

Municipality/Organization: Town of Medway, MA

EPA NPDES Permit Number: MA041132 (expired)

MassDEP Transmittal Number: W-

Annual Report Number & Reporting Period: **Year 9**
April 1, 2011 – March 31, 2012

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2012)

Part I. General Information

Contact Person: Mr. David D'Amico Title: Deputy Director, Dept. of Public Services

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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: Thomas Holder _____

Title: Director, Dept. of Public Services _____

Date: April 5, 2012 _____

Part II. Self-Assessment

The Town of Medway Department of Public Services has continued its efforts to improve overall awareness of stormwater related issues in the region and in Medway, in particular. The Department hired Kleinfelder / SEA to provide consulting and overall expertise in this area. Together, working with other boards and committees in Town, Town Meeting in June, 2011 voted to borrow \$500,000 from the State revolving fund loan program. The funds will be used for water resource planning and programs. This commitment occurs at a time of substantial shortfalls in funding for all public services including schools and public safety.

In the Summer of 2011, the Department of Public Services repaired three areas in Town experiencing localized flooding. Two of the projects were performed in house to reduce costs and further public understanding of the issues involved. Plans are also underway to improve drainage for an area neighborhood known as "Brentwood". The area is outlined by Main Street, Coffee Street, and Holliston Street. The Town was awarded a \$500,000 grant by the Massachusetts Emergency Management Agency due to years of localized flooding. The Town also has appropriated an additional \$300,000 for this work. One additional grant for \$300,000 has been awarded by the State for reconstruction of Main Street (RT 109) in our business district. A 25% design review plan has also been submitted to MassDOT. The Town instructed the engineers to incorporate new designs for water treatment and infiltration that will help the watershed when construction is completed in the next several years.

The Department participated in volunteer fundraising events with message boards, brochures, and hand-outs. Booths were set-up at Touch-A-Truck held at Choate Pond and at Medway Pride Day. These events are used to promote an array of conservation initiatives in water, solid waste recycling, and energy. In energy, the Town has been named a Green Community by the Commonwealth of Massachusetts. Although geared toward energy conservation, the Town is using the opportunity further water conservation and water quality awareness in our community.

In 2011, the Town undertook several initiatives that will further improve stormwater quality. We are attempting to move in a direction consistent with EPA's new permit requirements even though these have not been issued at this time. These include:

1. The Town of Medway contracted with PeopleGIS to provide GIS services for the Town. The EPA has stated and we agree that a comprehensive GIS map is a key component of stormwater management. Several new layers were added to the system in 2011. Mapping will improve as we move through the Water Resources Management Program.
2. The Department of Public Services purchased a survey grade GPS unit to assist in accurately mapping Town wide infrastructure.
3. Plans are underway to distribute rain barrels to residents throughout Town. The opportunity will be used to discuss a series of conservation measures with residents.

4. The Department of Public Services installed new fixed base radio read water meters for all water customers. The Department will use the system to more accurately monitor water use, detect system leaks, and cite violators of water bans.
5. The Department of Public Services has conducted sewer surveys along a major interceptor to detect inflow and infiltration. Funding is being sought to correct these problems in 2012. Further surveys are planned in 2012 as well.

Even under severe financial constraints, the Town is taking its obligation for a clean and ample water supply very seriously. The Town is under a host of other regulatory obligations in regards to education, safety, and health of our citizens. Increased funding through mechanisms like a stormwater discharge utility remains an unpopular option due to the economic climate.

