

Municipality/Organization: Town of Medway, MA
EPA NPDES Permit Number: MA041132 (expired)
MassDEP Transmittal Number: W-
Annual Report Number & Reporting Period: Year 15
April 1, 2017 – March 31, 2018

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2018)

Part I. General Information

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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, 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.

Signature: 
Printed Name: David D'Amico
Title: Director, Dept. of Public Services
Date: April 27, 2018

Handwritten text, possibly bleed-through from the reverse side of the page. The text is mostly illegible due to fading and blurring, but appears to be organized into several vertical columns. Some faint characters and symbols are visible, including what might be the letters 'A', 'B', 'C', 'D', 'E', 'F', 'G', 'H', 'I', 'J', 'K', 'L', 'M', 'N', 'O', 'P', 'Q', 'R', 'S', 'T', 'U', 'V', 'W', 'X', 'Y', 'Z' and some numbers. There are also some symbols that look like small circles or dots.

Part II. Self-Assessment

Over the past year, the Town of Medway maintained an intense focus on preparing to meet the new MS4 stormwater permit requirements. Chief among these has been an intense public outreach and dialogue on stormwater, water quality, and water conservation. The Town continues with its consultant, Kleinfelder, to take a proactive approach to compliance in preparation for the Final Permit, which will become effective on July 1, 2018. Kleinfelder used a MassDEP-provided working document of proposed requirements to develop a schedule of activities and costs over a 20 year period. The Selectmen authorized Kleinfelder to proceed with the second phase of an Integrated Water Resources Management Plan (IWRMP) that began in 2010. The IWRMP is near completion after years of careful planning and collaboration between the Stormwater Task Force and Kleinfelder.*

The Town created a new Compliance Coordinator position within the Department of Public Services to specialize in MS4 permitting compliance. The position was filled on November 27, 2017. The Compliance Coordinator will assist with reporting and interdepartmental collaboration to ensure policies, procedures, and messaging are compliant and consistent across departments. Approval of the position demonstrates the Town's receptivity and commitment to invest in measures that meet environmental quality goals.

The Town continued the implementation of its 2014 Illicit Discharge Detection & Elimination (IDDE) Plan by conducting 278 dry weather IDDE inspections during the summer of 2017. To date, 350 outfalls have been geo-located and inspected; however not all outfalls fall within the MS4 jurisdiction. Only 1 suspected illicit discharge was detected to date (2015), and was remediated in accordance with the MS4 permit requirements. No illicit discharges were detected during this reporting period. Outfall inspections will continue; any revisions to the program to meet new permit requirements will be completed accordingly.

Progress on the Route 109 Transportation Improvement Project continued during the reporting year. The drainage system is approximately 80% completed. Final tie-ins to the system are expected to be completed in 2018. We continue to emphasize the revisions and improvements to the stormwater collection system along the route and Choate Pond. The RT 109 project has provided many opportunities for direct mailings, public meetings, Business Council updates, and one-on-one conversation with area residents. Choate Park, located at the pond, itself was approved for a nearly \$2 million renovation.

The Department of Public Services has continued to receive funding for major sewer trunk line repairs with several inflow and infiltration problems corrected. These lines flow to the Charles River Water Pollution Control District for treatment and discharge to the Charles River. Although treated, the flow should be contributing to groundwater resources instead of being directly discharged to the Charles River. This has now become an established program to inspect and repair in alternating years various segments of the sewer collection system.

The Department participated in several annual community events with message boards, hand-outs, and web announcements all designed to raise public awareness. Town Meetings, Household Hazardous Waste Day, Clean Sweep, and other community events are used to promote an array of conservation initiatives in water, solid waste recycling, and energy. Booths were set-up at Medway Family Day held at Choate Pond and at Medway Pride Day for additional public outreach and one-on-one discussions. Educational material provided to the public covered several topics including rain barrels and how they can help decrease stormwater runoff to streams, yard waste and pet waste management, and the effects of excess phosphorous on water quality. Medway's growing social media presence has proven to be an effective tool to disseminate information as well.

During this past year, the Town has gained a more complete understanding of the requirements of the new Permit and the significant resources that will be required to meet them. As stated, Kleinfelder is near completion of the IWRMP and establishing its implementation timeline. Included within the scope of the IWRMP Phase II is the development of the MS4 Notice of Intent and Stormwater Management Plan. These activities were instated last summer in conjunction with the Town's stormwater Task Force. The Town is well prepared to meet the challenges of the new permit.

