

Program for Preventing and/or Reducing
Pollutant Runoff
from
Municipal Operations

Prepared For:



Prepared By:



September 30, 2015

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1.0 INTRODUCTION

This Program for Preventing and/or Reducing Pollutant Runoff from Municipal Operations has been developed in support of the Town of East Bridgewater's response to EPA's Request for Information. This program is also a partial requirement of the Operations and Maintenance program under the Town's permit for the NPDES Phase II MS4 stormwater permit program. The NPDES Phase II General Permit (General Permit) which was issued in 2003 required East Bridgewater to develop, implement, and enforce a stormwater management plan (SWMP). A SWMP was first published by the Town on June 26, 2003, and will be updated after the General Permit is reissued (scheduled for Winter 2015).

2.0 FERTILIZER USAGE, STORAGE AND DISPOSAL

The Town maintains its public spaces and parks utilizing the Department of Public Works (DPW) to periodically fertilize Town-owned land. The list of public spaces currently maintained include: East Bridgewater Jr./Sr. High School, Gordon W. Mitchell Middle School, Central Elementary School, Town Hall, Police Department, Farren Cottage, Public Library, Fire Station, The Center at Sachem Rock, Public Works Department, Strong's Field Complex, all three Water Treatment Plants, all five Well Buildings, Belmont Street Sports Complex, Church Street Sports Complex, and the Town Common (see attached Figure 1).

2.1 Current Fertilizer Usage

The Town of East Bridgewater Facilities Department currently uses fertilizers sparingly on open spaces and at public parks. They do not use herbicides or pesticides. The DPW only uses Country Club Fertilizer, and typically purchases it and applies on the day of purchase. If the Town does need to purchase weed killer, Round-up is purchased and also diluted properly and sprayed the day of purchase. Some small amounts are infrequently stored indoors at the Public Works Yard. For the fertilizing schedule, see the Facilities & Fields section of the 2015 Operations and Maintenance Schedule in Appendix B.

2.2 Fertilizer Storage

The Town does not need to store any of these materials, as the Town generally uses and applies all the fertilizer purchased the same day. If there is any remaining fertilizer, it is stored under cover inside the Public Works building, at the Public Works Yard.

2.3 Fertilizer Disposal

The Town does not need to dispose of any of these materials, as their Highway and Land Management Division uses and applies all the fertilizer purchased the same day. If material is stored, the Town disposes the material during one of the hazardous waste days organized by the Town.

3.0 LAWN & LANDSCAPING MAINTENANCE

The Town maintains its public spaces and parks utilizing the Highway and Land Management Division to periodically mow grass and landscape Town-owned land. The

list of public spaces currently maintained by the Highway and Land Management Division include: East Bridgewater Jr./Sr. High School, Gordon W. Mitchell Middle School, Central Elementary School, Town Hall, Police Department, Farren Cottage, Public Library, Fire Station, The Center at Sachem Rock, Public Works Department, Strong's Field Complex, all three Water Treatment Plants, all five Well Buildings, Belmont Street Sports Complex, Church Street Sports Complex, and the Town Common (see attached Figure 1).

3.1 Current Lawn & Landscaping Practices

The Town currently maintains a mowing and landscaping schedule through the DPW. The activities include mowing, tree-trimming and landscaping. The Town mows as needed and by priority based on upcoming games or events. For the mowing schedule, see the Facilities & Fields section of the 2015 Operations and Maintenance Schedule in Appendix B.

3.2 Disposal of Lawn Clippings

The Town does not remove any lawn clippings from the mowed areas; grass is mulched in, as they allow it to (re)fertilize the soil and biodegrade.

3.3 Alternative Landscaping Materials

The Town does not currently use alternative landscaping materials.

4.0 PUBLIC TRASH RECEPTACLES & PET WASTE SIGNAGE

4.1 Current Public Trash Operations

The Highway and Land Management Division maintains the trash receptacles within the Business District in the downtown area. The Facilities Department currently maintains the trash receptacles and dumpsters at the Public Buildings and Schools. The trash is collected and deposited into dumpsters on site, which is collected by the Town's trash collection subcontractor. For the trash removal schedule, see the Facilities & Fields section of the 2015 Operations and Maintenance Schedule in Appendix B.

4.2 Placement of Pet Waste Signage

The Town currently has Pet Waste informational signs and a collection area installed at Sachem Rock Community Center. The existing collection area at Sachem Rock Community Center is maintained by volunteers. For the pet waste removal schedule, see the Facilities & Fields section of the 2015 Operations and Maintenance Schedule in Appendix B.

5.0 CATCH BASIN CLEANING PROGRAM

5.1 Catch Basin Mapping and Inspections

There are 2,086 catch basins throughout East Bridgewater's MS4 Area (2000 + 2010 Census) that have been previously mapped in Geographic Information System (GIS) format using historic aerial flyover data, handheld GPS units, and DPW employee

knowledge. A town-wide mapbook has been prepared showing unique catch basin identifiers (ex. CB-1001) to aid in accurately recording and cataloging data from field inspections. The mapbook is included with this report as Attachment 1 (stand-alone 11x17 set of maps).

In the event that there are additional catch basins cleaned or inspected that have not been mapped, the field crew sketches in the approximate location and label with a temporary ID for future entry into the GIS system.

During the catch basin cleaning program, the field crew verifies the structures in the mapbook and uses a field inspection form to create a historic log for each structure. For the catch basin cleaning schedule, see the Municipal O&M section of the 2015 Operations and Maintenance Schedule in Appendix B.

5.2 *Catch Basin Cleaning*

The Municipality's catch basin cleaning operations are conducted for approximately six weeks in the fall each year, with approximately 50% of the catch basins cleaned per year.

In cases where an inspection reveals sediments with abnormal, non-natural discoloration or detects strong petroleum and/or chemical odors, the crew performing the catch basin cleanings notifies the East Bridgewater Fire Department for proper handling of hazardous materials and the Town has implemented protocols outlined in their Illicit Discharge Detection & Elimination (IDDE) Plan (EPG, 2012a).

5.3 *Catch Basin Cleanings Stockpile and Storage Area*

The cleanings are brought back to the Recycling Center to the catch basin cleanings stockpile area (see Figure 4). The annual amount generated is approximately 200 cubic yards.

Figure 4 also shows the location of the storage area and the proximity to localized wetlands and waterbodies surrounding the Recycling Center. The site is ¼ mile from the Taunton River; therefore, there is no direct route to discharge these materials to receiving waters.

6.0 STREET SWEEPING PROGRAM

6.1 *Existing Street Sweeping Program*

The DPW currently runs its street sweeping annually during the spring, and sweeps all paved roads within the MS4 Area (approximately 85 miles). The Town performs the street sweeping process using an Elgin Pelican conveyor device. There is currently no written route for sweeping, but roads with curbing and drainage are generally swept first. For the street sweeping schedule, see the Municipal O&M section of the 2015 Operations and Maintenance Schedule in Appendix B.

6.2 *Street Sweeping Stockpile and Storage Area*

The Municipality's street sweeping operations are mainly conducted once per year for eight weeks starting in April. The street sweepings are brought to the Recycling Center to the designated street sweeping stockpile area (see Figure 4). The annual amount generated is approximately 150 cubic yards.

Figure 4 also shows the location of the storage area and the proximity to localized wetlands and waterbodies surrounding the Recycling Center. The site is ¼ mile from the Taunton River; therefore, there is no direct route to discharge these materials to receiving waters.

7.0 WINTER ROAD MAINTENANCE

7.1 *Sand Use*

The Town of East Bridgewater currently uses only salt for deicing. Sand use has been removed from their application program, and is only used when necessary.

7.2 *Deicing Chemical Use*

The Town currently uses a Magnesium Chloride solution to treat the roads. The Town uses salt for deicing treatment of the roads during the winter.

7.3 *Storage of Sand and Deicing Chemicals*

During regular inspections, the salt storage area is inspected by the Highway and Land Management Division to ensure that runoff is minimized. All findings during an inspection are sent to the DPW Director.

Figure 3 shows the location of the salt storage area and the proximity to local wetlands and waterbodies surrounding the storage area. The closest water body (Forge Pond) is behind the DPW Garage.

7.4 *Snow Disposal Activities*

Plowed snow is left to the side of the roads to melt. When snow disposal is necessary, the Town stores the excess snow at Strong's Field on Strong Avenue, about 1/4 mile from the Satucket River. The Winter Snow Stockpile Area is shown on Figure 2.

8.0 FACILITY MAINTENANCE

8.1 *Town-owned Facilities*

The Town's Facilities Department maintains 28 buildings that are Town-owned. These facilities are shown on attached Figure 1 and include: East Bridgewater Jr./Sr. High School, Gordon W. Mitchell Middle School, Central Elementary School, Town Hall, Police Department, Farren Cottage, Public Library, Fire Station, The Center at Sachem Rock, Public Works Department, Strong's Field Complex, all three Water Treatment Plants, all five Well Buildings, Belmont Street Sports Complex, Church Street Sports Complex, and the Town Common.

8.2 Facility Maintenance

8.2.1 Cleaning Chemicals

The Town of East Bridgewater's publicly owned buildings have reduced their use of harsh chemicals and are using approximately 90% green cleaning solutions.

8.2.2 Floor Drains

Within the Town's facilities, all floor drains are connected to the corresponding onsite septic system and do not discharge to the stormwater system.

8.2.3 Laboratory Drains

Within the Town's Middle School, the science laboratory drains are connected to a neutralization tank which discharges to a leaching pit. At the High School, the science laboratory drains are connected to a tight tank and are pumped two times a year, as shown on the attached schedule in Appendix B.

8.2.4 Septic Systems

The Town of East Bridgewater's publicly owned buildings have their septic systems pumped annually, as shown on the attached schedule in Appendix B.

8.2.5 Oil/Water Separators

The Town of East Bridgewater has one OWS located adjacent to the Equipment Garage at the DPW Yard. The OWS is also pumped annually, as shown on the attached schedule in Appendix B.

9.0 VEHICLE MAINTENANCE

9.1 Vehicle Washing Practices

The Town currently rinses fleet vehicles at the DPW Yard. This is done once per year after the last spring snowfall. The DPW Yard is located at 100 Willow Avenue. A catch basin onsite at the DPW Yard collects the wash water and site runoff. The water flows down Willow Avenue and is eventually discharged into Meadow Brook.

9.2 Oil Changes

The Town's mechanic conducts the oil changes and basic maintenance on the Town's municipal fleet, which consists of over 50 vehicles. Each vehicle has a maintenance record and service sticker to help maintain records and the required schedule.

10.0 REPORTING AND RECORDKEEPING

The tracking and documentation of MS4 Maintenance and Operations is a required part of the permit program. All inspection forms are recorded and stored at the DPW Office to ensure that the proper documentation is maintained and reported on the annual MS4 report.

The DPW currently logs all catch basin cleanings and street sweepings using their own log book system. If additional information is required, the catch basin inspections are recorded on field forms. The Town is also currently building an online GIS cloud-based mapping platform with their Water Department. The DPW hopes to expand this operation to the catch basin cleaning program, with electronic field forms, in the near future.

Documentation of investigative, corrective and enforcement actions are maintained by the DPW Director.

