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

## Appendix 32
## Parker River Basin and Coastal Drainage Area 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.

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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 |
|---|---|---|---|---|---|---|
| Baldpate Pond | MA91001 | 5 | 5 | (Curly-leaf Pondweed*) | -- | Unchanged |
| Baldpate Pond | MA91001 | 5 | 5 | (Fanwort*) | -- | Unchanged |
| Baldpate Pond | MA91001 | 5 | 5 | Dissolved Oxygen | -- | Unchanged |
| Baldpate Pond | MA91001 | 5 | 5 | Mercury in Fish Tissue | -- | Unchanged |
| Bull Brook | MA91-04 | 2 | 2 | None | -- | Unchanged |
| Bull Brook Reservoir | MA91002 | 4c | 4c | (Fish Passage Barrier*) | -- | Unchanged |
| Central Street Pond | MA91003 | 3 | 3 | None | -- | Unchanged |
| Crane Pond | MA91004 | 3 | 3 | None | -- | Unchanged |
| Dow Brook Reservoir | MA91005 | 3 | 3 | None | -- | Unchanged |
| Eagle Hill River | MA91-06 | 4a | 4a | Fecal Coliform | R1_MA_2021_001 | Unchanged |
| Egypt River | MA91-13 | 4c | 4c | (Fish Passage Barrier*) | -- | Unchanged |
| Egypt River | MA91-14 | 4a | 4a | Fecal Coliform | R1_MA_2021_001 | Unchanged |
| Jackman Brook | MA91-07 | 5 | 5 | Benthic Macroinvertebrates | -- | Unchanged |
| Little Crane Pond | MA91007 | 3 | 3 | None | -- | Unchanged |
| Little River | MA91-11 | 4a | 4a | Fecal Coliform | R1_MA_2021_001 | Unchanged |
| Mill River | MA91-08 | 5 | 5 | (Fish Passage Barrier*) | -- | Unchanged |
| Mill River | MA91-08 | 5 | 5 | (Water Chestnut*) | -- | Unchanged |

| Waterbody | AU_ID | AU Category 2022 | AU Category 2024/26 | Impairment | ATTAINS Action ID | Impairment Change Summary |
|---|---|---|---|---|---|---|
| Mill River | MA91-08 | 5 | 5 | Algae | -- | Unchanged |
| Mill River | MA91-08 | 5 | 5 | Benthic Macroinvertebrates | -- | Unchanged |
| Mill River | MA91-08 | 5 | 5 | Dissolved Oxygen | -- | Unchanged |
| Mill River | MA91-08 | 5 | 5 | Nutrient/Eutrophication Biological Indicators | -- | Unchanged |
| Mill River | MA91-09 | 4a | 4a | Fecal Coliform | R1_MA_2021_001 | Unchanged |
| Ox Pasture Brook | MA91-10 | 2 | 2 | None | -- | Unchanged |
| Paine Creek | MA91-03 | 4a | 4a | Fecal Coliform | R1_MA_2021_001 | Unchanged |
| Parker River | MA91-01 | 4c | 5 | (Dewatering*) | -- | Unchanged |
| Parker River | MA91-01 | 4c | 5 | (Fish Passage Barrier*) | -- | Unchanged |
| Parker River | MA91-01 | 4c | 5 | Escherichia Coli (E. Coli) | -- | Added |
| Parker River | MA91-02 | 4a | 4a | Fecal Coliform | R1_MA_2021_001 | Unchanged |
| Penn Brook | MA91-16 | 5 | 5 | Benthic Macroinvertebrates | -- | Unchanged |
| Penn Brook | MA91-16 | 5 | 5 | Dissolved Oxygen | -- | Unchanged |
| Pentucket Pond | MA91010 | 5 | 5 | (Fanwort*) | -- | Unchanged |
| Pentucket Pond | MA91010 | 5 | 5 | Mercury in Fish Tissue | -- | Unchanged |
| Plum Island River | MA91-15 | 4a | 4a | Fecal Coliform | R1_MA_2021_001 | Unchanged |
| Plum Island Sound | MA91-12 | 4a | 4a | Fecal Coliform | R1_MA_2021_001 | Unchanged |
| Quills Pond | MA91011 | 3 | 3 | None | -- | Unchanged |
| Rock Pond | MA91012 | 5 | 5 | Mercury in Fish Tissue | -- | Unchanged |

| Waterbody | AU_ID | AU Category 2022 | AU Category 2024/26 | Impairment | ATTAINS Action ID | Impairment Change Summary |
|---|---|---|---|---|---|---|
| Rowley River | MA91-05 | 4a | 4a | Fecal Coliform | R1_MA_2021_001 | Unchanged |
| Sperrys Pond | MA91013 | 3 | 3 | None | -- | Unchanged |
| State Street Pond | MA91014 | 4c | 4c | (Fanwort*) | -- | Unchanged |
| Wilson Pond | MA91017 | 3 | 3 | None | -- | Unchanged |

# Baldpate Pond (MA91001)

| | |
|---|---|
| **Location:** | Boxford. |
| **AU Type:** | FRESHWATER LAKE |
| **AU Size:** | 60 ACRES |
| **Classification/Qualifier:** | B |

| AU Category 2022 | AU Category 2024/26 | Impairment | ATTAINS Action ID | Impairment Change Summary |
|---|---|---|---|---|
| 5 | 5 | (Curly-leaf Pondweed*) | -- | Unchanged |
| 5 | 5 | (Fanwort*) | -- | Unchanged |
| 5 | 5 | Dissolved Oxygen | -- | Unchanged |
| 5 | 5 | Mercury in Fish Tissue | -- | Unchanged |

| Impairment | Source (Confirmed Y/N) | ALU | FC | AES | PCR | SCR |
|---|---|---|---|---|---|---|
| (Curly-leaf Pondweed*) | Introduction of Non-native Organisms (Accidental or Intentional) (Y) | X | -- | -- | -- | -- |
| (Fanwort*) | Introduction of Non-native Organisms (Accidental or Intentional) (Y) | X | -- | -- | -- | -- |
| Dissolved Oxygen | Source Unknown (N) | X | -- | -- | -- | -- |
| Mercury in Fish Tissue | Atmospheric Deposition (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 Baldpate Pond (MA91001) continues to be assessed as Not Supporting and the prior Mercury in Fish Tissue impairment is being carried forward. MA DPH retained a site-specific advisory for Baldpate Pond in their January 2025 Freshwater Fish Consumption Advisory List. The public should refer to the most recent DPH 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 aesthetics data are available to assess the status of the Aesthetics Use for Baldpate Pond (MA91001), so it 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 are available for Baldpate Pond (MA91001), 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 are available for Baldpate Pond (MA91001) in the current IR window (2011-2022), so the Secondary Contact Recreation Use is Not Assessed. |

# Bull Brook (MA91-04)

| | |
|---|---|
| **Location:** | Headwaters south of Linebrook Road, Ipswich to mouth at inlet Bull Brook Reservoir, Ipswich. |
| **AU Type:** | RIVER |
| **AU Size:** | 1.4 MILES |
| **Classification/Qualifier:** | A: PWS, ORW (Tributary) |

No usable data were available for Bull Brook (MA91-04) 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 |

# Bull Brook Reservoir (MA91002)

| | |
|---|---|
| **Location:** | Ipswich. |
| **AU Type:** | FRESHWATER LAKE |
| **AU Size:** | 7 ACRES |
| **Classification/Qualifier:** | A: PWS, ORW |

No usable data were available for Bull Brook Reservoir (MA91002) 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 | (Fish Passage Barrier*) | -- | Unchanged |

| Impairment | Source (Confirmed Y/N) | ALU | FC | AES | PCR | SCR |
|---|---|---|---|---|---|---|
| (Fish Passage Barrier*) | Dam or Impoundment (Y) | X | -- | -- | -- | -- |

# Central Street Pond (MA91003)

| | |
|---|---|
| **Location:** | Rowley. |
| **AU Type:** | FRESHWATER LAKE |
| **AU Size:** | 3 ACRES |
| **Classification/Qualifier:** | B: ORW (also tributary to SA SFO ORW) |

No usable data were available for Central Street Pond (MA91003) 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 |

# Crane Pond (MA91004)

| | |
|---|---|
| **Location:** | Groveland. |
| **AU Type:** | FRESHWATER LAKE |
| **AU Size:** | 22 ACRES |
| **Classification/Qualifier:** | B: WWF, HQW (impoundment on river designated B/WWF/HQW) |

No usable data were available for Crane Pond (MA91004) 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 |

# Dow Brook Reservoir (MA91005)

| | |
|---|---|
| **Location:** | Ipswich. |
| **AU Type:** | FRESHWATER LAKE |
| **AU Size:** | 16 ACRES |
| **Classification/Qualifier:** | A: PWS, ORW |

No usable data were available for Dow Brook Reservoir (MA91005) 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 |

# Eagle Hill River (MA91-06)

| | |
|---|---|
| **Location:** | Headwaters north of Town Hill, east of Town Farm Road, Ipswich to the mouth at Plum Island Sound, Ipswich. |
| **AU Type:** | ESTUARY |
| **AU Size:** | 0.35 SQUARE MILES |
| **Classification/Qualifier:** | SA: ORW |

| AU Category 2022 | AU Category 2024/26 | Impairment | ATTAINS Action ID | Impairment Change Summary |
|---|---|---|---|---|
| 4a | 4a | Fecal Coliform | R1_MA_2021_001 | Unchanged |

| Impairment | Source (Confirmed Y/N) | ALU | FC | SH | AES | PCR | SCR |
|---|---|---|---|---|---|---|---|
| Fecal Coliform | Source Unknown (N) | -- | -- | 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 in the estuarine Eagle Hill River (MA91-06), so the Fish Consumption Use is Not Assessed. |

### Shellfish Harvesting

| 2024/26 Use Attainment | Alert |
|---|---|
| Not Supporting | NO |

| 2024/26 Use Attainment Summary |
|---|

Eagle Hill River (MA91-06): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 0.3443 sq mi (97%). The approved shellfish growing area represents 0 sq mi (0%). The Shellfish Harvesting Use is assessed as not supporting because the growing area (normalized to the AU area) is < 100% approved. Based on the new growing area classifications and the prior classifications, the existing fecal coliform impairment is being retained.

### *Shellfish Growing Area Classifications*

**MassDFG-Division of Marine Fisheries Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

| Area Name | Waterbody/Area Description | Classification | Area (Sq. Mi.) | Area (% of AU) |
|---|---|---|---|---|
| N4.0 | Plum Island Sound | Conditionally Approved | 0.02332 | 6.6% |
| N4.1 | Eagle Hill River | Conditionally Approved | 0.30660 | 86.8% |
| N4.5 | Greens Point Creek | Prohibited | 0.01138 | 3.2% |
| N4.8 | North Ridge Mooring Area | Prohibited | 0.00301 | 0.9% |

## Aesthetic

| 2024/26 Use Attainment | Alert |
|---|---|
| Not Assessed | NO |

| 2024/26 Use Attainment Summary |
|---|
| No aesthetics observation data are available, so the Aesthetics Use for the estuarine Eagle Hill River (MA91-06) is Not Assessed. |

## Primary Contact Recreation

| 2024/26 Use Attainment | Alert |
|---|---|
| Insufficient Information | NO |

| 2024/26 Use Attainment Summary |
|---|
| No bacteria data are available to assess the Primary Contact Recreation Use for the estuarine Eagle Hill River (MA91-06) so it is assessed as having Insufficient Information.<br>The shellfish growing areas (0.3443 sq mi) in this AU are less than 100% approved (0 sq mi, 0%). There is Insufficient Information to assess the Primary Contact Recreation Use of the Eagle Hill River (MA91-06) using the shellfish classification data. |

### *Shellfish Growing Area Classifications*

**Summary Statement for MassDFG Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

| Summary |
|---|
| Eagle Hill River (MA91-06): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 0.3443 sq mi (97%). The approved shellfish growing area represents 0 sq mi (0%). Because the total of all shellfish growing area classifications is anything less than “approved”, the Primary Contact Recreation Use cannot be assessed for 2024 using the shellfish classification data. |