*The Stormwater Task Force is comprised of representatives from Board of Selectmen, Department of Public Services, Water & Sewer Commission, Charles River Pollution Control District, Planning & Economic Development Board, Conservation Commission, Finance Committee, and the 495 Partnership.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1	NEWSPAPER ARTICLES	DPS/ DAVID D'AMICO	RAISE PUBLIC AWARENESS	<p>Committees, task forces, and municipal departments utilize the local newspaper to raise public awareness on stormwater and water quality initiatives.</p> <p>Medway hosts community events throughout the year including: Family Day, Clean Sweep, Household Hazardous Waste Day, and Medway Pride Day. Notice of these events are highly publicized through various mediums including the local newspaper and are well attended. These events are used as opportunities to promote awareness of Medway's stormwater management program and related initiatives.</p> <p>Local newspapers were used to report progress on the Choate Park/Pond project, as well as the Route 109 project.</p>	Continue to use the local newspaper to report and update the public on Town affairs. Revise Program to meet new permit requirements.

2	PUBLIC MEETINGS	BOH/ BETH HALLAL CONCOM/ BRIDGET GRAZIANO PEDB/OPEN SPACE COMMITTEE	CHOATE POND/ CHICKEN BROOK CLEAN UP	<p>Held Board of Health meetings on water quality.</p> <p>Held ConCom meetings on water quality.</p> <p>Choate Pond and sections along Chicken Brook are targeted during the annual Clean Sweep event.</p> <p>Funding for the boardwalk along Chicken Brook was approved at Town Meeting. Improved access will promote awareness and foster stewardship over the area.</p> <p>A Community Forum was held on October 3, 2017 to gather community input for the new Open Space and Recreation Plan. An online survey was also posted on the town website to solicit community input.</p>	Revise Program to meet new requirements while building on past successful public meetings related to Choate Pond, Chicken Brook and the new Open Space and Recreation Plan.
3	SCHOOL OUTREACH	SCHOOL DEPT SUPERINTENDENT/ DR. ARMAND PIRES	SCIENCE CURRICULUM INCLUDES WATER RESOURCES TOPICS	<p>Science curriculum includes topics on stormwater pollution and prevention.</p> <p>ConCom agent led a workshop with 4H students and their parents at Choate Park where they discussed the water cycle and stormwater.</p>	Continue to include stormwater topics in the science curriculum and build on past success. Revise the program to meet new permit requirements.

4	TOWN WEBSITES	COMMUNICATIONS/MARY BECOTTE & MATT FITZGERALD	RAISE PUBLIC AWARENESS	<p>The Communications Director as well as DPS personnel post stormwater and water quality information on the town and DPS website.</p> <p>The Communications Director utilized the live streaming feature on Medway's Facebook page to disseminate information regarding stormwater and other town matters.</p>	<p>Continue to use the town website and social media accounts to disseminate information and updates.</p> <p>Revise Program to meet new requirements while building on past successful electronic communications.</p>
5	CABLE TV	COMMUNICATIONS/MARY BECOTTE & MATT FITZGERALD	RAISE PUBLIC AWARENESS	<p>The Town records Selectmen, ConCom, FinCom, and PEDB meetings regularly and airs them on Medway's Cable Access station.</p> <p>During these meetings a variety of topics are discussed including stormwater management and water quality.</p>	<p>Continue to raise public awareness and make information accessible to residents by airing and recording public meetings over the cable access channel.</p>
6	CATCH BASIN STENCILING	DPS/DAVID D'AMICO	STENCIL ALL CATCHBASINS WITH DIRECT DISCHARGE TO OUTFALLS	<p>DPS field staff stenciled catch basins with direct discharge to outfalls. The stencil depicts an image of a fish and a "NO DUMPING" message. The stencil serves as an educational and public awareness tool.</p>	<p>Revise Program to meet new requirements while repainting the remaining catch basins with direct discharge to outfalls.</p>

7	EDUCATION SIGNAGE	DPS/ DAVID D'AMICO	RAISE PUBLIC AWARENESS	<p>Sign board postings continued. IWRMP Poster Board was displayed at Medway Pride Day and 3 different brochures that discuss stormwater pollution were distributed at the event.</p> <p>Informational signage on water quality and stormwater is used in strategic areas across town, such as at the Town Hall, Recycle Center, Schools, parks, and at high volume intersections.</p> <p>The Route 109 project updates and signage has presented additional opportunities to educate the public on stormwater as it relates to construction.</p>	<p>Revise Program to meet new requirements while building on past successful educational signage.</p> <p>The Town is investing in permanent electronic signage at Choate Park with the capability to cycle through multiple messages on a variety of topics including stormwater.</p>
8	PUBLIC FEEDBACK	TA/ DPS/ BOH /SELECTMEN	RAISE PUBLIC AWARENESS	<p>The publically founded Facebook page, "Friends of Medway" has presented an alternative avenue for residents and the municipal government to communicate. The page has over 9,000 members and has been an effective tool to communicate stormwater and water quality information and generate discussions.</p>	<p>Continue using the "Friends of Medway" page to disseminate information and generate active discussions.</p>

