

Municipality/Organization: Town of Swampscott, Massachusetts

EPA NPDES Permit Number:

MassDEP Transmittal Number: W- 041272

Annual Report Number Year 13
& Reporting Period: April 1, 2015 – March 31, 2016

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2016)

Part I. General Information

Contact Person: Gino A. Cresta, Jr.

Title: Director of Public Works

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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:

Thomas G. Younger

Printed Name: Thomas Younger

Title: Town Administrator

Date:

April 6, 2016

Part II. Self-Assessment

The Town of Swampscott, Massachusetts has completed the required self-assessment and has determined that, based on available information, the Town is in compliance with the conditions of the permit except for those issues outlined in EPA Consent Decree.

- **BMP 1-1: The Town will continue to post stormwater information and place brochures in public buildings in place of having speakers in two schools per year due to staffing shortages.**
- **BMP 3-4: The Town replaced 1000LF of drainage pipe on Paradise Road. We also cleaned and inspected 45,000LF of sewer pipe as well as 7,000LF of underdrain. We also inspected 241 sewer manholes, conducted 133 outfall samples and inspected 29 drain manholes. The Town eliminated a large source of sewerage in a drain culvert on Humphrey Street during a construction project. This work is being done under an EPA consent decree. The Town was relieved of its requirements set forth in the DEP ACOP-NE-07-1N001 for reasons on paperwork duplication. During this permit year and the next we will spend over \$600,000 in studies of our sewer and drain systems.**
- **BMP 6-5: Town hired a consultant to survey trees in 1/3 of the Town. We continue to follow the recommended actions.**

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 13	Planned Activities – Permit Year 14
1. Public Education and Outreach					
1-1	Speakers	Director of Public Works	Call two schools per year	Stormwater posters posted throughout term.	Will post Stormwater posters throughout term.
1-2	Local cable access spots	Director of Public Works	Produce two 5-minute spots	In compliance.	No activity planned.
2. Public Involvement and Participation					
2-1	Public Notification	Director of Public Works	Posting of all appropriate meetings	All DPW meetings are posted in Town Hall.	Continue to post notices of appropriate meetings.
2-2	Household hazardous waste collection	Health Director	One collection per year	The Town had two household hazardous waste collection days this permit year	We plan to have at least one collection in the upcoming permit year, with the goal of two collections.
2-3	Stencil catch basins that drain to sensitive areas	Director of Public Works	Stencil fifty (50) catch basins per year	Re-Stenciled 1/3 of town storm drains	Continue to maintain stenciled catch basins
2-4	Seedlings for Arbor Day	Director of Public Works / Tree Warden	Ten (10) seedlings per year for two (2) years	Planted ceremonial tree on Arbor Day. Town planted 33 trees during permit year. Continued to be Tree City USA member.	Plant ceremonial tree on Arbor Day and continue to plant public shade trees.
3. Illicit Discharge Detection and Elimination					
3-1	Map outfalls and receiving waters	Director of Public Works	Updated map by the end of the second year	In compliance	A Town wide \$350,000 drainage study is underway to improve GIS
3-2	Stormwater bylaw	Director of Public Works	Draft completed in time to submit to Town Meeting	Stormwater bylaw and illicit discharge bylaws passed at Town Meeting.	Work with Planning Board to update subdivision specs to reduce road width from 30' (to 28' or 29')
3-3	Dry weather screening of outfalls	Director of Public Works	Two rounds of sampling in 2004	The board of Health, DPW and a Engineer Consultant continue to take water samples from area beaches during the Summer.	Continue to investigate sources of high bacterial counts. Study areas of concern and remedy as soon as possible.
3-4	Illicit discharge elimination	Director of Public Works	Televis the entire system by the end of the term	Town replaced 1000 ft of Stormdrain on Paradise Road and televised 52,000LF of drain and sewers (see self-assessment)	Under EPA consent decree Town will continue to properly identify and remove sources of contamination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13	Planned Activities – Permit Year 14
4. Construction Site Stormwater Runoff Control					
4-1	Construction site bylaw and ordinance	Planning Board, Building Inspector, DPW, ERAC	Present draft bylaw to Town Meeting	Bylaw was approved	Implement bylaw
4-2	Public Comment	ZBA, ConComm, Planning Board, DPW	Receive input on draft bylaw at public meetings	In compliance	No Action needed
4-3	Review site plans	Building Inspector, DPW, ZBA, ConComm	Add stormwater management to scope of review	In compliance	Continue to review site plans for stormwater program compliance using new bylaw
4-4	Enforcement Procedures	Planning Board, ConComm	Notification to the boards about enforcement procedures	Enforcement limited to 60 day remedy of private held pipes. Town repairs and liens house if not remedied in 60 days.	Continue to implement enforcement
5. Post-Construction Stormwater Management in New Development and Redevelopment					
5-1	BMP manual	DPW, ConComm	BMP manual selected	In compliance, continue to recommend state BMP manual to local developers	Continue to recommend state BMP manual to local developers
5-2	Runoff Controls	Director of Public Works	Draft bylaw to Town Meeting	Bylaw was approved	Implement bylaw

