

**Municipality/Organization:** Town of Medway, MA  
**EPA NPDES Permit Number:** MA041132 (expired)  
**MassDEP Transmittal Number:** W-  
**Annual Report Number & Reporting Period:** Year 14  
April 1, 2016 – March 31, 2017

**NPDES PII Small MS4 General Permit  
Annual Report  
(Due: May 1, 2017)**

**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 29, 2017

## 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 as well as laying the groundwork for creation of a stormwater utility. 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, 2017. Kleinfelder has used a MassDEP-provided working document of proposed requirements to develop a schedule of activities and costs over a 20 year period. A presentation of anticipated program activities and costs was shared with the Town's Board of Selectmen twice during this Permit Year. In addition, a Storm Water Task Force with representatives from the Board of Selectmen, Department of Public Services, Water & Sewer Commission, Charles River Pollution Control District, Planning & Economic Development Board, Conservation Commission, Finance Committee and others has been convened to discuss strategies related to the new MS4 permit and other water conservation issues. The Town was awarded a MassDEP grant last fiscal year and has developed a draft Stormwater Utility Implementation Plan. The work on that grant during the current reporting year included completion of a Draft Implementation Framework for Stormwater Utility. Although political leaders are receptive at this point to increasing staff, budgets, and possibly adding a storm water utility, they do not want to commit precious resources to implement a large scale program until more definitive data is collected and a robust public outreach program is implemented. That program will be a part of the new Public Education / Outreach requirements in the new Permit. We also continue to work on infrastructure identification, mapping and testing as a primary focus in keeping with permit requirements.

The RT 109 Reconstruction Project has started construction. It provides many opportunities for direct mailings, public meetings, Business Council updates, and one-on-one conversation with area residents. We continue to stress the revisions and improvements to the storm water collection system along the route and Choate Pond.

MassDOT has also been advertising a new grant program called Complete Streets. This program seeks to have member communities provide added bike lanes and sidewalks for better multimodal transportation support. Medway along with other area towns has expressed concern that this program is at odds with the new MS4 permit as it actually encourages adding impervious surface. MassDOT has not formally responded to these concerns, however it should be addressed by the agencies involved.

During the current reporting period, the Town continued its work to update its Stormwater Program. 75 priority outfalls (out of 221 total MS4 Outfalls) have been GPS-located, and each has recently been inspected for dry-weather flow and condition. The Town recognizes the need to continue to update the Town's Drainage Basemap, as required under the Final Permit Section 2.3.4.5. A new GIS Coordinator has been hired and begun updating the Town's GIS basemap.

The Town continued the implementation of its 2014 Illicit Discharge Detection & Elimination (IDDE) Plan by conducting 58 dry weather IDDE inspections during the reporting period, focused initially on locations of concern (High and Medium priority outfalls)

prior to investigating low priority outfalls. Through these inspections, 7 assets were identified as non-MS4 outfalls (culverts) and 50 outfalls had no evidence of illicit discharge. One outfall had evidence of potential illicit discharge (outfall 50-3).

Outfall 50-3 on Kenny Drive was inspected on May 13, 2015. Elevated field test results for surfactants resulted in a water sample submission to Alpha Analytical laboratory in Westborough, MA. Visual and olfactory evidence indicated a likely contribution of illicit discharges. This outfall was re-screened according to the IDDE Plan, and on July 2, 2015 and dye traced. The source of the illicit discharge was identified and subsequently removed by the property owner, in accordance with local by-laws and the MS4 permit.

Working with the Metropolitan Area Planning Council, the Town participated in a flyover of the entire Town providing high resolution imagery for our GIS system during FY13. This imagery has been instated and provides important information on current BMP's to supplement ground data collection and allow superior operational planning.

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, as usual now, participated in volunteer community events with message boards, brochures, hand-outs, and web announcements all designed to raise public awareness. Booths were set-up at Family Day held at Choate Pond and at Medway Pride Day, as well as, other events such as Town meetings, household hazardous waste day, and other open meetings. These events are used to promote an array of conservation initiatives in water, solid waste recycling, and energy. Three separate educational brochures were developed specifically for Medway, and distributed at these events again in 2016. The topics covered include Recycling and described how rain barrels can help decrease stormwater runoff to streams, phosphorous, its use and effects, yard waste, and pet waste information. In addition, a new Director of Communications position has been created and filled in Town. This position will publish monthly newsletters and post more information on-line for improved public outreach.