## Secondary Contact Recreation

| 2024/26 Use Attainment | Alert |
|---|---|
| Insufficient Information | NO |

| 2024/26 Use Attainment Summary |
|---|
| No bacteria data are available to assess the Secondary Contact Recreation Use for the estuarine Eagle Hill River (MA91-06) so it is assessed as having Insufficient Information.<br>The shellfish growing areas (0.3443 sq mi) in this AU are less than 100% approved (0 sq mi, 0%). There is Insufficient Information to assess the Secondary Contact Recreation Use of Eagle Hill River (MA91-06) using the shellfish classification data. |

### *Shellfish Growing Area Classifications*

**Summary Statement for MassDFG Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

| Summary |
|---|
| Eagle Hill River (MA91-06): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 0.3443 sq mi (97%). The approved shellfish growing area represents 0 sq mi (0%). Because the total of all shellfish growing area classifications is anything less than “approved”, the Secondary Contact Recreation Use cannot be assessed for 2024 using the shellfish classification data. |

# Egypt River (MA91-13)

| | |
|---|---|
| **Location:** | Outlet Bull Brook Reservoir, Ipswich to tidally influenced area approximately 600 feet downstream from High Street (Route 1A), Ipswich. |
| **AU Type:** | RIVER |
| **AU Size:** | 0.3 MILES |
| **Classification/Qualifier:** | B: ORW |

No usable data were available for Egypt River (MA91-13) 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 | (Fish Passage Barrier*) | -- | Unchanged |

| Impairment | Source (Confirmed Y/N) | ALU | FC | AES | PCR | SCR |
|---|---|---|---|---|---|---|
| (Fish Passage Barrier*) | Dam or Impoundment (Y) | X | -- | -- | -- | -- |

# Egypt River (MA91-14)

| | |
|---|---|
| **Location:** | From tidally influenced area approximately 600 feet downstream from High Street (Route 1A), Ipswich to mouth at confluence with Rowley River, Rowley/Ipswich. |
| **AU Type:** | ESTUARY |
| **AU Size:** | 0.04 SQUARE MILES |
| **Classification/Qualifier:** | SA: ORW |

| AU Category 2022 | AU Category 2024/26 | Impairment | ATTAINS Action ID | Impairment Change Summary |
|---|---|---|---|---|
| 4a | 4a | Fecal Coliform | R1_MA_2021_001 | Unchanged |

| Impairment | Source (Confirmed Y/N) | ALU | FC | SH | AES | PCR | SCR |
|---|---|---|---|---|---|---|---|
| Fecal Coliform | Source Unknown (N) | -- | -- | 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 in this estuarine Egypt River AU (MA91-14), so the Fish Consumption Use is Not Assessed. |

### Shellfish Harvesting

| 2024/26 Use Attainment | Alert |
|---|---|
| Not Supporting | NO |

| 2024/26 Use Attainment Summary |
|---|

Egypt River (MA91-14): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 0.0257 sq mi (62%). The approved shellfish growing area represents 0 sq mi (0%). The prohibited shellfish growing area represents 0.0257 sq mi (62%). There is insufficient information available to assess the Shellfish Harvesting Use because the growing areas within this AU are classified as either entirely prohibited or a combination of approved and prohibited. There is insufficient information available to delist the existing Fecal Coliform impairment so the Shellfish Harvesting Use is evaluated as Not Supporting.

### *Shellfish Growing Area Classifications*

**MassDFG-Division of Marine Fisheries Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

| Area Name | Waterbody/Area Description | Classification | Area (Sq. Mi.) | Area (% of AU) |
|---|---|---|---|---|
| N4.2 | Upper Rowley River | Prohibited | 0.02566 | 62.1% |

## Aesthetic

| 2024/26 Use Attainment | Alert |
|---|---|
| Not Assessed | NO |

| 2024/26 Use Attainment Summary |
|---|
| No aesthetics observation data are available, so the Aesthetics Use for this estuarine Egypt River AU (MA91-14) is Not Assessed. |

## Primary Contact Recreation

| 2024/26 Use Attainment | Alert |
|---|---|
| Insufficient Information | NO |

| 2024/26 Use Attainment Summary |
|---|
| No bacteria data are available to assess the Primary Contact Recreation Use for this estuarine Egypt River AU (MA91-14) so it is assessed as having Insufficient Information. The shellfish growing areas (0.0257 sq mi) in this AU are less than 100% approved growing areas (0 sq mi, 0%). There is insufficient information to assess the Primary Contact Recreation Use of this Egypt River AU (MA91-14) using the shellfish classification data. |

### *Shellfish Growing Area Classifications*

**Summary Statement for MassDFG Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

| Summary |
|---|
| Egypt River (MA91-14): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 0.0257 sq mi (62%). The approved shellfish growing area represents 0 sq mi (0%). Because the total of all shellfish growing area classifications is anything less than “approved”, the Primary Contact Recreation Use cannot be assessed for 2024 using the shellfish classification data. |

## Secondary Contact Recreation

| 2024/26 Use Attainment | Alert |
|---|---|
| Insufficient Information | NO |

| 2024/26 Use Attainment Summary |
|---|
| No bacteria data are available to assess the Secondary Contact Recreation Use for this estuarine Egypt River AU (MA91-14) so it is assessed as having Insufficient Information. The shellfish growing areas (0.0257 sq mi) in this AU are less than 100% approved growing areas (0 sq mi, 0%). There is insufficient information to assess the Secondary Contact Recreation Use of this Egypt River AU (MA91-14) using the shellfish classification data. |

### *Shellfish Growing Area Classifications*

**Summary Statement for MassDFG Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

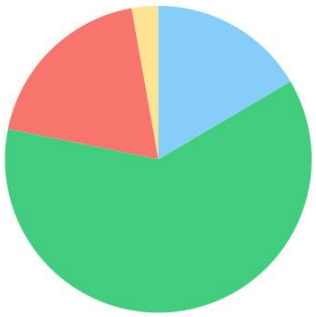
| Summary |
|---|
| Egypt River (MA91-14): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 0.0257 sq mi (62%). The approved shellfish growing area represents 0 sq mi (0%). Because the total of all shellfish growing area classifications is anything less than “approved”, the Secondary Contact Recreation Use cannot be assessed for 2024 using the shellfish classification data. |

# Jackman Brook (MA91-07)

| | |
|---|---|
| **Location:** | Perennial portion northeast of intersection of Jewett and Tenney streets, Georgetown to mouth at confluence with Wheeler Brook, Georgetown. |
| **AU Type:** | RIVER |
| **AU Size:** | 0.8 MILES |
| **Classification/Qualifier:** | B |

**Jackman Brook (MA91-07)**

*Watershed Area: 2.34 square miles*



| Land Cover Type | Entire Basin | Proximal Subbasin (5 km radius) | Stream Buffer (100 m) | Proximal Stream Buffer |
|---|---|---|---|---|
| Land Cover Area (square miles) | 2.34 | 2.34 | 1.05 | 1.05 |
| Agriculture | 2.8% | 2.8% | 2.4% | 2.4% |
| Developed | 19% | 19% | 15.1% | 15.1% |
| Natural | 61.6% | 61.6% | 56.1% | 56.1% |
| Wetland | 16.5% | 16.5% | 26.4% | 26.4% |
| Impervious | 10.9% | 10.9% | 9.3% | 9.3% |

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

| Impairment | Source (Confirmed Y/N) | ALU | FC | AES | PCR | SCR |
|---|---|---|---|---|---|---|
| Benthic Macroinvertebrates | Source Unknown (N) | 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 in Jackman Brook (MA91-07), so the Fish Consumption Use is Not Assessed. |

## Aesthetic

| 2024/26 Use Attainment | Alert |
|---|---|
| Fully Supporting | NO |

| 2024/26 Use Attainment Summary |
|---|
| The Aesthetics Use for Jackman Brook (MA91-07) is assessed as Fully Supporting based on the observations of MassDEP field crews at W2517 during summer 2015. MassDEP staff recorded aesthetics observations at one station in Jackman Brook during summer 2015 (n=5), in the upstream half of the AU ~1200 feet upstream/south of Jackman Street, Georgetown (W2517/MAP2-673). 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 |
|---|---|---|---|---|---|---|
| W2517 | MassDEP | Water Quality | Jackman Brook | [approximately 1200 feet upstream/south of Jackman Street, Georgetown] | 42.735035 | -70.942730 |

### *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 |
|---|---|---|---|
| W2517 | 2015 | 5 | Aesthetic observations were made by MassDEP field sampling crews at Station W2517 on Jackman Brook (MA91-07) during 5 site visits between May 2015 and Sep 2015. 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 7) (MassDEP Undated 4)

| Station Code | Data Year | Field Sheet Count | Field Sheet Count w/ Film & Filamentous Algae Observations | Dense/ Very Dense Film/ Filamentous Algae |
|---|---|---|---|---|
| W2517 | 2015 | 5 | 4 | 0 |

**MassDEP Aesthetics Observations (2011-2020)** (MassDEP Undated 7)

| Station Code | Waterbody | Data Year | Parameter | Result | Result Count | Total Field Sheet Count |
|---|---|---|---|---|---|---|
| W2517 | Jackman Brook | 2015 | Aesthetics Impaired? | No | 5 | 5 |
| W2517 | Jackman Brook | 2015 | Aquatic Plant Density, Overall | None | 5 | 5 |
| W2517 | Jackman Brook | 2015 | Color | Light Yellow/Tan | 2 | 5 |
| W2517 | Jackman Brook | 2015 | Color | None | 2 | 5 |
| W2517 | Jackman Brook | 2015 | Color | NR | 1 | 5 |
| W2517 | Jackman Brook | 2015 | Objectionable Deposits | No | 5 | 5 |
| W2517 | Jackman Brook | 2015 | Odor | None | 5 | 5 |
| W2517 | Jackman Brook | 2015 | Periphyton Density, Filamentous | None | 4 | 5 |
| W2517 | Jackman Brook | 2015 | Periphyton Density, Filamentous | NR | 1 | 5 |
| W2517 | Jackman Brook | 2015 | Periphyton Density, Film | None | 4 | 5 |
| W2517 | Jackman Brook | 2015 | Periphyton Density, Film | NR | 1 | 5 |
| W2517 | Jackman Brook | 2015 | Scum | No | 4 | 5 |
| W2517 | Jackman Brook | 2015 | Scum | NR | 1 | 5 |
| W2517 | Jackman Brook | 2015 | Turbidity | Moderately Turbid | 1 | 5 |
| W2517 | Jackman Brook | 2015 | Turbidity | None | 4 | 5 |

## Primary Contact Recreation

| 2024/26 Use Attainment | Alert |
|---|---|
| Fully Supporting | NO |

**2024/26 Use Attainment Summary**

The Primary Contact Recreation Use for Jackman Brook (MA91-07) continues to be assessed as Fully Supporting based on *E. coli* data collected at W2517 during summer 2015. MassDEP staff collected *E. coli* bacteria samples in the upstream half of Jackman Brook (MA91-07) at W2517 [~1200 ft upstream/S of Jackman St in Georgetown] from May-Sep 2015 (n=5). Analysis of this limited frequency *E. coli* dataset indicated no intervals had GMs >126 CFU/100mL and no samples exceeded the 410 CFU/100mL STV (the seasonal GM was 75 CFU/100mL). These data were indicative of good water quality conditions.