9	GREEN COMMUNITIES PROJECTS	TA/DPS/ BUILDING INSP	ASSORTED PROJECTS UNDER GRANT COMPLETED AND PUBLICIZED	<p>As a designated Green Community since 2010, the Town has used this platform to promote awareness of other environmental initiatives including stormwater management and water conservation.</p> <p>The Town is seeking funding through the DOER Green Communities grant for a variety of energy saving projects including the purchase of an electric vehicle and EV charging stations. This presents an opportunity to educate the public on the vehicle related pollutants such as oil, grease, heavy metals from exhaust and their effects on the stormwater system.</p>	<p>Build on past synergistic outreach between Green Communities projects and other environmental initiatives.</p> <p>Announce any new grant award and projects receiving funding under the Green Communities grant.</p> <p>Revise the program to meet new permit requirements.</p>
10	RAIN BARREL PROGRAM	DPS	PROMOTE SALE OF RAIN BARRELS.	<p>The Town sold 16 rain barrels and 14 diverters, which is an increase in the number of units sold during the prior permit year. Educational material on the benefits of using rain barrels and diverters was made available.</p>	<p>Build on past successful outreach and awareness efforts to increase the number of residents participating in this program.</p>

11	PROMOTE RESPONSIBLE YARD WASTE MANAGEMENT	DPS	<p>Promote Sale of Composters.</p> <p>Track number of composters sold.</p> <p>Distribute brochure that promotes yard waste recycling and composting.</p> <p>Promote use of the Town's recycling center for disposal of yard waste.</p>	<p>DPS sold 24 compost bins to the public during the past reporting year.</p> <p>Educational material on the benefits of composting was made available on the Town website and social media accounts, and posted in town offices.</p> <p>Town's homepage continues to provide a quick link to trash and recycling information.</p> <p>The Recycle Center collected 324 tons of yard waste in 2017, which demonstrates the success of the program and community support.</p> <p>The "Curbside Chronicle" is distributed annually with information regarding solid waste, recycling, and composting yard waste.</p>	<p>Continue to promote sale of composters and track the number of units sold.</p> <p>Build on the past success of the "Curbside Chronicle" to promote recycling and composting BMPs and increase awareness of the services provided at the Recycling Center</p>
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12	PROMOTE RESPONSIBLE PET WASTE MANAGEMENT	DPS	<p>Intensify the Existing Pet Waste Management Campaign.</p> <p>Update the existing dog park rules brochure to include information regarding the effects of pet waste on water quality, proper pet waste disposal and what pet owners can do to reduce pollution.</p>	<p>Medway Dog Park rules including proper pet waste disposal are posted at the entrance of the park.</p> <p>Pet waste management information is available on the DPS website.</p> <p>The Animal Control department manages the rules and regulations at the Medway Dog Park including proper pet waste disposal.</p> <p>The Friends of the Medway Dog Park Facebook page and website post proper pet waste disposal rules.</p>	<p>Revise Program to meet new requirements while building on past successful activities with the Animal Control Officer, DPS, and Friends of the Medway Dog Park in regards to license renewals.</p> <p>Enhance partnership between DPS, the Open Space Committee, and the Medway Trail Club on proper pet waste disposal its connection to stormwater and water quality.</p>
13	RESIDENTIAL LANDSCAPE AND LAWN CARE EDUCATION	DPS	<p>Develop a brochure that educates on the impacts of nutrient loading in Lawn Care and provides helpful lawn care and landscaping tips to help reduce the amount of pollutants from entering the storm water collection system.</p>	<p>DPS website posts soil care information and explains how using compost can reduce the need to use pesticides.</p> <p>DPS also lists water conservation measures for residential lawn care and landscaping that reduce impacts on the stormwater system.</p>	<p>Revise Program to meet new requirements while building on past successful activities</p>
14	GENERAL STORMWATER AWARENESS	DPS	<p>Develop a poster on Stormwater Pollution for display at Town Hall, Public Library, and outreach events.</p>	<p>Poster for the Integrated Water Resources Management Plan (IWRMP) includes stormwater educational language displayed at Town Hall, DPS Offices, Town Meetings, and community events.</p>	<p>Continue to make the IWRMP poster available for public viewing. Revise the program to meet new permit requirements.</p>