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. The town has made the action of hiring a full time ConCom Agent as well as requesting a new position to the department to specialize in MS4 Compliance Coordinator. Near the end of last calendar year, the Selectmen authorized the Town's consultant, Kleinfelder to proceed with the second phase of an Integrated Water Resources Management Plan (IWRMP) that was begun in 2010. 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.

**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 extended (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year extended
1	NEWSPAPER ARTICLES	DPS/ DAVID D'AMICO	RAISE PUBLIC AWARENESS	<p>The Town has organized an outreach committee for the project. They meet on a monthly basis to generate news stories that have a stormwater theme. Medway held Family Day again at Choate Park which was highly publicized and well attended. Clean Sweep, rain barrel disbursements, household hazardous waste day, Pride Day all held again with corresponding articles.</p> <p>The design plans for a multi-million dollar improvement to the Choate Pond area is out for bid and construction plans to begin this spring.</p>	Revise Program to meet new requirements while building on past successful activities
2	PUBLIC MEETINGS	BOH/BETH HALLAL	CHOATE POND/CHICKEN BROOK CLEAN UP	Held Board of Health meetings on water quality; hired a full time employee as a ConCom agent. Town Meeting will need to fund actual trail construction after plans are completed.	Revise Program to meet new requirements while building on past successful public meetings

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
3	SCHOOL OUTREACH	SCHOOL DEPT/DR. JUDY EVANS	SCIENCE CURRICULUM INCLUDES WATER RESOURCES TOPICS	Science curriculum includes topics on stormwater pollution and prevention; Worked with local Boy Scout troops on overnight camping at Choate Pond with water resource discussion.  RT 109 work delayed into 2016.	Revise Program to meet new requirements while building on past successful activities with School Dept.  Revise Program to meet new requirements while building on past successful activities with local Boy Scout troops on resource projects.  Revise Program to meet new requirements while building on past successful activities in regards to the RT 109 project.
4	TOWN WEB SITE	COMMUNICATIONS/MARY BECOTTE	RAISE PUBLIC AWARENESS	Stormwater and water quality information on the Town web site focusing on special events, projects, and general water resource information. Implemented position of Director of Communication to better utilize social media platforms.	Revise Program to meet new requirements while building on past successful web announcements.  Revise Program to meet new requirements while building on past successful activities.
5	CABLE TV	COMMUNICATIONS/MARY BECOTTE	RAISE PUBLIC AWARENESS	Discussed topics on stormwater management during Town Meeting, Selectmen, ConCom, and FinCom meetings aired locally.  Water & Sewer Commission, Conservation Commission and Planning Board meetings are shown through Medway's cable network on a regular basis.	Revise Program to meet new requirements while building on past successful discussions at aired meetings.
6	CATCHBASINS STENCILING	DPS/DAVID D'AMICO	STENCIL ALL CATCHBASINS WITH DIRECT	Approximately 40% of the CBs were repainted this year.	Revise Program to meet new requirements while repainting the remaining 60% catch basins.

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year extended (Reliance on non-municipal partners indicated, if any)</b>	<b>Planned Activities – Permit Year extended</b>
			<b>DISCHARGE TO OUTFALLS</b>		
7	EDUCATIONAL SIGNAGE	DPS/ DAVID D'AMICO	RAISE PUBLIC AWARENESS	Sign board postings continued. Two electronic signboards used to display public water messages IWRMP Poster Board was displayed at Medway Pride Day. Again, distributed 3 different brochures which discuss stormwater pollution at community events.	Revise Program to meet new requirements while building on past successful publishing notices and other educational areas in drainage areas for RT 109 reconstruction.
8	PUBLIC FEEDBACK	TA/ DPS/ BOH /SELECTMEN	RAISE PUBLIC AWARENESS	Town has increased its use of social media page called "Friends of Medway, MA" with impressive results. Order of magnitude increase in response from the public. Most effective communication tool found to date. Public at large responding positively to web site, advertisements, public discussions, and CB stenciling. Town now uses a reverse 911 system and school resources for additional outreach with good results.	Revise Program to meet new requirements while building on past feedback system. Continue to use PeopleGIS Forms capability for more surveys/public response also with the use of social media and the website.
9	GREEN COMMUNITY PROJECTS	TA/DPS/ BUILDING INSP	ASSORTED PROJECTS UNDER GRANT COMPLETED AND PUBLICIZED	DPS continued several initiatives in solid waste, water, stormwater, etc. Types of programs included rain barrel installs, rigid plastic recycling, no phosphorous fertilizer use, water conservation efforts and promoting composting activities.	Revise Program to meet new requirements while building on past successful outreach to the businesses in all areas and specifically along the RT 109 corridor.
10	RAIN BARREL PROGRAM	DPS	Promote sale of rain barrels.	DPS had a public sign-up for rain barrels and distributed 13 of them to the public. Brochures of the	Revise Program to meet new requirements while building on past successful activities.