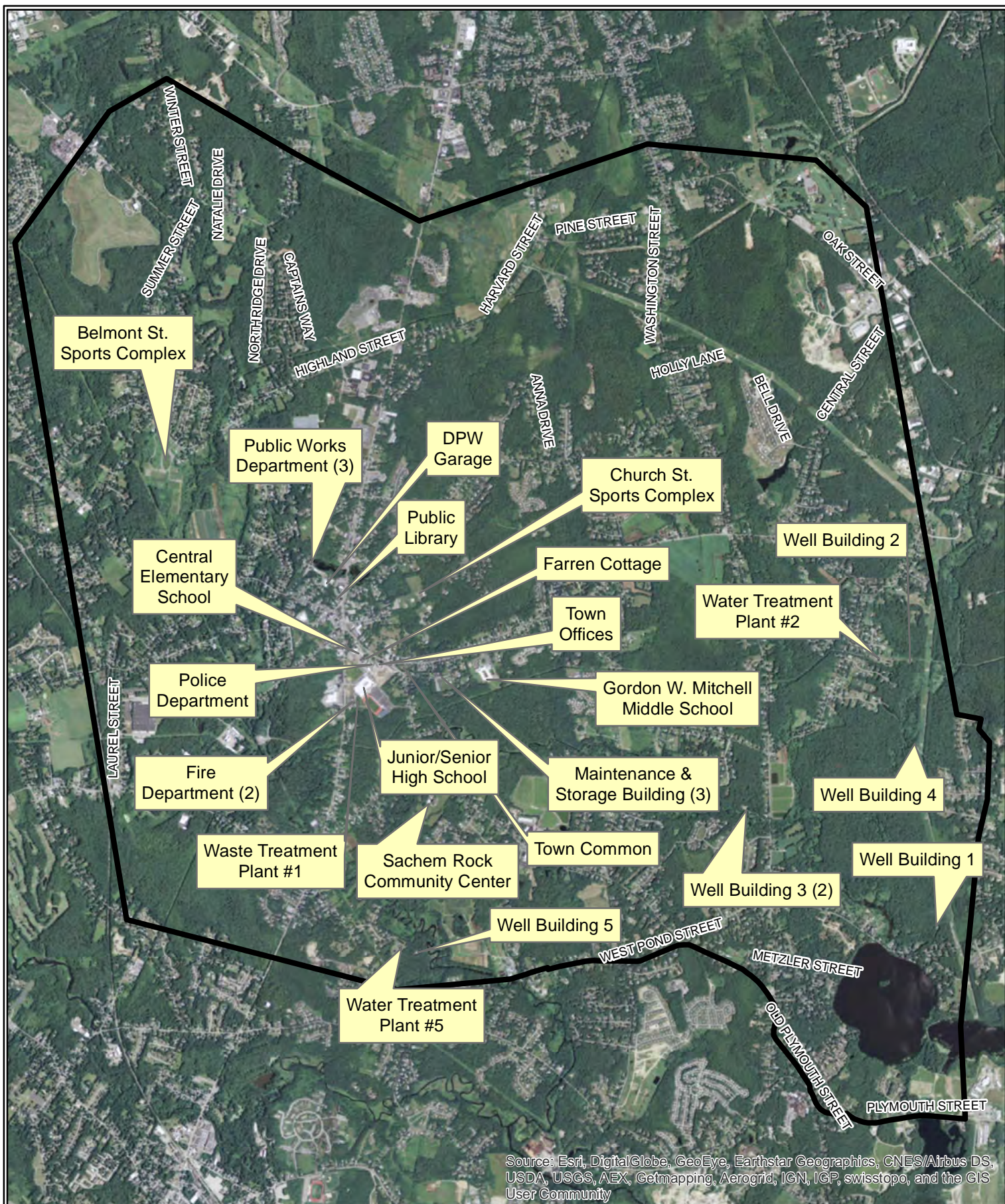
FIGURES

Figure 1 – Town Facilities Locations

Figure 2 – Storage Location of Snow

Figure 3 – DPW Yard Storage Locations

Figure 4 – Storage Locations of Street Sweepings and Catch Basin Cleanings



0 1,500 3,000 6,000 Feet

1 in = 3,000 feet

Environmental Partners
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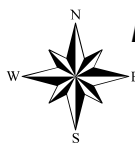


Figure 1: Town Facilities Locations
Town of East Bridgewater, MA
September 2015

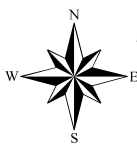


Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

0 100 200 400 Feet

1 in = 200 feet

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**Figure 2: Storage Location of Snow
Town of East Bridgewater, MA
September 2015**



0 100 200 400 Feet

1 in = 200 feet

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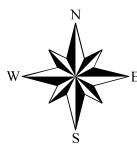
Figure 3: Storage Location of Deicing Materials and Fertilizers
Town of East Bridgewater, MA
September 2015



0 100 200 400 Feet

1 in = 200 feet

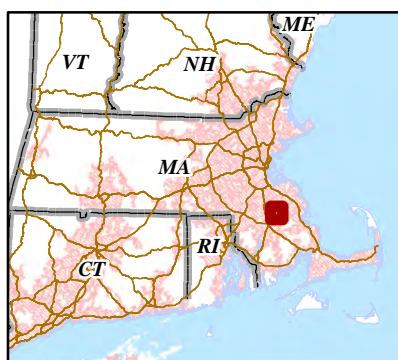
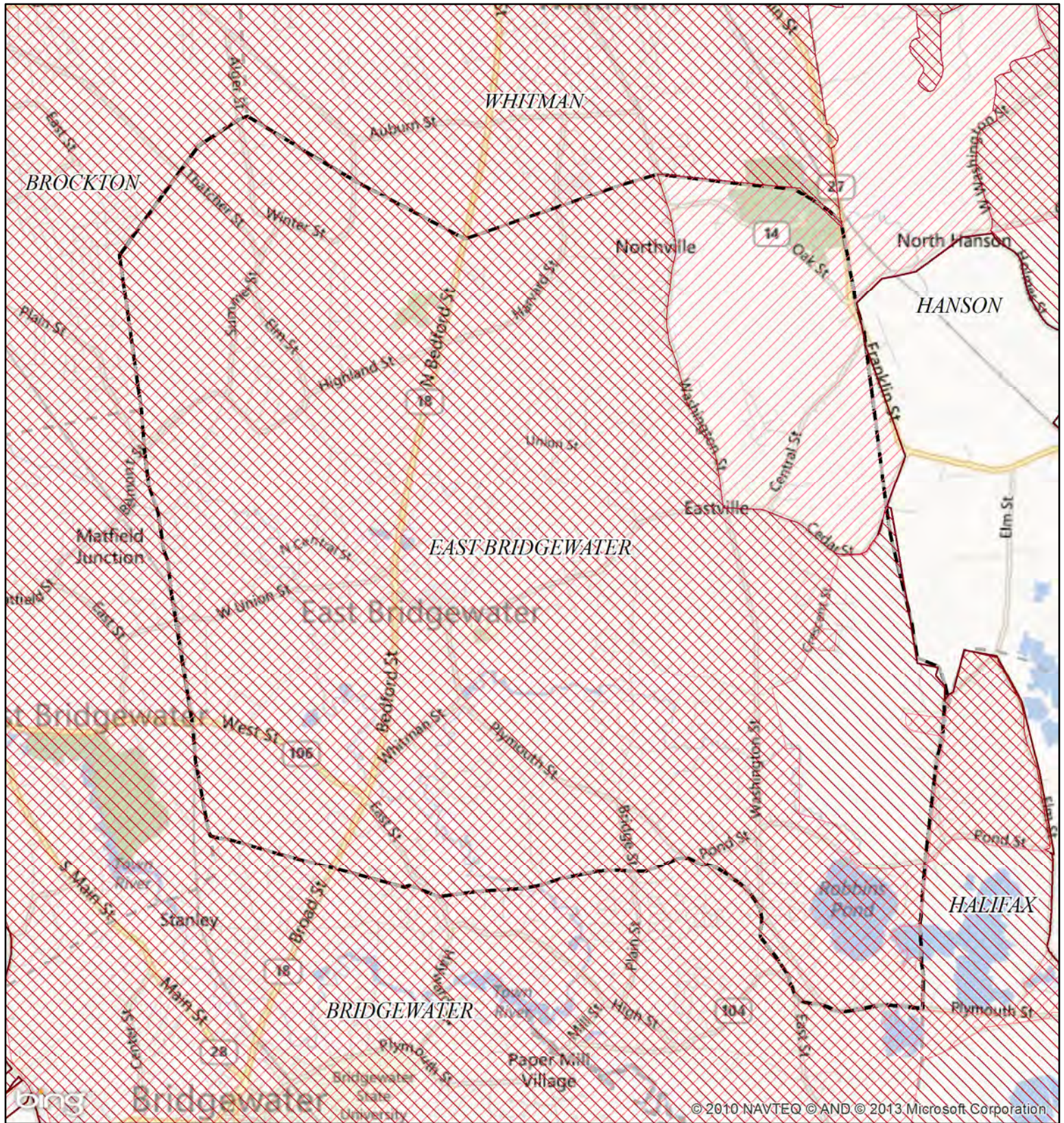
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**Figure 4: Storage Locations of CB Cleanings & Street Sweepings
Town of East Bridgewater, MA
September 2015**

APPENDIX A

Town of East Bridgewater Urbanized Area Map
Town of East Bridgewater Impaired Waterbodies and TMDL Map/Data



NPDES Phase II Stormwater Program Automatically Designated MS4 Areas **East Bridgewater MA**

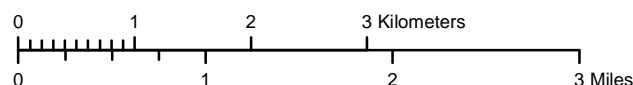
Regulated Area:

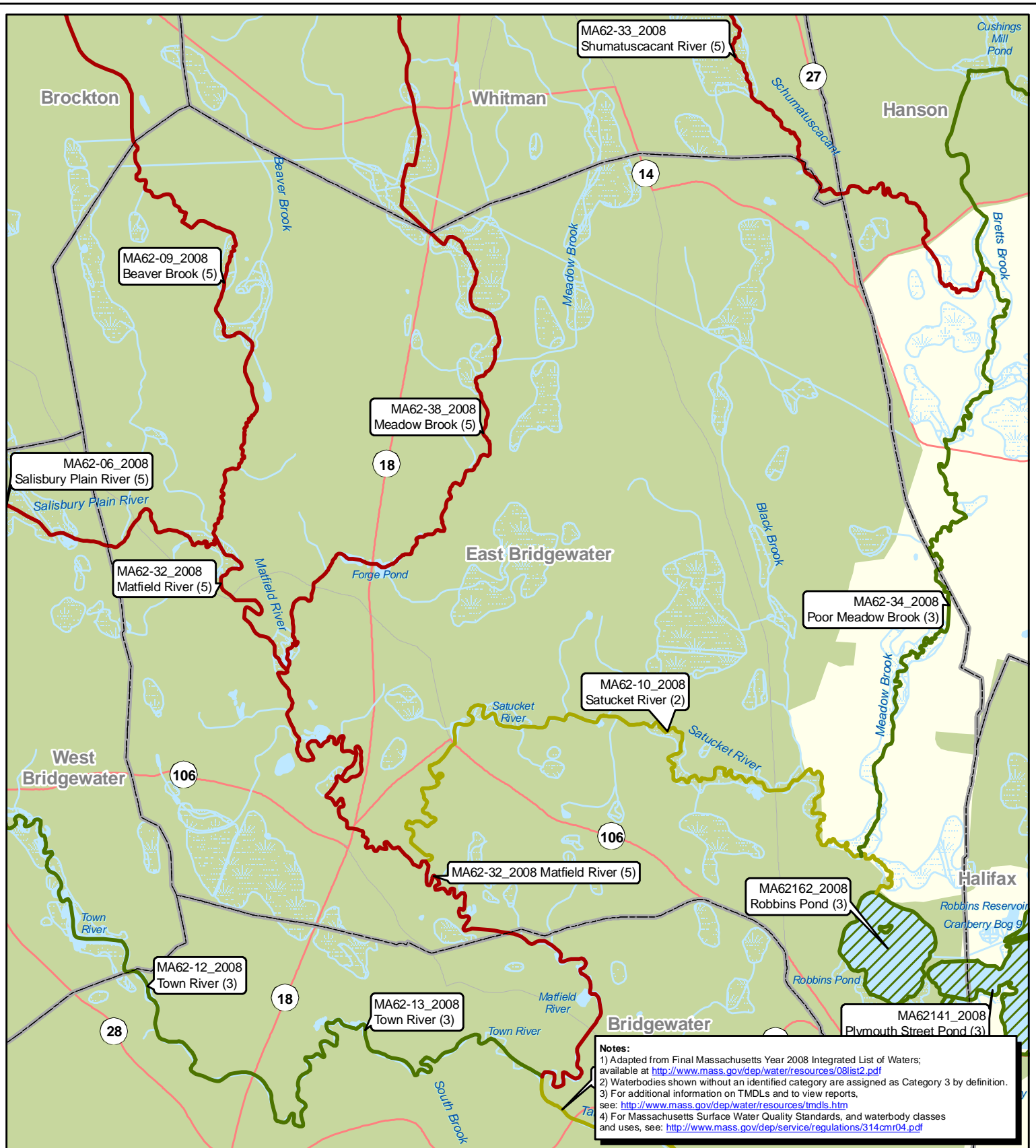


Town Population: 13794
Regulated Population: 13794
(Populations estimated from 2010 Census)



Urbanized Areas, Town Boundaries:
US Census (2000, 2010)
Base map © 2013 Microsoft Corporation
and its data suppliers





Waterbody Assessment and TMDL Status East Bridgewater, MA



0 0.5
Miles



Map produced by EPA Region I GIS Center
Map Tracker ID 6678, February 25, 2010
Data Sources: TeleAtlas, Census Bureau,
USGS, MassDEP

See companion table for a listing of pollutants,
non-pollutants, and TMDLs for each waterbody

