics sampling was not conducted.

Aesthetic

2024/26 Use Attainment	Alert
Fully Supporting	NO

2024/26 Use Attainment Summary

The Aesthetics Use for Wellington Brook (MA42-11) is assessed as Fully Supporting based on the general lack of objectionable conditions in the brook during the summer of 2011. Aesthetic observations were made by MassDEP field sampling crews three quarters of the way down this Wellington Brook AU ~1275 feet upstream of Main St. (Rt. 12), Oxford (W2213) during the summer of 2011 (n=6). There were generally no noted objectionable conditions (odors, deposits, growths, or turbidity) recorded.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
W2213	MassDEP	Water Quality	Wellington Brook	[approximately 1275 feet upstream of Main Street (Route 12), Oxford]	42.142714	-71.861845

Aesthetic Observations

Aesthetics Summary Statements for MassDEP Stations (2011-2020) (MassDEP Undated 4)
[Note: scums of natural origins (e.g. pollen blankets or natural foams) are excluded.]

Station Code	Data Year	Field Sheet Count	Aesthetics Summary Statement
W2213	2011	6	Aesthetic observations were made by MassDEP field sampling crews at Station W2213 on Wellington Brook (MA42-11) during 6 site visits between May 2011 and Oct 2011. There were generally no persistent objectionable conditions (odors, deposits, growths, or turbidity) recorded.

Observations of Filamentous/Film Algae at MassDEP Stations (2011-2020) (MassDEP Undated 6) (MassDEP Undated 4)

Station Code	Data Year	Field Sheet Count	Field Sheet Count w/ Film & Filamentous Algae Observations	Dense/ Very Dense Film/ Filamentous Algae
W2213	2011	6	6	2

MassDEP Aesthetics Observations (2011-2020) (MassDEP Undated 6)

Station Code	Waterbody	Data Year	Parameter	Result	Result Count	Total Field Sheet Count
W2213	Wellington Brook	2011	Aquatic Plant Density, Overall	Sparse	6	6
W2213	Wellington Brook	2011	Color	Light Yellow/Tan	3	6
W2213	Wellington Brook	2011	Color	None	2	6
W2213	Wellington Brook	2011	Color	NR	1	6
W2213	Wellington Brook	2011	Objectionable Deposits	No	6	6
W2213	Wellington Brook	2011	Odor	None	5	6
W2213	Wellington Brook	2011	Odor	NR	1	6

Station Code	Waterbody	Data Year	Parameter	Result	Result Count	Total Field Sheet Count
W2213	Wellington Brook	2011	Periphyton Density, Filamentous	None	6	6
W2213	Wellington Brook	2011	Periphyton Density, Film	Dense	2	6
W2213	Wellington Brook	2011	Periphyton Density, Film	Moderate	1	6
W2213	Wellington Brook	2011	Periphyton Density, Film	None	1	6
W2213	Wellington Brook	2011	Periphyton Density, Film	Sparse	2	6
W2213	Wellington Brook	2011	Scum	No	4	6
W2213	Wellington Brook	2011	Scum	Yes	2	6
W2213	Wellington Brook	2011	Turbidity	None	6	6

Primary Contact Recreation

2024/26 Use Attainment	Alert
Not Supporting	NO

2024/26 Use Attainment Summary

The Primary Contact Recreation Use for Wellington Brook (MA42-11) continues to be assessed as Not Supporting. The prior Escherichia Coli (E. Coli) impairment is being carried forward. MassDEP staff collected *E. coli* bacteria samples three-quarters of the way down this Wellington Brook AU at W2213 [~1275 ft upstream of Main St (Rt. 12), Oxford] from May-Oct 2011 (n=6). Analysis of this single year limited frequency *E. coli* dataset indicated 67% of intervals had GMs >126 CFU/100ml and the seasonal GM was 151 CFU/100ml though only 1 sample exceeded the 410 CFU/100ml STV (866 CFU). While overall this data does not exceed 2024 CALM guidance thresholds for single year limited frequency *E. coli* dataset, the elevated *E. coli* concentrations (especially the sample exceeding the 410 CFU STV threshold) are reflective of the prior impairment.