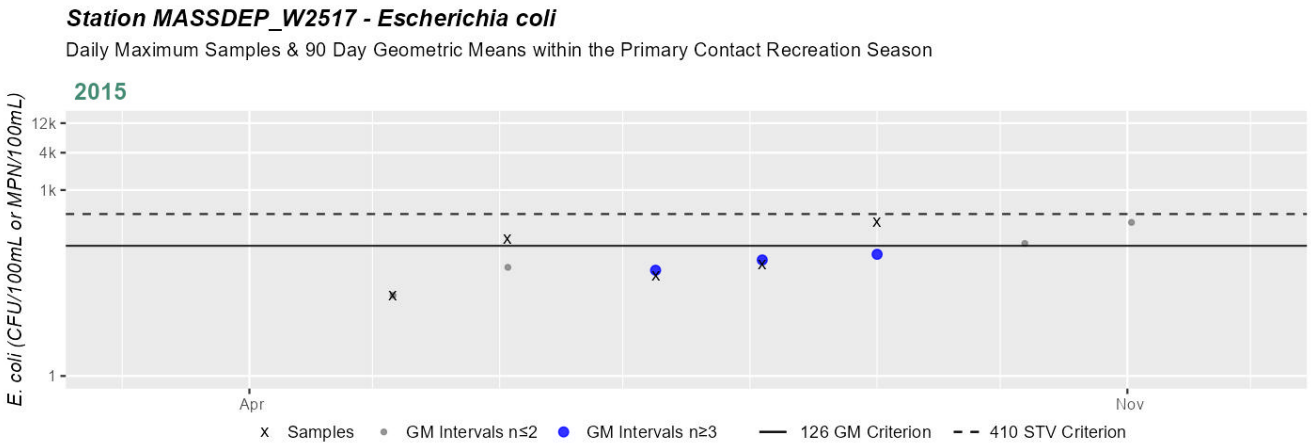
### *Monitoring Stations*

| Station Code | Organization | Type | Water Body | Station Description | Latitude | Longitude |
|---|---|---|---|---|---|---|
| W2517 | MassDEP | Water Quality | Jackman Brook | [approximately 1200 feet upstream/south of Jackman Street, Georgetown] | 42.735035 | -70.942730 |

### *Bacteria Data*

**Bacteria Data Collected by MassDEP (2011-2020) and External Data Providers (2011-2022) (90-day Interval Analysis)**
(MassDEP Undated 7) (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 |
|---|---|---|---|---|---|---|---|---|
| W2517 | MassDEP | E. coli | 05/06/15 | 09/01/15 | 5 | 20 | 300 | 75 |




| Variable* | Result |
|---|---|
| Samples | 5 |
| SeasGM | 75 |
| #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.*

## Secondary Contact Recreation

| 2024/26 Use Attainment | Alert |
|---|---|
| Fully Supporting | NO |

| 2024/26 Use Attainment Summary |
|---|
| The Secondary Contact Recreation Use for Jackman Brook (MA91-07) continues to be assessed as Fully Supporting based on *E. coli* data collected at W2517 during summer 2015. MassDEP staff collected *E. coli* bacteria samples in the upstream half of Jackman Brook (MA91-07) at W2517 [~1200 ft upstream/S of Jackman St, Georgetown] from May-Sep 2015 (n=5). Analysis of this limited frequency *E. coli* dataset indicated no intervals had GMs >244 CFU/100mL and no samples exceeded the 794 CFU/100mL STV (the overall GM was 75 CFU/100mL). These data were indicative of good water quality conditions. |

## *Monitoring Stations*

| Station Code | Organization | Type | Water Body | Station Description | Latitude | Longitude |
|---|---|---|---|---|---|---|
| W2517 | MassDEP | Water Quality | Jackman Brook | [approximately 1200 feet upstream/south of Jackman Street, Georgetown] | 42.735035 | -70.942730 |

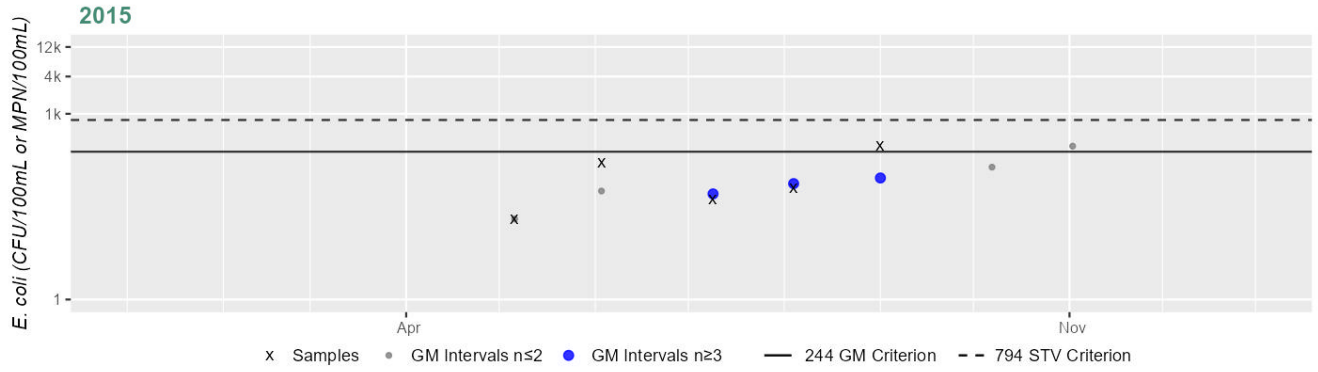
## *Bacteria Data*

**Bacteria Data Collected by MassDEP (1997-2020) and External Data Providers (1997-2022) (90-day Interval Analysis)**
(MassDEP Undated 7) (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 |
|---|---|---|---|---|---|---|---|---|
| W2517 | MassDEP | E. coli | 05/06/15 | 09/01/15 | 5 | 20 | 300 | 75 |

***Station MASSDEP_W2517 - Escherichia coli***

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




| Variable* | Result |
|---|---|
| Samples | 5 |
| SeasGM | 75 |
| #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.*

# Little Crane Pond (MA91007)

| | |
|---|---|
| **Location:** | West Newbury. |
| **AU Type:** | FRESHWATER LAKE |
| **AU Size:** | 4 ACRES |
| **Classification/Qualifier:** | B |

No usable data were available for Little Crane Pond (MA91007) 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 (MA91-11)

| | |
|---|---|
| **Location:** | from tidally influenced area approximately 100 feet downstream from Hanover Street, Newbury to mouth at confluence with Parker River, Newbury. |
| **AU Type:** | ESTUARY |
| **AU Size:** | 0.08 SQUARE MILES |
| **Classification/Qualifier:** | SA: ORW, SFO (Tributary to SA SFO ORW) |

| AU Category 2022 | AU Category 2024/26 | Impairment | ATTAINS Action ID | Impairment Change Summary |
|---|---|---|---|---|
| 4a | 4a | Fecal Coliform | R1_MA_2021_001 | Unchanged |

| Impairment | Source (Confirmed Y/N) | ALU | FC | SH | AES | PCR | SCR |
|---|---|---|---|---|---|---|---|
| Fecal Coliform | Source Unknown (N) | -- | -- | 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 in the estuarine Little River (MA91-11), so the Fish Consumption Use is Not Assessed. |

### Shellfish Harvesting

| 2024/26 Use Attainment | Alert |
|---|---|
| Not Supporting | NO |

| 2024/26 Use Attainment Summary |
|---|

| |
|---|
| Little River (MA91-11): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 0.0375 sq mi (46%). The approved shellfish growing area represents 0 sq mi (0%). The prohibited shellfish growing area represents 0.0375 sq mi (46%). There is insufficient information available to assess the Shellfish Harvesting Use because the growing areas within this AU are classified as either entirely prohibited or a combination of approved and prohibited. There is insufficient information available to delist the existing Fecal Coliform impairment, so the Shellfish Harvesting Use is evaluated as not supporting. |

### *Shellfish Growing Area Classifications*

**MassDFG-Division of Marine Fisheries Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

| Area Name | Waterbody/Area Description | Classification | Area (Sq. Mi.) | Area (% of AU) |
|---|---|---|---|---|
| N4.3 | | Prohibited | 0.03755 | 45.9% |

## Aesthetic

| 2024/26 Use Attainment | Alert |
|---|---|
| Not Assessed | NO |

| 2024/26 Use Attainment Summary |
|---|
| No aesthetics observation data are available, so the Aesthetics Use for the estuarine Little River (MA91-11) is Not Assessed. |

## Primary Contact Recreation

| 2024/26 Use Attainment | Alert |
|---|---|
| Insufficient Information | NO |

| 2024/26 Use Attainment Summary |
|---|
| No bacteria data are available to assess the Primary Contact Recreation Use for the estuarine Little River (MA91-11) so it is assessed as having Insufficient Information. The shellfish growing areas (0.0375 sq mi) in this AU are less than 100% approved (0 sq mi, 0%). There is Insufficient Information to assess the Primary Contact Recreation Use of the Little River (MA91-11) using the shellfish classification data. |

### *Shellfish Growing Area Classifications*

**Summary Statement for MassDFG Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

| Summary |
|---|
| Little River (MA91-11): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 0.0375 sq mi (46%). The approved shellfish growing area represents 0 sq mi (0%). Because the total of all shellfish growing area classifications is anything less than “approved”, the Primary Contact Recreation Use cannot be assessed for 2024 using the shellfish classification data. |

## Secondary Contact Recreation

| 2024/26 Use Attainment | Alert |
|---|---|
| Insufficient Information | NO |

| 2024/26 Use Attainment Summary |
|---|
| No bacteria data are available to assess the Secondary Contact Recreation Use for the estuarine Little River (MA91-11) so it is assessed as having Insufficient Information. The shellfish growing areas (0.0375 sq mi) in this AU are less than 100% approved (0 sq mi, 0%). There is Insufficient Information to assess the Secondary Contact Recreation Use of the Little River (MA91-11) using the shellfish classification data. |

### *Shellfish Growing Area Classifications*

**Summary Statement for MassDFG Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

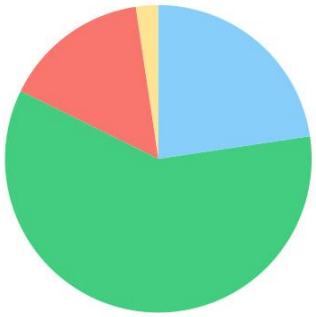
| Summary |
|---|
| Little River (MA91-11): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 0.0375 sq mi (46%). The approved shellfish growing area represents 0 sq mi (0%). Because the total of all shellfish growing area classifications is anything less than “approved”, the Secondary Contact Recreation Use cannot be assessed for 2024 using the shellfish classification data. |

# Mill River (MA91-08)

| | |
|---|---|
| **Location:** | Headwaters - Outlet of small unnamed pond between Route 95 and Rowley Road, Boxford to tidally influenced area approximately 1200 feet upstream from Route 1, Rowley/Newbury (through former 2008 segment: Upper Mill Pond MA91015 and through former 2010 segment: Lower Mill Pond MA91008). |
| **AU Type:** | RIVER |
| **AU Size:** | 6.7 MILES |
| **Classification/Qualifier:** | B: ORW, WWF |

**Mill River (MA91-08)**

*Watershed Area: 12.88 square miles*



| Land Cover Type | Entire Basin | Proximal Subbasin (5 km radius) | Stream Buffer (100 m) | Proximal Stream Buffer |
|---|---|---|---|---|
| Land Cover Area (square miles) | 12.88 | 6.53 | 5.22 | 2.62 |
| Agriculture | 2.4% | 3.4% | 2.6% | 3.6% |
| Developed | 15.4% | 15.4% | 10.6% | 10.6% |
| Natural | 59.6% | 60% | 50.6% | 50.3% |
| Wetland | 22.7% | 21.3% | 36.2% | 35.5% |
| Impervious | 7.3% | 7.2% | 5% | 4.4% |

| AU Category 2022 | AU Category 2024/26 | Impairment | ATTAINS Action ID | Impairment Change Summary |
|---|---|---|---|---|
| 5 | 5 | (Fish Passage Barrier*) | -- | Unchanged |
| 5 | 5 | (Water Chestnut*) | -- | Unchanged |
| 5 | 5 | Algae | -- | Unchanged |
| 5 | 5 | Benthic Macroinvertebrates | -- | Unchanged |
| 5 | 5 | Dissolved Oxygen | -- | Unchanged |
| 5 | 5 | Nutrient/Eutrophication Biological Indicators | -- | Unchanged |

| Impairment | Source (Confirmed Y/N) | ALU | FC | AES | PCR | SCR |
|---|---|---|---|---|---|---|
| (Fish Passage Barrier*) | Dam or Impoundment (Y) | X | -- | -- | -- | -- |
| (Water Chestnut*) | Introduction of Non-native Organisms (Accidental or Intentional) (Y) | X | -- | -- | -- | -- |
| Algae | Source Unknown (N) | -- | -- | X | X | X |
| Benthic Macroinvertebrates | Source Unknown (N) | X | -- | -- | -- | -- |
| Dissolved Oxygen | Source Unknown (N) | X | -- | -- | -- | -- |
| Nutrient/Eutrophication Biological Indicators | Source Unknown (N) | -- | -- | 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 in this Mill River AU (MA91-08), so the Fish Consumption Use is Not Assessed. |

## Aesthetic

| 2024/26 Use Attainment | Alert |
|---|---|
| Not Supporting | NO |

| 2024/26 Use Attainment Summary |
|---|

The Aesthetics Use for this freshwater Mill River AU (MA91-08) is assessed as Not Supporting with the prior Algae and Nutrient/Eutrophication Biological Indicators impairments being carried forward.