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13	Planned Activities – Permit Year 14
6. Pollution Prevention and Good Housekeeping in Municipal Operations					
6-1	Sensitive Areas	Director of Public Works	Identify and map sensitive areas	In compliance.	No activity planned.
6-2	Clean catch basins	Director of Public Works	Clean catch basins every other year, maintain records	Cleaned approximately 25% of catch basins town-wide in 2015.	Clean 50% of catch basins in 2016.
6-3	Sweep Streets twice per year	Director of Public Works	Sweep each street twice per year.	All streets were swept twice during permit and as needed.	Continue to sweep each street twice per year and as needed.
6-4	Continue no pesticide policy	Director of Public Works	No pesticide use on Town property	No pesticides were used on Town property	Continue no pesticide policy
6-5	Tree survey	Director of Public Works / Tree Warden	Implement survey and long-term forestation plan	Surveyed 1/3 of town tree	Follow recommendations of study
6-6	Implement long-term forestation plan	Director of Public Works / Tree Warden	Implement long-term forestation plan	Planted 33 trees throughout Town. Continue to be Tree City USA member	Continue to implement long-term forestation plan and plant public shade trees
6-7	Provide training to DPW staff	Director of Public Works	Two training days per year	Stormwater video is outdated. DPW staff trained in field.	Continue to train staff in field and investigate an updated video.
6-8	Implement long-term forestation plan	Director of Public Works / Tree Warden	Implement long-term forestation plan	In compliance. Undergoing updated study.	No activity planned.
6-9	Maintain covered salt storage; calibrate salt spreaders annually	Director of Public Works	Maintain salt storage shed, and calibrate salt spreaders, as needed	Mechanic calibrated salt spreaders. Applied for funding for salt storage shed improvement.	Plan to install new shed during permit year or next.

Part IV. Summary of Information Collected and Analyzed

Television inspection

Under EPA consent decree the Town replaced 1000LF of drainage pipe on Paradise Road. We also cleaned and inspected 45,000LF of sewer pipe as well as 7,000LF of underdrain. The Town eliminated a large source of sewerage in a drain culvert on Humphrey Street. This work is being done under an EPA consent decree. The Town was relived of its requirements set forth in the DEP ACOP-NE-07-1N001 for reasons on paperwork duplication. The Town signed an Engineering contract for a \$350,000 Town wide drainage study. The Town was award a coastal resiliency grant from CZM to study sea level rise effects on Swampscott. We look forward to finishing the drainage study in the next permit year. Following completion of the study we look forward to seeking funding to complete measures recommended in the drainage study.

Dry Weather Sampling

The Board of Health samples waters from local beaches on a regular basis during the summer.

DPW samples drainage outfall flow at King's Beach three times per week between May 1 and September 30 for total fecal coliform. Results are submitted to DEP as part of an Administrative Consent Order signed in June, 2008. These samples are representative of the water quality in Stacey's Brook and the associated drainage area.

Under contract with a consultant engineering firm we conducted 133 outfall samples.

Manhole Inspections

Under contract with a consultant engineering firm we also inspected 241 sewer manholes and 29 drain manholes.

Beach Closings

During Permit we did not close any beaches due to bacteria counts.

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 through March 31)

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	(%)	

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 vector **	(%)	

	(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	