Summary of Waterbody Assessment and TMDL Status in Massachusetts

East Bridgewater, MA

| ID | Waterbody Name | Watershed Name | Category | Acres | | Miles | | Cause | TMDL |
|--------------|-----------------------|----------------|----------|-----------------|--|-----------------|-----|---|---|
| | | | | In Town - Total | | In Town - Total | | | |
| MA62-06_2008 | Salisbury Plain River | Taunton | 5 | | | 0.9 | 2.3 | Cause Unknown Noxious aquatic plants Nutrients Objectionable deposits* Organic enrichment/Low DO Pathogens Taste, odor and color Turbidity | |
| MA62-09_2008 | Beaver Brook | Taunton | 5 | | | 3.0 | 6.8 | | |
| | | | | | | | | | Pathogens |
| MA62-10_2008 | Satucket River | Taunton | 2 | | | 5.6 | 5.6 | | |
| MA62-32_2008 | Matfield River | Taunton | 5 | | | 5.1 | 6.7 | | |
| | | | | | | | | | Cause Unknown Noxious aquatic plants Nutrients Organic enrichment/Low DO Pathogens Taste, odor and color |
| | | | | | | | | | |

1) Adapted from Final Massachusetts Year 2008 Integrated List of Waters (CN 281.1, 12/2008); available at <http://www.mass.gov/dep/water/resources/08list2.pdf>
 2) For additional information on TMDLs and to view reports, see: <http://www.mass.gov/dep/water/resources/tmdls.htm>
 3) For Massachusetts Surface Water Quality Standards, and waterbody classes and uses, see: <http://www.mass.gov/dep/service/regulations/314cmr04.pdf>

Assessment of Waterbody Segment

Category 2 - Attaining some uses; other uses not assessed
 Category 3 - Insufficient information to make assessments for any use
 Category 4a - TMDL is completed
 Category 4c - Impairment not caused by a pollutant
 Category 5 - Impaired or threatened for one or more uses and requiring a TMDL

Summary of Waterbody Assessment and TMDL Status in Massachusetts

East Bridgewater, MA

| ID | Waterbody Name | Watershed Name | Category | Acres | | Miles | | Cause | TMDL |
|--------------|----------------------|----------------|----------|-----------|--------|-----------|-------|---|------|
| | | | | In Town - | Total | In Town - | Total | | |
| MA62-33_2008 | Shumatuscacant River | Taunton | 5 | | | 0.2 | 8.5 | Organic enrichment/Low DO Other habitat alterations* Pathogens Siltation | |
| MA62-34_2008 | Poor Meadow Brook | Taunton | 3 | | | 2.1 | 6.9 | | |
| MA62-38_2008 | Meadow Brook | Taunton | 5 | | | 3.6 | 6.0 | Pathogens | |
| MA62141_2008 | Plymouth Street Pond | Taunton | 3 | 23.58 | 165.02 | | | | |
| MA62162_2008 | Robbins Pond | Taunton | 3 | 123.73 | 123.73 | | | | |

1) Adapted from Final Massachusetts Year 2008 Integrated List of Waters (CN 281.1, 12/2008); available at <http://www.mass.gov/dep/water/resources/08list2.pdf>
 2) For additional information on TMDLs and to view reports, see: <http://www.mass.gov/dep/water/resources/tmdls.htm>
 3) For Massachusetts Surface Water Quality Standards, and waterbody classes and uses, see: <http://www.mass.gov/dep/service/regulations/314cmr04.pdf>

Assessment of Waterbody Segment

Category 2 - Attaining some uses; other uses not assessed
 Category 3 - Insufficient information to make assessments for any use
 Category 4a - TMDL is completed
 Category 4c - Impairment not caused by a pollutant
 Category 5 - Impaired or threatened for one or more uses and requiring a TMDL

APPENDIX B

Operations and Maintenance Annual Schedule

Town of East Bridgewater, MA
Operations and Maintenance Schedule
Rev: September 2015

| | Activity | January | February | March | April | May | June | July | August | September | October | November | December |
|---------------------|------------------------------|--------------------|--------------------|--------------------|----------------------------|--------------------|--------------------|--------------------|---------------------|--------------------|-------------------------------|--------------------|--------------------|
| Municipal O&M | Street Sweeping | | | | 8 weeks, starting in April | | | | | | | | |
| | Catch Basin Cleaning | | | | | | | | | | 6 weeks, starting in the Fall | | |
| | BMP Maintenance | | | | Once in Spring | | | | Once in late Summer | | | | |
| Facilities & Fields | Mowing | | | | 1-2 times per week | 1-2 times per week | 1-2 times per week | 1-2 times per week | 1-2 times per week | 1-2 times per week | | | |
| | Fertilizing | | | | Thrice per year | | | Thrice per year | | Thrice per year | | | |
| | Trash Removal | 1-2 times per week | 1-2 times per week | 1-2 times per week | 1-2 times per week | 1-2 times per week | 1-2 times per week | 1-2 times per week | 1-2 times per week | 1-2 times per week | 1-2 times per week | 1-2 times per week | 1-2 times per week |
| | Pet Waste Removal | Once per week | Once per week | Once per week | Once per week | Once per week | Once per week | Once per week | Once per week | Once per week | Once per week | Once per week | Once per week |
| | Pump Water Dept. Tight Tanks | | | | | | | 1st week of July | | | | | |
| | Pump OWS | | | | | | | 1st week of July | | | | | |
| | Pump Septic Systems | | | | | | | 1st week of July | | | | | |
| | Pump H.S. Tight Tanks | | | | | | Twice per year | | | | | | Twice per year |
| Fleet Maintenance | Vehicle Washing | | | Once per year | | | | | | | | | |
| | Oil Change | | | | | | | | | | | | |
| | Other Activities? | | | | | | | | | | | | |

Program of Inspections
and Maintenance of
Stormwater Control Measures

Prepared For:



Prepared By:



September 30, 2015

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Figure 1 – Townwide BMP Locations

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Town of East Bridgewater Map of Impaired Waterbodies/TMDL Data
Appendix B: BMP Inspection Form Template
Appendix C: Outfall Inspection Form Template
Appendix D: Operations and Maintenance Schedule

1.0 INTRODUCTION

This Program of Inspections and Maintenance of Stormwater Control Measures has been developed in support of the Town of East Bridgewater's response to EPA's Request for Information. This program is also a partial requirement of the Operations and Maintenance program under the Town's permit for the NPDES Phase II MS4 stormwater permit program. The NPDES Phase II General Permit (General Permit), which was issued in 2003, required East Bridgewater to develop, implement, and enforce a stormwater management plan (SWMP). A SWMP was first published by the Town on June 26, 2003, and will be updated after the General Permit is reissued (scheduled for Fall/Winter, 2015). For reference, Appendix A contains the *Town of East Bridgewater Urbanized Area Map* and the *Town of East Bridgewater TMDL Map/Data*

The Program includes a description of structural and non-structural BMP's under municipal control as well as maintenance schedules and operations for municipal stormwater structures. Long term operation and maintenance of stormwater BMP's, when accepted by the municipality, become the responsibility of the Town of East Bridgewater's Department of Public Works (East Bridgewater DPW). The Town may enter into a services agreement with a qualified outside party to perform the required maintenance of the BMP's as well as provide the inspection records and maintenance logs of activity. There are two key components to adequately maintaining stormwater management infrastructure:

1. Periodic and scheduled inspections, and
2. Maintenance scheduling and performance.

2.0 CATCH BASIN CLEANING PROGRAM

2.1 Catch Basin Mapping and Inspections

There are 2,086 catch basins throughout East Bridgewater's MS4 Area (2000 + 2010 Census) that have been previously mapped in Geographic Information System (GIS) format using an historic aerial flyover data, handheld GPS units, and DPW employee knowledge. A town-wide mapbook has been prepared showing unique catch basin identifiers (ex. CB-1001) to aid in accurately recording and cataloging data from field inspections.

In the event that there are additional catch basins cleaned or inspected that have not been mapped, the field crew sketches in the approximate location, and label with a temporary ID for future entry into the GIS system. This allows for the field crew to generate a historic record in the logging system for the new structures' characteristics.

During the catch basin cleaning program, the field crew verifies the structures in the mapbook and use a field inspection form to create a historic log for each structure. Items to be noted include: condition of the frame and grate, volume of sediment accumulated in the structure, date inspected/cleaned, marking paint condition, etc. For the catch basin cleaning schedule, see the 2015 Operations and Maintenance Schedule in Appendix D.

2.2 Catch Basin Cleaning Priority Ranking

The Municipality's catch basin cleaning operations are conducted for approximately six weeks in the fall each year, with approximately 50% of the catch basins cleaned per year. The Town has not noted or identified catch basins that require more frequent cleaning. If such a condition presents itself in subsequent inspections and cleaning, the DPW would create a priority maintenance schedule, which could take the following form:

- Priority A – Catch basins that are designated as consistently generating the highest volumes of trash, sediment and/or debris.
- Priority B – Catch basins that are designated as consistently generating moderate volumes of trash, sediment and/or debris.

The inspection/cleaning schedule assignments are as follows:

| BMP | Activity | Frequency |
|-------------|--------------------------|---|
| Catch Basin | Inspection / Cleaning | Priority A – one (1) time / year Priority B – one (1) time / 2-years |

Catch basins are cleaned of accumulated sediments and debris by a clam shell (mechanical) method. In cases where an inspection reveals sediments with abnormal, non-natural discoloration or detects strong petroleum and/or chemical odors, the crew performing the catch basin cleanings notifies the East Bridgewater Fire Department for proper handling of hazardous materials. The Town has implemented protocols outlined in their Illicit Discharge Detection & Elimination (IDDE) Plan (EPG, 2012a). As necessary, a Licensed Site Professional (LSP) registered in the State of Massachusetts pursuant to MGL c.21A, §§ 19 through 19J is responsible for managing the disposal of such material in accordance with 310 CMR 40.0000 (Massachusetts Contingency Plan).

3.0 BMP MAINTENANCE

3.1 Subsurface Separators

Subsurface Separators provide a greater ability to trap and contain stormwater borne pollutants than standard catch basins. They are fitted with baffles and chambers that create a hydrodynamic separation of floatable and non-floatable particles. The Town has one Oil/Water Separator (OWS) (DPW Equipment Garage), and adheres to the inspection process detailed herein. For the inspection/cleaning schedule, see the applicable section of the 2015 Operations and Maintenance Schedule in Appendix D.

Inspection of the subsurface separator includes the operational condition of any baffles and filters contained within the structure. The depth of sediment collected in the separator is also measured and recorded. All floatable trash is removed from the separator during each inspection. If the accumulated sediment is greater than 50 percent of the structure, or annually at a minimum, the sediment is removed by vacuum or mechanical means. Due to the nature of fluid wastes discharged to the oil/water separator, sediments are removed by a licensed

hazardous waste contractor (e.g., Clean Harbors) and shipped off-site as oily waste (hazardous waste code: MA98)). The Town has an on-call contract with a hazardous waste contractor in case of emergencies.

3.2 Water Detention/Retention Basins

Open stormwater detention/retention basins under operational control by the Town are maintained annually. Appendix B contains the inspection form under consideration by the DWP for compliance with the new Draft MS4 permit. For the cleaning schedule, see the 2015 Operations and Maintenance Schedule in Appendix D.

The stormwater basins are inspected / cleaned annually to observe for proper operation of the system and all components. The basin inspection includes observing the condition of the inlet and outlet structures, the accumulation of sediment within the basin, evidence of oil/gas sheen, the accumulation of trash within the basin and the condition of vegetation within the basin. Any erosion noted is repaired as soon as possible but no later than the next scheduled inspection.

Repairs may include the replacement of displaced rip-rap and the repair of eroded banks. Repairs to vegetated banks are stabilized with erosion control mats until sufficient vegetation has been established as evidenced by 75% new seeding growth. Sediment collecting in the basin is removed when its depth reaches 6-inches anywhere in the basin. Disposal of all collected sediments conforms to the procedures described herein for disposal of sediments collected from municipal catch basins.

During the growing season, access ways to the basins are mowed. All tree saplings are removed from embankments and basin bottoms. Vegetation collected from the basin is transported to the Town's composting facility.

The Town has 8 detention/retention basins within its MS4 System under its ownership and control, specifically in newer developments (see Figure 1).

4.0 OUTFALL MAINTENANCE

Pursuant to the draft Permit requirements, the Town is required to visit every outfall (within the MS4 Area) to inspect, and if required for dry or wet weather sampling, to conduct field water quality screening and sampling events, as well as to conduct an inspection and to permanently identify each of the outfall structures (with tag or signage). The Town has already mapped 351 inlet/outfall structures within its MS4 System (62 inlets and 289 outlets).

As the Town visits each of the outfall structures, inspectors assess if any additional structures have deteriorated since the last inspection and need further attention. The Town's Outfall Inspection Form Template, under consideration for compliance with the new Draft MS4 permit, is provided as Appendix C.