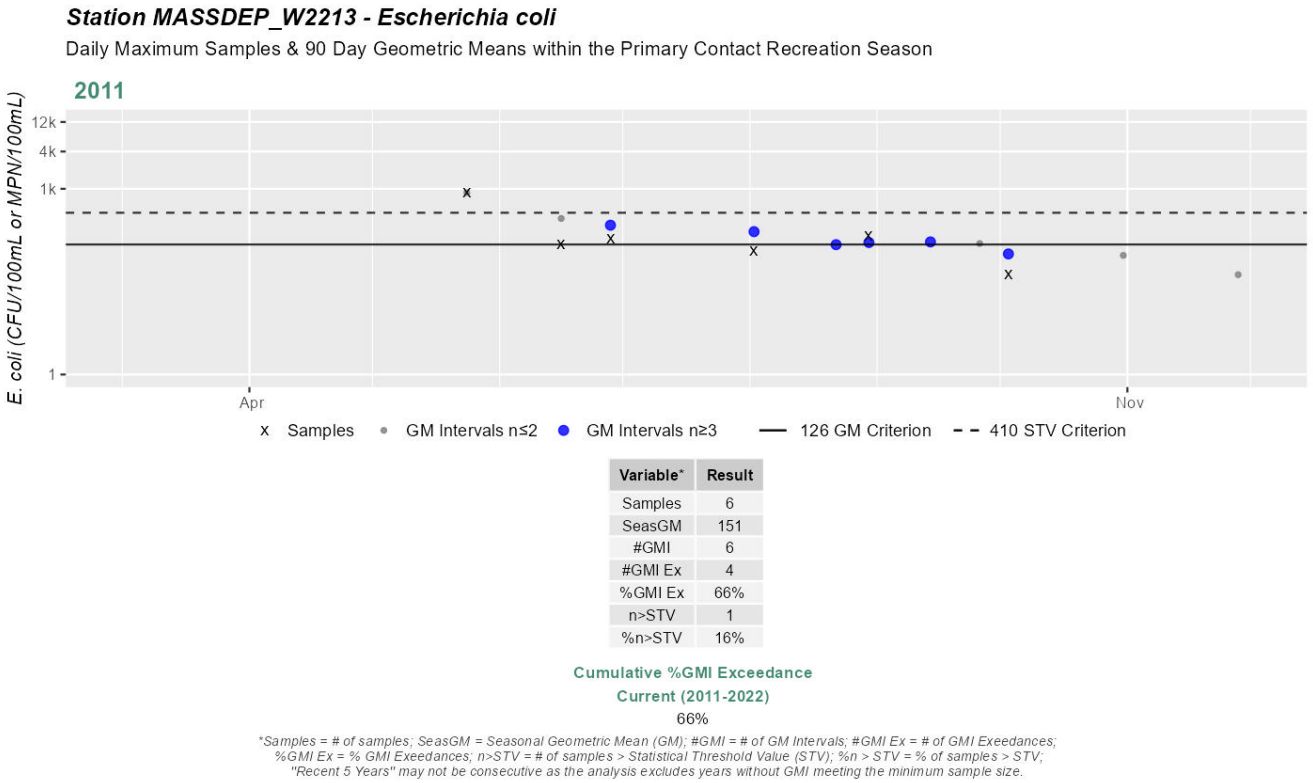
Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
W2213	MassDEP	Water Quality	Wellington Brook	[approximately 1275 feet upstream of Main Street (Route 12), Oxford]	42.142714	-71.861845

Bacteria Data

Bacteria Data Collected by MassDEP (2011-2020) and External Data Providers (2011-2022) (90-day Interval Analysis)
(MassDEP Undated 6) (MassDEP Undated 4)
[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
W2213	MassDEP	E. coli	05/24/11	10/03/11	6	41	866	151



Variable*	Result
Samples	6
SeasGM	151
#GMI	6
#GMI Ex	4
%GMI Ex	66%
n>STV	1
%n>STV	16%

Cumulative %GMI Exceedance
Current (2011-2022)
66%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Secondary Contact Recreation

2024/26 Use Attainment	Alert
Insufficient Information	NO

2024/26 Use Attainment Summary

Too limited bacteria data are available to assess the Secondary Contact Recreation Use for Wellington Brook (MA42-11) and available aesthetics observations for this AU did not result in any impairment, so it is assessed as having Insufficient Information. MassDEP staff collected *E. coli* bacteria samples in both the historic (1997-2010) & the current IR window (2011-2022) in this Wellington Brook AU from 2004-2011 at two stations. Samples were collected from the following stations/sample years from upstream to downstream: halfway down the AU at W1166 [W of Millbury Rd, ~600 ft downstream of Chimney Pond outlet, Oxford] from May-Sep 2004 (n=5), and three-quarters of the way down the AU at W2213 [~1275 ft upstream of Main St (Rt. 12), Oxford] from May-Oct 2011 (n=6). Since bacteria data from the historic IR window are indicative of good water quality conditions, only the analysis from the current IR window will be summarized here. Analysis of the single year limited frequency *E. coli* dataset from W2213 indicated 16% of intervals had GMs >244 CFU/100ml, 1 sample exceeded the 794 CFU/100ml STV (866 CFU), and the overall GM was 151 CFU/100ml. Since *E. coli* data from W2213 are single year, limited frequency and analysis of the data resulted in a GM below the threshold but also an exceedance of the STV threshold, the data are too limited to assess the Secondary Contact Recreation Use. Although the *E. coli* data collected in the historic window (2004) for Wellington Brook was indicative of good water quality conditions, the data from the current IR window is insufficient to make a use decision according to 2024 CALM guidance.