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 Revised	NEWSPAPER ARTICLES	DPS/ DAVID D'AMICO	RAISE PUBLIC AWARENESS	New emphasis on Choate Pond/Thayer House as a Town center/open space is being highlighted, RT 109 public meetings, hazardous waste day, and proposed new highway facility are raising awareness.	Friends of Choate activities and news articles, similar for Thayer House Development Committee and Medway 300.
2 Revised	PUBLIC MEETINGS	BOH/BILL FISHER	CHOATE POND/CHICKEN BROOK CLEAN UP	Public meetings with Conservation Commission, Board of Health, and Parks Commissioners held at duly posted regular meetings.	Continue Board of Health meetings on water quality; increased coordination with ConCom through their agent.
3	SCHOOL OUTREACH	SCHOOL DEPT/DR. JUDY EVANS	SCIENCE CURRICULUM INCLUDES WATER RESOURCES TOPICS	Science curriculum includes topics on stormwater pollution and prevention; working with local Boy Scout troops on awareness projects. Co-sponsored a booth at Medway Pride Day with Green School group.	Work with elementary curriculum advisor to include demonstrations on stormwater flows and pollution prevention; work with local Boy Scout troops on resource projects. Look at RT 109 work as an educational opportunity.
4	TOWN WEB SITE	DPS/ THOMAS HOLDER	RAISE PUBLIC AWARENESS	Stormwater and water quality information on the Town web site	Continue web announcements. Launch new web site and make more user friendly.
5	CABLE TV	DPS/ DAVID D'AMICO	RAISE PUBLIC AWARENESS	Discussed topics on stormwater management during Selectmen and FinCom meetings aired locally. Several discussions about Water Resources Management Project.	Continue discussions at aired meetings. Launch new web site with more content, better navigation.
6	CATCHBASINS STENCILING	DPS/DAVID D'AMICO	STENCIL ALL CATCHBASINS WITH DIRECT DISCHARGE TO OUTFALLS	100% complete. Working others into school demonstration and curriculum.	Update and re-stencil as needed.

7	EDUCATIONAL SIGNAGE	DPS/ DAVID D'AMICO	RAISE PUBLIC AWARENESS	Sign board at Choate Park complete and posted; signs posted at dog park on proper disposal of pet wastes. New sign board located at Thayer House.	Continue publishing notices. Acquire electronic roadside sign for more messages.
8	PUBLIC FEEDBACK	TA/ DPS/ /BOH /SELECTMEN	RAISE PUBLIC AWARENESS	Public at large responding positively to web site, advertisements, public discussions, and CB stenciling. Increased response from Green Community designation and several grant awards. Revised Master Plan and open space surveys released. PeopleForms surveys providing added feedback.	Continue to gather, analyze, and adjust to feedback. Launch new web site. Continue to use PeopleGIS Forms capability for more surveys/public response.
9	GREEN COMMUNITY PROJECTS	TA/DPS/ BUILDING INSP	ASSORTED PROJECTS UNDER GRANT COMPLETED AND PUBLICIZED	Assorted projects financed by DOER Grant are completed and general response is expanding the concept from energy to recycling to clean water awareness.	Looking to move to include businesses in opportunities in all areas.

1a. Additions

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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	Much improved coordination through single engineer consultant, ConCom Agent, and consolidated DPS. Meeting 1 to 3 times per week on issues.	Continue regular meetings with key staff. Review permitting requirements.
Revised					
2	HHW DAY	DPS/TOM HOLDER	PUBLIC PARTICIPATION	HHW collection advertised and held w/ 140+ residents	HHW collection day scheduled for May 19 th .
3	POND CLEAN-UPS	PARKS COMM.	HOLD ANNUAL EVENT	Clean-up day at Choate Park held early April, 2011 with Friends of Choate.	Plan similar event for 2012.
4	PUBLIC EVENTS	PARKS COMM.	HOLD ONE OR MORE ANNUAL EVENTS	Earth Day celebration held at Choate Park with Friends of Choate. Air Force Band, Summer Concert, Farmers Market, and Christmas Parade end point all held at the park.	Hold similar events. Some interest from citizens to do neighborhood clean-ups with DPS assistance.