15	TARGETED OUTREACH TO INDUSTRIAL, COMMERCIAL, DEVELOPMENT AUDIENCES	DPS	Develop a plan for outreach on audience -specific message	Launched the Upper Charles River Regional Feasibility Study to identify ways Medway, Franklin, and Milford can collaborate on water and stormwater related challenges. The task forces includes Franklin, Medway and Milford DPS, local businesses, the 495 Partnership, regional and state authorities, and the engineering group AMEC Foster and Wheeler.	Task force will continue to meet and develop the feasibility study and identify opportunities to collaborate with surrounding towns. Revise Program to meet new requirements while building on past successful activities
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1a. Additions

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year extended (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year extended
1	CROSS COMMITTEE INVOLVEMENT	TOWN ADMINISTRATOR	RAISE PUBLIC AWARENESS	<p>Stormwater has been discussed at various meetings including: BOS, Water Commission, Open Space and Recreation Task Force, PEDB, BOH and ConCom.</p> <p>The Stormwater and Land Disturbance bylaw was discussed and accepted during the May 2017 Town Meeting.</p> <p>The IWRMP task force consists of the Town Administrator’s office, DPS, BOS, Water Commission, PEDB, ConCom, CRPCD, and 495 Partnership.</p>	<p>Continue to build cross committee involvement as it pertains to stormwater, water conservation, and water quality.</p> <p>Revise the programs to meet new permit requirements.</p>
2	HHW DAY	DPS/TOM HOLDER	PUBLIC PARTICIPATION	<p>HHW Collection Day is scheduled concurrently with Medway Pride Day in order to raise awareness, provide convenience, and increase participation.</p> <p>Approximately 200+ residents participated in the May 2017 event.</p>	<p>The annual HHW Collection Day is scheduled for May 19, 2018.</p> <p>Continue to build on past successes of the event and promote additional participation in the May 2018 event.</p>
3	POND CLEAN-UPS	TA/ALLISON POTTER	HOLD ANNUAL EVENT	<p>Medway Clean Sweep volunteers target dozens of areas across the Town including Choate Park and Charles River areas.</p> <p>Approximately 200 volunteers participated.</p>	<p>Medway Clean Sweep is scheduled for April 28, 2018.</p> <p>Continue to promote the annual event and explore option to weigh the amount of material recovered and publicize on social media accounts and websites.</p>

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year extended (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year extended
4	PUBLIC EVENTS	PARKS COMM.	HOLD ONE OR MORE ANNUAL EVENTS	The Town hosts several annual events including: Medway Pride Day, Medway Memorial Day Parade, Medway Family Day, Pumpkin Walk, Turkey Trot, and Christmas Parade.	Revise Program to meet new requirements while building on past successful activities.
5.	PUBLIC ACCESS	DPS/OPEN SPACE COMMITTEE	OPEN BROOK AND RIVER AREAS TO THE PUBLIC AND RAISE AWARENESS	<p>Maintained canoe launch constructed on Village Street by the State DRC.</p> <p>Educational kiosks installed at all trailheads.</p> <p>DPS, Open Space Committee, and the Trails Task Force continued to link recreational trails throughout the Town providing public access to Chicken Brook, Choate Pond and the Charles River.</p> <p>On November 18, 2018, the Trails Task Force and Open Space Committee dedicated the new 240 foot boardwalk over Chicken Brook and surrounding wetlands.</p>	<p>Continue efforts to create 3.5 mile ecological and recreation corridor from the Upper Charles Trail in Holliston to Choate Park in Medway.</p> <p>Revise program to meet new permit standards.</p> <p>Publish Open Space & Recreation Plan identifying properties of interest along waterfronts for possible acquisition and protection by the Town.</p>

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year extended (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year extended
6	DEVELOP AND IMPLEMENT A MEANS FOR RESIDENTS TO REPORT STORMWATER VIOLATIONS	DPS/IT/ COMMUNICATIONS	<p>Establish the electronic form or web link on the Town’s website.</p> <p>Advertise the electronic form or web link</p> <p>Track the number of complaints received</p> <p>Track the problems/incidents remedied as a result of the electronic form/link.</p>	<p>IT and DPS created an electronic form for residents to report a violation or provide feedback on stormwater management. The form is located on the DPS website.</p> <p>No violations or public comments have been recorded as of this reporting period.</p> <p>Town social media pages have enhanced reporting and communications on a broad range of topics.</p>	Build on current reporting methods and revise the program to meet new requirements.

