TOWN OF EAST BRIDGEWATER

MASSACHUSETTS

Storm Water Management Phase II Assessment

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Overview
General Discussion

Introduction

This document presents the results of an assessment of the storm water management infrastructure and procedures now in place within the Town of East Bridgewater, Massachusetts and the town's current level of compliance with the US EPA NPDES Storm Water Phase II Final Rule. Tasks and initiatives to achieve full compliance are also identified. Implementation of the Final Rule occurs over a specific timetable, such that the Storm Water Phase II General Permit will be issued on December 8, 2002 and all regulated small MS4s must file a Notice of Intent (NOI) with supporting documentation within 90 days, or by March 10, 2003. This storm water assessment contains specific a review of procedures now in place within the town and identifies the elements necessary for a successful Notice of Intent to be filed before March 10, 2003. The information presented within the discussions of the various elements of the Storm Water Phase II program have been derived from a combination of Fact Sheets provided by EPA, information received during EPA and DEP seminar presentations on Phase II, and conversations with various regulators at both EPA and DEP.

Note: EPA delayed the issuance of the final permit until May 1, 2003. The permit will expire five years from the effective date. The Notice of Intent required by the permit must be submitted no later than July 30, 2003.

US EPA NPDES Storm Water Phase II Final Rule

On December 8, 1999, the US Environmental Protection Agency published the National Pollution Discharge Elimination System (NPDES) Final Rule as applies to storm water discharges from small Municipal Separate Storm Sewer System operators (small MS4s). This action brought under EPA NPDES jurisdiction 189 towns and cities throughout the Commonwealth of Massachusetts, as well as thousands more nationwide. The implementation of Phase II is felt more keenly in Massachusetts than in most other states because Massachusetts is one of seven "primacy" states – that is, EPA is the primary regulatory authority for the implementation of the NPDES Rules. The Town of East Bridgewater is one of the small MS4s required to comply with the NPDES Storm Water Final Rule.

Components of Compliance – The Six Minimum Control Measures

Small MS4s are required to develop storm water management programs designed to reduce discharge of pollutants to the "maximum extent practicable," protect water quality, and comply with the applicable water quality provisions of the Clean Water Act. The Storm Water Phase II Final Rule program is defined by EPA as a program comprised of six Minimum Control Measures to be implemented together, thereby significantly reducing inputs of pollutants into receiving waters. The six Minimum Control Measures are:

1. Public Education and Outreach
2. Public Participation and Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
5. Post-Construction Runoff Control
6. Pollution Prevention/Good Housekeeping

The six Minimum Control Measures are discussed individually in the next six sections of this assessment. Within each discussion is a review of activities and programs already in place or under development within the town contributing to compliance with the requirements of the particular Minimum Control Measures under discussion, as well as a listing of additional activities, initiatives and programs recommended for full compliance.

The Storm Water Management Program and the Notice of Intent

This assessment provides recommendations for specific steps to be taken to create a Storm Water Management Program in preparation for filing an EPA Notice of Intent, and an estimate of the cost to prepare and submit both the Storm Water Management Program and the NOI. The Notice of Intent is itself a very simple document, which identifies the applicant and the contact persons and presents a schedule of activities to be conducted over the 5-year permit period. The Storm Water Management Program is considerably more complex, containing schedules and specific descriptions of programs, procedures and Best Management Practices (BMPs) to be implemented over the permit period. This Program will be the reference document to be used by town departments and committees for developing and implementing activities during the intensive first five years of compliance with the NPDES Storm Water Phase II Final Rule.

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Section 1
Minimum Control Measure 1: Public Education and Outreach

Rationale

The Public Education and Outreach Minimum Control Measure is based on the principle that an informed and knowledgeable community is crucial to the success of a storm water management program. The EPA NPDES Storm Water Phase II program recognizes that an understanding of the problems created by non-point source pollution is the single most important element in reducing pollutant loads to local water bodies. This Minimum Measure focuses on public understanding of both the issues and solutions to storm water pollution, since the support of the members of the community is crucial to both curtail individual activities contributing to non-point source pollution and to provide community-wide moral and financial support to the various approaches implemented to improve management of storm water discharges. The results of effective public education and outreach are:

- Greater support for the program as the public gains a greater understanding of the reasons why it is necessary and important. Public support is particularly beneficial as communities move to institute new funding initiatives for the program and/or seek volunteers to help implement the program; and

- Greater compliance with the program as the public becomes aware of the personal responsibilities regarding individual actions they can take to protect or improve the quality of local water bodies.

General Approach

In general, the focus of this Minimum Measure is to distribute educational materials and to conduct outreach activities regarding storm water impacts and ways the public can help mitigate them. To successfully develop the public education and outreach program, three action areas are recommended. These are to:

1. *Form Partnerships*: Planning for the formation of partnerships may include review of the activities of other towns and cities required to comply with this Minimum Measure. If feasible, it makes sense and saves money to implement an existing education program or to develop a regional program than it does to have several individual towns developing their own local programs. Non-governmental organizations (e.g., environmental, civic, and industrial organizations) should be contacted to determine whether they have already prepared educational materials and/or are performing outreach activities.

2. *Use Existing Educational Materials and Strategies*: Storm water educational information already created by the State, EPA Region I, or environmental, public interest, or trade organizations may be used instead of developing new materials. Materials and activities must be relevant to local situations and issues and should incorporate a variety of strategies to ensure maximum coverage.

3. *Reach Diverse Audiences*: The public education program should use a mix of appropriate strategies to address the viewpoints and concerns of the full suite of audiences and communities, including (for example) businesses, children, minority and disadvantaged communities, and appropriate organizations. Printing posters and brochures in more than one language, stenciling storm drains or posting large warning signs near storm sewer outfalls cautioning against fishing and/or swimming, as may be applicable are methods that have been used to reach audiences less likely to read standard materials. Directing materials or outreach programs toward specific groups of commercial, industrial, and institutional entities likely to have significant storm water impacts is recommended.

To satisfy this Minimum Control Measure, the Town of East Bridgewater must:

- Implement a public education program to distribute educational materials, and/or conduct equivalent outreach activities showing the impacts of storm water discharges on local water bodies and the steps that can be taken to reduce storm water pollution; and

- Determine appropriate Measurable Goals for this Minimum Measure and create a timetable for their implementation. Measurable Goals are designed to demonstrate permit compliance and measure program effectiveness. They are selected to illustrate implementation of the requirements and intent of the Minimum Control Measure, and have target dates associated with each of them. Measurable Goals might be reported as follows:

  Year 1. Brochures developed (bilingual, if appropriate) and distributed in water utility bills; storm water hotline in place; volunteer educators identified and trained.

  Year 2. Web site created; school curricula developed; storm drains stenciled.

  Year 3. A certain percentage of restaurants no longer dumping grease and other pollutants down storm sewer drains.

  Year 4. A certain percentage reduction in litter or animal waste detected in discharges.

Current Programs and Specific Recommendations

- The Town of East Bridgewater provides information on household waste recycling on the Town's website at www.eastbridgewaterma.org

- Household waster is collected by a private contractor contracted by the Town. The Town sponsors an annual hazardous waste collection day.

Both state and citizen based organizations are active within East Bridgewater promoting activities and distributing information about water quality improvement:

- The Town of East Bridgewater is located within the Taunton River Watershed. The Taunton River Watershed Team operates under the auspices of the Commonwealth of Massachusetts Executive Office of Environmental Affairs (EOEA). The Watershed Team has established as one of its five priorities the reduction of the negative effects of non-point sources of pollution, primarily stormwater runoff. More information about the Taunton River Watershed Team can be found at their website: www.state.ma.us/envir/mwi/Taunton.htm.