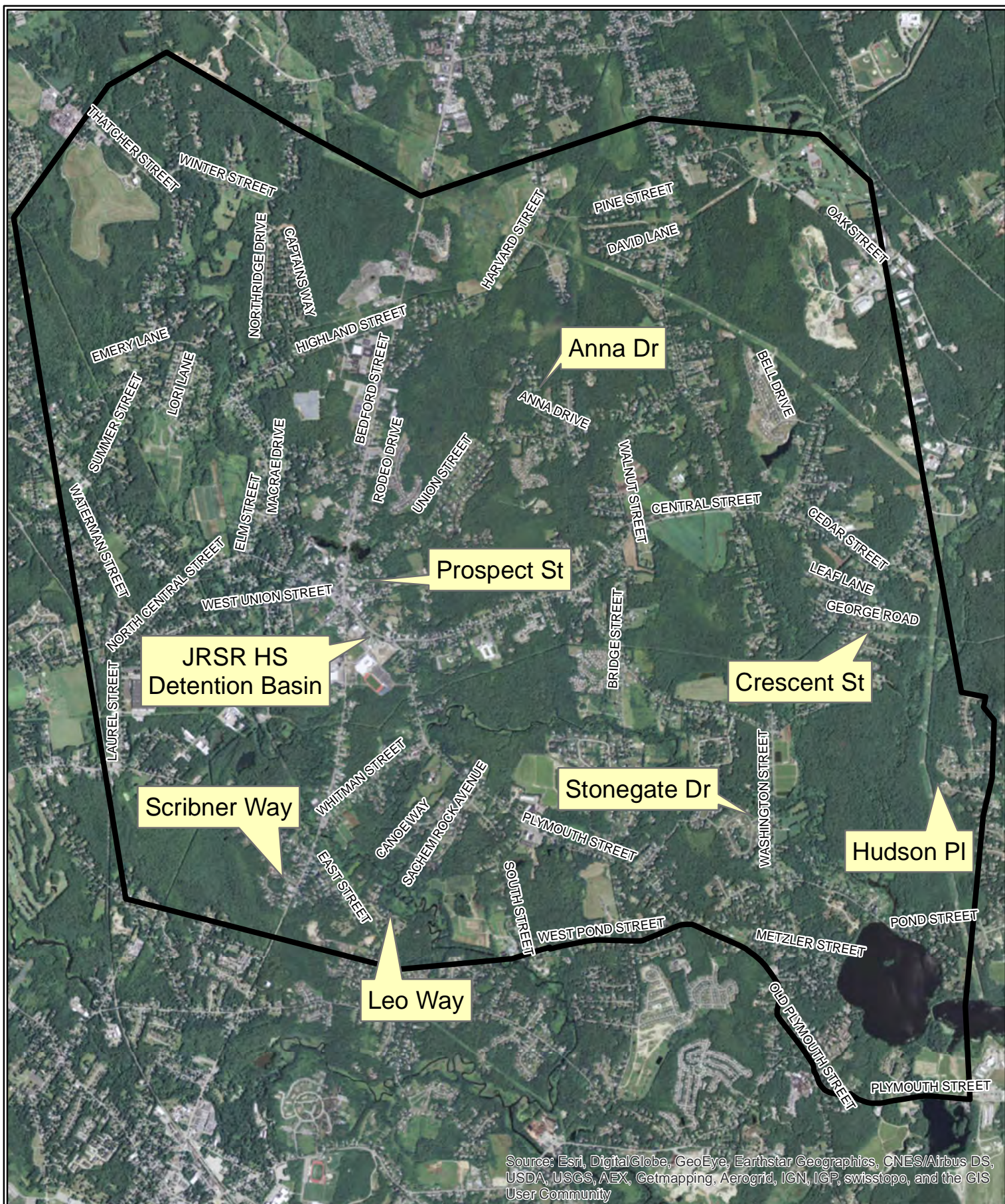
During the inspections of the outfalls, any sediment buildup is cleared, trash or debris is disposed of, and tree limbs cleared, etc.

5.0 REPORTING AND RECORDKEEPING

The tracking and documentation of MS4 Maintenance and Operations is a required part of the MS4 permit program. All inspection forms are recorded and stored at the DPW Department Office to maintain the proper documentation, to be included on the annual MS4 reports. Documentation of investigative, corrective and enforcement actions are maintained by the DPW Director.

FIGURES

Figure 1 – Townwide BMP Locations



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

0 1,500 3,000 6,000 Feet

1 in = 3,000 feet

Environmental Partners
A partnership for engineering solutions.

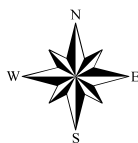
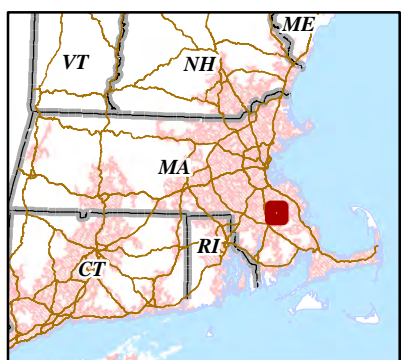
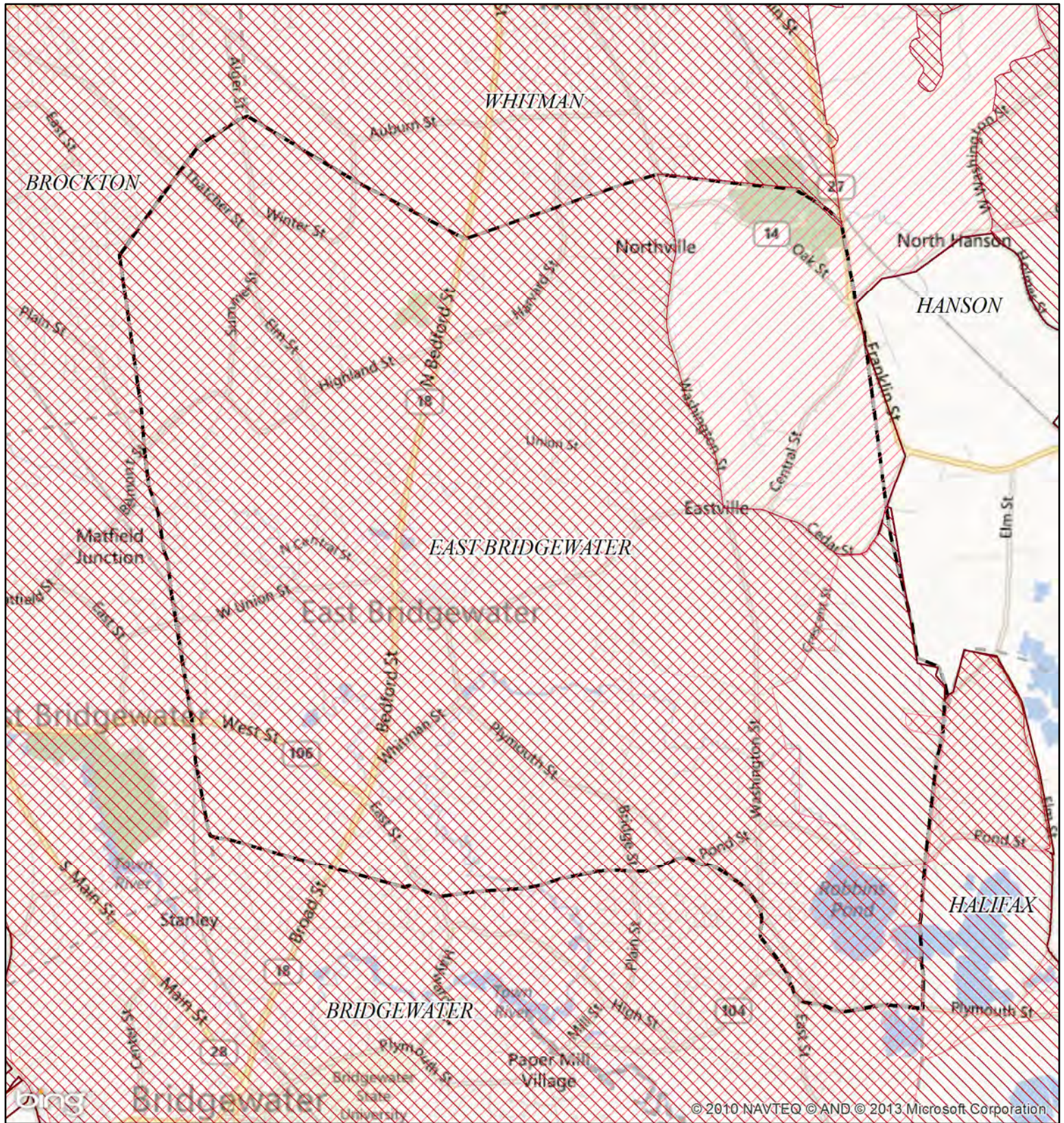


Figure 1: Townwide BMP Locations
Town of East Bridgewater, MA
September 2015

APPENDIX A

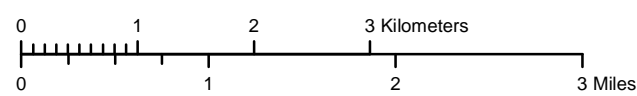
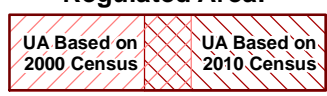
Town of East Bridgewater Urbanized Area Map
Town of East Bridgewater TMDL Map/Data



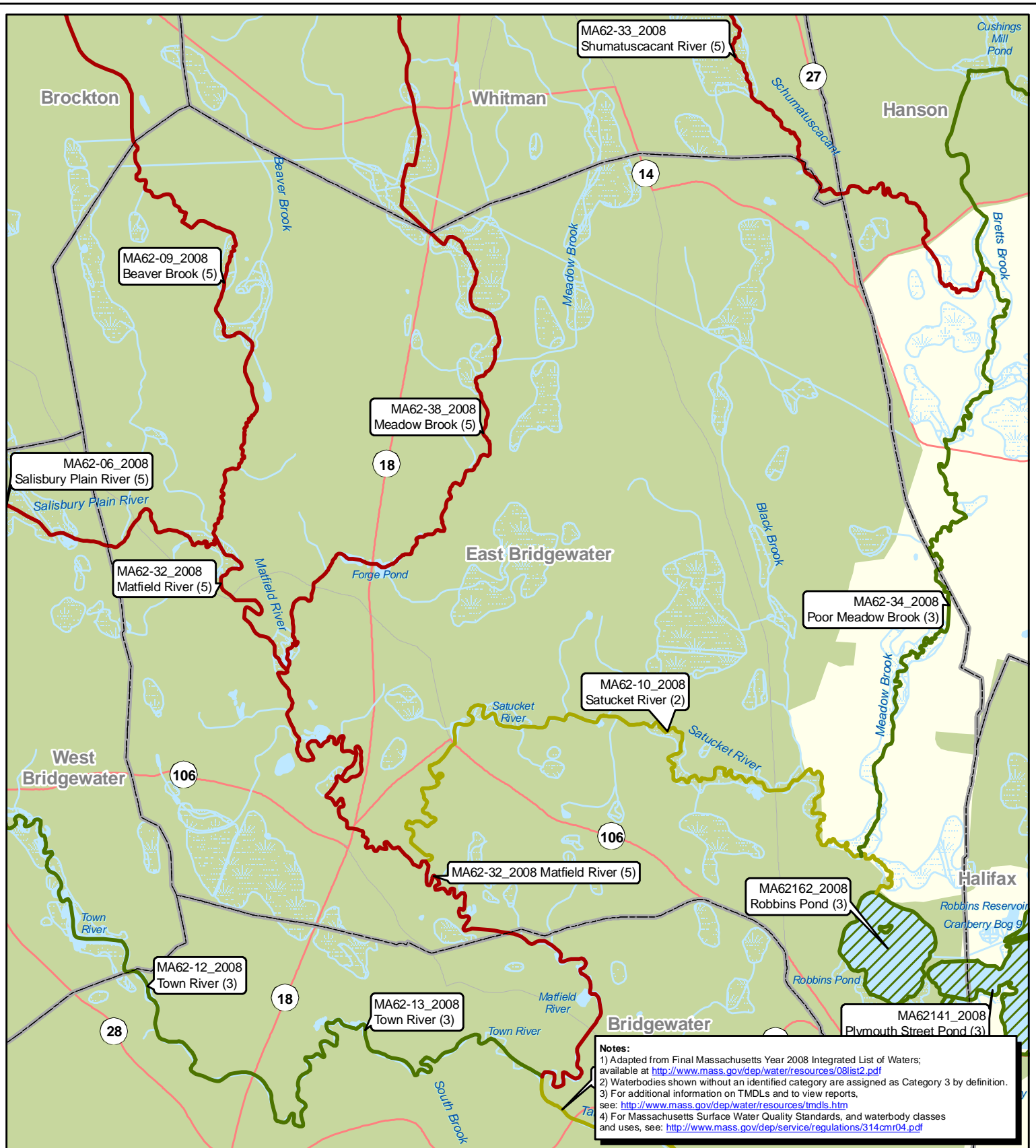
NPDES Phase II Stormwater Program
Automatically Designated MS4 Areas
East Bridgewater MA