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
			Track the number of rain barrels sold.	benefits were made available.	
11	Promote Responsible Yard Waste Management	DPS	<p>Promote Sale of Composters.</p> <p>Track number of composters sold.</p> <p>Distribute brochure that propomotes yards waste receycling and composting.</p> <p>Promote use of the Town's recycling center for disposal of yard waste.</p>	<p>DPS sold 0 bins to the public for 2016. Brochures of the benefits continue to be made available.</p> <p>Town's homepage continues to provide a quick link to trash and recycling information. Yard waste is a substantial portion of the total volume handled at the center.</p> <p><b>Organic lawn treatment grant application</b></p>	Revise Program to meet new requirements while building on past successful activities promoting composters which includes brochures and mailings for the recycling center offered services.
12	Promote Responsible Pet Waste Management	DPS	<p>Intensify the Existing Pet Waste Management Campaign. 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>Some Garnsey Park rules modified as appropriate.</p> <p>Worked with organizers of "King Fido's Fair" held at the park to promote pet waste management.</p>	Revise Program to meet new requirements while building on past successful activities with the Animal Control Officer in regards to license renewals.
13	Residential Landscape and Lawn Care Education		Develop a brochure that educates on the impacts of nutrient loading in Lawn Care and provides helpful	<p>Pesticide and Yard Waste brochures distributed at pertinent events.</p> <p>Recycling Center brochure</p>	Revise Program to meet new requirements while building on past successful activities

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
			lawn care and landscaping tips to help reduce the amount of pollutants from entering the storm water collection system.  Distribute brochure at pertinent events. Track events where brochure was made available.	developed and distributed.	
14	General Stormwater Awareness		Develop a poster on Stormwater Pollution for display at Town Hall, Public Library, and outreach events	Poster for the Integrated Water Resources Management Plan (IWRMP) includes stormwater educational language displayed at Medway Pride Day, Town Hall, DPS Offices and Town Meetings.	Revise material to meet new requirements while building on past successful areas of poster.
15	Targeted outreach to Industrial / Commercial / Development audiences		Develop a plan for outreach on audience –specific message	Attended many joint meetings with area businesses focused on new MS4 regulations. The desire is to tailor the message to the new requirements. Deferral of the permit issue has pushed this activity back. Many other outreach activities continue especially thru local boards and Medway Business Council.	Revise Program to meet new requirements while building on past successful activities

**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	Hired a full time employee to be a ConCom Agent.  Stormwater was discussed at the Board of Selectmen's meetings on June 20, 2016 and August 15, 2016.	Revise Program to meet new requirements while building on past successful discussions.
2	HHW DAY	DPS/TOM HOLDER	PUBLIC PARTICIPATION	HHW collection advertised and held w/210+ residents.	HHW collection day scheduled for May 20 <sup>th</sup>
3	POND CLEAN-UPS	TA/ALLISON POTTER	HOLD ANNUAL EVENT	Medway Clean Sweep encompassed entire Town including Choate Park and Charles River areas. Approximately 200 volunteers participated.	Revise Program to meet new requirements while building on past successful activities throughout the Town including Choate Park and Charles River areas
4	PUBLIC EVENTS	PARKS COMM.	HOLD ONE OR MORE ANNUAL EVENTS	Events held at Choate Park: Thayer House-Air Force Band, Summer Concert series, Family Day, Pumpkin Walk 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	Maintained canoe launch constructed on Village St. by the State DRC.  New trail opened at High School.  Educational kiosks installed at all trailheads.  Storywalk Trail has been opened from Choate Park and Medway High School.  Medway Boardwalk is under	Revise Program to meet new requirements while building on past successful activities and completing construction for the Medway Boardwalk.