- The Taunton River Watershed Council (TRW) is a broad based citizen advocate for the environmental well being of the entire Taunton Basin. Their primary mission is to promote improvement of water quality and the restoration, conservation, wise development, and use of the natural resources of the Taunton River watershed. The TRW builds partnerships, conducts research, produces publications, and initiates programs that spawn local activism and encourages the discovery, enjoyment, and love of the river and its watershed environment. For more information: www.tauntonriver.org.

- The Taunton River Watershed Alliance (TRWA) is a non-profit alliance of concerned individuals, business and organizations who are dedicated to protecting and restoring the Taunton River watershed, its tributaries, wetlands, floodplains, river corridors and wildlife. With a part-time staff and a corps of dedicated volunteers, TRWA helps protect the watershed through education and awareness programs, public policy advocacy, campaigns, water quality monitoring and citizen action. Additional information can be found at: http://www.amrivers.org/

- MyWatershed.com supports watershed education in the Taunton River watershed. Information and maps on the watersheds within the Town of East Bridgewater are located at www.mywatershed.com.

The following additional action items and Measurable Goals are recommended for inclusion in the public education and outreach program:

- Review opportunities from the Department of Environmental Protection's Source Water Protection Grant Program to address stormwater remediation within the Town of East Bridgewater's **drinking water protection zones**;

- **Provide additional brochures and/or fact sheets** for general public and specific audiences. Included in this report are brochures available from the Environmental Protection Agency that can be duplicated for distribution within the Town of East Bridgewater. Other sources of printed material include the Taunton River Watershed Council;

- **Post stormwater BMPs on the Town's website** and distribute BMPs targeting specific audiences such as homeowners at the Town Hall, Transfer Station, and Library;

- **Apply for funding from DEP's Municipal Recycling Grant Program** to provide recycling outreach assistance, consumer education mailers, or other activities eligible for funding from this program;

- **Broadcast Water Quality videos available from the EPA on East Bridgewater's local access channel**. Include a round table discussion of water quality concerns within the community;

- **Storm drain stenciling** of storm drains with messages such as "*Do Not Dump - Drains Directly to Pond.*"

- **Recreational guides** to educate groups such as golfers, hikers, paddlers, climbers, fishermen, and campers;

- **Alternative information sources**, such as web sites, bumper stickers, refrigerator magnets, posters for bus and subway stops, and restaurant placemats;

- **A library of educational materials** for community and school groups;

- **Volunteer citizen educators** to staff a **public education task force**;

- **Event participation** with educational displays at home shows and community festivals;

- **Educational programs** for school-age children;

- **Storm water hotlines** for information and for citizen reporting of polluters;

- **Economic incentives** to citizens and businesses (e.g., rebates to homeowners purchasing mulching lawnmowers or biodegradable lawn products); and

- **Tributary signage** to increase public awareness of local water resources.

Section 2
Minimum Control Measure 2: Public Participation and Involvement

Rationale

Minimum Control Measure 2, Public Participation and Involvement, is based on EPA's experience that the public can provide valuable input and assistance to a regulated small MS4's municipal storm water management program and that the public must therefore be given opportunities to play active roles in program development and implementation. An active and involved community offers the following benefits to the success of a storm water management program:

- Broader public support since citizens who participate in the development and decision-making process are partially responsible for the program and therefore are typically less likely to raise legal challenges to the program and more likely to take an active role in its implementation;
- Shorter implementation schedules due to fewer public and legal challenges and increased citizen volunteerism;
- Broader base of expertise and economic benefits since community input offers valuable (and free) intellectual resources; and
- Conduit to other programs as citizens involved in the storm water program development process provide important cross-connections to and relationships with other community and government programs. This benefit is particularly valuable when implementing storm water management programs at regional or watershed levels.

Public Education and Involvement Program – General Approach

By means of careful compliance with public notification procedures, the public must be invited to participate in development, implementation and review of the storm water management program. It is highly recommended that strong efforts must be made to inform and engage all economic and ethnic groups. Though it has generally been the experience of land and water managers that significant challenges can be associated with public involvement, it has also been shown that these challenges can be mitigated through an aggressive and inclusive program. Practices to help increase successful participation are discussed below.

1. **Be aware of the various audiences** and act creatively to gain their attention and interest. Standard methods of soliciting public input may not be generally successful in generating interest and subsequent involvement throughout all sectors of the community. For example, municipalities typically rely on advertising in local newspapers to announce public meetings and other

opportunities for public involvement. However, large sectors of the population may not read the local press and of those who do, many may not peruse the legal notices. The effectiveness of newspaper notices alone is therefore likely to be limited.

2. **Use alternative advertising methods whenever possible**, including (as examples) radio or television spots, postings at public transportation stops, announcements in neighborhood newsletters, announcements at meetings of local organizations, production and distribution of flyers, mass mailings, door-to-door visits, telephone notifications, and multilingual announcements. These approaches are closely allied to efforts supporting Minimum Control Measure 1, Public Education and Outreach.

3. **Aim advertising and solicitations for help toward specific sectors of the population** to include ethnic, minority, and low-income communities; schools; neighborhood and community groups; outdoor recreation groups and business and industry to contact and involve a diverse cross-section of people offering a multitude of concerns, ideas, and connections contributing to implementation of this Minimum Measure.

To satisfy Minimum Control Measure 2, the Town of East Bridgewater must:

- Comply with applicable State and local public notice requirements; and
- Determine appropriate Best Management Practices (BMPs) and Measurable Goals for this Minimum Measure. Measurable Goals might be reported as follows:

  Year 1. Notice of public meetings in several different print media and bilingual panel established; volunteers organized to locate outfalls/illicit discharges and stencil drains.

  Year 2. Final recommendations of the citizen panel; radio spots promoting the storm water management program and participation in its creation and implementation.

  Year 3. A certain percentage of residents participating in community clean-ups.

  Year 4. Citizen watch groups established in a certain percentage of neighborhoods; outreach to every different population sector completed.

Public Participation and Involvement Program – Current Programs and Specific Recommendations

- A number of action elements contributing to compliance with NPDES Storm Water Phase II, including this Minimum Measure, are already either in place or in the development process. Some of the same activities under Minimum Measure 1 can also meet the requirements of Minimum Measure 2.

Programs and resources are available to East Bridgewater to expand on current public participation and involvement, including:

- The Massachusetts Department of Fisheries, Wildlife, and Law Enforcement promotes the **Adopt-A-Stream Program**. Stream Teams are volunteers who walk the stream banks looking for pipe outfalls as part of a shoreline survey. The Teams note pipe conditions, materials, existence of headwalls, and rip rap. Team volunteers may continually monitor identified "hot spots." The following website contains information about the program: www.massriverways.org

- **Solicit Boy Scout and Girl Scout volunteers** to distribute EPA prepared handouts to residents in the watershed promoting stormwater BMPs specific to homeowner activities such as land maintenance, waste disposal, pet management;

- The **Taunton River Watershed Council (TRW)** is a broad-based citizen advocate for the environmental well being of the entire Taunton Basin. Their primary mission is to promote improvement of water quality and the restoration, conservation, wise development, and use of the natural resources of the Taunton River watershed. The TRW builds partnerships, conducts research, produces publications, and initiates programs that spawn local activism and encourages the discovery, enjoyment, and love of the river and its watershed environment. For more information: www.tauntonriver.org. Town could further utilize the resources available through the TRW.