Town Population: 13794
Regulated Population: 13794
(Populations estimated from 2010 Census)

Regulated Area:



Urbanized Areas, Town Boundaries:
US Census (2000, 2010)
Base map © 2013 Microsoft Corporation
and its data suppliers



Waterbody Assessment and TMDL Status East Bridgewater, MA



0 0.5
Miles



Map produced by EPA Region I GIS Center
Map Tracker ID 6678, February 25, 2010
Data Sources: TeleAtlas, Census Bureau,
USGS, MassDEP

See companion table for a listing of pollutants,
non-pollutants, and TMDLs for each waterbody

Summary of Waterbody Assessment and TMDL Status in Massachusetts

East Bridgewater, MA

| ID | Waterbody Name | Watershed Name | Category | Acres | | Miles | | Cause | TMDL |
|--------------|-----------------------|----------------|----------|-----------------|--|-----------------|-----|---|---|
| | | | | In Town - Total | | In Town - Total | | | |
| MA62-06_2008 | Salisbury Plain River | Taunton | 5 | | | 0.9 | 2.3 | Cause Unknown Noxious aquatic plants Nutrients Objectionable deposits* Organic enrichment/Low DO Pathogens Taste, odor and color Turbidity | |
| MA62-09_2008 | Beaver Brook | Taunton | 5 | | | 3.0 | 6.8 | | |
| | | | | | | | | | Pathogens |
| MA62-10_2008 | Satucket River | Taunton | 2 | | | 5.6 | 5.6 | | |
| MA62-32_2008 | Matfield River | Taunton | 5 | | | 5.1 | 6.7 | | |
| | | | | | | | | | Cause Unknown Noxious aquatic plants Nutrients Organic enrichment/Low DO Pathogens Taste, odor and color |
| | | | | | | | | | |

1) Adapted from Final Massachusetts Year 2008 Integrated List of Waters (CN 281.1, 12/2008); available at <http://www.mass.gov/dep/water/resources/08list2.pdf>
 2) For additional information on TMDLs and to view reports, see: <http://www.mass.gov/dep/water/resources/tmdls.htm>
 3) For Massachusetts Surface Water Quality Standards, and waterbody classes and uses, see: <http://www.mass.gov/dep/service/regulations/314cmr04.pdf>

Assessment of Waterbody Segment

Category 2 - Attaining some uses; other uses not assessed
 Category 3 - Insufficient information to make assessments for any use
 Category 4a - TMDL is completed
 Category 4c - Impairment not caused by a pollutant
 Category 5 - Impaired or threatened for one or more uses and requiring a TMDL

Summary of Waterbody Assessment and TMDL Status in Massachusetts

East Bridgewater, MA

| ID | Waterbody Name | Watershed Name | Category | Acres | | Miles | | Cause | TMDL |
|--------------|----------------------|----------------|----------|-----------|--------|-----------|-------|---|------|
| | | | | In Town - | Total | In Town - | Total | | |
| MA62-33_2008 | Shumatuscacant River | Taunton | 5 | | | 0.2 | 8.5 | Organic enrichment/Low DO Other habitat alterations* Pathogens Siltation | |
| MA62-34_2008 | Poor Meadow Brook | Taunton | 3 | | | 2.1 | 6.9 | | |
| MA62-38_2008 | Meadow Brook | Taunton | 5 | | | 3.6 | 6.0 | Pathogens | |
| MA62141_2008 | Plymouth Street Pond | Taunton | 3 | 23.58 | 165.02 | | | | |
| MA62162_2008 | Robbins Pond | Taunton | 3 | 123.73 | 123.73 | | | | |

1) Adapted from Final Massachusetts Year 2008 Integrated List of Waters (CN 281.1, 12/2008); available at <http://www.mass.gov/dep/water/resources/08list2.pdf>
 2) For additional information on TMDLs and to view reports, see: <http://www.mass.gov/dep/water/resources/tmdls.htm>
 3) For Massachusetts Surface Water Quality Standards, and waterbody classes and uses, see: <http://www.mass.gov/dep/service/regulations/314cmr04.pdf>

Assessment of Waterbody Segment

Category 2 - Attaining some uses; other uses not assessed
 Category 3 - Insufficient information to make assessments for any use
 Category 4a - TMDL is completed
 Category 4c - Impairment not caused by a pollutant
 Category 5 - Impaired or threatened for one or more uses and requiring a TMDL

APPENDIX B

BMP Inspection Form Template



Stormwater Controls Site Inspection Report

| General Information | | | |
|---|--|----------------|--|
| GIS BMP ID (To be provided by mapbook) | | | |
| GIS Grid Page # (To be provided by mapbook) | | | |
| Description | | | |
| Location/Street Name/Address | | | |
| Date of Inspection | | Start/End Time | |
| Inspector's Name(s) | | | |
| Inspector's Title(s) | | | |
| Inspector's Contact Information | | | |
| Type of Inspection: | | | |
| <input type="checkbox"/> Regular <input type="checkbox"/> Pre-storm event <input type="checkbox"/> During storm event <input type="checkbox"/> Post-storm event | | | |
| Weather Information | | | |
| Weather at time of this inspection? | | | |
| <input type="checkbox"/> Clear <input type="checkbox"/> Cloudy <input type="checkbox"/> Rain <input type="checkbox"/> Sleet <input type="checkbox"/> Fog <input type="checkbox"/> Snowing <input type="checkbox"/> High Winds | | | |
| <input type="checkbox"/> Other: Temperature: | | | |

BMP Maintenance Required

☐ Yes

☐ No

Corrective Actions Needed and Additional Notes

| |
|--|
| |
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APPENDIX C

Outfall Inspection Form Template



Outfall Pipe Inspection Report

| General Information | | | |
|--|--|--------------------|--|
| GIS Outfall ID (To be provided by mapbook) | | | |
| GIS Grid Page # (To be provided by mapbook) | | | |
| Location/Street Name/Address | | | |
| Date of Inspection | | Start/End Time | |
| Inspector's Name(s) | | | |
| Inspector's Title(s) | | | |
| Inspector's Contact Information | | | |
| Type of Inspection: <input type="checkbox"/> Regular <input type="checkbox"/> Pre-storm event <input type="checkbox"/> During storm event <input type="checkbox"/> Post-storm event | | | |
| Weather Information | | | |
| Weather at time of this inspection? <input type="checkbox"/> Clear <input type="checkbox"/> Cloudy <input type="checkbox"/> Rain <input type="checkbox"/> Sleet <input type="checkbox"/> Fog <input type="checkbox"/> Snowing <input type="checkbox"/> High Winds <input type="checkbox"/> Other: Temperature: | | | |
| Outfall Structure Information | | | |
| Type of Structure | | | |
| Pipe Condition | | | |
| Pipe Submerged | | Material | |
| Headwall Type | | Headwall Condition | |
| Visual Characteristics (aesthetics, deposits/stains, erosion, vegetation) | | | |

Maintenance Required

☐ Yes

☐ No

Repair Required

☐ Yes

☐ No

Corrective Actions Needed and Additional Notes

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

APPENDIX D

Operations and Maintenance Schedule

Town of East Bridgewater, MA
Operations and Maintenance Schedule
Rev: September 2015

| | Activity | January | February | March | April | May | June | July | August | September | October | November | December |
|---------------------|------------------------------|--------------------|--------------------|--------------------|----------------------------|--------------------|--------------------|--------------------|---------------------|--------------------|-------------------------------|--------------------|--------------------|
| Municipal O&M | Street Sweeping | | | | 8 weeks, starting in April | | | | | | | | |
| | Catch Basin Cleaning | | | | | | | | | | 6 weeks, starting in the Fall | | |
| | BMP Maintenance | | | | Once in Spring | | | | Once in late Summer | | | | |
| Facilities & Fields | Mowing | | | | 1-2 times per week | 1-2 times per week | 1-2 times per week | 1-2 times per week | 1-2 times per week | 1-2 times per week | | | |
| | Fertilizing | | | | Thrice per year | | | Thrice per year | | Thrice per year | | | |
| | Trash Removal | 1-2 times per week | 1-2 times per week | 1-2 times per week | 1-2 times per week | 1-2 times per week | 1-2 times per week | 1-2 times per week | 1-2 times per week | 1-2 times per week | 1-2 times per week | 1-2 times per week | 1-2 times per week |
| | Pet Waste Removal | Once per week | Once per week | Once per week | Once per week | Once per week | Once per week | Once per week | Once per week | Once per week | Once per week | Once per week | Once per week |
| | Pump Water Dept. Tight Tanks | | | | | | | 1st week of July | | | | | |
| | Pump OWS | | | | | | | 1st week of July | | | | | |
| | Pump Septic Systems | | | | | | | 1st week of July | | | | | |
| | Pump H.S. Tight Tanks | | | | | | Twice per year | | | | | | Twice per year |
| Fleet Maintenance | Vehicle Washing | | | Once per year | | | | | | | | | |
| | Oil Change | | | | | | | | | | | | |
| | Other Activities? | | | | | | | | | | | | |

Table 4-1. SSO Inventory
East Bridgewater, Massachusetts
Revision Date: June 2019

| SSO Location ¹ | Discharge Statement ² | Date ³ | Time Start ³ | Time End ³ | Estimated Volume ⁴ | Description ⁵ | Mitigation Completed ⁶ | Mitigation Planned ⁷ |
|---------------------------|----------------------------------|-------------------|-------------------------|-----------------------|-------------------------------|--------------------------|-----------------------------------|---------------------------------|
| N/A (none) | | | | | | | | |
| | | | | | | | | |
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| | | | | | | | | |

¹ Location (approximate street crossing/address and receiving water, if any)

² A clear statement of whether the discharge entered a surface water directly or entered the MS4

³ Date(s) and time(s) of each known SSO occurrence (i.e., beginning and end of any known discharge)

⁴ Estimated volume(s) of the occurrence

⁵ Description of the occurrence indicating known or suspected cause(s)