MassDEP staff recorded aesthetics observations at one station close to the downstream end of this Mill River AU, approximately 4300 feet upstream/south of Glen Street, Rowley (W2543) during the summers of 2015 (n=4) and 2016 (n=4). Generally, no noted objectionable conditions (odors, deposits, growths, or turbidity) were recorded in either year. Mill River (MA91-08) includes two run-of-river impoundments, Upper Mill Pond (formerly MA91015) and Lower Mill Pond (formerly MA91008). As noted in the 2022 IR (MassDEP 2023), the Aquatic Plants (Macrophytes) impairment for these ponds (originally Noxious Aquatic Plants in 1996, later remapped to Aquatic Plants (Macrophytes) during the 2010 IR cycle) was converted to Nutrient/Eutrophication Biological Indicators. The Aquatic Plants (Macrophytes) impairment was based on synoptic surveys conducted by MassDEP staff in June 1994, when it was noted that the ponds were mostly/entirely covered with aquatic macrophytes, including the non-rooted, floating species, *Lemna*/*Wolffia* spp. and *Spirodela* sp. The 2022 IR (MassDEP 2023) also noted that Google Earth images from summer 2013, 2014, 2015 and 2022 showed high amounts of plant coverage in the ponds and these impoundments account for roughly 12% of this Mill River AU (MA91-08); thus the Aquatic Plants (Macrophytes) impairment was converted to Nutrient/Eutrophication Biological Indicators. Since the observations of good aesthetics conditions recorded in 2015 and 2016 were not in located in the Upper Mill and Lower Mill Pond areas of the AU, the existing impairments cannot be removed at this time.

### *Monitoring Stations*

| Station Code | Organization | Type | Water Body | Station Description | Latitude | Longitude |
|---|---|---|---|---|---|---|
| W2543 | MassDEP | Water Quality | Mill River | [approximately 4300 feet upstream/south of Glen Street, Rowley] | 42.733424 | -70.904624 |

### *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 |
|---|---|---|---|
| W2543 | 2015 | 4 | Aesthetic observations were made by MassDEP field sampling crews at Station W2543 on Mill River (MA91-08) during 4 site visits between May 2015 and Aug 2015. There were generally no persistent objectionable conditions (odors, deposits, growths, or turbidity) recorded. |
| W2543 | 2016 | 4 | Aesthetic observations were made by MassDEP field sampling crews at Station W2543 on Mill River (MA91-08) during 4 site visits between May 2016 and Aug 2016. 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 7) (MassDEP Undated 4)

| Station Code | Data Year | Field Sheet Count | Field Sheet Count w/ Film & Filamentous Algae Observations | Dense/ Very Dense Film/ Filamentous Algae |
|---|---|---|---|---|
| W2543 | 2015 | 4 | 3 | 0 |
| W2543 | 2016 | 4 | 3 | 0 |

**MassDEP Aesthetics Observations (2011-2020)** (MassDEP Undated 7)

| Station Code | Waterbody | Data Year | Parameter | Result | Result Count | Total Field Sheet Count |
|---|---|---|---|---|---|---|
| W2543 | Mill River | 2015 | Aesthetics Impaired? | No | 4 | 4 |
| W2543 | Mill River | 2015 | Aquatic Plant Density, Overall | Sparse | 3 | 4 |
| W2543 | Mill River | 2015 | Aquatic Plant Density, Overall | Unobservable | 1 | 4 |
| W2543 | Mill River | 2015 | Color | Light Yellow/Tan | 4 | 4 |
| W2543 | Mill River | 2015 | Objectionable Deposits | No | 4 | 4 |
| W2543 | Mill River | 2015 | Odor | None | 4 | 4 |
| W2543 | Mill River | 2015 | Periphyton Density, Filamentous | None | 3 | 4 |
| W2543 | Mill River | 2015 | Periphyton Density, Filamentous | Unobservable | 1 | 4 |
| W2543 | Mill River | 2015 | Periphyton Density, Film | None | 3 | 4 |
| W2543 | Mill River | 2015 | Periphyton Density, Film | Unobservable | 1 | 4 |
| W2543 | Mill River | 2015 | Scum | No | 3 | 4 |
| W2543 | Mill River | 2015 | Scum | Yes | 1 | 4 |
| W2543 | Mill River | 2015 | Turbidity | Moderately Turbid | 1 | 4 |
| W2543 | Mill River | 2015 | Turbidity | None | 2 | 4 |
| W2543 | Mill River | 2015 | Turbidity | Slightly Turbid | 1 | 4 |
| W2543 | Mill River | 2016 | Aesthetics Impaired? | No | 4 | 4 |
| W2543 | Mill River | 2016 | Aquatic Plant Density, Overall | Sparse | 4 | 4 |
| W2543 | Mill River | 2016 | Color | Brownish | 1 | 4 |
| W2543 | Mill River | 2016 | Color | Light Yellow/Tan | 3 | 4 |
| W2543 | Mill River | 2016 | Objectionable Deposits | No | 4 | 4 |
| W2543 | Mill River | 2016 | Odor | Musty (Basement) | 1 | 4 |
| W2543 | Mill River | 2016 | Odor | None | 3 | 4 |
| W2543 | Mill River | 2016 | Periphyton Density, Filamentous | None | 3 | 4 |
| W2543 | Mill River | 2016 | Periphyton Density, Filamentous | Unobservable | 1 | 4 |
| W2543 | Mill River | 2016 | Periphyton Density, Film | None | 2 | 4 |
| W2543 | Mill River | 2016 | Periphyton Density, Film | Sparse | 1 | 4 |
| W2543 | Mill River | 2016 | Periphyton Density, Film | Unobservable | 1 | 4 |
| W2543 | Mill River | 2016 | Scum | No | 3 | 4 |

| Station Code | Waterbody | Data Year | Parameter | Result | Result Count | Total Field Sheet Count |
|---|---|---|---|---|---|---|
| W2543 | Mill River | 2016 | Scum | Yes | 1 | 4 |
| W2543 | Mill River | 2016 | Turbidity | Moderately Turbid | 1 | 4 |
| W2543 | Mill River | 2016 | Turbidity | None | 1 | 4 |
| W2543 | Mill River | 2016 | Turbidity | Slightly Turbid | 2 | 4 |

## Primary Contact Recreation

| 2024/26 Use Attainment | Alert |
|---|---|
| Not Supporting | NO |

| 2024/26 Use Attainment Summary |
|---|
| The Primary Contact Recreation Use for this freshwater Mill River AU (MA91-08) continues to be assessed as Not Supporting. The prior Algae and Nutrient/Eutrophication Biological Indicators impairments (from the Aesthetics Use) are being carried forward. |

## Secondary Contact Recreation

| 2024/26 Use Attainment | Alert |
|---|---|
| Not Supporting | NO |

| 2024/26 Use Attainment Summary |
|---|
| The Secondary Contact Recreation Use for this freshwater Mill River AU (MA91-08) continues to be assessed as Not Supporting. The prior Algae and Nutrient/Eutrophication Biological Indicators impairments (from the Aesthetics Use) are being carried forward. |

# Mill River (MA91-09)

| | |
|---|---|
| **Location:** | From tidally influenced area approximately 1200 feet upstream from Route 1, Rowley/Newbury to mouth at confluence with Parker River, Newbury. |
| **AU Type:** | ESTUARY |
| **AU Size:** | 0.09 SQUARE MILES |
| **Classification/Qualifier:** | SA: ORW, SFO (also tributary to SA SFO ORW) |

| AU Category 2022 | AU Category 2024/26 | Impairment | ATTAINS Action ID | Impairment Change Summary |
|---|---|---|---|---|
| 4a | 4a | Fecal Coliform | R1_MA_2021_001 | Unchanged |

| Impairment | Source (Confirmed Y/N) | ALU | FC | SH | AES | PCR | SCR |
|---|---|---|---|---|---|---|---|
| Fecal Coliform | Source Unknown (N) | -- | -- | 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 in this estuarine Mill River AU (MA91-09), so the Fish Consumption Use is Not Assessed. |

### Shellfish Harvesting

| 2024/26 Use Attainment | Alert |
|---|---|
| Not Supporting | NO |

| 2024/26 Use Attainment Summary |
|---|

Mill River (MA91-09): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 0.0591 sq mi (67%). The approved shellfish growing area represents 0 sq mi (0%). The prohibited shellfish growing area represents 0.0591 sq mi (67%). There is insufficient information available to assess the Shellfish Harvesting Use because the growing areas within this AU are classified as either entirely prohibited or a combination of approved and prohibited. There is insufficient information available to delist the existing Fecal Coliform impairment, so the Shellfish Harvesting Use is evaluated as Not Supporting.

### *Shellfish Growing Area Classifications*

**MassDFG-Division of Marine Fisheries Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

| Area Name | Waterbody/Area Description | Classification | Area (Sq. Mi.) | Area (% of AU) |
|---|---|---|---|---|
| N4.4 | | Prohibited | 0.05911 | 67.4% |

## Aesthetic

| 2024/26 Use Attainment | Alert |
|---|---|
| Not Assessed | NO |

| 2024/26 Use Attainment Summary |
|---|
| There are no aesthetics observation data available to evaluate the Aesthetics Use for this estuarine Mill River AU (MA91-09), so it is Not Assessed. |

## Primary Contact Recreation

| 2024/26 Use Attainment | Alert |
|---|---|
| Insufficient Information | NO |

| 2024/26 Use Attainment Summary |
|---|
| No bacteria data are available to assess the Primary Contact Recreation Use for this estuarine Mill River AU (MA91-09), so it is assessed as having Insufficient Information.<br>The shellfish growing areas (0.0591 sq mi) in this AU are less than 100% approved growing areas (0 sq mi, 0%), so there is insufficient information to assess the Primary Contact Recreation Use of this Mill River AU (MA91-09) using the shellfish classification data. |

### *Shellfish Growing Area Classifications*

**Summary Statement for MassDFG Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

| Summary |
|---|
| Mill River (MA91-09): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 0.0591 sq mi (67%). The approved shellfish growing area represents 0 sq mi (0%). Because the total of all shellfish growing area classifications is anything less than “approved”, the Primary Contact Recreation Use cannot be assessed for 2024 using the shellfish classification data. |

## Secondary Contact Recreation

| 2024/26 Use Attainment | Alert |
|---|---|
| Insufficient Information | NO |

| 2024/26 Use Attainment Summary |
|---|
| No bacteria data are available to assess the Secondary Contact Recreation Use for this estuarine Mill River AU (MA91-09), so it is assessed as having Insufficient Information.<br>The shellfish growing areas (0.0591 sq mi) in this AU are less than 100% approved growing areas (0 sq mi, 0%), so there is insufficient information to assess the Secondary Contact Recreation Use of this Mill River AU (MA91-09) using the shellfish classification data. |

### *Shellfish Growing Area Classifications*

**Summary Statement for MassDFG Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

| Summary |
|---|
| Mill River (MA91-09): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 0.0591 sq mi (67%). The approved shellfish growing area represents 0 sq mi (0%). Because the total of all shellfish growing area classifications is anything less than “approved”, the Secondary Contact Recreational Use cannot be assessed for 2024 using the shellfish classification data. |