The following additional action items and Measurable Goals are recommended to be included in East Bridgewater's Public Participation and Involvement program:

- Public meetings/citizen panels to allow citizens to discuss various viewpoints and provide input concerning appropriate storm water management policies and BMPs. **Post public meeting notices** and relevant residential BMPs on www.east bridgewaterma.org and on the local access channel. **Update BMPs to reflect seasonal activities**, i.e.: spring fertilizing, summer watering, fall leaf disposal, and winter sanding/salting;

- **Solicit volunteers** to participate in annual stream walks on local access channel and town's website. Post collection result, i.e.: number of trash bags, tires, etc. cleaned up and removed;

- Contact the Massachusetts Department of Fisheries, Wildlife, and Law Enforcement to **review opportunities for establishing volunteer water quality monitoring** to give citizens first-hand knowledge of the quality of local water bodies. Stream Teams can provide a cost-effective means of collecting water quality data;

- **Solicit volunteer educators/speakers** to conduct workshops, encourage public participation, and staff special events;

- **Apply for funding from DEP's Municipal Recycling Grant Program** to provide recycling outreach assistance, consumer education mailers, or other activities eligible for funding from this program;

- Contact the Taunton River Watershed Team Leader to solicit both technical and financial support to **expand storm drain stenciling by local volunteers** within the community. Storm drain stenciling is an important and simple activity that concerned citizens, especially students, can perform;

- **Expand annual community clean-ups** along local waterways to include **storm drains;**

- **Citizen watch groups** can aid local enforcement authorities in identifying polluters; and

- "*Adopt A Storm Drain*" programs encourage individuals or groups to keep storm drains free of debris and to monitor what is entering local waterways through storm drains.

Section 3
Minimum Control Measure 3: Illicit Discharge Detection and Elimination

Rationale

Discharges from storm water management systems throughout urbanized areas have often included wastes and wastewater from non-storm water sources. Webster's Dictionary defines the word "illicit" to mean "unlawful, prohibited, unauthorized, improper." NPDES Phase II focuses not so much on the illegal aspect as the improper nature of these discharges, which have been shown in some areas to make up as much as half the total flows within the storm water management system. These flows are designated as "Illicit Discharges" because they consist of or contain materials the storm water drainage system is not designed to treat, transport or discharge. Illicit Discharges are therefore considered by Federal regulations to be "...any discharge to an MS4 that is not composed entirely of storm water..." There are particular exceptions to this definition, such as discharges from NPDES-permitted industrial sources and discharges from fire-fighting activities.

Illicit discharges enter storm water systems through either direct connections (e.g., wastewater piping either mistakenly or deliberately connected to the storm drains) or indirect connections (e.g., infiltration from cracked sanitary systems, spills collected by drain outlets, or paint or used oil dumped directly into a drain). The untreated discharges then contribute high levels of pollutants to receiving water bodies (for example, heavy metals, toxics, oil and grease, solvents, nutrients, viruses, and bacteria). **Specific examples of illicit discharges include sanitary wastewater, effluent from septic tanks, car wash wastewaters, improper oil disposal, radiator flushing, laundry wastewaters, spills from roadway accidents, and improper disposal of auto and household toxics**. Pollutant levels from these illicit discharges have been shown to be high enough to significantly degrade receiving water quality and threaten aquatic, wildlife, and human health.

Illicit Discharge Detection and Elimination – General Approach

The general approach of this Minimum Control Measure is that the managers of the storm sewer system will become very familiar with the system and the discharges it conveys. This Minimum Control Measure also helps other public and private entities as well as the general public to become aware of the system and their role in keeping its discharges clean. The illicit discharge detection and elimination program must therefore include inventory and mapping of the storm sewer system, inspection and detection activities, regulatory protection and enforcement, public education (part of Minimum Control Measure 1), and public involvement in reporting illicit discharges (contributes to Minimum Control Measure 2). More specifically, the program will include:

- A **storm sewer system map** showing the location of all outfalls and the names and location of all waters of the United States receiving discharges from those outfalls;
- A **plan to detect and address non-storm water discharges** into the storm water management system, including illegal dumping;
- A **bylaw or other regulatory mechanism** prohibiting non-storm water discharges into the storm sewer system, including appropriate enforcement procedures and actions;
- **Education of public employees, businesses, and the general public** about the hazards associated with illegal discharges and improper disposal of waste; and
- Determination of appropriate Best Management Practices (BMPs) and Measurable Goals for this Minimum Measure. Some Measurable Goals are suggested below.

  Year 1. Storm sewer system map completed; a certain percentage of sources of illicit discharges determined.

  Year 2. Bylaw in place; training for public employees completed; public education and outreach under way; a certain percentage of sources of illicit discharges determined and eliminated through local-bylaw control or prohibition and public outreach and education.

  Year 3. Additional illicit discharges eliminated; ongoing public education and outreach; storm drains stenciled.

  Year 4. Most illicit discharge sources detected and eliminated.

It is important to note that not all illicit discharges must be addressed, unless the discharges are specifically identified as significant pollutant sources. The following categories of discharges do not need to be addressed:

Water line flushing	Landscape irrigation	Diverted stream flows
Rising ground waters	Uncontaminated groundwater infiltration	Uncontaminated pumped ground water
Discharges from potable water sources	Foundations drains	Air conditioning condensation
Irrigation water	Springs	Water from crawl space pumps
Footing drains	Lawn watering	Individual residential car washing
Flows from riparian habitats and wetlands	Dechlorinated swimming pool discharges	Street wash water

Current Programs and Specific Recommendations

Mapping

Mapping: Creation of the map of the storm sewer system requires basic awareness of both the intake and discharge areas of the system. The map should be designed to help locate discharged dry weather flows, their likely sources, and the waterbodies into which these flows are discharged. An existing map, such as a topographical map, on which the location of major pipes and outfalls can be clearly shown, will satisfy this requirement. All existing information on outfall locations (e.g., town records, drainage maps, storm drain maps) should be collected and reviewed. Field surveys should then be conducted to verify locations of intakes and outfalls as well as to gather any supplemental information that may be necessary.

The Town of East Bridgewater does not have any centralized mapping of its storm sewer system. The Town of East Bridgewater Board of Assessors has GIS parcel maps using MassGIS as base maps.

Illicit Discharge Detection and Elimination Program

Enforcement

At this writing, The Town of East Bridgewater does not have a storm water management bylaw in effect. Part of the storm water management program, and in fact a Measurable Goal, will be to prepare a draft storm water management bylaw for review and approval by the citizens and public officials of the Town.

Illicit Discharge Detection and Elimination Program

The program to detect and address illicit discharges is the central element of this Minimum Control Measure. As a general guide, the four steps of a recommended program are outlined below:

- *Locate Problem Areas*: Identify priority areas for detailed examination of the system based on the likelihood of illicit connections. Preliminary indications of problem areas might include: public complaints; visual screening; older storm sewer system; examination of manholes and outfalls during dry weather; and use of infrared aerial photography. Field surveys should then be conducted to verify locations of intakes and outfalls as well as to gather any supplemental information that may be necessary. The field work will require walking (wading or boating) along the streambanks and shorelines for visual observation of outfalls and dry weather flows.

- *Find the Source*: Once a problem area or discharge is found, additional efforts are sometimes necessary to determine the source of the problem. Methods include: dye-testing buildings in problem areas; dye- or smoke-testing buildings at the time of sale; tracing the discharge upstream in the storm sewer; using video to inspect the storm sewers; implementing an inspection program of existing septic systems; and creating a certification program showing that buildings have been checked for

illicit connections. Some of these methods may be reported independently as Measurable Goals.

- *Remove/Correct Illicit Connections*: Once a source is identified, the offending discharger should be notified and directed to correct the problem. Local by-laws should be developed in response to the conditions found within East Bridgewater's stormwater system.

- *Document Actions Taken*: As a final step, all actions taken under the plan must be documented. This substantiates that measurable progress is being made to eliminate illicit connections and discharges. Any documented actions will be included in annual reports and include information such as: specific complaints received and corrected; the number of outfalls screened; the number of dye or smoke tests conducted; the number of discharges disconnected; and the character and quantities of flow eliminated.