⁶ Mitigation and corrective measures completed with dates implemented

⁷ Mitigation and corrective measures planned with implementation schedules

Stormwater Catchment Delineation
East Bridgewater, Massachusetts



| Catchment ID | Subcatchment ID | Receiving Water | Outfall ID | Catchment Scores | | | | | | Outfall Scores | | | | Outfall Sampled | Outfall Score | Catchment Score | Outfall Ranking* | Catchment Ranking** |
|--------------|-----------------|--|------------|-----------------------------|------------------------------------|--------------------------------------|----------------------------------|--------------------------------------|--|---|---|--|--|------------------|---------------|-----------------|------------------|---------------------|
| | | | | Density of Generating Sites | Age of Development/ Infrastructure | Historic Combined Sewers or Septic? | Aging Septic? | Culverted Streams? | Discharging to Area of Concern to Public Health? (Catchment) | Receiving Water Quality | Previous Screening Results Indicate Likely Sewer Input? | Frequency of Past Discharge Complaints | Discharging to Area of Concern to Public Health? (Outfall) | | | | | |
| | | | | Information Source | Land Use Information, Town Input | Town Input, GIS Maps | Parcel Age | GIS and Storm System Maps | GIS Maps, Town Input | Impaired Waters List | Outfall inspections and sample results | Town Input | GIS Maps, Town Input | Sampling Results | | | | |
| | | | | Scoring Criteria | High = 2 Medium = 1 Low = 0 | Older = 2 Medium = 1 Newer = 0 | Yes = 2 No Data = 1 No = 0 | Older = 2 Medium = 1 Newer = 0 | Yes = 2 No Data = 1 No = 0 | Category 4a = 2 Category 5 = 1 Others = 0 | Yes = 2 No Data = 1 No = 0 | Frequent = 2 Occasional = 1 None = 0 | Yes = 2 No Data = 1 No = 0 | Yes No Dry | | | | |
| B | 244 | Matfield River | O-47 | 2 | 0 | 0 | 2 | 0 | 2 | 1 | 1 | 0 | 0 | No | 2 | 6 | High | High |
| B | 244 | Matfield River | O-48 | 2 | 0 | 0 | 2 | 0 | 2 | 1 | 1 | 0 | 0 | No | 2 | 6 | High | High |
| B | 261 | Matfield River | O-187 | 2 | 0 | 0 | 2 | 0 | 2 | 1 | 1 | 0 | 0 | No | 2 | 6 | High | High |
| B | 261 | Matfield River | O-190 | 2 | 0 | 0 | 2 | 0 | 2 | 1 | 1 | 0 | 0 | No | 2 | 6 | High | High |
| B | 261 | Matfield River | O-191 | 2 | 0 | 0 | 2 | 0 | 2 | 1 | 1 | 0 | 0 | No | 2 | 6 | High | High |
| C | 243 | Meadow Brook | O-101 | 2 | 0 | 0 | 2 | 0 | 2 | 2 | 1 | 0 | 0 | No | 3 | 6 | High | High |
| C | 245 | Meadow Brook | O-185 | 2 | 0 | 0 | 2 | 0 | 2 | 2 | 1 | 0 | 0 | No | 3 | 6 | High | High |
| C | 243 | Meadow Brook | O-193 | 2 | 0 | 0 | 2 | 0 | 2 | 2 | 1 | 0 | 0 | No | 3 | 6 | High | High |
| C | 243 | Meadow Brook | O-194 | 2 | 0 | 0 | 2 | 0 | 2 | 2 | 1 | 0 | 0 | No | 3 | 6 | High | High |
| C | 243 | Meadow Brook | O-195 | 2 | 0 | 0 | 2 | 0 | 2 | 2 | 1 | 0 | 0 | No | 3 | 6 | High | High |
| C | 243 | Meadow Brook | O-196 | 2 | 0 | 0 | 2 | 0 | 2 | 2 | 1 | 0 | 0 | No | 3 | 6 | High | High |
| C | 243 | Meadow Brook | O-197 | 2 | 0 | 0 | 2 | 0 | 2 | 2 | 1 | 0 | 0 | No | 3 | 6 | High | High |
| C | 236 | Meadow Brook | O-213 | 2 | 0 | 0 | 2 | 0 | 2 | 2 | 1 | 0 | 0 | No | 3 | 6 | High | High |
| C | 223 | Meadow Brook | O-245 | 2 | 0 | 0 | 2 | 0 | 2 | 2 | 1 | 0 | 0 | No | 3 | 6 | High | High |
| C | 245 | Meadow Brook | O-266 | 2 | 0 | 0 | 2 | 0 | 2 | 2 | 1 | 0 | 0 | No | 3 | 6 | High | High |
| C | 224 | Unnamed Tributary to Meadow Brook | O-90 | 2 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 6 | Low | High |
| C | 237 | Forge Pond | O-251 | 2 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 6 | Low | High |
| H | 241 | Unnamed Tributary to Meadow Brook | O-27 | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 1 | 0 | 0 | No | 1 | 6 | Low | High |
| H | 241 | Unnamed Wetlands near Meadow Brook | O-30 | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 1 | 0 | 0 | No | 1 | 6 | Low | High |
| H | 241 | Unnamed Wetlands near Meadow Brook | O-98 | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 1 | 0 | 0 | No | 1 | 6 | Low | High |
| H | 241 | Unnamed Wetlands near Meadow Brook | O-99 | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 1 | 0 | 0 | No | 1 | 6 | Low | High |
| H | 241 | Unnamed Tributary to Meadow Brook | O-212 | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 1 | 0 | 0 | No | 1 | 6 | Low | High |
| H | 238 | Unnamed Tributary to Meadow Brook | O-269 | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 1 | 0 | 0 | No | 1 | 6 | Low | High |
| N | 222 | Unnamed Pond near Shumatuscacant River | O-278 | 2 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 6 | Low | High |
| A | 240 | Salisbury Plain River | O-38 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | No | 2 | 2 | High | Low |
| A | 248 | Salisbury Plain River | O-40 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | No | 2 | 2 | High | Low |
| A | 248 | Salisbury Plain River | O-41 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | No | 2 | 2 | High | Low |
| D | 226 | Beaver Brook | O-9 | 2 | 0 | 0 | 2 | 0 | 0 | 2 | 1 | 0 | 0 | No | 3 | 4 | High | Low |
| D | 227 | Beaver Brook | O-239 | 2 | 0 | 0 | 2 | 0 | 0 | 2 | 1 | 0 | 0 | No | 3 | 4 | High | Low |
| D | 221 | Beaver Brook | O-252 | 2 | 0 | 0 | 2 | 0 | 0 | 2 | 1 | 0 | 0 | No | 3 | 4 | High | Low |
| D | 227 | Beaver Brook | O-276 | 2 | 0 | 0 | 2 | 0 | 0 | 2 | 1 | 0 | 0 | No | 3 | 4 | High | Low |
| D | 221 | Beaver Brook | O-288 | 2 | 0 | 0 | 2 | 0 | 0 | 2 | 1 | 0 | 0 | No | 3 | 4 | High | Low |
| D | 269 | Unnamed Tributary to Beaver Brook | O-284 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| E | 263 | Unnamed Wetlands near Meadow Brook | O-4 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 2 | Low | Low |
| E | 225 | Unnamed Tributary to Meadow Brook | O-11 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 2 | Low | Low |
| E | 225 | Unnamed Tributary to Meadow Brook | O-109 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 2 | Low | Low |
| E | 263 | Unnamed Wetlands near Meadow Brook | O-220 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 2 | Low | Low |
| E | 263 | Unnamed Wetlands near Meadow Brook | O-227 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 2 | Low | Low |
| E | 230 | Unnamed Wetlands to Meadow Brook | O-241 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 2 | Low | Low |
| E | 230 | Unnamed Wetlands to Meadow Brook | O-242 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 2 | Low | Low |
| J | 228 | Unnamed Wetlands near Black Brook | O-66 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 3 | Low | Low |
| J | 228 | Unnamed Wetlands near Black Brook | O-67 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 3 | Low | Low |
| J | 257 | Black Brook | O-171 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 3 | Low | Low |
| J | 256 | Black Brook | O-172 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 3 | Low | Low |



Stormwater Catchment Delineation
East Bridgewater, Massachusetts



| Catchment ID | Subcatchment ID | Receiving Water | Outfall ID | Catchment Scores | | | | | | Outfall Scores | | | | Outfall Sampled | Outfall Score | Catchment Score | Outfall Ranking* | Catchment Ranking** |
|--------------|-----------------|--|------------|---|--------------------------------------|-------------------------------------|--------------------------------------|----------------------------------|--|---|---|--|--|-----------------|---------------|-----------------|------------------|---------------------|
| | | | | Density of Generating Sites | Age of Development/ Infrastructure | Historic Combined Sewers or Septic? | Aging Septic? | Culverted Streams? | Discharging to Area of Concern to Public Health? (Catchment) | Receiving Water Quality | Previous Screening Results Indicate Likely Sewer Input? | Frequency of Past Discharge Complaints | Discharging to Area of Concern to Public Health? (Outfall) | | | | | |
| | | | | Land Use/GIS Maps, Aerial Photography, Google Earth | Land Use Information, Town Input | Town Input, GIS Maps | Parcel Age | GIS and Storm System Maps | GIS Maps, Town Input | Impaired Waters List | Outfall inspections and sample results | Town Input | GIS Maps, Town Input | | | | | |
| | | | | High = 2 Medium = 1 Low = 0 | Older = 2 Medium = 1 Newer = 0 | Yes = 2 No Data = 1 No = 0 | Older = 2 Medium = 1 Newer = 0 | Yes = 2 No Data = 1 No = 0 | Yes = 2 No Data = 1 No = 0 | Category 4a = 2 Category 5 = 1 Others = 0 | Yes = 2 No Data = 1 No = 0 | Frequent = 2 Occasional = 1 None = 0 | Yes = 2 No Data = 1 No = 0 | | | | | |
| J | 228 | Black Brook | O-207 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 3 | Low | Low |
| J | 228 | Black Brook | O-208 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 3 | Low | Low |
| K | 242 | Unnamed Tributary to Satucket River | O-46 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| K | 255 | Satucket River | O-65 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| K | 249 | Satucket River | O-96 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| K | 233 | Satucket River | O-137 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| K | 250 | Satucket River | O-144 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| K | 250 | Satucket River | O-145 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| K | 255 | Satucket River | O-146 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| K | 254 | Satucket River | O-149 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| K | 251 | Satucket River | O-150 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| K | 233 | Satucket River | O-154 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| K | 246 | Satucket River | O-158 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| K | 252 | Satucket River | O-159 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| K | 246 | Satucket River | O-160 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| K | 249 | Satucket River | O-161 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| K | 249 | Satucket River | O-162 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| K | 233 | Satucket River | O-163 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| K | 233 | Satucket River | O-164 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| K | 249 | Satucket River | O-165 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| K | 233 | Satucket River | O-166 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| K | 260 | Satucket River | O-169 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| K | 260 | Satucket River | O-170 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| L | 239 | Unnamed Wetlands to Poor Meadow Brook | O-173 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 2 | Low | Low |
| L | 264 | Unnamed Wetlands to Poor Meadow Brook | O-268 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 2 | Low | Low |
| M | 266 | Unnamed Wetlands near Black Brook | O-225 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 2 | Low | Low |
| O | 258 | Unnamed Tributary to Black Brook | O-176 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 2 | Low | Low |
| O | 258 | Unnamed Tributary to Black Brook | O-177 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 2 | Low | Low |
| O | 229 | Unnamed Tributary to Black Brook | O-209 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 2 | Low | Low |
| O | 229 | Unnamed Tributary to Black Brook | O-210 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 2 | Low | Low |
| O | 229 | Unnamed Tributary to Black Brook | O-211 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 2 | Low | Low |
| P | 235 | Unnamed Tributary to Beaver Brook | O-216 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 2 | Low | Low |
| P | 235 | Unnamed Tributary to Beaver Brook | O-217 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 2 | Low | Low |
| Q | 268 | Unnamed Tributary to Salisbury Plain River | O-249 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| S | 270 | Meadow Brook | O-42 | 0 | 0 | 0 | 2 | 0 | 2 | 2 | 1 | 0 | 0 | No | 3 | 4 | High | Low |
| S | 270 | Unnamed Tributary to Meadow Brook | O-37 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| S | 270 | Unnamed Tributary to Meadow Brook | O-215 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| T | 247 | Unnamed Tributary to Salisbury Plain River | O-16 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 2 | Low | Low |
| T | 247 | Unnamed Tributary to Salisbury Plain River | O-49 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 2 | Low | Low |
| V | 265 | Unnamed Tributary to Matfield River | O-93 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 2 | Low | Low |
| V | 265 | Unnamed Tributary to Matfield River | O-155 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 2 | Low | Low |
| V | 232 | Unnamed Tributary to Matfield River | O-156 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 2 | Low | Low |
| W | 231 | Unnamed Wetlands near Satucket River | O-124 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| W | 231 | Unnamed Wetlands near Satucket River | O-126 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |



Stormwater Catchment Delineation
East Bridgewater, Massachusetts



| | | | | Catchment Scores | | | | | | Outfall Scores | | | | | | | | |
|--------------------|-----------------|--------------------------------------|------------|---|--------------------------------------|-------------------------------------|--------------------------------------|----------------------------------|--|---|---|--|--|------------------|---------------|-----------------|------------------|---------------------|
| Catchment ID | Subcatchment ID | Receiving Water | Outfall ID | Density of Generating Sites | Age of Development/ Infrastructure | Historic Combined Sewers or Septic? | Aging Septic? | Culverted Streams? | Discharging to Area of Concern to Public Health? (Catchment) | Receiving Water Quality | Previous Screening Results Indicate Likely Sewer Input? | Frequency of Past Discharge Complaints | Discharging to Area of Concern to Public Health? (Outfall) | Outfall Sampled | Outfall Score | Catchment Score | Outfall Ranking* | Catchment Ranking** |
| Information Source | | | | Land Use/GIS Maps, Aerial Photography, Google Earth | Land Use Information, Town Input | Town Input, GIS Maps | Parcel Age | GIS and Storm System Maps | GIS Maps, Town Input | Impaired Waters List | Outfall inspections and sample results | Town Input | GIS Maps, Town Input | Sampling Results | | | | |
| Scoring Criteria | | | | High = 2 Medium = 1 Low = 0 | Older = 2 Medium = 1 Newer = 0 | Yes = 2 No Data = 1 No = 0 | Older = 2 Medium = 1 Newer = 0 | Yes = 2 No Data = 1 No = 0 | Yes = 2 No Data = 1 No = 0 | Category 4a = 2 Category 5 = 1 Others = 0 | Yes = 2 No Data = 1 No = 0 | Frequent = 2 Occasional = 1 None = 0 | Yes = 2 No Data = 1 No = 0 | Yes No Dry | | | | |
| W | 231 | Unnamed Wetlands near Satucket River | O-130 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| W | 231 | Unnamed Wetlands near Satucket River | O-131 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| X | 262 | Unnamed Tributary to Satucket River | O-134 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 3 | Low | Low |
| X | 253 | Unnamed Tributary to Satucket River | O-247 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 3 | Low | Low |
| X | 253 | Unnamed Tributary to Satucket River | O-248 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 3 | Low | Low |
| Y | 259 | Unnamed Tributary to Satucket River | O-78 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| Y | 259 | Unnamed Tributary to Satucket River | O-79 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| Y | 259 | Unnamed Tributary to Satucket River | O-179 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| Y | 259 | Unnamed Tributary to Satucket River | O-200 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 4 | Low | Low |
| Z | 267 | Unnamed Wetlands near Robbins Pond | O-112 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 2 | Low | Low |
| Z | 234 | Robbins Pond | O-115 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | No | 1 | 2 | Low | Low |

*Outfall classification:

Problem outfall: Outfalls/interconnections with known or suspected contributions of illicit discharges are Problem Outfalls. This includes outfalls/interconnections with previous screening that indicates likely sewer input, including:

- Olfactory or visual evidence of sewage,
- Ammonia ≥ 0.5 mg/L, surfactants ≥ 0.25 mg/L, and bacteria levels greater than the water quality criteria applicable to the receiving water, or
- Ammonia ≥ 0.5 mg/L, surfactants ≥ 0.25 mg/L, and detectable levels of chlorine.