Monitoring Stations

Station Code	Organization	Type	Water Body	Station Description	Latitude	Longitude
W1166	MassDEP	Water Quality	Wellington Brook	[west of Millbury Road, approximately 600 feet downstream of Chimney Pond outlet, Oxford]	42.151133	-71.851681
W2213	MassDEP	Water Quality	Wellington Brook	[approximately 1275 feet upstream of Main Street (Route 12), Oxford]	42.142714	-71.861845

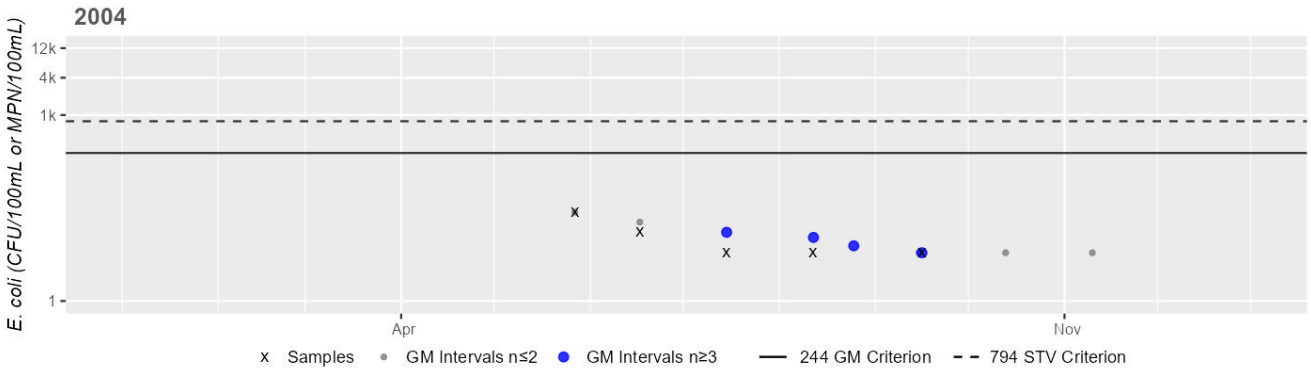
Bacteria Data

Bacteria Data Collected by MassDEP (1997-2020) and External Data Providers (1997-2022) (90-day Interval Analysis)
(MassDEP Undated 6) (MassDEP Undated 3)
[Result units are CFU/100mL or MPN/100mL]

Station Code	Organization	Indicator	Start Date	End Date	Sample Count	Minimum Sample Result	Maximum Sample Result	Seasonal Geometric Mean
W1166	MassDEP	E. coli	05/26/04	09/15/04	5	6	27	9
W2213	MassDEP	E. coli	05/24/11	10/03/11	6	41	866	151

Station MASSDEP_W1166 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



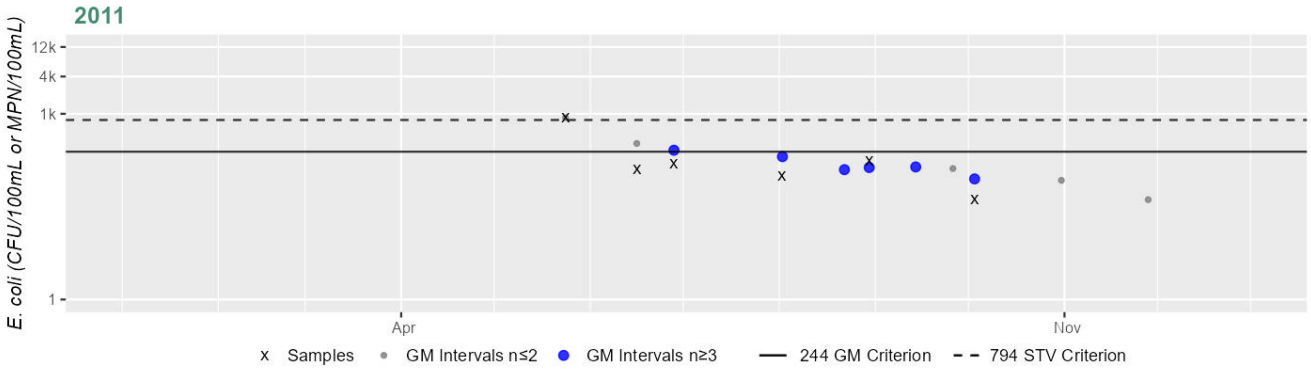
Variable*	Result
Samples	5
SeasGM	9
#GMI	4
#GMI Ex	0
%GMI Ex	0%
n>STV	0
%n>STV	0%

Cumulative %GMI Exceedance
Historic (1997-2010)
0%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Station MASSDEP_W2213 - Escherichia coli

Daily Maximum Samples & 90 Day Geometric Means within the Secondary Contact Recreation Season



Variable*	Result
Samples	6
SeasGM	151
#GMI	6
#GMI Ex	1
%GMI Ex	16%
n>STV	1
%n>STV	16%

Cumulative %GMI Exceedance
Current (2011-2022)
16%

**Samples = # of samples; SeasGM = Seasonal Geometric Mean (GM); #GMI = # of GM Intervals; #GMI Ex = # of GMI Exeedances; %GMI Ex = % GMI Exeedances; n>STV = # of samples > Statistical Threshold Value (STV); %n > STV = % of samples > STV; "Recent 5 Years" may not be consecutive as the analysis excludes years without GMI meeting the minimum sample size.*

Data Sources

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