The Town does not have a written storm sewer system inspection plan. The Town responds to problems as they arise. There are some localized problem areas due to a lack of proper drainage on some roads. Some inspections that have taken place have indicated the possibility of existing illegal and illicit connections. Extensive Title V problems have contributed to the creation of a Sewer Study Committee appointed by the Board of Selectmen.

303(d) List of Waters

DEP is responsible under Massachusetts General Law (MGL) chapter 21 for monitoring the waters of the Commonwealth, identifying those waters that are impaired, and developing a plan to bring them back into compliance with the Massachusetts Surface Water Quality Standards. The list of impaired waters, better known as the "303d list," identifies river, lake, and coastal waters and the reasons for impairment.

Once a waterbody is identified as impaired, DEP is required by the Federal Clean Water Act to essentially develop a "pollution budget" designed to restore the health of the impaired waterbody. The process of developing this budget, generally referred to as a Total Maximum Daily Load (TMDL), includes identifying the causes (types of pollutant) and source(s) (where the pollutants come from) of the pollutant from direct discharges (point sources) and indirect discharges (non-point sources), determining the maximum amount of the pollutant that can be discharged to a specific water body to meet water quality standards, and developing a plan to meet that goal.

<u>Plymouth Street Pond</u>

Pollutant Stressors: ID # 2200 Noxious Aquatic Plants

<u>Mattield River</u>

From the confluence of Beaver Brook and Salisbury Plan River

Pollutant Stressors: ID# 1700 Pathogens

Salisbury Plain River

From Brockton WWTP to confluence with Matfield River

Pollutant Stressors: ID # 0000 Cause unknown; ID# 1700 Pathogens

Another major water quality concern in the Town of East Bridgewater is Forge Pond, a neighborhood pond impacted by siltation from residential development and residential activities in the past several years.

Wellhead Protection/Source Water Protection

Ground Water

The Town of East Bridgewater has five active drinking water wells.

Zone IIs have been delineated for all wells. The water department also has an Emergency Response Plan in the case of an accident within the Zone II areas. Wellhead Protection Plans have not been developed for the wells. The Town should be aware that some Zone II protection areas encroach on neighboring towns and Zone II's in neighboring towns encroach on East Bridgewater.

Assessments performed by DEP as part of the state's Source Water Assessment Program (SWAP) are in draft form. The draft and final SWAP assessments should be included in East Bridgewater's Comprehensive Stormwater Management Program.

Surface Water

There is no surface water drinking water supply in East Bridgewater.

The following additional action items and Measurable Goals are recommended for inclusion in the public education and outreach program:

- **Develop a storm sewer system map** showing the location of all outfalls and the names and location of all waters of the United States receiving discharges from those outfalls;
- **Develop a plan to detect and address non-storm water discharges** into the storm water management system, including illegal dumping;
- **Education and Outreach**: Outreach to public employees, businesses, property owners, the general community, and elected officials regarding detection and elimination of illicit discharges will help gain support for the storm water program.

This element also contributes to Minimum Control Measures 1 (Public Education and Outreach) and 2 (Public Participation and Involvement);

- **Adopt by-law prohibiting non-stormwater discharges** into the local storm drain system. Massachusetts Department of Environmental Protection is developing a model bylaw for reference by MS4 communities which will be available on their website: http://www.state.ma.us/dep/.

- **Distribute Informative brochures and guidance** developed for specific audiences. This report includes EPA recommended BMPs targeted to specific audiences;

- **Field verify** location of stormwater appurtenances not yet documented through field inspection;

- Review opportunities from the Department of Environmental Protection's Source Water Protection Grant Program to **develop Wellhead Protection Plans** in accordance with DEP's guide, *Developing a Local Wellhead Protection Plan*, November 2001;

- **Facilitate public reporting** of illicit discharges through the establishment of a hot-line number;

- **Find the source** of illicit and/or illegal discharges already noted and prioritized;

- **Coordinate volunteers** for ongoing visually inspection of outfalls or to stencil storm drains; and

- **Apply for funding assistance from DEP's Municipal Recycling Grant Program** to support recycling and proper disposal of household hazardous waste materials

Section 4
Minimum Control Measure 4: Construction Site Runoff Control

Rationale

Minimum Control Measure 4 requires the Town of East Bridgewater to develop, implement, and enforce a program to reduce pollutants in stormwater runoff to their MS4 from construction activities that result in land disturbance of greater than or equal to one acre. In general, sediment is the main pollutant of concern. Polluted stormwater runoff from construction sites often flows to MS4s and ultimately is discharged into local rivers and streams. Sediment runoff rates from construction sites have been shown to be typically 10 to 20 times greater than those of agricultural lands, and 1,000 to 2,000 times greater than those of forest lands. During the relatively brief construction period, construction sites can therefore contribute more sediment to streams than can be deposited naturally over several decades. Sediment also tends to be a carrier of other pollutants, including oils, fluids associated with all phases of construction activity, and a wide variety of other pollutants. Uncontrolled siltation from construction sites causes physical, chemical, and biological harm to receiving waters.

Even though all construction sites that disturb more than one acre are covered nationally by an NPDES Stormwater Permit, Minimum Control Measure 4 is needed to induce more localized site regulation and enforcement efforts, and to enable operators of regulated small MS4s to more effectively control construction site discharges into their MS4s. The Massachusetts Department of Environmental Protection has issued a Stormwater Management Policy listing nine Standards to be implemented during and following construction activities. The Conservation Commission is the local regulatory board responsible for making sure that the Stormwater Management Policy is included in a proposal and followed during and following construction. The Stormwater Management Policy applies to most construction activities proposed within areas subject to jurisdiction under the Wetlands Protection Act. Minimum Measure 4 should include as a Measurable Goal adding the strength of regulation to address the issue of construction site management through adoption of appropriate clauses in a storm water Bylaw.

The principal result of the implementation of this minimum measure will be:

- **More localized site regulation and enforcement** will be in place to allow the Town to more effectively control construction site discharges into local waters. Even though all construction sites that disturb more than one acre will be covered nationally by an NPDES storm water permit, local oversight is necessary to genuinely assure good compliance with the regulations and protection of aquatic and wetland resources.

General Approach

In general, the following elements will be required within the portion of the storm water management program addressing construction site runoff:

1. **Create a Regulatory Mechanism**: Prior to initiation of any construction falling under the jurisdiction of the NPDES program, preparation of a Storm Water Pollution Prevention Plan (SWPPP) is required. Through development of regulatory language within the storm water management bylaw, the Town can establish a mechanism to receive and review SWPPPs. Under the NPDES Phase II regulations, the SWPPP defines a detailed construction program to specifically control runoff from construction sites having an area of land disturbance greater than or equal to one acre. This mechanism will complement the DEP's Stormwater Management Policy now implemented by the Conservation Commission and will apply local regulatory authority to support implementation of the NPDES Phase II Final Rule as it applies to construction as well as municipal storm water management as of December 2002.

2. **Site Plan Review**: Requirements for the implementation of appropriate Best Management Practices (BMPs) on construction sites to control erosion and sediment and other waste at the site will be included in the regulatory program addressing construction activities. This will include a site plan review component to determine whether a construction site is in compliance with such provisions before ground is broken. The site plan review will enable compliance and enforcement efforts, in that it provides a way to track new construction activities and to assess the planned use or non-use of proper BMPs. The tracking of sites is useful not only for the small MS4 operator's recordkeeping and reporting purposes (required under the NPDES storm water permit), but also for members of the public interested in ensuring that the sites are in compliance.

3. **Conduct Inspections and Provide for Penalties**: To be certain that the SWPPP is implemented and BMPs are properly installed as proposed, the Town is required to conduct site inspections and provide for enforcement of storm water runoff control measures. General inspection procedures should include identification of priority sites for inspection and enforcement based on the conditions of the permits issued to allow the construction activities to proceed. The site and BMP inspections offer opportunities to provide additional guidance and education, issue warnings, or assess penalties. It may be reasonable to have these inspections performed by the same inspector that visits the sites to check compliance with health and safety building codes.