High priority outfalls: Outfalls/interconnections that have not been classified as Problem Outfalls and that are:

- Discharging to an area of concern to public health due to proximity of public beaches, recreational areas, drinking water supplies or shellfish beds
- Determined by the permittee as high priority based on the characteristics listed below or other available information.

Outfalls discharging to Beaver Brook, Meadow Brook, Matfield River, or Salisbury River ranked HIGH

Low priority outfalls: Outfalls/interconnections determined by the permittee as low priority based on previous screening results, frequency of past discharge complaints and discharging to areas of public concern.

Excluded outfalls: Outfalls/interconnections with no potential for illicit discharges may be excluded from the IDDE program. This category is limited to roadway drainage in undeveloped areas with no dwellings and no sanitary sewers; drainage for athletic fields, parks or undeveloped green space and associated parking without services; cross-country drainage alignments through undeveloped land.

**Catchment classification:

High priority catchments: These catchments have the highest amount of indicators for illicit discharge potential.

Medium priority catchments: These catchments contain indicators of both a high and low potential of illicit discharge.

Low priority catchments: These catchments have the fewest amount of indicators for illicit discharge potential.



Year 1 Annual Report

Massachusetts Small MS4 General Permit

Reporting Period: May 1, 2018-June 30, 2019

****Please DO NOT attach any documents to this form. Instead, attach all requested documents to an email when submitting the form****

Unless otherwise noted, all fields are required to be filled out. If a field is left blank, it will be assumed the requirement or task has not been completed.

Part I: Contact Information

Name of Municipality or Organization: Town of East Bridgewater

EPA NPDES Permit Number: MAR041109

Primary MS4 Program Manager Contact Information

Name: John Haines

Title: DPW Director

Street Address Line 1: 100 Willow Ave

Street Address Line 2:

City: East Bridgewater

State: MA

Zip Code: 02333

Email: jhaines@ebmass.com

Phone Number: (508) 378-1620

Fax Number:

Stormwater Management Program (SWMP) Information

SWMP Location (web address): N/A

Date SWMP was Last Updated: September 30, 2015

If the SWMP is not available on the web please provide the physical address and an explanation of why it is not posted on the web:

SWMP located at the DPW and Health Department; Updates to be completed in 2020.

Part II: Self Assessment

First, in the box below, select the impairment(s) and/or TMDL(s) that are applicable to your MS4.

Impairment(s)

- ☒ Bacteria/Pathogens
 ☐ Chloride
 ☒ Nitrogen
 ☒ Phosphorus
☒ Solids/ Oil/ Grease (Hydrocarbons)/ Metals

TMDL(s)

- In State: ☐ Assabet River Phosphorus
 ☒ Bacteria and Pathogen
 ☐ Cape Cod Nitrogen
☐ Charles River Watershed Phosphorus
 ☐ Lake and Pond Phosphorus

- Out of State: ☐ Bacteria/Pathogens
 ☐ Metals
 ☐ Nitrogen
 ☐ Phosphorus

Clear Impairments and TMDLs

Next, check off all requirements below that have been completed. **By checking each box you are certifying that you have completed that permit requirement fully.** If you have not completed a requirement leave the box unchecked. Additional information will be requested in later sections.

Year 1 Requirements

- ☒ Develop and begin public education and outreach program
☒ Identify and develop inventory of all known locations where SSOs have discharged to the MS4 in the last 5 years
 - ☒ The SSO inventory is attached to the email submission
 - ☐ The SSO inventory can be found at the following website:☒ Develop written IDDE plan including a procedure for screening and sampling outfalls
☒ IDDE ordinance complete
☒ Identify each outfall and interconnection discharging from MS4, classify into the relevant category, and priority rank each catchment for investigation
 - ☒ The priority ranking of outfalls/interconnections is attached to the email submission
 - ☐ The priority ranking of outfalls/interconnections can be found at the following website:☒ Construction/ Erosion and Sediment Control (ESC) ordinance complete
☐ Develop written procedures for site inspections and enforcement of sediment and erosion control measures
☐ Develop written procedures for site plan review
☒ Keep a log of catch basins cleaned or inspected
☒ Complete inspection of all stormwater treatment structures

Annual Requirements

- ☒ Annual opportunity for public participation in review and implementation of SWMP
- ☒ Comply with State Public Notice requirements
- ☒ Keep records relating to the permit available for 5 years and make available to the public
- ☒ Properly store and dispose of catch basin cleanings and street sweepings so they do not discharge to receiving waters
- ☒ Annual training to employees involved in IDDE program
- ☒ All curbed roadways have been swept a minimum of one time per year

Bacteria/ Pathogens (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

Annual Requirements

*Public Education and Outreach**

- ☒ Annual message encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- ☐ Permittee or its agents disseminate educational material to dog owners at the time of issuance or renewal of dog license, or other appropriate time
- ☒ Provide information to owners of septic systems about proper maintenance in any catchment that discharges to a water body impaired for bacteria

** Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)*

Nitrogen (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

Annual Requirements

*Public Education and Outreach**

- ☒ Distribute an annual message in the spring (April/May) that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release fertilizers
- ☒ Distribute an annual message in the summer (June/July) encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- ☒ Distribute an annual message in the fall (August/September/October) encouraging the proper disposal of leaf litter

** Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)*

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

- ☐ Increase street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.a.iii.(c) to a minimum of two times per year (spring and fall)

Potential structural BMPs

- Any structural BMPs listed in Table 3 of Attachment 1 to Appendix H already existing or installed in the regulated area by the permittee or its agents shall be tracked and the permittee shall estimate the
- ☐ nitrogen removal by the BMP consistent with Attachment 1 to Appendix H. Document the BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated nitrogen removed in mass per year by the BMP in each annual report

Phosphorus (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

Annual Requirements*Public Education and Outreach**

- ☒ Distribute an annual message in the spring (April/May) that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release and phosphorus-free fertilizers
- ☒ Distribute an annual message in the summer (June/July) encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- ☒ Distribute an annual message in the fall (August/September/October) encouraging the proper disposal of leaf litter

** Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)*

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

- ☐ Increase street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.a.iii.(c) to a minimum of two times per year (spring and fall)

Potential structural BMPs

- Any structural BMPs listed in Attachment 3 to Appendix F already existing or installed in the regulated area by the permittee or its agents shall be tracked and the permittee shall estimate the phosphorus
- ☐ removal by the BMP consistent with Attachment 1 to Appendix H. Document the BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated phosphorus removed in mass per year by the BMP in each annual report

Solids, Oil and Grease (Hydrocarbons), or MetalsAnnual Requirements*Good Housekeeping and Pollution Prevention for Permittee Owned Operations*

- ☐ Increase street sweeping frequency of all municipal owned streets and parking lots to a schedule to target areas with potential for high pollutant loads
- Prioritize inspection and maintenance for catch basins to ensure that no sump shall be more than 50
- ☒ percent full; Clean catch basins more frequently if inspection and maintenance activities indicate excessive sediment or debris loadings

Use the box below to input additional details on any unchecked boxes above or any additional information you would like to share as part of your self assessment:

Structural BMPs will be tracked and estimates for nutrient removal developed in accordance with Attachment 1 to Appendix H in the future.

Part III: Receiving Waters/Impaired Waters/TMDL

Have you made any changes to your lists of receiving waters, outfalls, or impairments since the NOI was submitted?

Yes ☐ No ☒

If yes, describe below, including any relevant impairments or TMDLs:

N/A

Part IV: Minimum Control Measures

Please fill out all of the metrics below. If applicable, include in the description who completed the task if completed by a third party.

MCM1: Public Education

Number of educational messages completed during the reporting period:

Below, report on the educational messages completed during the first year. For the measurable goal(s) please describe the method/measures used to assess the overall effectiveness of the educational program.

BMP: Publish Outreach on Website

Message Description and Distribution Method:

Published "Stormwater Pollution Prevention Guide" on the East Bridgewater DPW's website.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Distribute at least two educational messages within the permit term (5 years).

Message Date(s):

Message Completed for: Appendix F Requirements ☐ Appendix H Requirements ☐

Was this message different than what was proposed in your NOI? Yes ☐ No ☒

If yes, describe why the change was made:

BMP: Summer Pet Waste Management Message

Message Description and Distribution Method:

Encouraged proper management of pet waste, including noting any existing ordinances where appropriate; "Do you Doody for Clean Water" flyer; Social media post on East Bridgewater's Facebook page and ThinkBlue's Facebook page in Summertime.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Distribute annual messaging in accordance with the Town's Phosphorus, Nitrogen and Bacteria and Pathogen impairments and Bacteria and Pathogen TMDL.

7170 people reached on ThinkBlue Massachusetts Facebook page.

Message Date(s): June 7, 2019

Message Completed for: Appendix F Requirements ☒ Appendix H Requirements ☒

Was this message different than what was proposed in your NOI? Yes ☐ No ☒

If yes, describe why the change was made:

BMP: Spring Fertilizer and Grass Clipping Messaging

Message Description and Distribution Method:

Proper use and disposal of grass clippings and encouragement of slow-release fertilizers: "Leave grass clippings to fertilize lawn naturally; Know before you mow!" Social media post on East Bridgewater's Facebook page and ThinkBlue's Facebook page in Springtime.

Targeted Audience: Residents

Responsible Department/Parties: ThinkBlue

Measurable Goal(s):

Distribute annual messaging in accordance with the Town's Phosphorus and Nitrogen impairments.

3549 people reached through ThinkBlue Massachusetts Facebook post.

Message Date(s): March 18, 2019; May 22, 2019

Message Completed for: Appendix F Requirements ☐ Appendix H Requirements ☒

Was this message different than what was proposed in your NOI? Yes ☐ No ☒

If yes, describe why the change was made:

BMP: Fall Leaf Litter Messaging

Message Description and Distribution Method:

Proper disposal of leaf litter: "Don't leaf clean water to chance!" posted to DPW web site and social media via East Bridgewater's Facebook page and ThinkBlue's Facebook page in Fall.

Targeted Audience: Residents

Responsible Department/Parties: ThinkBlue

Measurable Goal(s):

Distribute annual messaging in accordance with the Town's Phosphorus and Nitrogen impairments.

43 people reached on through ThinkBlue MA Facebook post; 76 visitors to DPW Stormwater web page.

Message Date(s): October 26, 2019

Message Completed for: Appendix F Requirements ☐ Appendix H Requirements ☒

Was this message different than what was proposed in your NOI? Yes ☐ No ☒

If yes, describe why the change was made:

BMP: Septic Information

Message Description and Distribution Method:

Flyer titled "After the Storm: a citizen's guide to understanding stormwater" posted to the East Bridgewater DPW's website that covers lawn care, septic systems, auto care, pet waste and green gardening.

Targeted Audience: Resident

Responsible Department/Parties: DPW Operations, Board of Health, Conservation Commission

Measurable Goal(s):

Distribute annual messaging in accordance with the Town's Bacteria and Pathogen impairment and TMDL.

Message Date(s): Ongoing

Message Completed for: Appendix F Requirements ☒ Appendix H Requirements ☒

Was this message different than what was proposed in your NOI? Yes ☐ No ☒

If yes, describe why the change was made:

Add an Educational Message

MCM2: Public Participation

Describe the opportunity provided for public involvement in the development of the Stormwater Management Program (SWMP) during the reporting period:

SWMP will be updated in Year 2 with public involvement program included.