# Ox Pasture Brook (MA91-10)

| | |
|---|---|
| **Location:** | Headwaters - Outlet of small unnamed impoundment east of Bradford Street, Rowley to west of Ox Pasture Hill in the Mill Creek Wildlife Management Area boundary, Rowley. |
| **AU Type:** | RIVER |
| **AU Size:** | 2.4 MILES |
| **Classification/Qualifier:** | B: ORW (also tributary to SA SFO ORW) |

No usable data were available for Ox Pasture Brook (MA91-10) 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 |

# Paine Creek (MA91-03)

| | |
|---|---|
| **Location:** | Headwaters east of Town Farm Road, Ipswich to confluence with Eagle Hill River, Ipswich. |
| **AU Type:** | ESTUARY |
| **AU Size:** | 0.06 SQUARE MILES |
| **Classification/Qualifier:** | SA: ORW |

| AU Category 2022 | AU Category 2024/26 | Impairment | ATTAINS Action ID | Impairment Change Summary |
|---|---|---|---|---|
| 4a | 4a | Fecal Coliform | R1_MA_2021_001 | Unchanged |

| Impairment | Source (Confirmed Y/N) | ALU | FC | SH | AES | PCR | SCR |
|---|---|---|---|---|---|---|---|
| Fecal Coliform | Source Unknown (N) | -- | -- | 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 in the estuarine Paine Creek (MA91-03), so the Fish Consumption Use is Not Assessed. |

### Shellfish Harvesting

| 2024/26 Use Attainment | Alert |
|---|---|
| Not Supporting | NO |

| 2024/26 Use Attainment Summary |
|---|

Paine Creek (MA91-03): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 0.0559 sq mi (90%). The approved shellfish growing area represents 0 sq mi (0%). The Shellfish Harvesting Use is assessed as Not Supporting because the growing area (normalized to the AU area) is < 100% approved. Based on the new growing area classifications and the prior classifications, the existing fecal coliform impairment is being retained.

### *Shellfish Growing Area Classifications*

**MassDFG-Division of Marine Fisheries Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

| Area Name | Waterbody/Area Description | Classification | Area (Sq. Mi.) | Area (% of AU) |
|---|---|---|---|---|
| N4.1 | Eagle Hill River | Conditionally Approved | 0.05591 | 90.1% |

## Aesthetic

| 2024/26 Use Attainment | Alert |
|---|---|
| Not Assessed | NO |

| 2024/26 Use Attainment Summary |
|---|
| No recent aesthetics observation data are available, so the Aesthetics Use of the estuarine Paine Creek (MA91-03) is Not Assessed. |

## Primary Contact Recreation

| 2024/26 Use Attainment | Alert |
|---|---|
| Insufficient Information | NO |

| 2024/26 Use Attainment Summary |
|---|
| No bacteria data are available to assess the Primary Contact Recreation Use for the estuarine Paine Creek (MA91-03) so it is assessed as having Insufficient Information. The shellfish growing areas (0.0559 sq mi) in this AU are less than 100% approved (0 sq mi, 0%). There is Insufficient Information to assess the Primary Contact Recreation Use of Paine Creek (MA91-03) using the shellfish classification data. |

### *Shellfish Growing Area Classifications*

**Summary Statement for MassDFG Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

| Summary |
|---|
| Paine Creek (MA91-03): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 0.0559 sq mi (90%). The approved shellfish growing area represents 0 sq mi (0%). Because the total of all shellfish growing area classifications is anything less than “approved”, the Primary Contact Recreation Use cannot be assessed for 2024 using the shellfish classification data. |

## Secondary Contact Recreation

| 2024/26 Use Attainment | Alert |
|---|---|
| Insufficient Information | NO |

| 2024/26 Use Attainment Summary |
|---|
| No bacteria data are available to assess the Secondary Contact Recreation Use for the estuarine Paine Creek (MA91-03) so it is assessed as having Insufficient Information. The shellfish growing areas (0.0559 sq mi) in this AU are less than 100% approved (0 sq mi, 0%). There is Insufficient Information to assess the Secondary Contact Recreation Use of Paine Creek (MA91-03) using the shellfish classification data. |

### *Shellfish Growing Area Classifications*

**Summary Statement for MassDFG Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

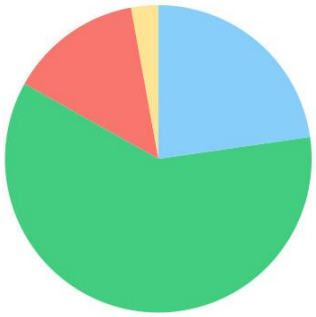
| Summary |
|---|
| Paine Creek (MA91-03): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 0.0559 sq mi (90%). The approved shellfish growing area represents 0 sq mi (0%). Because the total of all shellfish growing area classifications is anything less than “approved”, the Secondary Contact Recreation Use cannot be assessed for 2024 using the shellfish classification data. |

# Parker River (MA91-01)

| | |
|---|---|
| **Location:** | Source north of Silver Mine Road, Boxford to Parker River Dam#1 (NATID# MA00241) just upstream of Central Street, Newbury (excluding Sperry Pond segment MA91013, Rock Pond segment MA91012, Pentucket Pond segment MA91010, and Crane Pond segment MA91004). |
| **AU Type:** | RIVER |
| **AU Size:** | 12.3 MILES |
| **Classification/Qualifier:** | B: WWF, HQW |

**Parker River (MA91-01)**

*Watershed Area: 24.61 square miles*



| Land Cover Type | Entire Basin | Proximal Subbasin (5 km radius) | Stream Buffer (100 m) | Proximal Stream Buffer |
|---|---|---|---|---|
| Land Cover Area (square miles) | 24.61 | 9.16 | 9.16 | 3.73 |
| Agriculture | 2.9% | 2.5% | 1.5% | 1.1% |
| Developed | 14% | 12.7% | 10.8% | 9.9% |
| Natural | 60.4% | 56.2% | 51.9% | 45.8% |
| Wetland | 22.7% | 28.6% | 35.7% | 43.2% |
| Impervious | 6.6% | 6.5% | 5.3% | 5.3% |

| AU Category 2022 | AU Category 2024/26 | Impairment | ATTAINS Action ID | Impairment Change Summary |
|---|---|---|---|---|
| 4c | 5 | (Dewatering*) | -- | Unchanged |
| 4c | 5 | (Fish Passage Barrier*) | -- | Unchanged |
| 4c | 5 | Escherichia Coli (E. Coli) | -- | Added |

| Impairment | Source (Confirmed Y/N) | ALU | FC | AES | PCR | SCR |
|---|---|---|---|---|---|---|
| (Dewatering*) | Baseflow Depletion from Groundwater Withdrawals (N) | X | -- | -- | -- | -- |

| Impairment | Source (Confirmed Y/N) | ALU | FC | AES | PCR | SCR |
|---|---|---|---|---|---|---|
| (Fish Passage Barrier*) | Dam or Impoundment (Y) | X | -- | -- | -- | -- |
| Escherichia Coli (E. Coli) | Discharges from Municipal Separate Storm Sewer Systems (MS4) (N) | -- | -- | -- | X | -- |
| Escherichia Coli (E. Coli) | Source Unknown (N) | -- | -- | -- | X | -- |

## Recommendations

| 2024/26 Recommendations |
|---|
| 2024/2026 IR [*E. coli*, low priority] Based on data (collected in 2022) from the 2024/2026 IR cycle, follow-up monitoring is recommended in the vicinity of IRWA_PB04 in the middle of this Parker River AU (MA91-01). Collection of additional bacteria samples, and moderate to high frequency data if possible, is requested to better understand whether the elevated *E. coli* concentration documented in 2022 (1046 CFU/100mL) is a frequent or infrequent event affecting the Secondary Contact Recreation Use. This is a low priority since a bacteria impairment has already been identified for the Primary Contact Recreation Use. {IRWA_PB04} |

## 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 in this Parker River AU (MA91-01), so the Fish Consumption Use is Not Assessed. |

### Aesthetic

| 2024/26 Use Attainment | Alert |
|---|---|
| Not Assessed | NO |

| 2024/26 Use Attainment Summary |
|---|
| No aesthetics data are available for this Parker River AU (MA91-01), so the Aesthetics Use 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 this Parker River AU (MA91-01) is assessed as Not Supporting. An Escherichia Coli (E. Coli) impairment is being added due to bacteria data not meeting the threshold at IRWA_PB04 in 2022.<br>IRWA staff/volunteers collected *E. coli* bacteria samples in the middle of this Parker River AU (MA91-01) just downstream of Pentucket Pond at IRWA_PB04 [Mill St. in Georgetown] from Jun-Oct 2022 (n=6). Analysis of this limited frequency *E. coli* dataset indicated 100% of intervals had GMs >126 CFU/100mL and 2 samples exceeded the 410 CFU/100mL STV (the seasonal GM was 289 CFU/100mL). *E. coli* data from IRWA_PB04 are indicative of an Escherichia Coli (E. Coli) impairment. |

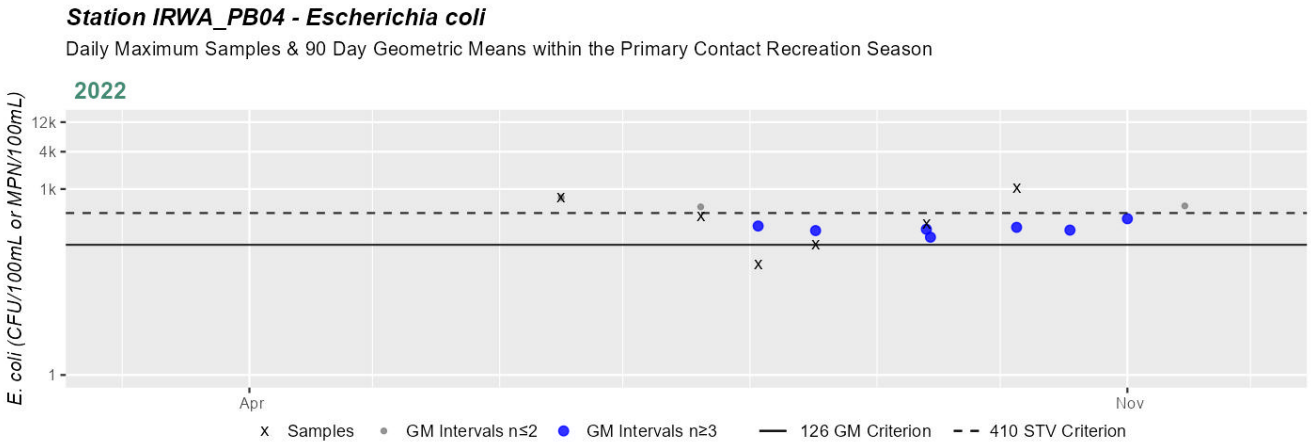
### *Monitoring Stations*

| Station Code | Organization | Type | Water Body | Station Description | Latitude | Longitude |
|---|---|---|---|---|---|---|
| IRWA_PB04 | Ipswich River Watershed Association | Water Quality | Penn Brook | Mill St., Georgetown | 42.732210 | -70.986650 |

### *Bacteria Data*

**Bacteria Data Collected by MassDEP (2011-2020) and External Data Providers (2011-2022) (90-day Interval Analysis)**
(IRWA 2022) (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 |
|---|---|---|---|---|---|---|---|---|
| IRWA_PB04 | Ipswich River Watershed Association | E. coli | 06/16/22 | 10/05/22 | 6 | 61 | 1046 | 289 |




| Variable* | Result |
|---|---|
| Samples | 6 |
| SeasGM | 289 |
| #GMI | 7 |
| #GMI Ex | 7 |
| %GMI Ex | 100% |
| n>STV | 2 |
| %n>STV | 33% |