4. **Receive Information from the Public**: The NPDES Phase II Storm Water Final Rule requires development of procedures for receipt and consideration of public inquiries, concerns, and information submitted regarding local

construction activities. This provision reinforces the public participation component of the Phase II storm water management program (Minimum Control Measure 2) and recognizes the crucial role that the public can play in identifying violations of permit conditions. Though some responsive form of enforcement action or reply is not required by the NPDES program, demonstration of acknowledgment and consideration of the information submitted *is* required. A simple tracking process in which submitted public information (written and/or verbal) is recorded and then given to the construction site inspector for possible follow-up is adequate.

Specific Recommendations

When applicable, the Town of East Bridgewater requires that developers of land in the Town adhere to Best Management Practices (BMPs) as found in the most recent version of the Department of Environmental Protection's *Non-Point Source Management Manual*. These Stormwater approve BMPs shall be designed in a manner to contain soil erosion on site, to prevent non-point source pollutants from entering streams, lakes and ponds, and to minimize the need for maintenance. The development shall also conform to the Stormwater Management Standards of DEP.

To date these regulations are specific to developments that fall under the Commonwealth's Subdivision Control Law. NPDES Phase II requires East Bridgewater to develop, implement, and enforce a program to reduce pollutants in stormwater runoff to their MS4 from all construction activities within East Bridgewater's Urbanized Area that result in land disturbance of greater than or equal to one acre.

To satisfy this minimum measure, the Town of East Bridgewater must:

- Create language within a storm water management bylaw requiring implementation of appropriate BMPs including proper erosion and sediment controls as well as controls for other wastes and containment of storm water runoff on all construction sites within the Town's Urbanized Area disturbing one or more acres of land;
- Include procedures for site plan review of construction plans that consider potential water quality impacts;
- Include procedures for site inspection and enforcement of storm water runoff control measures;
- Determine methods and penalties to ensure compliance (established in the language within the storm water management bylaw);
- Establish procedures for the receipt and review of information submitted by the public; and

- Determine the appropriate best management practices (BMPs) and measurable goals for this minimum control measure. Suggested BMPs (i.e., the program actions/activities) and measurable goals are presented below.

  Year 1: Bylaw or other regulatory mechanism in place; procedures for information submitted by the public in place.

  Year 2: Procedures for site inspections implemented; a certain percentage rate of compliance achieved by construction operators.

  Year 3: Maximum compliance with bylaw; improved clarity and reduced sedimentation of local waterbodies.

  Year 4: Increased numbers of sensitive aquatic organisms in local waterbodies.

Massachusetts Department of Environmental Protection is developing a model bylaw for reference by MS4 communities which will be available on their website: http://www.state.ma.us/dep/.

Section 5
Minimum Control Measure 5: Post Construction Runoff Control

Rationale

The Phase II Final Rule requires an operator of a regulated small MS4 to develop, implement, and enforce a program to reduce pollutants in post-construction runoff to their MS4 from new development and redevelopment projects that result in land disturbance of greater than or equal to one acre. Many studies indicate that prior planning and design for the minimization of pollutants in post-construction storm water discharges is the most cost effective approach to storm water quality management. This is best accomplished through combined good municipal planning with thorough project review during the proposal and permitting stages. Note that most construction projects will also pass through review under the criteria already established by the DEP's Stormwater Management Policy, within which an Operations and Maintenance Plan addressing ongoing storm water management is required. However, this Minimum Measure will provide protection of the Town's waters both in the contexts of additional layers of attention through this and other Minimum Measures, and through review of projects proposed outside areas under jurisdiction of the Massachusetts Wetlands Protection Act.

Post-construction runoff can generate two principal types of pollutants. The first is an increase in the type and quantity of pollutants in storm water runoff. As runoff flows over areas altered by development, it can pick up harmful sediment and chemicals such as oil and grease, pesticides, heavy metals, and nutrients (e.g., nitrogen and phosphorus). These pollutants often become suspended in runoff and are carried to receiving waters, such as lakes, ponds, and streams. The second occurs by increasing the rate of runoff delivered to the water body during storms. Instead of rainfall absorption into the soil via the natural cycle of gradual percolation, storm water is quickly shed by paved surfaces and compacted soils and routed to drainage systems where large volumes of runoff quickly flow to the nearest receiving water. The effects of this process include streambank scouring and downstream flooding, often leading to degradation of aquatic ecosystems and damage to property.

General Approach

The post-construction runoff control program will reference a variety of elements, many of which are associated with other Minimum Measures. For instance, public outreach and education will figure in design and proposal of projects, public involvement and participation will contribute to long term monitoring and reporting of violations, runoff control measures pertaining to new construction will put in place specific BMPs to control post-construction runoff, and municipal good housekeeping will aid in awareness of problem areas. In addition, structural and non-structural BMPs recommended to support this Minimum Measure will likely include the following:

Planning and Procedures: Master Plans, Open Space Plans, and zoning regulations can promote improved water quality by guiding the growth of a community away from sensitive areas and by restricting certain types of growth to areas that can support it without compromising water quality.

Storm Water Flow and Pollutant Controls: Detention or retention basins control storm water by collecting runoff in systems that may include catch basins, wet-bottomed ponds, and/or dry basins and slowly releasing it to receiving waters or drainage systems. These BMPs both control storm water volume and treat runoff to remove pollutants.

Infiltration: Infiltration systems are BMPs designed to allow percolation of runoff into the soil to ground water, reducing storm water quantity and mobilization of pollutants. Examples include infiltration basins/trenches, dry wells, and porous pavement.

Bioengineering: Bioengineering practices include vegetative BMPs to enhance pollutant removal, maintain/improve natural site hydrology, promote healthier habitats, and increase aesthetic appeal. Examples include vegetated swales, filter strips, and constructed wetlands. These BMPs are also frequently used to repair eroded stream banks and other forms of damage by storm water.

Specific Recommendations

The Town of East Bridgewater has a Master Plan.

East Bridgewater has a current Open Space Plan, which requires updates every five years.

East Bridgewater's post-construction runoff control program will develop, implement, and enforce a program to reduce pollutants in post-construction runoff from new development and redevelopment projects disturbing one or more acres of land. In general, five action areas are recommended for successful development of this program. These are to:

1. Include language requiring implementation of post-construction runoff controls in the storm water management bylaw. Massachusetts Department of Environmental Protection is developing a model bylaw for reference by MS4 communities which will be available on their website: http://www.state.ma.us/dep/.

2. Develop and implement applicable strategies including a combination of structural and/or non-structural Best Management Practices (BMPs) to address both new development and redevelopment projects; **renew Open Space Plan,**

3. **Update East Bridgewater's Master Plan** to help guide growth; create a program by which operation and maintenance of storm water management systems may be reported and/or tracked at regular intervals;

4. Require adequate long-term operation and maintenance of controls;

5. Determine appropriate Measurable Goals for this minimum measure, and create a timetable for their implementation. Measurable Goals are selected to illustrate implementation of the requirements and intent of the Minimum Control Measure, and have target dates associated with each of them. Measurable Goals for the post-construction runoff control program might be reported as follows:

   Year 1. Update of East Bridgewater's Open Space and Recreation Plan. Strategies developed to include structural and non-structural BMPs.

   Year 2. Post-construction runoff control language accepted into storm water bylaw.

   Year 3. Reduction in new impervious surfaces associated with new development projects, retro-fitting of redevelopment projects with up-to-date storm water controls.

   Year 4. Reduced sedimentation and high-volume storm water flows in local waters.