2a. Additions

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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	DPS/DAVID D'AMICO	MAINTAIN LOW ECOLI LEVELS	Swimming program at Choate suspended. Regular testing suspended.	None at this time.
Revised		BOH/BILL FISHER			
2	MAINTAIN STORM SEWER SYSTEM MAP W/OUTFALLS	DPS/DAVID D'AMICO	STORM SEWER SYSTEM MAP MAINTAINED	All paper maps scanned and cataloged. Stormwater structures sketched, scanned, and cataloged. Funding obtained for a Water Resource Management Plan. Not much progress as funding was not available.	Integrate scanned images into GIS system. Begin work on new GIS layer of stormwater drainage system.
Revised					
3	SCREEN OUTFALLS FOR ILLICIT CONNECTIONS	DPS/DAVID D'AMICO	SCREEN ALL OUTFALLS AND REMOVE ILLICIT CONNECTIONS	Little progress no funding for system mapping or adequate staff. Screening manholes as we do inspections for schematic mappings.	Inspect all outfalls during dry season to gain understanding of the extent of the possible problem if funding permits.
Revised					

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	BUILDING/JOHN EMIDY & CONCOM /KARON SKINNER-CATRONE	NO RUNOFF INTO STORMWATER SYSTEM AT CONSTRUCTION SITES	Conservation Agent and Building Inspector are both working to improve enforcement.	Continue enforcement of new regulations. Propose new regulations as needed. Planning & Economic Development Board revising regulation to include new EPA Construction Permit.
Revised					
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.	Continue compliance with regulations.
Revised					

4a. Additions

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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&ED B	REGULATIONS PASSED	Town engineering firm working through Planning & Economic Development Board to monitor and improve regulation.	Continue to review regulations and propose changes as needed.
Revised					
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. Incorporated tree infiltration wells and gravel wetlands into RT 109 reconstruction project.	Continue progress with new engineering designs incorporating tree infiltration wells and gravel wetlands.
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.	Continue as-built plan requirements.
4	PROVIDE LONG TERM MAINTENANCE	DPS/DAVID D'AMICO	LONG TERM MAINTENANCE PERFORMED	Even with limited funding performed repairs on three seperate problem areas.	Planning and design going forward for Brentwood area and Village Street culvert drainage reconstruction.
Revised					

5a. Additions

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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 Revised	WASH DOWN AREA	DPS/DAVID D'AMICO	NEW WASH AREA CONSTRUCTED	Washbay constructed and operational.	Continue operation.
2 Revised	SALT SHED	DPS/DAVID D'AMICO	COVERED & COFFER DAMED	Feasibility study for new DPS facility completed. Seeking funding for new construction in 4 years. Currently little support for new facility due to lack of funds.	Continue to press need for new DPS Facilities.
3	CATCHBASIN SUMP CLEANING	DPS/DAVID D'AMICO	# CATCHBASINS CLEANED	Entire Town cleaned. 400+ catchbasin sumps cleaned; cost over \$43,000.	Monitor basins. Funds do not permit deep cleaning on more than an annual basis.
4	PUBLIC WAY CLEANUP	DPS/DAVID D'AMICO	# ROADS SERVICED	Street sweeping / catch basin cleaning complete throughout Town.	Street sweeping / catch basin cleaning.
5	EMPLOYEE TRAINING	DPS/DAVID D'AMICO	# EMPLOYEES TRAINED	Employees trained in SWMP, new by-laws, illicit connections, etc. DPS includes highway, parks, vehicle maintenance, building maintenance, water, sewer, & solid waste under one department.	Revise program, refresher training to be performed.
6	BEAVER CONTROL POLICY	BOH/BILL FISHER, CONCOM/KARON SKINNER- CATRONE	# OF BEAVER DAMS BREACHED	Less than 3 dams breached and only due to public safety concerns. Much reduced from previous seasons.	Install more water level control devices and leave beaver dams in place.
7	REDESIGN AND RECONSTRUCT RT 109 BUSINESS DISTRICT	DPS/DAVID D'AMICO	RT 109 RECONSTRUCTED	State and Federal funds have been earmarked for the design phase of the project. Greenman-Pederson has been retained to perform the design. 25% design plan submitted to MassDOT.	Hold 25% design public hearing and continue design. Potentially on the 2016 State Transportation Improvement Projects List.

8	TOWN WIDE CLEAN-UP	DPS/DAVID D'AMICO	ALL STREETS CANVASED AND TRASH PICKED-UP	Completed sweep of entire Town using High School students to both clean areas and raise awareness.	Continue program.
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6a. Additions

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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
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7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

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
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

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	(#) (est. gpd)	
% of population on sewer	(%)	
% 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 ₂ % MgCl ₂ % 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)	