2a. Additions

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year extended (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year extended
1	WEEKLY TESTING	BOH DPS CONCOM	MAINTAIN LOW E.COLI LEVELS	Swimming at Choate Pond is suspended. Regular E.coli testing is suspended. DPS identified a vendor to begin bio-remediation efforts at Choate Pond. The scope includes treatment for excessive algae, aquatic weeds, and nutrients.	DPS will file a NOI, finalize contract, and remain in compliance with water treatment procedure and public notification. Treatment is expected to begin in 2018.
2	MAINTAIN STORM SEWER SYSTEM MAP W/OUTFALLS	DPS/DAVID D'AMICO	STORM SEWER SYSTEM MAP MAINTAINED	The Storm Sewer Drainage Base Map shows the location of all known outfalls and the names of all waters that receive discharges from these outfalls. The map is compliant with Phase I of the new permit. Completed outfall mapping during summer 2017. Completed catch basin mapping town-wide during the summer 2017.	Continue to update Storm Sewer Drainage Base Map and revise program to meet new permit requirements.
3	SCREEN OUTFALLS FOR ILLICIT CONNECTIONS	DPS/DAVID D'AMICO	SCREEN ALL OUTFALLS AND REMOVE ILLICIT CONNECTIONS	During the summer of 2017, DPS field staff used the outfall map book, a Trimble, and an iPad to geo-locate the remaining unmapped outfalls (278 outfalls). It is likely that not all of these outfalls are MS4 jurisdictional. Additional research is needed.	Revise Program to meet new outfall screening requirements and ranking criteria while building on past assessments.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year extended (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year extended
				<p>Revised any mapping discrepancies and added any missing infrastructure.</p> <p>The existing level of accuracy for the outfalls on the maps is adequate for planning level purposes and IDDE investigation.</p> <p>350 outfalls have been mapped and inspected with only one illicit discharge detected to date. The illicit discharge was corrected within the required time period.</p>	
4	INTEGRATE THE SEPTIC SYSTEM DATABASE INTO THE TOWN'S GIS DATABASE AND MAPPING SYSTEMS	BOH / BETH HALLAL	<p>Develop septic system records data entry interface for use with the Town's GIS database and mapping systems.</p> <p>Implement use of the new data entry interface.</p> <p>Track the number of septic systems that have failed each year and action taken.</p>	BOH tracks the number of septic repairs, d- box repairs, percolation tests, and the number of failed systems across the Town.	<p>Continue to track the number of pump outs and failed systems.</p> <p>Partner with BOH to make an interdepartmental procedure that keeps information accessible.</p> <p>Partner with GIS Coordinator to integrate the septic system data entry interface into the Town's GIS database and mapping system.</p> <p>Build a GIS layer to geo-locate septic systems and analyze data.</p> <p>Revise Program to meet new requirements while continuing collecting data using forms.</p>
5	SEPTIC SYSTEM MAINTENANCE EDUCATION	BOH	<p>Develop educational packets.</p> <p>Track the distribution of the public education packets.</p> <p>Post educational information on the BOH's website.</p>	Posted on the BOH webpage is a "How to Care for My Septic System" link that directs users to information on septic system maintenance, BMPs, and the impacts of a failing system on public and environmental health.	Revise Program to meet new requirements while building on past successful activities. Link BOH information to the DPS stormwater page for ease of access to information and to demonstrate the influence that these systems can have on one another.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year extended (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year extended
6	SEPTIC SYSTEM REPLACEMENT PROGRAM	BOH	Participate in the State DEP "Community Septic Betterment Loan" program.	Loans made available through the BOH.	Revise Program to meet new requirements while building on past successful activities

3a. Additions

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4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year extended (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year extended
1	SILT FENCING, HAY BALES	DPS/ D'AMICO CONCOM /BRIDGET GRAZIANO BUILDING/JACK MEE PEDB	NO RUNOFF INTO STORMWATER SYSTEM AT CONSTRUCTION SITES	<p>The Stormwater and Land Disturbance bylaw was approved at the annual Town Meeting on May 8, 2017.</p> <p>A Land Disturbance Permit is required for construction activities as defined in Section 26.5 of Medway's Stormwater and Land Disturbance bylaw.</p> <p>An Erosion and Sediment Control Plan is required for construction activities as defined in Section 26.5-26.7 of the Stormwater and Land Disturbance bylaw.</p> <p>A Post-Construction and Stormwater Management Plan, including a Long-Term Operations and Management Plan is required for construction activities defined in Section 26.5 and 26.8 of the Stormwater and Land Disturbance bylaw.</p> <p>The new Compliance Coordinator position was approved and the position has been filled.</p>	<p>Continue to enforce Sections 26.4-20.13 of the Stormwater and Land Disturbance Bylaw.</p> <p>Amend program to meet new permit requirements as needed.</p>

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year extended (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year extended
2	PUBLIC WAY CLEANUP	DPS/DAVID D'AMICO	ENSURE NO SILT ON THE ROAD ADJACENT TO AREA	<p>The Town followed O&M BMPs to ensure sediment remains on site during routine maintenance.</p> <p>Stabilization pads at all entrance/egresses during construction.</p> <p>Street sweeping and catch basin cleaning completed annually by contractors & DPS.</p>	Continue to follow the O&M Manual on BMPs, and revise measures to meet new requirements accordingly.