**Cumulative %GMI Exceedance**
**Current (2011-2022)**
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.*

## Secondary Contact Recreation

| 2024/26 Use Attainment | Alert |
|---|---|
| Fully Supporting | YES |

| 2024/26 Use Attainment Summary |
|---|
| The Secondary Contact Recreation Use for this Parker River AU (MA91-01) is assessed as Fully Supporting. However, an Alert is being identified for Escherichia Coli (E. Coli) based on bacteria data collected at IRWA_PB04 in 2022.<br>IRWA staff/volunteers collected *E. coli* bacteria samples in the middle of this Parker River AU (MA91-01) just downstream of Pentucket Pond at IRWA_PB04 [Mill St., Georgetown] from Jun-Oct 2022 (n=6). Analysis of this limited frequency *E. coli* dataset indicated 28% of intervals had GMs >244 CFU/100mL, 1 sample exceeded the 794 CFU/100mL STV, and the overall GM was 289 CFU/100mL. An alert is being identified for Escherichia Coli (E. Coli) at IRWA_PB04. |

### *Monitoring Stations*

| Station Code | Organization | Type | Water Body | Station Description | Latitude | Longitude |
|---|---|---|---|---|---|---|
| IRWA_PB04 | Ipswich River Watershed Association | Water Quality | Penn Brook | Mill St., Georgetown | 42.732210 | -70.986650 |

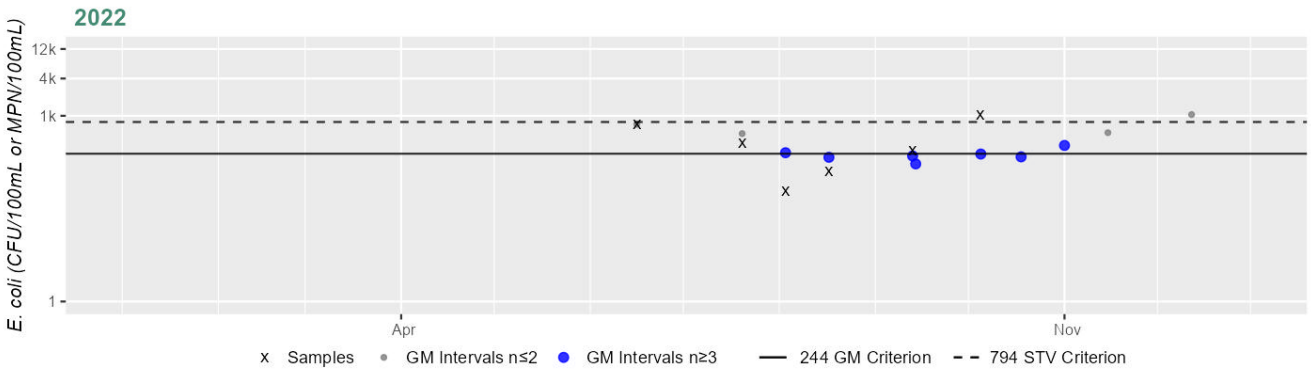
## *Bacteria Data*

**Bacteria Data Collected by MassDEP (1997-2020) and External Data Providers (1997-2022) (90-day Interval Analysis)**
(IRWA 2022) (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 |
|---|---|---|---|---|---|---|---|---|
| IRWA_PB04 | Ipswich River Watershed Association | E. coli | 06/16/22 | 10/05/22 | 6 | 61 | 1046 | 289 |

***Station IRWA_PB04 - Escherichia coli***

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




| Variable* | Result |
|---|---|
| Samples | 6 |
| SeasGM | 289 |
| #GMI | 7 |
| #GMI Ex | 2 |
| %GMI Ex | 28% |
| n>STV | 1 |
| %n>STV | 16% |

**Cumulative %GMI Exceedance**
**Current (2011-2022)**
28%

**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.*

# Parker River (MA91-02)

| | |
|---|---|
| **Location:** | From Parker River Dam#1 (NATID# MA00241) just upstream of Central Street, Newbury to mouth at Plum Island Sound, Newbury. |
| **AU Type:** | ESTUARY |
| **AU Size:** | 0.6 SQUARE MILES |
| **Classification/Qualifier:** | SA: ORW, SFO |

| AU Category 2022 | AU Category 2024/26 | Impairment | ATTAINS Action ID | Impairment Change Summary |
|---|---|---|---|---|
| 4a | 4a | Fecal Coliform | R1_MA_2021_001 | Unchanged |

| Impairment | Source (Confirmed Y/N) | ALU | FC | SH | AES | PCR | SCR |
|---|---|---|---|---|---|---|---|
| Fecal Coliform | Source Unknown (N) | -- | -- | 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 in this estuarine Parker River AU (MA91-02), so the Fish Consumption Use is Not Assessed. |

### Shellfish Harvesting

| 2024/26 Use Attainment | Alert |
|---|---|
| Not Supporting | NO |

| 2024/26 Use Attainment Summary |
|---|

Parker River (MA91-02): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 0.5222 sq mi (88%). The approved shellfish growing area represents 0 sq mi (0%). The Shellfish Harvesting Use is assessed as Not Supporting because the growing area (normalized to the AU area) is < 100% approved. Based on the new growing area classifications and the prior classifications, the existing fecal coliform impairment is being retained.

### *Shellfish Growing Area Classifications*

**MassDFG-Division of Marine Fisheries Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

| Area Name | Waterbody/Area Description | Classification | Area (Sq. Mi.) | Area (% of AU) |
|---|---|---|---|---|
| N4.0 | Plum Island Sound | Conditionally Approved | 0.00075 | 0.1% |
| N4.3 | | Prohibited | 0.14125 | 23.7% |
| N4.4 | | Prohibited | 0.14851 | 24.9% |
| N4.6 | Parker River and Mud Creek | Conditionally Approved | 0.23168 | 38.8% |

## Aesthetic

| 2024/26 Use Attainment | Alert |
|---|---|
| Not Assessed | NO |

| 2024/26 Use Attainment Summary |
|---|
| No aesthetics observation data are available, so the Aesthetics Use for this estuarine Parker River AU (MA91-02) is Not Assessed. |

## Primary Contact Recreation

| 2024/26 Use Attainment | Alert |
|---|---|
| Insufficient Information | NO |

| 2024/26 Use Attainment Summary |
|---|
| No bacteria data are available to assess the Primary Contact Recreation Use for this estuarine Parker River AU (MA91-02) so it is assessed as having Insufficient Information. The shellfish growing areas (0.5222 sq mi) in this AU are less than 100% approved (0 sq mi, 0%). There is Insufficient Information to assess the Primary Contact Recreation Use of this Parker River AU (MA91-02) using the shellfish classification data. |

### *Shellfish Growing Area Classifications*

**Summary Statement for MassDFG Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

| Summary |
|---|
| Parker River (MA91-02): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 0.5222 sq mi (88%). The approved shellfish growing area represents 0 sq mi (0%). Because the total of all shellfish growing area classifications is anything less than “approved”, the Primary Contact Recreation Use cannot be assessed for 2024 using the shellfish classification data. |

## Secondary Contact Recreation

| 2024/26 Use Attainment | Alert |
|---|---|
| Insufficient Information | NO |

| 2024/26 Use Attainment Summary |
|---|
| No bacteria data are available to assess the Secondary Contact Recreation Use for this estuarine Parker River AU (MA91-02) so it is assessed as having Insufficient Information. The shellfish growing areas (0.5222 sq mi) in this AU are less than 100% approved growing areas (0 sq mi, 0%). There is Insufficient Information to assess the Secondary Contact Recreation Use of this Parker River AU (MA91-02) using the shellfish classification data. |

### *Shellfish Growing Area Classifications*

**Summary Statement for MassDFG Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

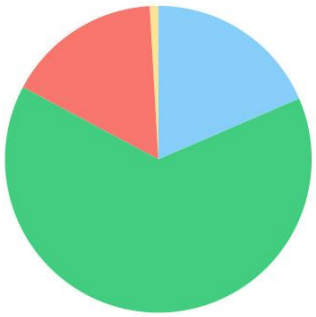
| Summary |
|---|
| Parker River (MA91-02): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 0.5222 sq mi (88%). The approved shellfish growing area represents 0 sq mi (0%). Because the total of all shellfish growing area classifications is anything less than “approved”, the Secondary Contact Recreation Use cannot be assessed for 2024 using the shellfish classification data. |

# Penn Brook (MA91-16)

| | |
|---|---|
| **Location:** | Headwaters, outlet Baldpate Pond, Boxford to mouth at confluence with Parker River, Georgetown. |
| **AU Type:** | RIVER |
| **AU Size:** | 3 MILES |
| **Classification/Qualifier:** | B |

**Penn Brook (MA91-16)**

*Watershed Area: 3.92 square miles*



| Land Cover Type | Entire Basin | Proximal Subbasin (5 km radius) | Stream Buffer (100 m) | Proximal Stream Buffer |
|---|---|---|---|---|
| Land Cover Area (square miles) | 3.92 | 3.92 | 1.52 | 1.52 |
| Agriculture | 0.9% | 0.9% | 1% | 1% |
| Developed | 16.3% | 16.3% | 11.8% | 11.8% |
| Natural | 64.3% | 64.3% | 55.2% | 55.2% |
| Wetland | 18.5% | 18.5% | 32% | 32% |
| Impervious | 8.7% | 8.7% | 6.4% | 6.4% |

| 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 | -- | -- | -- | -- |

## Recommendations

| 2024/26 Recommendations |
|---|
| 2016 IR [Turbidity, low priority] An Alert was previously identified for Turbidity in Penn Brook (MA91-16) in the 2016 IR cycle based on three instances of high turbidity observed in 2010 at MassDEP station W2141 in the downstream half of the brook. Follow-up sampling should be carried out in the vicinity of W2141 as resources permit- this is a low priority. {W2141} |

## 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 in Penn Brook (MA91-16), so the Fish Consumption Use is Not Assessed. |

### Aesthetic

| 2024/26 Use Attainment | Alert |
|---|---|
| Not Assessed | YES |

| 2024/26 Use Attainment Summary |
|---|
| No aesthetics data are available to assess the status of the Aesthetics Use for Penn Brook (MA91-16), so it is Not Assessed. The prior Alert identified for Turbidity (based on three instances of high turbidity observed in 2010 at MassDEP station W2141 in the downstream half of the brook) in this waterbody is being carried forward. |

### Primary Contact Recreation

| 2024/26 Use Attainment | Alert |
|---|---|
| Not Assessed | NO |

| 2024/26 Use Attainment Summary |
|---|
| No bacteria or other indicator data for Penn Brook (MA91-16) are available, so the Primary Contact Recreation Use is Not Assessed. The Alert for Turbidity is being removed from the recreational uses but continues to be maintained under the Aesthetics Use. |

### Secondary Contact Recreation

| 2024/26 Use Attainment | Alert |
|---|---|
| Not Assessed | NO |

| 2024/26 Use Attainment Summary |
|---|

No bacteria or other indicator data for Penn Brook (MA91-16) are available in the current IR window (2011-2022), so the Secondary Contact Recreation Use is Not Assessed. The Alert for Turbidity is being removed from the recreational uses but continues to be maintained under the Aesthetics Use.
MassDEP staff collected historic *E. coli* bacteria samples in the downstream half of Penn Brook (MA91-16) at W2141 [~390 ft upstream of E Main St (Rt. 133), Georgetown] from May-Oct 2010 (n=6). These *E. coli* data were indicative of good water quality conditions (no GM or STV exceedances). However, since they were collected prior to the current IR window (2011-2022), they cannot be used to positively assess the Secondary Contact Recreation Use of Penn Brook.