Section 6
Minimum Control Measure 6: Pollution Prevention/Good Housekeeping

Rationale

Pollution Prevention/Good Housekeeping for municipal operations minimum control measure will likely improve or protect receiving water quality through alteration of municipal operations. This measure can generate cost savings for the Town over the long term, since appropriate maintenance of storm sewer systems can avoid damage caused by age and neglect. Compliance with this Minimum Control Measure results in:

- Reductions in pollution that falls on streets, parking lots, open spaces, and storage and vehicle maintenance areas and is carried by storm water into local waterways, and
- Improvement of management approaches to avoid environmentally destructive development and storm water management practices or poor maintenance of storm sewer systems.

General Approach

In general, the purpose behind this Minimum Measure is to improve existing municipal operations to the point that they minimize pollution of storm water discharges into local waters. The following components should be considered when developing the pollution prevention/good housekeeping program:

1. **Maintenance activities, maintenance schedules, and long-term inspection procedures** for structural and non-structural controls to capture floatables and other pollutants and prevent discharge into local waters from the storm sewers;

2. **Identification and implementation of controls for eliminating discharge of pollutants** from Town-controlled areas including roads, parking lots, maintenance and storage yards, and waste transfer stations;

3. **Procedures for the proper disposal of waste** including dredge spoil, accumulated sediments, floatables, and other debris removed from catch basins and other accumulators as well as areas listed above; and

4. **Assess impacts of new flood management projects on water quality** and examine existing projects for incorporation of additional water quality protection devices or practices.

To implement the pollution prevention/good housekeeping program, the Town is required to:

- Develop a training program for municipal employees on how to incorporate pollution prevention/good housekeeping techniques into municipal operations such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance;
- Develop and implement an Operations and Maintenance Plan with the ultimate goal of preventing polluted runoff from entering the storm sewer system;
- Determine appropriate Measurable Goals and Best Management Practices (BMPs) for the pollution prevention/good housekeeping program. Measurable Goals might be reported as follows:

  Year 1. Municipal Pollution Prevention Plan (including identification of new procedures) completed; employee training materials gathered or developed; procedures in place for regular catch basin cleaning and street sweeping.

  Year 2. Training for municipal employees completed.

  Year 3. Some BMPs incorporated into the master storm water management plan; a certain percent reduction in use of sand/salt; maintenance schedule for BMPs implemented.

  Year 4. A certain compliance rate with maintenance schedules for BMPs achieved; controls in place for all areas of concern.

Current Programs and Specific Recommendation

- The current Operations and Maintenance Plan is informal (not written) and driven by available budget. The East Bridgewater Highway Department owns the equipment used for street sweeping and catchbasin cleaning. The Town should **develop a formal Operations and Maintenance Policy**. The written policy can be used to support budget needs instead of reflecting budget constraints;
- **Develop a winter road de-icing program** that considers impacts on the watershed protection areas;
- **The Town of East Bridgewater conducts an aggressive Town-wide street sweeping program.** Streets are swept minimally once a year. Trouble spots are maintained throughout the year;
- The Town should **continue to improve drainage operations associated with roadway improvements**;

- There is no formal inventory for the approximately 1,250 catch basins in the Town of East Bridgewater. The Town of East Bridgewater can **develop a roadway improvement schedule and plan that includes applicable stormwater Best Management Practices and a schedule for their implementation and/or installation;**

- The Town of East Bridgewater cleans its catch basins annually by using local forces. Trouble spots are maintained throughout the year. Crews record date of cleaning and note needed repairs. The Town has instituted a practice of recording potential illegal pipes exposed during clean-outs. Catchbasin cleaning is dependent on funds from the town budget. **Scheduled inspection and maintenance of infrastructure** should be part of East Bridgewater's Comprehensive Stormwater Management Plan;

- The **Town can develop formal inspection and maintenance logs to record cleanout schedules and system conditions**. This can support an ongoing stormwater maintenance program. The Town complies with DEP guidelines for the disposal of street sweepings and waste from catchbasin cleanings;

- **Create a municipal employee education program**. This may include educational materials such as brochures and videos, as well as scheduling regular seminars or series of classes addressing various aspects of the topic. Measurable Goals for this activity could include materials prepared and/or assembled, seminars or classes held, percentage of applicable municipal employees in attendance. The Town participation level in taking advantage of seminars sponsored by **Bay State Roads Program** and other agencies in support of public works operations is dependant upon budget constraints. These educational opportunities can supplement East Bridgewater's educational program;

- At the present time the East Bridgewater DPW reports to the Conservation Commission as needed. **An annual maintenance plan should be developed in consultation with the Conservation Commission**.

Section 7
Permitting Requirements

Eligibility Criteria

B. 2. (e), iii

Storm water discharges, allowable non-storm water discharges, and discharge related activities in the Town of East Bridgewater are not likely to jeopardize the continued existence of any species that are listed as endangered or threatened ("listed") under the Endangered Species Act (ESA) or result in the adverse modification or destruction of habitat that is designated as critical under the ESA ("critical habitat"). This has been determined by review of the most recent Endangered and Threatened Species County-Species List available at http://www.epa.gov/npdes/. Federal Listed Endangered Species: Piping Plover (*Charadrius Melodus*), Bald Eagle (*Haliaeetus Leucocephalus*), and Eskimo Curlew (*Numenius Borealis*).

Public works employees and their agents should be sensitive to the possible disturbance of habitat resulting from stormwater maintenance activities.

B. 2. (f)

Essential Fish Habitat: no Inland Habitat listed for East Bridgewater

B. 2. (g)

National Register of Historic Places:

East Bridgewater Common Historic District, Central and Plymouth Streets, and Morse Avenue

C.

303d Waters (impaired) within the Town of East Bridgewater:

Plymouth Street Pond

Pollutant Stressors: ID # 2200 Noxious Aquatic Plants

Mattield River

From the confluence of Beaver Brook and Salisbury Plan River

Pollutant Stressors: ID# 1700 Pathogens

Salisbury Plain River

From Brockton WWTP to confluence with Matfield River

Pollutant Stressors: ID # 0000 Cause unknown; ID# 1700 Pathogens

The Town of East Bridgewater's Comprehensive Stormwater Management Plan should include additional assessment, implementation, and public education and outreach to reduce non-point source pollution sources within the watershed and maintain already established partnerships with private and public stakeholders.

D. Total Maximum Daily Load Allocations

DEP is responsible under Massachusetts General Law (MGL) Chapter 21 for monitoring the waters of the Commonwealth, identifying those waters that are impaired, and developing a plan to bring them back into compliance with the Massachusetts Surface Water Quality Standards. The list of impaired waters, better known as the "303d list," identifies river, lake, and coastal waters and the reasons for impairment.

Once a waterbody is identified as impaired, DEP is required by the Federal Clean Water Act to essentially develop a "pollution budget" designed to restore the health of the impaired waterbody. The process of developing this budget, generally referred to as a Total Maximum Daily Load (TMDL), includes identifying the causes (types of pollutant) and source(s) (where the pollutants come from) of the pollutant from direct discharges (point sources) and indirect discharges (non-point sources), determining the maximum amount of the pollutant that can be discharged to a specific water body to meet water quality standards, and developing a plan to meet that goal.

No Total Maximum Daily Loads (TMDL) have been established for water bodies in the Town of East Bridgewater.

Wellhead Protection

Ground Water

The Town of East Bridgewater has five active drinking water wells.

Zone IIs have been delineated for all wells. The water department also has an Emergency Response Plan with the Town Fire Department and the Town Police Department in the case of an accident within the Zone II area. Wellhead Protection Plans have not been developed for the wells. The Town should be aware that some Zone II protection areas encroach on neighboring towns and Zone II's in neighboring towns encroach on East Bridgewater.