Was this opportunity different than what was proposed in your NOI? Yes ☒ No ☐

Describe any other public involvement or participation opportunities conducted during the reporting period:

Hosted annual hazardous waste day (August 25, 2018); Supported town-wide clean-up activities (May 11, 2019); Unused prescription collection is now continuous with a collection bin at the police department; Member of the in the Massachusetts Statewide Municipal Stormwater Coalition that presented at: Metrowest/495 Partnership (Oct 4), MetroWest Stormwater Roundtable (Nov 20), Massachusetts Municipal Association Meeting & Trade Show (Jan 18-19), New England Water Environment Association Annual Conference (Jan 28), Massachusetts Association of Conservation Commissions Annual Conference (March 2), Massachusetts congress of Lake and Pond Associations Annual Workshop (April 12), New England American Public Works Association Spring Conference (April 17), Ecotarium Earth Day (April 16-19), and New England Water Environment Association Spring Meeting (June 4)

MCM3: Illicit Discharge Detection and Elimination (IDDE)

Sanitary Sewer Overflows (SSOs)

Below, report on the number of SSOs identified in the MS4 system and removed during this reporting period.

Number of SSOs identified:

Number of SSOs removed:

Below, report on the total number of SSOs identified in the MS4 system and removed to date. At a minimum, report SSOs identified since 2013.

Total number of SSOs identified:

Total number of SSOs removed:

MS4 System Mapping

Describe the status of your MS4 map, including any progress made during the reporting period (phase I map due in year 2):

The Town of East Bridgewater has completed the following updates to its stormwater mapping to meet the Phase I requirements:

- Outfalls and receiving waters (updated 2018)
- Water bodies identified by name and indication of all use impairments as identified on the most recent EPA approved Massachusetts Integrated List of Waters report (taken from USGS/MassDEP Hydrography data updated April 2017)
- Initial catchment delineations are included in the IDDE Plan (attached as Appendix C and further developed in Section 5.1 of the IDDE Plan)

Screening of Outfalls/Interconnections

If conducted, please submit any outfall monitoring results from this reporting period. Outfall monitoring results should include the date, outfall/interconnection identifier, location, weather conditions at time of sampling, precipitation in previous 48 hours, field screening parameter results, and results from all analyses.

- ☐ The outfall screening data is attached to the email submission
- ☐ The outfall screening data can be found at the following website:

Below, report on the number of outfalls/interconnections screened during this reporting period.

Number of outfalls screened:

Below, report on the percent of total outfalls/ interconnections screened to date.

Percent of total outfalls screened:

Catchment Investigations

If conducted, please submit all data collected during this reporting period as part of the dry and wet weather investigations. Also include the presence or absence of System Vulnerability Factors for each catchment.

- ☐ The catchment investigation data is attached to the email submission
- ☐ The catchment investigation data can be found at the following website:

Below, report on the number of catchment investigations completed during this reporting period.

Number of catchment investigations completed this reporting period:

Below, report on the percent of catchments investigated to date.

Percent of total catchments investigated:

Optional: Provide any additional information for clarity regarding the catchment investigations below:

N/A

IDDE Progress

If illicit discharges were found, please submit a document describing work conducted over this reporting period, and cumulative to date, including location source; description of the discharge; method of discovery; date of discovery; and date of elimination, mitigation, or enforcement OR planned corrective measures and schedule of removal.

- ☐ The illicit discharge removal report is attached to the email submission
- ☐ The illicit discharge removal report can be found at the following website:

Below, report on the number of illicit discharges identified and removed, along with the volume of sewage removed during this reporting period.

Number of illicit discharges identified:

Number of illicit discharges removed:

Estimated volume of sewage removed:

Below, report on the total number of illicit discharges identified and removed to date. At a minimum, report on the number of illicit discharges identified and removed since the effective date of the permit.

Total number of illicit discharges identified:

Total number of illicit discharges removed:

Optional: Provide any additional information for clarity regarding illicit discharges identified, removed, or planned to be removed below:

Overflowing treatment system at nursing home to drainage in Central Street; Board of Health submitted a pumping order for Central St treatment system on June 18, 2018; engineers are under contract with system owner to determine a permanent solution.

Employee Training

Describe the frequency and type of employee training conducted during the reporting period:

IDDE implementation training with Health Department May 19, 2019.

MCM4: Construction Site Stormwater Runoff Control

Below, report on the construction site plan reviews, inspections, and enforcement actions completed during this reporting period.

Number of site plan reviews completed:

Number of inspections completed:

Number of enforcement actions taken:

MCM5: Post-Construction Stormwater Management in New Development and Redevelopment

Ordinance Development

Describe the status of the post-construction ordinance required to be complete in year 2 of the permit term:

Nothing to date.

As-built Drawings

Describe the status of the measures the MS4 has utilized to require the submission of as-built drawings and ensure long term operation and maintenance of completed construction sites required to be complete in year 2 of the permit term:

Nothing to date.

Street Design and Parking Lots Report

Describe the status of the street design and parking lots assessment due in year 4 of the permit term, including any planned or completed changes to local regulations and guidelines:

Nothing to date.

Green Infrastructure Report

Describe the status of the green infrastructure report due in year 4 of the permit term, including the findings and progress towards making the practice allowable:

Nothing to date.

Retrofit Properties Inventory

Describe the status of the inventory, due in year 4 of the permit term, of permittee-owned properties that could be modified or retrofitted with BMPs to mitigate impervious areas and report on any properties that have been modified or retrofitted:

Nothing to date.

MCM6: Good Housekeeping**Catch Basin Cleaning**

Describe the status of the catch basin cleaning optimization plan:

Completed in 2015. Plan details are included in the attached Program of Inspections and Maintenance of Storm

If complete, attach the catch basin cleaning optimization plan or the schedule to gather information to develop the optimization plan:

- ☒ The catch basin cleaning optimization plan or schedule is attached to the email submission
- ☐ The catch basin cleaning optimization plan or schedule can be found at the following website:

Below, report on the number of catch basins inspected and cleaned, along with the total volume of material removed from the catch basins during this reporting period.

Number of catch basins inspected:

Number of catch basins cleaned:

Total volume or mass of material removed from all catch basins:

Below, report on the total number of catch basins in the MS4 system, if known.

Total number of catch basins:

If applicable:

Report on the actions taken if a catch basin sump is more than 50% full during two consecutive routine inspections/cleaning events:

N/A. None noted.

Street Sweeping

Describe the status of the written procedures for sweeping streets and municipal-owned lots:

Completed in 2015; to be updated in Year 2. Details are attached with the Program for Preventing and/or Reducing Pollutant Runoff from Municipal Operations.

Report on street sweeping completed during the reporting period using one of the three metrics below.

☒ Number of miles cleaned:

☐ Volume of material removed:

☐ Weight of material removed:

If applicable:

For rural uncurbed roadways with no catch basins, describe the progress of the inspection, documentation, and targeted sweeping plan:

All roads are swept annually.

Winter Road Maintenance

Describe the status of the written procedures for winter road maintenance including the storage of salt and sand:

Completed in 2015; to be updated in Year 2. Details are attached with the Program for Preventing and/or Reducing Pollutant Runoff from Municipal Operations.

Inventory of Permittee-Owned Properties

Describe the status of the inventory, due in year 2 of the permit term, of permittee-owned properties, including parks and open spaces, buildings and facilities, and vehicles and equipment, and include any updates:

Properties identified. To be completed in Year 2.

O&M Procedures for Parks and Open Spaces, Buildings and Facilities, and Vehicles and Equipment

Describe the status of the operation and maintenance procedures, due in year 2 of the permit term, of permittee-owned properties (parks and open spaces, buildings and facilities, vehicles and equipment) and include maintenance activities associated with each:

Completed in 2015; to be updated in Year 2. The 2015 plan is included in the attached Program for Preventing and/or Reducing Pollutant Runoff from Municipal Operations.

Stormwater Pollution Prevention Plan (SWPPP)

Describe the status of any SWPPP, due in year 2 of the permit term, for permittee-owned or operated facilities including maintenance garages, public works yards, transfer stations, and other waste handling facilities where pollutants are exposed to stormwater:

SWPPPs for the Highway facility and Recycling Center will be completed in Year 2.

Below, report on the number of site inspections for facilities that require a SWPPP completed during this reporting period.

Number of site inspections completed: 0

Describe any corrective actions taken at a facility with a SWPPP:

N/A

O&M Procedures for Stormwater Treatment Structures

Describe the status of the written procedure for stormwater treatment structure maintenance:

Complete in 2015. Details are attached with the Program of Inspections and Maintenance of Stormwater Control Measures.

Additional Information**Monitoring or Study Results**

Results from any other stormwater or receiving water quality monitoring or studies conducted during the reporting period not otherwise mentioned above, where the data is being used to inform permit compliance or permit effectiveness must be attached.

- ☒ Not applicable
- ☐ The results from additional reports or studies are attached to the email submission
- ☐ The results from additional reports or studies can be found at the following website(s):

If such monitoring or studies were conducted on your behalf or if monitoring or studies conducted by other entities were reported to you, a brief description of the type of information gathered or received shall be described below:

N/A

Additional Information

Optional: Enter any additional information relevant to your stormwater management program implementation during the reporting period. Include any BMP modifications made by the MS4 if not already discussed above:

N/A

Activities Planned for Next Reporting Period

Please confirm that your SWMP has been, or will be, updated to comply with all applicable permit requirements including but not limited to the year 2 requirements summarized below. (Note: impaired waters and TMDL requirements are not listed below)

Yes, I agree ☒

- Complete system mapping Phase I
- Begin investigations of catchments associated with Problem Outfalls
- Develop or modify an ordinance or other regulatory mechanism for post-construction stormwater runoff from new development and redevelopment
- Establish and implement written procedures to require the submission of as-built drawings no later than two years after the completion of construction projects
- Develop, if not already developed, written operations and maintenance procedures
- Develop an inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment; review annually and update as necessary
- Establish a written program detailing the activities and procedures the permittee will implement so that the MS4 infrastructure is maintained in a timely manner
- Develop and implement a written SWPPP for maintenance garages, public works yards, transfer stations, and other waste handling facilities where pollutants are exposed to stormwater
- Enclose or cover storage piles of salt or piles containing salt used for deicing or other purposes
- Develop, if not already developed, written procedures for sweeping streets and municipal-owned lots
- Develop, if not already developed, written procedures for winter road maintenance including storage of salt and sand
- Develop, if not already developed, a schedule for catch basin cleaning
- Develop, if not already developed, a written procedure for stormwater treatment structure maintenance
- Develop a written catchment investigation procedure (*18 months*)

Annual Requirements

- Annual report submitted and available to the public
- Annual opportunity for public participation in review and implementation of SWMP
- Keep records relating to the permit available for 5 years and make available to the public
- Properly store and dispose of catch basin cleanings and street sweepings so they do not discharge to receiving waters
- Annual training to employees involved in IDDE program
- Update inventory of all known locations where SSOs have discharged to the MS4 in the last 5 years
- Continue public education and outreach program
- Update outfall and interconnection inventory and priority ranking and include data collected in connection with the dry weather screening and other relevant inspections conducted
- Implement IDDE program
- Review site plans of construction sites as part of the construction stormwater runoff control program
- Conduct site inspection of construction sites as necessary
- Inspect and maintain stormwater treatment structures
- Log catch basins cleaned or inspected
- Sweep all uncurbed streets at least annually

Provide any additional details on activities planned for permit year 2 below:

The Town of East Bridgewater will complete, or contract to complete, the following in Year 2:

- Screen 44 MS4 outfalls, or approximately 50% of outfalls that have not been screened yet, during dry weather condition and record information including outfall diameter, material, condition, connectivity, receiving water, and flow and sediment notes. For those outfalls that are flowing, temperature, dissolved oxygen, salinity, specific conductance, pH, biological oxygen demand, total Phosphorus, total residual Chlorine, Ammonia as Nitrogen, Surfactants and E. Coli will be tested, as well as additional parameters required based on waterbody

or watershed impairments and TMDLs.

- Inspect the Town's 25 stormwater BMPs, noting BMP type, condition and issues related to excess sedimentation, excess vegetation, soil erosion, clogging, trash/debris, oil/grease and invasive species. Draft a Municipal Stormwater Treatment Systems O&M SOP.

- Inspect town-owned facilities for potential contributions to illicit stormwater discharge.

The Town will continue to work with the ThinkBlue on public education and outreach opportunities.

Part V: Certification of Small MS4 Annual Report 2019

40 CFR 144.32(d) Certification

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

Name:

John Haines

Title:

Director of Public Works

Signature:

John Haines

Digitally signed by John Haines
DN: cn=John Haines, o=Town of East
Bridgewater, ou=DPW,
email=jhaines@ebmass.com, c=US
Date: 2019.09.27 14:51:57 -0400

Date:

*[Signatory may be a duly authorized
representative]*