### *Monitoring Stations*

| Station Code | Organization | Type | Water Body | Station Description | Latitude | Longitude |
|---|---|---|---|---|---|---|
| W2141 | MassDEP | Water Quality | Penn Brook | [approximately 390 feet upstream of East Main Street (Route 133), Georgetown] | 42.718728 | -70.984149 |

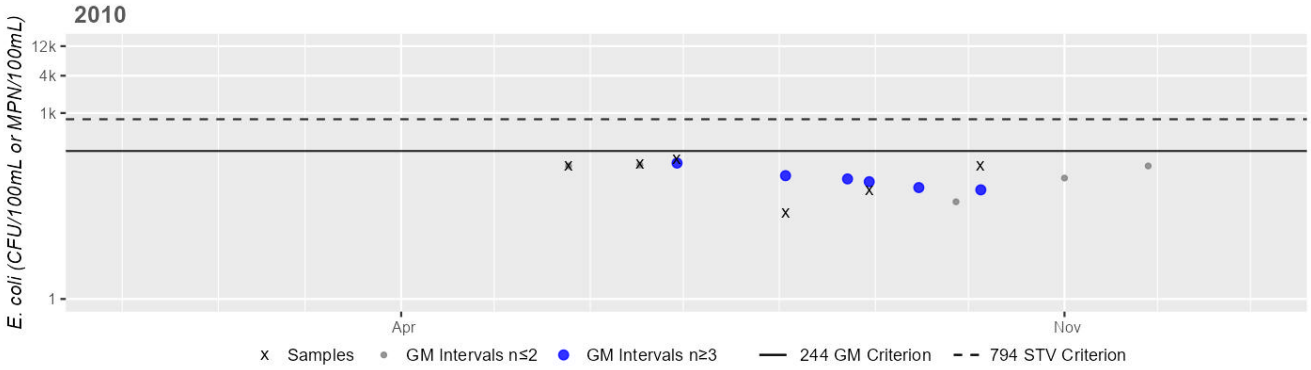
### *Bacteria Data*

**Bacteria Data Collected by MassDEP (1997-2020) and External Data Providers (1997-2022) (90-day Interval Analysis)**
(MassDEP Undated 7) (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 |
|---|---|---|---|---|---|---|---|---|
| W2141 | MassDEP | E. coli | 05/25/10 | 10/05/10 | 6 | 24 | 180 | 94 |

***Station MASSDEP_W2141 - Escherichia coli***

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




| Variable* | Result |
|---|---|
| Samples | 6 |
| SeasGM | 94 |
| #GMI | 6 |
| #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.*

# Pentucket Pond (MA91010)

| | |
|---|---|
| **Location:** | Georgetown. |
| **AU Type:** | FRESHWATER LAKE |
| **AU Size:** | 92 ACRES |
| **Classification/Qualifier:** | B: WWF, HQW (impoundment on river designated B/WWF/HQW) |

| AU Category 2022 | AU Category 2024/26 | Impairment | ATTAINS Action ID | Impairment Change Summary |
|---|---|---|---|---|
| 5 | 5 | (Fanwort*) | -- | Unchanged |
| 5 | 5 | Mercury in Fish Tissue | -- | Unchanged |

| Impairment | Source (Confirmed Y/N) | ALU | FC | AES | PCR | SCR |
|---|---|---|---|---|---|---|
| (Fanwort*) | Introduction of Non-native Organisms (Accidental or Intentional) (Y) | X | -- | -- | -- | -- |
| Mercury in Fish Tissue | Atmospheric Deposition (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 Pentucket Pond (MA91010) continues to be assessed as Not Supporting and the prior Mercury in Fish Tissue impairment is being carried forward. MA DPH retained a site-specific advisory for Pentucket Pond in their January 2025 Freshwater Fish Consumption Advisory List. The public should refer to the most recent DPH 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 aesthetics data are available, so the Aesthetics Use for Pentucket Pond (MA91010) 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 are available for Pentucket Pond (MA91010), 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 are available for Pentucket Pond (MA91010) in the current IR window (2011-2022), so the Secondary Contact Recreation Use is Not Assessed. |

# Plum Island River (MA91-15)

| | |
|---|---|
| **Location:** | From "high sandy" sandbar just north of the confluence with Pine Island Creek, Newbury to confluence with Plum Island Sound, Newbury (formerly part of 2000 segment: Plum Island River MA84A-23). |
| **AU Type:** | ESTUARY |
| **AU Size:** | 0.39 SQUARE MILES |
| **Classification/Qualifier:** | SA: ORW, SFO |

| AU Category 2022 | AU Category 2024/26 | Impairment | ATTAINS Action ID | Impairment Change Summary |
|---|---|---|---|---|
| 4a | 4a | Fecal Coliform | R1_MA_2021_001 | Unchanged |

| Impairment | Source (Confirmed Y/N) | ALU | FC | SH | AES | PCR | SCR |
|---|---|---|---|---|---|---|---|
| Fecal Coliform | Source Unknown (N) | -- | -- | 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 in this estuarine Plum Island River AU (MA91-15), so the Fish Consumption Use is Not Assessed. |

### Shellfish Harvesting

| 2024/26 Use Attainment | Alert |
|---|---|
| Not Supporting | NO |

| 2024/26 Use Attainment Summary |
|---|

Plum Island River (MA91-15): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 0.3621 sq mi (93%). The approved shellfish growing area represents 0 sq mi (0%). The Shellfish Harvesting Use is assessed as Not Supporting because the growing area (normalized to the AU area) is < 100% approved. Based on the new growing area classifications and the prior classifications, the existing fecal coliform impairment is being retained.

### *Shellfish Growing Area Classifications*

**MassDFG-Division of Marine Fisheries Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

| Area Name | Waterbody/Area Description | Classification | Area (Sq. Mi.) | Area (% of AU) |
|---|---|---|---|---|
| N4.0 | Plum Island Sound | Conditionally Approved | 0.36207 | 93.2% |

## Aesthetic

| 2024/26 Use Attainment | Alert |
|---|---|
| Not Assessed | NO |

| 2024/26 Use Attainment Summary |
|---|
| No aesthetics observation data are available, so the Aesthetics Use for this estuarine Plum Island River AU (MA91-15) is Not Assessed. |

## Primary Contact Recreation

| 2024/26 Use Attainment | Alert |
|---|---|
| Insufficient Information | NO |

| 2024/26 Use Attainment Summary |
|---|
| No bacteria data are available to assess the Primary Contact Recreation Use for this estuarine Plum Island River AU (MA91-15) so it is assessed as having Insufficient Information. The shellfish growing areas (0.3621 sq mi) in this AU are less than 100% approved (0 sq mi, 0%). There is Insufficient Information to assess the Primary Contact Recreation Use of this Plum Island River AU (MA91-15) using the shellfish classification data. |

### *Shellfish Growing Area Classifications*

**Summary Statement for MassDFG Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

| Summary |
|---|
| Plum Island River (MA91-15): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 0.3621 sq mi (93%). The approved shellfish growing area represents 0 sq mi (0%). Because the total of all shellfish growing area classifications is anything less than “approved”, the Primary Contact Recreation Use cannot be assessed for 2024 using the shellfish classification data. |

## Secondary Contact Recreation

| 2024/26 Use Attainment | Alert |
|---|---|
| Insufficient Information | NO |

| 2024/26 Use Attainment Summary |
|---|
| No bacteria data are available to assess the Secondary Contact Recreation Use for this estuarine Plum Island River AU (MA91-15) so it is assessed as having Insufficient Information. The shellfish growing areas (0.3621 sq mi) in this AU are less than 100% approved (0 sq mi, 0%). There is Insufficient Information to assess the Secondary Contact Recreation Use of this Plum Island River AU (MA91-15) using the shellfish classification data. |

### *Shellfish Growing Area Classifications*

**Summary Statement for MassDFG Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

| Summary |
|---|
| Plum Island River (MA91-15): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 0.3621 sq mi (93%). The approved shellfish growing area represents 0 sq mi (0%). Because the total of all shellfish growing area classifications is anything less than “approved”, the Secondary Contact Recreational Use cannot be assessed for 2024 using the shellfish classification data. |

# Plum Island Sound (MA91-12)

| | |
|---|---|
| **Location:** | From the mouth of both the Parker River and Plum Island River, Newbury to the Atlantic Ocean, Ipswich (Includes Ipswich Bay) (formerly reported as 2000 segment: Plum Island Sound MA84A-24). |
| **AU Type:** | ESTUARY |
| **AU Size:** | 4.48 SQUARE MILES |
| **Classification/Qualifier:** | SA: ORW, SFO |

| AU Category 2022 | AU Category 2024/26 | Impairment | ATTAINS Action ID | Impairment Change Summary |
|---|---|---|---|---|
| 4a | 4a | Fecal Coliform | R1_MA_2021_001 | Unchanged |

| Impairment | Source (Confirmed Y/N) | ALU | FC | SH | AES | PCR | SCR |
|---|---|---|---|---|---|---|---|
| Fecal Coliform | Source Unknown (N) | -- | -- | 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 in this estuarine Plum Island Sound AU (MA91-12), so the Fish Consumption Use is Not Assessed. |

### Shellfish Harvesting

| 2024/26 Use Attainment | Alert |
|---|---|
| Not Supporting | NO |

| 2024/26 Use Attainment Summary |
|---|

Plum Island Sound (MA91-12): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 4.4015 sq mi (98%). The approved shellfish growing area represents 1.0929 sq mi (24%). The Shellfish Harvesting Use is assessed as Not Supporting because the growing area (normalized to the AU area) is < 100% approved. Based on the new growing area classifications and the prior classifications, the existing fecal coliform impairment is being retained.

### *Shellfish Growing Area Classifications*

**MassDFG-Division of Marine Fisheries Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

| Area Name | Waterbody/Area Description | Classification | Area (Sq. Mi.) | Area (% of AU) |
|---|---|---|---|---|
| N3.0 | Plum Island | Approved | 0.03484 | 0.8% |
| N4.0 | Plum Island Sound | Conditionally Approved | 2.75009 | 61.4% |
| N4.10 | Clark Beach | Prohibited | 0.05680 | 1.3% |
| N4.11 | Pavilion Beach Mooring Area | Prohibited | 0.02044 | 0.5% |
| N4.12 | Grape Island Mooring Area | Prohibited | 0.02882 | 0.6% |
| N4.13 | Eel Run Mooring Area | Prohibited | 0.01652 | 0.4% |
| N4.14 | Sandy Point Mooring Area | Prohibited | 0.03416 | 0.8% |
| N4.6 | Parker River and Mud Creek | Conditionally Approved | 0.00929 | 0.2% |
| N4.7 | Rowley River and Rogers Island | Conditionally Approved | 0.04052 | 0.9% |
| N4.8 | North Ridge Mooring Area | Prohibited | 0.03670 | 0.8% |
| N4.9 | Ipswich Bay Yacht Club Mooring Area | Prohibited | 0.15541 | 3.5% |
| N6.0 | Cranes Beach | Approved | 1.05807 | 23.6% |
| N6.1 | Steep Hill Beach | Prohibited | 0.15990 | 3.6% |

## Aesthetic

| 2024/26 Use Attainment | Alert |
|---|---|
| Not Assessed | NO |

| 2024/26 Use Attainment Summary |
|---|
| No aesthetics observation data are available, so the Aesthetics Use for this estuarine Plum Island Sound AU (MA91-12) 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 this estuarine Plum Island Sound AU (MA91-12) continues to be assessed as Fully Supporting based on beach closure data from four beaches. Plum Island Sound (MA91-12) has 4 beaches with DPH Beach Closure data: Clark [Beach ID: 2921], Pavilion [Beach ID: 2923], Steep Hill [Beach ID: 2922], and Crane [Beach ID: 2924] beaches in Ipswich. None of the beaches were ever posted for swimming from 2014-2022. The shellfish growing areas (4.4015 sq mi) in this AU are less than 100% approved (1.0929 sq mi, 24%). These shellfish classification data, therefore, cannot be used to assess the Primary Contact Recreation Use of Plum Island Sound.