Assessments performed by DEP as part of the state's Source Water Assessment Program (SWAP) are in draft form. The draft and final SWAP assessments should be included in East Bridgewater's Comprehensive Stormwater Management Program.

Surface Water

There is no surface water drinking water supply in East Bridgewater.

Hand-enter Your Transmittal Number → W 041043 (Transmittal Number)

Your unique Transmittal Number can be accessed online: http://www.state.ma.us/scripts/dep/trasmfrm.stm or call DEP's InfoLine at 617-338-2255 or 800-462-0444 (from 508, 781, and 978 area codes).

Massachusetts Department of Environmental Protection

Transmittal Form for Permit Application and Payment

1. Please type or print. A separate Transmittal Form must be completed for each permit application.
2. Make your check payable to the Commonwealth of Massachusetts and mail it with a copy of this form to: DEP, P.O. Box 4062, Boston, MA 02211.
3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application.
Copy 2 must accompany your fee payment.
Copy 3 should be retained for your records

Both fee-paying and exempt applicants must mail a copy of this transmittal form to DEP, P.O. Box 4062, Boston, MA 02211

For DEP Use Only
Permit No._____
Rec'd Date_____
Reviewer

A. Permit Information

BRP WM 08A — Permit Code: 7 or 8 character code from permit instructions
NPDES Stormwater General Permit — Name of Permit Category
Notice of Intent for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) — Type of Project or Activity

B. Applicant Information – Firm or Individual

Town of East Bridgewater — Name of Firm - Or, if party needing this approval is an individual enter name below:

Last Name of Individual | **First Name** of Individual | MI

175 Central Street — Street Address
East Bridgewater — City/Town | MA — State | 02333 — Zip Code | (508) 378-1601 — Telephone # and extension

Contact Person | e-mail address (optional)

C. Facility, Site or Individual Requiring Approval

Town of East Bridgewater — Name of Facility, Site or Individual | DEP Facility Number (if Known) | Federal I.D. Number (if Known)
175 Central Street — Street Address | e-mail address (optional)
East Bridgewater — City/Town | MA — State | 02333 — Zip Code | (508) 378-1601 — Telephone # and extension

D. Application Prepared by (if different from Section B)

Guertin Elkerton & Associates, Inc. — Name of Firm Or Individual
91 Montvale Avenue — Address
Stoneham — City/Town | MA — State | 02180 — Zip Code | (413) 781-0000 — Telephone # and extension
Mary Burgess — Contact Person | LSP Number (21E only)

E. Permit - Project Coordination

Is this project subject to MEPA review? ☐ yes ☒ no If yes, enter the project's EOEA file number - assigned when an Environmental Notification Form is submitted to the MEPA unit: EOEA file number _____
Is an Environmental Impact Report Required? ☐ yes ☒ no
Is this application part of a larger project for which two or more DEP permits are being or will be sought? ☐ yes ☒ no

List any other DEP permits that apply to this project:

Permit Category	**Date of Submission** (tentative or actual)	**Transmittal #** if application already submitted

F. Amount Due

Special Provisions:

☒ Fee Exempt* (city, town or municipal housing authority)(state agency if fee is $100 or less)
☐ Hardship Request - payment extensions according to 310 CMR 4.04(3)(c)
☐ Alternative Schedule Project (according to 310 CMR 4.05 and 4.10)

*There are no fee exemptions for 21E, regardless of applicant status

Check Number | Dollar Amount | Date

Please make check payable to the Commonwealth of Massachusetts and mail check and one copy of this form to:
DEP, P.O. Box 4062, Boston, MA 02211

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Watershed Management

BRP WM 08A NPDES Stormwater General Permit

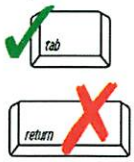
Notice of Intent for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)

W041043
Transmittal Number

Facility ID (if known)

A. Instructions

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Submission of this Notice of Intent constitutes notice that the entity named at item B1. of this form intends to be authorized by the DEP General Permit issued jointly with EPA for stormwater discharges from the small municipal separate storm sewer system (MS4), in the location identified at item B2. of this form. Submission of the Notice of Intent also constitutes notice that the party identified at item B1. has read, understands and meets the eligibility conditions of Part I.B. of the NPDES Small MS4 General Permit, agrees to comply with all applicable terms and conditions of the NPDES Small MS4 General Permit, and understands that continued authorization to discharge is contingent on maintaining eligibility for coverage. **In order to be granted coverage, all information required on BRP WM 08A, including the Stormwater Management Program Summary and Time Frames form, must be completed. Please read the permit and make sure you comply with all requirements, including the requirement to develop and implement a stormwater management program.**

B. Applicant Information

1. Small MS4 Operator/Owner Information:

Name

Town of East Bridgewater, 175 Central Street
Mailing Address

Town of East Bridgewater — City/Town

MA — State

(508) 378-1601 — Telephone Number

Email (if available)

2. Municipality Name

Town of East Bridgewater
City/Town

3. Legal Status:

☐ Federal ☒ City/Town ☐ State ☐ Tribal ☐ Private

☐ Other public entity: Specify Public Entity

4. Other regulated MS4(s) within municipal boundaries:

5. Based on the instructions provided in Part I of the NPDES Small MS4 General Permit, have the eligibility criteria for "listed species" and critical habitat been met?

☒ yes ☐ pending ☐ no

B. Applicant Information (cont.)

6. Based on the instructions provided in Part I of the NPDES Small MS4 General Permit, have the eligibility criteria for protection of historic properties been met?

☒ yes ☐ pending ☐ no

Note:
Section C may be duplicated to accommodate a larger list of receiving waters

C. Names of (Presently Known) Receiving Waters

- No current mapping. Unknown at present time. Will be identified during 5-year implementation of stormwater management program (See program summary).

Receiving Water:	No. of Outfalls	Listed as Impaired?	Impairment
Name	Number	☐ Yes ☐ No	Specify
Name	Number	☐ Yes ☐ No	Specify
Name	Number	☐ Yes ☐ No	Specify
Name	Number	☐ Yes ☐ No	Specify
Name	Number	☐ Yes ☐ No	Specify
Name	Number	☐ Yes ☐ No	Specify
Name	Number	☐ Yes ☐ No	Specify
Name	Number	☐ Yes ☐ No	Specify
Name	Number	☐ Yes ☐ No	Specify
Name	Number	☐ Yes ☐ No	Specify
Name	Number	☐ Yes ☐ No	Specify
Name	Number	☐ Yes ☐ No	Specify
Name	Number	☐ Yes ☐ No	Specify
Name	Number	☐ Yes ☐ No	Specify
Name	Number	☐ Yes ☐ No	Specify
Name	Number	☐ Yes ☐ No	Specify

D. Stormwater Management Program Summary

1. Public Education:

BMP ID #	Specify Best Management Practice	Responsible Dept./Person Name	Specify Measurable Goal
1	Create a Stormwater Program	Department of Public Works Planning Board Conservation Commission Board of Health Board of Selectmen	East Bridgewater will present to the public at a public meeting East Bridgewater's draft Comprehensive Stormwater Management Program.
2	Create a Stormwater Program	Department of Public Works	East Bridgewater will identify appropriate sources of funding assistance (SRF, 319 Grant Program, 604(b) Grant Program, Lakes & Ponds Grant Program, Source Water Protection Grant Program, Recycling Grant Program) and apply for assistance in implementing portions of East Bridgewater's Comprehensive Stormwater Management Program, including public education and outreach.
3	Address specific groups	Department of Public Works	Distribute EPA and other relevant educational brochures to targeted audiences. Distribution points include Town Hall, Library, and Transfer Station.
4	Target groups likely to impact storm water	Department of Public Works	Brochures targeting specific audiences and activities will be available. These target groups include homeowner and lawn maintenance activities, disposal of household waste, and pet maintenance.