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
				contract which involves a new 240 foot boardwalk over wetlands.	
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>General comments and concerns available on the web site.</p> <p>Town social media pages and monitoring of other social media pages greatly enhancing reporting and communications in a broad range of topics.</p>	Revise Program to meet new requirements while building on past successful activities using the Town's web site and social media pages.

**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/BETH HALLAL	MAINTAIN LOW ECOLI LEVELS	Swimming program at Choate suspended. Regular testing suspended. No desire to reinstate swimming at present.	None at this time.
2	MAINTAIN STORM SEWER SYSTEM MAP W/OUTFALLS	DPS/DAVID D'AMICO	STORM SEWER SYSTEM MAP MAINTAINED	Town hired a GIS staff person and continued to update its Drainage Basemap. The map is compliant with Phase I of the new Permit. Implemented new aerial imagery for GIS mapping.  Gathered data on catchbasins during CB cleaning.	Revise Program to meet new requirements while building on previous Drainage Basemap.
3	SCREEN OUTFALLS FOR ILLICIT CONNECTIONS	DPS/DAVID D'AMICO	SCREEN ALL OUTFALLS AND REMOVE ILLICIT CONNECTIONS	The DPS field staff has used the outfall map book to mark mapping discrepancies and to add missing infrastructure, to a planning level of accuracy. The paper markups are then used to update the GIS periodically. The existing level of accuracy for the outfalls on the maps is adequate for planning level purposes and IDDE investigation.  Total of 75 outfalls have been mapped and inspected to date. Only one problem detected and corrected so far.	Revise Program to meet new outfall screening requirements and ranking criteria while building on past assessments.
4	INTEGRATE THE SEPTIC SYSTEM DATABASE INTO THE TOWN'S GIS DATABASE AND MAPPING SYSTEMS	BOH / BETH HALLAL	Develop septic system records data entry interface for use with the Town's GIS database and mapping systems.  Implement use of the	On-line data entry forms have been implemented using the Town's GIS mapping system.	Revise Program to meet new requirements while continuing collecting data using forms.  Build a GIS layer to geo-locate and analyze data.

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
	<i>(Promotes centralized storage of records, incorporates data into a format to be used with future phosphorous control mapping, and provides easy format for querying pumping records to identify systems that have been pumped more than four times per year.)</i>		new data entry interface.  Track the number of septic systems that have failed each year and action taken.		
5	SEPTIC SYSTEM MAINTENANCE EDUCATION <i>(Educational packets to include literature about caring for a septic system, identifying a failing system and guidance for having a Title V inspection done.)</i>	BOH	Develop educational packets.  Track the distribution of the public education packets.  Post educational information on the BOH's website.	"Septic Facts" brochure has been created and is available on-line.	Revise Program to meet new requirements while building on past successful activities

### 3a. Additions

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
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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	BUILDING/JACK MEE & CONCOM /BRIDGET GRAZIANO	NO RUNOFF INTO STORMWATER SYSTEM AT CONSTRUCTION SITES	Working to improve enforcement considering new stormwater permit. New draft of by-law waiting to be approved at annual meeting May 8, 2017.  New Compliance Coordinator position requested and waiting approval.	In state new by-laws, when approved, while continuing to enforce past regulations.  If approved, fill Compliance Coordinator position.
2	PUBLIC WAY CLEANUP	DPS/DAVID D'AMICO	INSURE NO SILT ON THE ROAD ADJACENT TO AREA	Stabilization pads at all entrance/egresses during construction; street sweeping / catch basin cleaning completed by contractors & DPS.	Revise regulations to meet new requirements while continuing to enforce past regulations