4a. Additions

5. Post-Construction Stormwater Management in New Development and Redevelopment

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year extended (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year extended
1	REGULATE STORMWATER MGT & EROSION CONTROL	DPS/DAVID D'AMICO PLANNING BOARD CONSERVATION	REGULATIONS PASSED	The Stormwater and Land Disturbance bylaw was approved at the annual Town Meeting on May 8, 2017. The new Compliance Coordinator position was approved and the position has been filled.	Revise regulations to meet new requirements while continuing to enforce past regulations and propose changes as needed.
2	IMPLEMENT IMPROVED ENG DESIGN FOR INFILTRATION & SEDIMENT CONTROL	PLANNING BOARD	NEW DESIGNS INSTALLED	Construction site operators performing land disturbance activities under the jurisdiction of the bylaw are required to submit an Erosion and Sediment Control Plan that meets 15 design requirements. Design requirements include: Minimizing soil erosion and control sedimentation during construction and document that proposed measures can handle a 100-year storm; Inspect and report stormwater controls at consistent intervals; Use perimeter controls to prevent off-site transport of sediment.	Enforce Erosion and Sediment Control design requirements. Amend or add design requirements as needed.
3	REQUIRE AS-BUILT DOCUMENTATION	PLANNING BOARD/ BUILDING INSPECTOR/ DPS	AS-BUILTS RECEIVED AND PROPERLY FILED	As-built plans for construction projects received, reviewed, and filed.	Compliance Coordinator will assist in filing As-Built documents electronically for interdepartmental viewing. Revise program to meet new requirements.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year extended (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year extended
4	PROVIDE LONG TERM MAINTENANCE	DPS/DAVID D'AMICO	LONG TERM MAINTENANCE PERFORMED	<p>Installed drainage at Hill Street.</p> <p>Oversaw Candlewood Subdivision detention basin maintenance.</p> <p>Installed drainage improvements at Town Hall.</p> <p>Catch basin manhole repairs – 24 total.</p>	Revise long term maintenance activities to meet new requirements while building on past successful activities in regards to drainage work throughout the Town.