### *Beach Postings*

**MA DPH Beach Posting Data Summary (% Bathing Season Posted 2014-2022)** (Bailey, Logan Feb. 2, 2021) (Bailey Sept. 10, 2023) (MassDEP Undated 2)

| Beach ID | Beach Name/ Town | Left Border (Lat., Long.) | Right Border (Lat., Long.) | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | # years >10% |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2921 | Clark/ Ipswich | 42.70538, -70.79530 | 42.70317, -70.79460 | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0 |
| 2922 | Steep Hill/ Ipswich | 42.69250, -70.78980 | 42.69099, -70.77950 | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0 |
| 2923 | Pavilion/ Ipswich | 42.70016, -70.79190 | 42.69740, -70.79160 | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0 |
| 2924 | Crane/ Ipswich | 42.69097, -70.77470 | 42.66260, -70.72950 | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0 |

### *Shellfish Growing Area Classifications*

**Summary Statement for MassDFG Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

| Summary |
|---|
| Plum Island Sound (MA91-12): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 4.4015 sq mi (98%). The approved shellfish growing area represents 1.0929 sq mi (24%). Because the total of all shellfish growing area classifications is anything less than “approved”, the Primary Contact Recreation Use cannot be assessed for 2024 using the shellfish classification data. |

## Secondary Contact Recreation

| 2024/26 Use Attainment | Alert |
|---|---|
| Fully Supporting | NO |

| 2024/26 Use Attainment Summary |
|---|

The Secondary Contact Recreation Use for this estuarine Plum Island Sound AU (MA91-12) continues to be assessed as Fully Supporting based on beach closure data from four beaches. Plum Island Sound (MA91-12) has 4 beaches with DPH Beach Closure data: Clark [Beach ID: 2921], Pavilion [Beach ID: 2923], Steep Hill [Beach ID: 2922], and Crane [Beach ID: 2924] beaches in Ipswich. None of the beaches were ever posted for swimming from 2014-2022. The shellfish growing areas (4.4015 sq mi) in this AU are less than 100% approved (1.0929 sq mi, 24%). These shellfish classification data, therefore, cannot be used to assess the Secondary Contact Recreation Use of Plum Island Sound.

### *Shellfish Growing Area Classifications*

**Summary Statement for MassDFG Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

| **Summary** |
| --- |
| Plum Island Sound (MA91-12): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 4.4015 sq mi (98%). The approved shellfish growing area represents 1.0929 sq mi (24%). Because the total of all shellfish growing area classifications is anything less than “approved”, the Secondary Contact Recreation Use cannot be assessed for 2024 using the shellfish classification data. |

# Quills Pond (MA91011)

| | |
|---|---|
| **Location:** | Newbury. |
| **AU Type:** | FRESHWATER LAKE |
| **AU Size:** | 2 ACRES |
| **Classification/Qualifier:** | B |

No usable data were available for Quills Pond (MA91011) 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 |

# Rock Pond (MA91012)

| | |
|---|---|
| **Location:** | Georgetown. |
| **AU Type:** | FRESHWATER LAKE |
| **AU Size:** | 49 ACRES |
| **Classification/Qualifier:** | B: WWF, HQW (impoundment on river designated B/WWF/HQW) |

| 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 | Atmospheric Deposition (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 Rock Pond (MA91012) continues to be assessed as Not Supporting and the prior Mercury in Fish Tissue impairment is being carried forward. Fish toxics sampling was conducted in Rock Pond (MA91012) at station F0070 in 2020 as part of the MassDEP Office of Research and Standards Mercury Initiative. MA DPH included a site-specific advisory for Rock Pond in their January 2025 Freshwater Fish Consumption Advisory List. The public should refer to the most recent DPH Freshwater Fish Consumption Advisory List for the most up to date meal advice for sensitive and general populations. |

#### *Fish Consumption Advisories*

**Summary of Fish Toxics Sampling and Resulting Fish Consumption Advisories** (MA DPH 2025) (MassDEP Undated 6)

| Summary Statement |
| --- |
| Fish toxics sampling was conducted in Rock Pond (MA91012) at station F0070 in 2020 as part of the MassDEP Office of Research and Standards Mercury Initiative. MA DPH retained the existing site-specific fish consumption advisories for Mercury associated with Rock Pond in their 2025 Freshwater Fish Consumption Advisory List. The site-specific DPH advisories are indicative of a Fish Consumption Use impairment for Mercury in Fish Tissue for Rock Pond (MA91012). |

## Aesthetic

| 2024/26 Use Attainment | Alert |
| --- | --- |
| Not Assessed | NO |

| 2024/26 Use Attainment Summary |
| --- |
| No aesthetics data are available, so the Aesthetics Use for Rock Pond (MA91012) 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 are available for Rock Pond (MA91012), 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 are available for Rock Pond (MA91012) in the current IR window (2011-2022), so the Secondary Contact Recreation Use is Not Assessed. |

# Rowley River (MA91-05)

| | |
|---|---|
| **Location:** | Headwaters, confluence with Egypt River, Rowley/Ipswich to mouth at Plum Island Sound, Rowley/Ipswich. |
| **AU Type:** | ESTUARY |
| **AU Size:** | 0.25 SQUARE MILES |
| **Classification/Qualifier:** | SA: ORW |

| AU Category 2022 | AU Category 2024/26 | Impairment | ATTAINS Action ID | Impairment Change Summary |
|---|---|---|---|---|
| 4a | 4a | Fecal Coliform | R1_MA_2021_001 | Unchanged |

| Impairment | Source (Confirmed Y/N) | ALU | FC | SH | AES | PCR | SCR |
|---|---|---|---|---|---|---|---|
| Fecal Coliform | Source Unknown (N) | -- | -- | 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 in the estuarine Rowley River (MA91-05), so the Fish Consumption Use is Not Assessed. |

### Shellfish Harvesting

| 2024/26 Use Attainment | Alert |
|---|---|
| Not Supporting | NO |

| 2024/26 Use Attainment Summary |
|---|

Rowley River (MA91-05): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 0.2425 sq mi (97%). The approved shellfish growing area represents 0 sq mi (0%). The Shellfish Harvesting Use is assessed as Not Supporting because the growing area (normalized to the AU area) is < 100% approved. Based on the new growing area classifications and the prior classifications, the existing fecal coliform impairment is being retained.

### *Shellfish Growing Area Classifications*

**MassDFG-Division of Marine Fisheries Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

| Area Name | Waterbody/Area Description | Classification | Area (Sq. Mi.) | Area (% of AU) |
|---|---|---|---|---|
| N4.0 | Plum Island Sound | Conditionally Approved | 0.00013 | 0.1% |
| N4.2 | Upper Rowley River | Prohibited | 0.01292 | 5.2% |
| N4.7 | Rowley River and Rogers Island | Conditionally Approved | 0.22941 | 91.4% |

## Aesthetic

| 2024/26 Use Attainment | Alert |
|---|---|
| Not Assessed | NO |

| 2024/26 Use Attainment Summary |
|---|
| No aesthetics observation data are available, so the Aesthetics Use for the estuarine Rowley River (MA91-05) is Not Assessed. |

## Primary Contact Recreation

| 2024/26 Use Attainment | Alert |
|---|---|
| Insufficient Information | NO |

| 2024/26 Use Attainment Summary |
|---|
| No bacteria data are available to assess the Primary Contact Recreation Use for the estuarine Rowley River (MA91-05) so it is assessed as having Insufficient Information. The shellfish growing areas (0.2425 sq mi) in this AU are less than 100% approved (0 sq mi, 0%). There is Insufficient Information to assess the Primary Contact Recreation Use of the Rowley River (MA91-05) using the shellfish classification data. |

### *Shellfish Growing Area Classifications*

**Summary Statement for MassDFG Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

| Summary |
|---|
| Rowley River (MA91-05): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 0.2425 sq mi (97%). The approved shellfish growing area represents 0 sq mi (0%). Because the total of all shellfish growing area classifications is anything less than “approved”, the Primary Contact Recreation Use cannot be assessed for 2024 using the shellfish classification data. |

## Secondary Contact Recreation

| 2024/26 Use Attainment | Alert |
|---|---|
| Insufficient Information | NO |

| 2024/26 Use Attainment Summary |
|---|
| No bacteria data are available to assess the Secondary Contact Recreation Use for the estuarine Rowley River (MA91-05) so it is assessed as having Insufficient Information. The shellfish growing areas (0.2425 sq mi) in this AU are less than 100% approved (0 sq mi, 0%). There is Insufficient Information to assess the Secondary Contact Recreation Use of the Rowley River (MA91-05) using the shellfish classification data. |

### *Shellfish Growing Area Classifications*

**Summary Statement for MassDFG Shellfish Growing Area Classification Data** (MassGIS 2024) (MassDEP Undated 5)

| Summary |
|---|
| Rowley River (MA91-05): The total of all shellfish growing area classifications (MassGIS, 2024) within this AU is 0.2425 sq mi (97%). The approved shellfish growing area represents 0 sq mi (0%). Because the total of all shellfish growing area classifications is anything less than “approved”, the Secondary Contact Recreation Use cannot be assessed for 2024 using the shellfish classification data. |

# Sperrys Pond (MA91013)

| | |
|---|---|
| **Location:** | Boxford. |
| **AU Type:** | FRESHWATER LAKE |
| **AU Size:** | 26 ACRES |
| **Classification/Qualifier:** | B: WWF, HQW (impoundment on river designated B/WWF/HQW) |

No usable data were available for Sperrys Pond (MA91013) 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 |

# State Street Pond (MA91014)

| | |
|---|---|
| **Location:** | Newburyport. |
| **AU Type:** | FRESHWATER LAKE |
| **AU Size:** | 4 ACRES |
| **Classification/Qualifier:** | B |

No usable data were available for State Street Pond (MA91014) 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 |

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

# Wilson Pond (MA91017)

| | |
|---|---|
| **Location:** | Rowley. |
| **AU Type:** | FRESHWATER LAKE |
| **AU Size:** | 5 ACRES |
| **Classification/Qualifier:** | B: ORW, WWF ('and tributaries thereto' to a river designated B/WWF/ORW) |

No usable data were available for Wilson Pond (MA91017) 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 |

# Data Sources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IRWA. "2022 bacteria data submitted to MassDEP WPP portal or downloaded from WQX (last submittal/download 12/23/2022)." Ipswich River Watershed Association, Ipswich, MA, 2022.

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MassDEP. "Final Massachusetts Integrated List of Waters for the Clean Water Act 2022 Reporting Cycle (and associated basin-specific appendices)." CN 568.1, Available at https://www.mass.gov/doc/final-massachusetts-integrated-list-of-waters-for-the-clean-water-act-2022-reporting-cycle/download, Watershed Planning Program, Division of Watershed Management, Massachusetts Department of Environmental Protection, Worcester, MA, 2023.

MassDEP. "Open file analysis of external water quality data (potential date range 1997-2022) using 2024 CALM guidance." Watershed Planning Program, Massachusetts Department of Environmental Protection, Worcester, MA, Undated 1.

MassDEP. "Open file analysis of external water quality data (potential date range 2011-2022) using 2024 CALM guidance." Watershed Planning Program, Massachusetts Department of Environmental Protection, Worcester, MA, Undated 2.

MassDEP. "Open file analysis of MassDEP WPP water quality data collected between 1997 and 2020 using 2024 CALM guidance." Watershed Planning Program, Massachusetts Department of Environmental Protection, Worcester, MA, Undated 3.

MassDEP. "Open file analysis of MassDEP WPP water quality data collected between 2011 and 2020 using 2024 CALM guidance." Watershed Planning Program, Massachusetts Department of Environmental Protection, Worcester, MA, Undated 4.

MassDEP. "Open file analysis of shellfish growing area classifications using 2024 CALM guidance." Data published June 2024 and available on MassGIS website, Watershed Planning Program, Massachusetts Department of Environmental Protection, Worcester, MA, Undated 5.

MassDEP. "Open files of fish toxicity testing data, metadata, and GIS datalayers in development." Watershed Planning Program, Massachusetts Department of Environmental Protection, Worcester, MA, Undated 6.

MassDEP. "Open files of unpublished, validated water quality monitoring data, field sheet data, and GIS datalayers in development." Watershed Planning Program, Massachusetts Department of Environmental Protection, Worcester, MA, Undated 7.

MassGIS. "MassGIS Data: Designated Shellfish Growing Areas, Data provided by Massachusetts Department of Fish and Game's Division of Marine Fisheries." Bureau of Geographic Information, Boston, MA. June 2024. https://www.mass.gov/info-details/massgis-data-designated-shellfish-growing-areas (accessed July 2024).