#### 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 & THOMAS HOLDER/P&EDB/ CONSERVATION	REGULATIONS PASSED	Town engineering firm working through Planning & Economic Development Board to monitor and improve regulation by requesting the position of Compliance Coordinator.  Town Counsel is voting on the final version of the stormwater by-law to match Final Permit regulations May 8, 2017.	Revise regulations to meet new requirements while continuing to enforce past regulations and propose changes as needed.  If approved, fill Compliance Coordinator position.  In state new by-laws, when approved, while continuing to enforce past regulations.
2	IMPLEMENT IMPROVED ENG DESIGN FOR INFILTRATION & SEDIMENT CONTROL	PLANNING BOARD	NEW DESIGNS INSTALLED	New construction being requested to install forebays to better manage sediment and cultic units for below grade infiltration of storm water.	Revise Program to meet new requirements while building on continuing progress with new engineering designs incorporating tree infiltration wells and gravel wetlands. Develop a simple drop in tree well design and have available for use.
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. Documents being filed electronically filed and cataloged hopefully completed by the new Compliance Coordinator.  Instated submission of new plans in GIS format for easy update of GIS layers.	Revise program to meet new requirements while continuing to enforce past as-built plan requirements.
4	PROVIDE LONG TERM MAINTENANCE	DPS/DAVID D'AMICO	LONG TERM MAINTENANCE PERFORMED	Brentwood culvert work completed.  Culvert relined on Winter Street  Drainage system redesigned at	Revise long term maintenance activities to meet new requirements while building on past successful activities in regards to drainage work throughout the

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
				Billard Street.	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.	Revise Program to meet new requirements while building on past successful activities
2	SALT SHED	DPS/DAVID D'AMICO	COVERED & COFFER DAMED	Committee determined that new DPS facility was not feasible.	Continue to press need for new DPS Facilities. Establish a new plan in 2017.
3	CATCHBASIN SUMP CLEANING	DPS/DAVID D'AMICO	# CATCHBASINS CLEANED	Entire Town cleaned. 2,098 catch basin sumps cleaned	Revise Program to meet new requirements on monitoring catch basins.
4	PUBLIC WAY CLEANUP	DPS/DAVID D'AMICO	# ROADS SERVICED	Street sweeping / catch basin cleaning complete throughout Town.	Revise Program to meet new requirements on street sweeping / catch basin cleaning.
5	EMPLOYEE TRAINING	DPS/DAVID D'AMICO	# EMPLOYEES TRAINED	26 Employees trained in SWMP, new by-laws, illicit connections, good housekeeping, etc. DPS includes highway, parks, vehicle maintenance, building maintenance, water, sewer, & solid waste under one department.	Revise Program to meet new requirements while building on past successful trainings.
6	BEAVER CONTROL POLICY	BOH/BETH HALLAL, CONCOM/BRIDG	# OF BEAVER DAMS BREACHED	0 dams were breached in 2016. Maintain installed control devices.	Revise Program to meet new requirements while building on past successful outreach materials

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
		ET GRAZIANO			about beaver control.
7	REDESIGN AND RECONSTRUCT RT 109 BUSINESS DISTRICT	DPS/DAVID D'AMICO	RT 109 RECONSTRUCTED	Project construction brook ground in 2016. All ROW secured and certified by MassDOT.	Progress of project is regularly updated on the project website and is projected to be completed 2017
8	TOWN WIDE CLEAN-UP	TA/ALLISON POTTER	ALL STREETS CANVASED AND TRASH PICKED-UP	Completed sweep of entire Town using High School students to both clean areas and raise awareness.	Revise Program to meet new requirements while building on past successful activities
9	MUNICIPAL OPERATIONS & MAINTENANCE GOOD HOUSEKEEPING MANUAL	DPS/DAVID D'AMICO	Develop and implement a Municipal Services Operations & Maintenance Manual (Good Housekeeping Best Management Practices) landscape and lawn care policy.  Incorporate the Manual policy requirements into the Employee Training Program.	Manual contains 11 different BMP sheets applying to all aspects of Municipal O&M that impacts stormwater (Lawn care, Street sweeping, deicing, vehicle washing, materials management, etc).  Annual training was provided	Revise Program to meet new requirements while building on past revision of the Municipal O&M. Train staff in revisions.
10	DEVELOP A STRUCTURAL BMP MAINTENANCE PROGRAM	DPS/DAVID D'AMICO	Inventory all municipally maintained structural BMPS.  GPS locate the BMPS.  Clean BMPS on an "as needed basis".  Obtain access agreements for BMPS not located on public property of within easements.	Work on larger structures not under immediate distress has been deferred due to lack of funding and GIS imagery updates.  GIS Coordinator was hired to assist in updates.  Obtain access agreements for BMPS not located on public property. Estimated that access agreements may be obtained at a rate of approx. rate of 10% per year beginning in 2016.	Revise Program to meet new requirements while building on existing information, new imagery and inventory.