5a. Additions

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year extended (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year extended
1	WASH DOWN AREA	DPS/DAVID D'AMICO	NEW WASH AREA CONSTRUCTED	Wash bay operational.	Continue to maintain the wash bay.
2	SALT SHED	DPS/DAVID D'AMICO	COVERED & COFFER DAMED	Renewed discussion on DPS facility. Created a DPS Facility Building Committee with members from BOS, DPS, TA, and Energy Committee. Site visits to newly constructed DPS buildings in neighboring communities. Interviewing potential engineering firms.	Continue the planning and design phase of the new DPS Facility, keeping stormwater and other environmental BMPs at the forefront of discussions.
3	CATCHBASIN SUMP CLEANING	DPS/DAVID D'AMICO	# CATCHBASINS CLEANED	Annual catch basin cleaning throughout Town during late spring. 2,104 catch basin sumps cleaned.	Continue annual catch basin cleaning and revise program to meet new catch basin maintenance requirements.
4	PUBLIC WAY CLEANUP	DPS/DAVID D'AMICO	# ROADS SERVICED	Annual street sweeping completed throughout Town covering 100 miles of roadway.	Revise Program to meet new requirements on street sweeping / catch basin cleaning.
5	EMPLOYEE TRAINING	DPS/DAVID D'AMICO	# EMPLOYEES TRAINED	DPS includes Highway, Fleet Maintenance, Facilities, Environmental Services, and Water and Sewer Divisions. Recent hires have not received SWMP training.	Continue to train all DPS staff on SWMP, new stormwater bylaw, illicit discharges, and good housekeeping BMPs. Incorporate additional training sessions to meet new permit requirements and update staff on amendments to the SWMP.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year extended (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year extended
6	BEAVER CONTROL POLICY	BOH/BETH HALLAL CONCOM/BRIDGET GRAZIANO	# OF BEAVER DAMS BREACHED	0 dams were breached in 2017. Maintain installed control devices.	Continue to maintain beaver control devices, and revise the program to meet new requirements. Build on past successful public outreach materials and messaging.
7	REDESIGN AND RECONSTRUCT RT 109 BUSINESS DISTRICT	DPS/DAVID D'AMICO	RT 109 RECONSTRUCTED	During the reporting period, the Route 109 Transportation Improvement Project completed drainage work along the corridor, approximately 80% of the drainage system is complete. The final tie ins to the system are scheduled for completion during the next reporting period.	Continue posting RT 109 project updates on the Town website. Complete final phase of heavy construction, finish sidewalks, install streetlights and traffic signals, complete drainage system tie in.
8	TOWN WIDE CLEAN-UP	TA/ALLISON POTTER	ALL STREETS CANVASED AND TRASH PICKED-UP	Held 5 th Annual Medway Clean Sweep on April 8, 2017 to both clean areas and raise awareness. DPS Highway division routinely canvases the streets and disposes of litter as it's found.	6 th Annual Medway Clean Sweep scheduled for April 28, 2018. Use social media to increase awareness and participation. Revise program to meet new requirements.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year extended (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year extended
9	MUNICIPAL OPERATIONS & MAINTENANCE GOOD HOUSEKEEPING MANUAL	DPS/DAVID D'AMICO	<p>Develop and implement a Municipal Services Operations & Maintenance Manual (Good Housekeeping Best Management Practices) landscape and lawn care policy.</p> <p>Incorporate the Manual policy requirements into the Employee Training Program.</p>	The Municipal Services O&M Manual outlines 11 BMPs to prevent stormwater pollution including: road treatment, snow removal, materials management, vehicle maintenance, landscape maintenance, catch basin cleaning, and pet waste maintenance.	<p>Incorporate new BMPs in the Municipal Services O&M Manual as BMP standards evolve.</p> <p>Continue to train staff on BMPs.</p> <p>Revise program to meet new permit requirements.</p>
10	DEVELOP A STRUCTURAL BMP MAINTENANCE PROGRAM	DPS/DAVID D'AMICO	<p>Inventory all municipally maintained structural BMPS.</p> <p>GPS locate the BMPS.</p> <p>Clean BMPS on an "as needed basis".</p> <p>Obtain access agreements for BMPS not located on public property of within easements.</p> <p>Track maintenance activities for BMPS.</p> <p>Place a notice on the Town's website that informs residents that any maintenance requests for municipally maintained detention/retention basins located within their subdivision should be directed to the DPS.</p>	<p>Outfalls and catch basins were inventoried, mapped, inspected and cleaned as needed.</p> <p>Began inventorying manholes, Stormceptors, detention basins, and other structural BMPS.</p> <p>DPS website has a link to report a stormwater violation or provide feedback to the DPS department.</p>	<p>Work on larger structures not under immediate distress as funding allows.</p> <p>Obtain access agreements for BMPS not located on public property.</p> <p>Continue tracking maintenance activities for BMPS.</p> <p>Revise Program to meet new requirements while building on existing information.</p>

6a. Additions

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<if applicable>>

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year extended (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year extended
1	DEVELOP A WATER QUALITY STRATEGY FOR 303d WATERS	DPS BOH CONCOM	Summary of pollution prevention efforts, future needs, and responsible parties	The 2014 IDDE Plan and the Municipal O&M Manual identifies pollution prevention methods, names responsible parties, and makes recommendations to address future needs. BMPs to reduce nutrient loading are outlined in numerous documents and web links.	Revise Program to meet new requirements while incorporating the preliminary TMDL strategy into the SWMP. Revise Program to meet new requirements while considering information available from Studies in the Charles River Watershed.
2	OUTFALL INSPECTION IN CHARLES STORMWATER-SHEDS	DPS	Inspect at least 70 Outfalls draining to the Charles River	GIS Map updating with outfall inventory is complete. Conducted field inspections during the summer of 2017. 278 additional outfalls were mapped and inspected, bringing the total number of known outfalls in Town to 350. It is likely that not all of these outfalls are MS4 jurisdictional.	Continue to inspect outfalls and follow BMPs. Continue to track inspections and conduct follow-ups as needed. Update GIS map as new structural elements are located.
3	PUBLIC EDUCATION ON TMDL POLLUTANTS	DPS BOH CONCOM	Revisit Existing Public Education BMPs to include additional messaging or target audiences to meet anticipated requirements of new MS4	Reexamined educational materials on septic systems, pet waste management, yard care, fertilizer and pesticide use. Initial phase of revising material to incorporate specific messaging related to stormwater and TMDL pollutants.	Revise program to meet new public education requirements on TMDL pollutants.

7a. Additions

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7b. WLA Assessment

Two TMDLs have been finalized for the Charles River Basin.

1. Final TMDL for Nutrients in the Upper/Middle Charles River, CN272.0, May 2011.
2. Final TMDL for Pathogens in the Charles River Watershed January 2007, CN 0156.0.