D. Stormwater Management Program Summary (Cont.)

1. Public Education (Cont.):

BMP ID #	Specify Best Management Practice	Responsible Dept./Person Name	Specify Measurable Goal
5	Identify alternative information sources	Department of Public Works MIS Department	East Bridgewater will post links to stormwater BMPs and other water quality education resources, including EPA and DEP on its website. www.eastbridgewaterma.org
6	Identify alternative information sources	Department of Public Works MIS Department	East Bridgewater will also post links on its website to the Taunton River Watershed Council www.tauntonriver.org
7	Utilize local public access channel	Department of Public Works	Public meeting notice and the meeting reviewing East Bridgewater's Comprehensive Stormwater Management Program will be posted on East Bridgewater's local access channel.
8	Develop, conduct and document educational programs	Department of Public Works TRW Liaison	The Town of East Bridgewater will appoint a liaison to the Taunton River Watershed Council to disseminate information to the Town on TRW programs and activities.
9	Promote household waste recycling	Department of Public Works Board of Health	The Town of East Bridgewater will work with the Town's contracted waste hauler and the Board of Health to continue to sponsor Regional Hazardous Waste Collection Days.

D. Stormwater Management Program Summary (Cont.)

2. Public Participation:

BMP ID #	Specify Best Management Practice	Responsible Dept./Person Name	Specify Measurable Goal
10	Storm drain stenciling	Department of Public Works	East Bridgewater will work with local Scout groups to develop a stenciling program. Stenciling will target East Bridgewater's subwatersheds.
11	Community clean-ups	Department of Public Works East Bridgewater Conservation Commission	Town of East Bridgewater will encourage local stream team cleanups. Town will provide notice of event on local access channel and website.
12	Community clean-ups	Department of Public Works	Town will provide trucks and other material to support cleanup efforts and disposal of materials.

3. Illicit Discharge Detection and Elimination:

BMP ID #	Specify Best Management Practice	Responsible Dept./Person Name	Specify Measurable Goal
13	Inventory and mapping of storm drain system	Department of Public Works	East Bridgewater will identify appropriate sources of funding assistance (SRF, 319 Grant Program, 604(b) Grant Program, Lakes & Ponds Grant Program, Source Water Protection Grant Program, Recycling Grant Program) and apply for assistance in implementing portions of East Bridgewater's Comprehensive Stormwater Management Program, including public education and outreach.

D. Stormwater Management Program Summary (Cont.)

3. Illicit Discharge Detection and Elimination (Cont.):

BMP ID #	Specify Best Management Practice	Responsible Dept./Person Name	Specify Measurable Goal
14	Mapping and identification of outfalls and receiving waters	Department of Public Works Board of Assessors	East Bridgewater will develop and implement a plan to map all outfalls and receiving bodies of water, contingent on Town Meeting approval of funding.
15	Identification/description of problem areas	Department of Public Works	East Bridgewater will develop and implement an Illicit Discharge Detection and Elimination (IDDE) plan, contingent on Town Meeting approval of funding.
16	Enforcement procedures addressing illicit discharges	Planning Board Town Counsel Board of Health	East Bridgewater will review whether local authority is appropriate and able to respond to potential illicit discharges. New by-laws, if necessary, will be proposed to Town Meeting.
17	Public information program regarding hazardous wastes and dumping	Department of Public Works Board of Health	East Bridgewater will provide educational brochures to residents within the member communities promoting proper disposal of household hazardous wastes and conditions for regional collections.
18	Initiation of recycling programs	Department of Public Works Board of Health	East Bridgewater will apply for funding assistance from DEP's Recycling Grant Program for assistance in public education and the purchase of recycling materials.

D. Stormwater Management Program Summary (Cont.)

3. Illicit Discharge Detection and Elimination (Cont.):

19
BMP ID #

Watershed assessments and studies Specify Best Management Practice	Department of Public Works Conservation Commission Board of Health Responsible Dept./Person Name	East Bridgewater will identify opportunities for funding assistance from DEP's 604(b) and 319 grant programs and the Department of environmental Management's Lakes and Ponds Grant Program to support watershed assessment and implementation activities. Tasks can include design and installation of stormwater BMPs and public outreach including storm drain stenciling. Emphasis will be on assessments and remediation of stormwater related problems impacting water quality in Plymouth Street Pond, Mattield River from the confluence of Beaver Brook and Salisbury Plain River, Salisbury Plain River from Brockton WWTP to confluence with Matfield River. These waterbodies have been identified as impaired an on DEP's 303d list. Specify Measurable Goal

20
BMP ID #

Watershed assessments and studies Specify Best Management Practice	Department of Public Works Water Department Responsible Dept./Person Name	The Town of East Bridgewater will encourage the East Bridgewater Water Department to apply for funding assistance from DEP's Source Water Protection Program for grant assistance to develop wellhead protection plans and stormwater management plans within Zones II. Specify Measurable Goal

D. Stormwater Management Program Summary (Cont.)

4. Construction Site Runoff Control:

BMP ID #	Specify Best Management Practice	Responsible Dept./Person Name	Specify Measurable Goal
21	Bylaw: Storm water management regulations for construction sites 1 acre or larger	Planning Board Conservation Commission Town Counsel Board of Health Zoning Board of Appeals	East Bridgewater will review model by-law developed by DEP in consultation with the Attorney General's Office.

5. Post Construction Runoff Control:

BMP ID #	Specify Best Management Practice	Responsible Dept./Person Name	Specify Measurable Goal
22	Bylaw: Require post-construction runoff controls	Planning Board Conservation Commission Town Counsel Board of Health Zoning Board of Appeals	East Bridgewater will review model by-law developed by DEP in consultation with the Attorney General's Office.

6. Municipal Good Housekeeping:

BMP ID #	Specify Best Management Practice	Responsible Dept./Person Name	Specify Measurable Goal
23	Develop a municipal Operations and Maintenance Plan	Department of Public Works	Using regulations and recommendations from DEP and EPA, East Bridgewater will develop and update an operations and maintenance plan to include proper disposal of street sweepings, catchbasin cleanout, snow disposal, roadway de-icing procedures, vehicle washing, and outside storage of materials.
24	Develop a municipal Operations and Maintenance Plan	Department of Public Works	East Bridgewater will implement a formal inspection program, including maintenance logs and scheduling, for catchbasin cleaning, repairs, and new installation.

D. Stormwater Management Program Summary (Cont.)

6. Municipal Good Housekeeping (Cont.):

BMP ID #	Specify Best Management Practice	Responsible Dept./Person Name	Specify Measurable Goal
25	Develop and implement training programs for municipal employees	Department of Public Works	East Bridgewater will send a minimum of 5 public works employees annually to training seminars sponsored by MassHighway, BayState Roads, and other relevant agencies or vendors.
26	Review storm drainage infrastructure needs	Department of Public Works	East Bridgewater will incorporate storm drain infrastructure review in East Bridgewater's Chapter 90 project utilizations.

7. BMPs for Meeting TMDL:

BMP ID #	Specify Best Management Practice	Responsible Dept./Person Name	Specify Measurable Goal

E. 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.

Printed Name

Signature

Date

STORM WATER [illegible]AGEMENT PROGRAM **SCHE[illegible]**

Mass. Transmittal No. W041043

EPA No_____

Name of MS4: East Bridgewater

	PERMIT YEAR				PERMIT YEAR TWO				PERMIT YEAR THREE				PERMIT YEAR FOUR				PERMIT YEAR FIVE				
BMP ID.	Spring 03	Summer 03	Fall 03	Winter 03-04	Spring 04	Summer 04	Fall 04	Winter 04-05	Spring 05	Summer 05	Fall 05	Winter 05-06	Spring 06	Summer 06	Fall 06	Winter 06-07	Spring 07	Summer 07	Fall 07	Winter 07-08	Next Permit
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