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>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>		

**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, Board of Health, Conservation Commission	Summary of pollution prevention efforts, future needs, and responsible parties	The January 2014 IDDE Plan addresses a number of these of these considerations, as does the Municipal O&M Manual. Awaiting final permit for further action.	<p>Revise Program to meet new requirements while incorporating the preliminary TMDL strategy into the SWMP.</p> <p>Revise Program to meet new requirements while considering information available from Studies in the Charles River Watershed.</p>
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. Additional field inspection bringing	Revise Program to meet new requirements while building on past follow-up inspections.

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
				total count to 75 outfalls draining to the Charles was completed in 2016.	Revise Program to meet new requirements while building on past inspections and mapping of the upstream system.
3	Public Education on TMDL pollutants	DPS, Board of Health, Conservation Commission	Revisit Existing Public Education BMPs to include additional messaging or target audiences to meet anticipated requirements of new MS4	Educational materials (septic system brochure, pet licensing materials, yard care brochure, phosphorous use) are being revised to incorporate specific messaging related to stormwater and TMDL pollutants. See Public Education /Outreach BMPs for additional detail.	Continue existing Public Ed BMPs (see above). Upon new Final Permit reissuance, implement revisions to educational materials for residential audience and develop new materials for industrial/commercial/developer audiences.

**7a. Additions**


**7b. WLA Assessment**

Two TMDLs have been finalized for the Charles River Basin; these include the Final TMDL for Nutrients in the Upper/Middle Charles River, CN272.0, May 2011 and the Final Pathogen TMDL for the Charles River Watershed January 2007, CN 0156.0. Both apply to the area of Charles River located in Medway.

Concurrently, Medway is evaluating changes to its SWMP and developing its Integrated Water Resources Management Plan (IWRMP) to comply with NPDES MS4 Permit changes, TMDLs and the Massachusetts Water Management Act regulations. Changes to the SWMP and the development of the IWRMP are being considered in the context of all these requirements so that compliance with one program does not jeopardize another. Changes to the SWMP during 2017 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.

**Part IV. Summary of Information Collected and Analyzed**

- Number of Outfalls Inspected for Illicit Discharges: 75
- Number of Outfalls Re-sampled: 1
- Number of Illicit Discharges Found: 1 illicit discharge was identified and removed during this permit year.

**Part V. Program Outputs & Accomplishments (OPTIONAL)**

**Programmatic**

Stormwater management position created/staffed	(y/n)	
Annual program budget/expenditures	(\$)	

**Education, Involvement, and Training**

Estimated number of residents 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.)	
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	
▪ community participation	(%)	
▪ material collected	(tons or gal)	
School curricula implemented	(y/n)	

**Legal/Regulatory**

	In Place Prior to Phase II	Under Review	Drafted	Adopted
<b>Regulatory Mechanism Status (indicate with "X")</b>				
▪ Illicit Discharge Detection & Elimination				
▪ Erosion & Sediment Control				
▪ Post-Development Stormwater Management				
<b>Accompanying Regulation Status (indicate with "X")</b>				
▪ Illicit Discharge Detection & Elimination				
▪ Erosion & Sediment Control				
▪ Post-Development Stormwater Management				

**Mapping and Illicit Discharges**

Outfall mapping complete	(%)	
Estimated or actual number of outfalls	(#)	
System-Wide mapping complete	(%)	
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	
Outfalls inspected/screened	(# or %)	
Illicit discharges identified	(#)	
Illicit connections removed	(#)	
% of population on sewer	(est. gpd)	
% of population on septic systems	(%)	

### Construction

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 completed	(# or %)	
Estimated volume of stormwater recharged	(gpy)	

### 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)	
Total number of structures cleaned	(#)	
Storm drain cleaned	(LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		
Cost of screenings disposal	(\$)	

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)	
Cost of sweepings disposal	(\$)	
Vacuum street sweepers purchased/leased	(#)	
Vacuum street sweepers specified in contracts	(y/n)	

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	

Anti-/De-Icing products and ratios	% NaCl % CaCl <sub>2</sub> % MgCl <sub>2</sub> % CMA % Kac % KCl % Sand	
Pre-wetting techniques utilized	(y/n)	
Manual control spreaders used	(y/n)	
Automatic or Zero-velocity spreaders used	(y/n)	
Estimated net reduction in typical year salt application	(lbs. or %)	
Salt pile(s) covered in storage shed(s)	(y/n)	
Storage shed(s) in design or under construction	(y/n)	