Both apply to the area of Charles River located in Medway.

Medway is evaluating changes to its SWMP to comply with NPDES MS4 Permit changes, TMDLs and the Massachusetts Water Management Act regulations. The Integrated Water Resource Management Plan is expected to be completed by July 1, 2018, and will provide detailed recommendations for the Town to pursue in order to remain in compliance. Development of the IWRMP and adjustments to the SWMP were considered in the context of all these requirements so that compliance with one program did not jeopardize another. Changes to the SWMP during 2018 will include actions needed to develop and implement a Phosphorous Control Plan, which will be effective in supporting achievement of the WLA for both the Nutrient and Pathogen TMDLs. The Town recognizes that the 2016 Integrated List of Waters (draft report) lists Chicken Brook and Hopping Brook as Impaired Waters under definitions within the MS4 permit. Proposed activities to be developed for the NOI will acknowledge requirements to meet additional conditions in Appendix H of the permit.

Part IV. Summary of Information Collected and Analyzed

- Number of Outfalls Inspected for Illicit Discharges: 278
- Number of Outfalls Re-sampled: 0
- Number of Illicit Discharges Found: 0

Part V. Program Outputs & Accomplishments (OPTIONAL)

(Since beginning of permit coverage unless specified otherwise by a **, which indicates response is for period covering April 1, 2010 through March 31, 2011)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	
Annual program budget/expenditures **	(\$)	
Total program expenditures since beginning of permit coverage	(\$)	
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	
Stormwater management committee established	(y/n)	
Stream teams established or supported	(# or y/n)	
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	
Shoreline cleaned since beginning of permit coverage	(mi.)	
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	
▪ community participation **	(# or %)	
▪ material collected **	(tons or gal)	
School curricula implemented	(y/n)	

Legal/Regulatory

	In Place Prior to Phase II	Reviewing Existing Authorities	Drafted	Draft in Review	Adopted
Regulatory Mechanism Status (indicate with "X")					
▪ Illicit Discharge Detection & Elimination					
▪ Erosion & Sediment Control					
▪ Post-Development Stormwater Management					
Accompanying Regulation Status (indicate with "X")					
▪ Illicit Discharge Detection & Elimination					
▪ Erosion & Sediment Control					
▪ Post-Development Stormwater Management					

Mapping and Illicit Discharges

	(Preferred Units)	Response
Outfall mapping complete	(%)	
Estimated or actual number of outfalls	(#)	
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	
Outfalls inspected/screened **	(# or %)	
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	
Illicit discharges identified **	(#)	
Illicit discharges identified (Since beginning of permit coverage)	(#)	
Illicit connections removed **	(#); and (est. gpd)	
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	
% of population on sewer	(%)	

% of population on septic systems	(%)	
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Construction

	(Preferred Units)	Response
Number of construction starts (>1-acre) **	(#)	
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	
Site inspections completed **	(# or %)	
Tickets/Stop work orders issued **	(# or %)	
Fines collected **	(# and \$)	
Complaints/concerns received from public **	(#)	

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	
Site inspections (for proper BMP installation & operation) completed **	(# or %)	
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	
Low-impact development (LID) practices permitted and encouraged	(y/n)	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **	(times/yr)	
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	
Qty of structures cleaned **	(#)	
Qty. of storm drain cleaned **	(%, LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)	
• Disposal cost**	(\$)	
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	
• Vacuum truck(s) owned/leased	(#)	
• Vacuum trucks specified in contracts	(y/n)	
• % Structures cleaned with clam shells **	(%)	
• % Structures cleaned with vactor **	(%)	

	(Preferred Units)	Response
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	
• Hourly or lane mile contract rate **	(\$/hr. or ln mi.)	
• Disposal cost**	(\$)	
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	
• Vacuum street sweepers owned/leased	(#)	
• Vacuum street sweepers specified in contracts	(y/n)	
• % Roads swept with rotary brush sweepers **	%	
• % Roads swept with vacuum sweepers **	%	

Reduction (since beginning of permit coverage) in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	
Integrated Pest Management (IPM) Practices Implemented	(y/n)	

	(Preferred Units)	Response
Average Ratio of Anti-/De-Icing products used ** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	
Pre-wetting techniques utilized **	(y/n or %)	
Manual control spreaders used **	(y/n or %)	
Zero-velocity spreaders used **	(y/n or %)	
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/ln mi. or %)	
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	
% of salt/chemical pile(s) covered in storage shed(s)	(%)	
Storage shed(s) in design or under construction	(y/n or #)	
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	

Water Supply Protection

Storm water outfalls to public water supplies eliminated or relocated	# or y/n	
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	
Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	

