

Municipality/Organization: Swansea

EPA NPDES Permit Number:

MaDEP Transmittal Number: W-

Annual Report Number

& Reporting Period: No.11 April 2013 – March 2014

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: James A. Kern

Title: Town Administrator

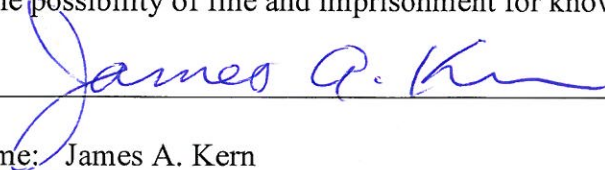
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Certification:

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: James A. Kern

Title: Town Administrator

Date:

4-29-14

Part II. Self-Assessment

The Town of Swansea has made progress in its review of stormwater issues within the Town. All new commercial construction projects over 1 acre are reviewed for compliance with Massachusetts' DEP Stormwater Policy before approval by the Swansea Planning Boards and Conservation Commission. This includes subdivisions and commercial building projects.

Swansea's Conservation Commission has a pre-application review process whereby prospective builders must obtain a sign-off for any work in town. The sign-off enables the Commission's agent to review a site for the potential of any wetland impacts and confer with the builder prior to submitting an application. All projects must come before the Swansea Conservation Commission if work is to occur within 100 feet of a bordering vegetated wetland or protected natural resource area as well as within the 200-foot riverfront area associated with perennial streams and rivers. Nearly all of the projects that come before the Conservation Commission must comply with MA DEP's Storm Water Management regulations, unless the work is minor and does not create any new impervious areas. Swansea's Wetland Protection By-law is more stringent than the MA Wetlands Protection Act and requires a 25-foot no alteration zone.

The Conservation Commission is working with the SRPEDD Planning Agency in conjunction with the Rhode Island Dept of Health to assess and protect the Palmer River and the Kickamuit River. The Kickamuit River and the Warren Reservoir serve two (2) public water supplies which service communities in Rhode Island. The Kickamuit River and Warren Reservoir watersheds extend into Swansea and other Narragansett Bay communities, yet neither supplies water to the residents of Swansea. Regardless, the wetlands associated with the water bodies are protected to the maximum extent feasible pursuant to local, state and federal wetland protection laws, regulations and approvals.

The Swansea Highway Department has instituted a program of an annual review of each outfall and drainage structure on all public roadways. Any structure which is not functioning properly is cleaned and restored to proper working order. All detention ponds are checked annually to ensure proper function and storage capacity for all storms. During this review, any illicit discharges into any structure are ordered removed.

During this past year, the town reconstructed several areas where there were stormwater drainage problems, using best management practices for stormwater reduction and cleaning. These included additional stormwater structures on Hortonville Rd., Gardners Neck Rd, Wilder, Norwood, and the Leaside area of town as well as Seaview Ave and Touisset Rd. Illicit discharges were removed from these areas as well. In addition, by working with the town's Conservation Agent, any repairs, up-grades or replacement to the town's drainage system are brought into compliance with the storm water standards to the extent practical using available best management practices.

The Town of Swansea continues to develop a solid waste program which includes the bi-annual collection of household hazardous waste. The program has expanded to include tires, propane tanks, and car batteries, shredded paper, electronics such as monitors, computers, and televisions. The program was expanded further to include year-round collection of old, unused, and unwanted medications at the police station.

As a result of the continued improvement in the water quality in Mount Hope Bay as measured by the Massachusetts Department of Marine Fisheries (DMF), a third section of the Coles River has been opened for shellfishing, in addition to the two sections of the bay which had previously been opened. These areas have not been suitable for shellfish harvesting for over 20 years but now are available for commercial and family use because of water quality improvements and protection of local wetland resource areas.

Over the next years, Swansea and DMF will continue to test the water quality upstream of the bay and into the Coles and Lees Rivers in order determine whether more shell fishing areas can be re-opened as well.

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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12-
1 Revised	Add stormwater information and links to the Town's website	Conservation Agent/Planner	Post information by the end of year 5 provided the town has developed an official website	Stormwater information is included in the web-site which is now on line.	Improve stormwater information is included in the web-site
2 Revised	Develop informational brochure on storm water program <i>Seek, copy and distribute stormwater educational information from EPA, MA DEP or other environmental organizations.</i>	Conservation Agent/Planner	Provide and maintain copies at the Library by the end of Year 2 (pending funding availability)	Storm water information has been developed in a form which is included in a brochure. Town Conservation Agent to reach out to Narragansett Bay Commission to locate stormwater educational material and seek to initiate a collaborative effort with other communities in the Narragansett Bay watershed.	Continue to develop the information in a brochure.
3 Revised	Distribute informational brochure via bulk mail to Town Residents	Conservation Agent/Planner	One mailing per year over the 5-year permit term (pending funding availability)	Brochure has been distributed at Town Hall, and Library. New brochure for year round collection of unwanted, old and unused medications through mass distribution	Continue to develop the information in a form which can be mass mailed.

4	Broadcast the public meetings described below under BMP ID#5 over the local cable access channel	Board of Selectmen's Office	Three public meetings over the 5-year permit term	Broadcast video of issues associated with storm water through local cable channel.	Continue to develop programs for presentation at public meetings.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
5	Conduct public meetings to describe the Town's stormwater program and receive input from the public. <i>Develop information brochures on specific industries including motor vehicle repair, sub-division construction and other common activities carried out in Swansea.</i>	Board of Selectmen's Office	Three public meetings over the 5 year permit term	Town engineer Town held public meetings regarding re-construction of stormwater system in the section of town which empties into the Lee River. Town Conservation Commission agent to pursue on-line sources of educational material to distribute with Notice of Intent applications	Continue to develop programs for presentation at public meetings.
Revised					

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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
6	Map stormwater drainage system and outfalls	Highway Department	Map 20% of the system per year (pending funding availability)	All outfalls to marine coastline have been mapped. 50% of town outfalls have been mapped.	Continue program of mapping town's system if funds become available.
7	Develop GIS database of the drainage system	Highway Dept	Map 20% of the system per year (pending funding availability)	GIS Stormwater to be integrated into the Town GIS system which is being developed and will be available to the public.	Continue mapping of town's stormwater system as monies become available for this purpose.
8	Visually inspect outfalls for dry weather flows	Board of Health/ Highway Dept	Inspect all outfalls.	All outfalls which have been mapped were inspected. Reports of any illicit discharges are maintained. Property	Outfalls inspected yearly. Continue program of monitoring pipes.

Revised				owners contacted to remove pipes. Town developed and instituted a plan to eliminate illicit discharges of water to street drainage system on Seaview Ave and Touisset Rd as well as Leaside area during roadway and drainage reconstruction.	
9	Develop a sampling and analysis program for sampling outfalls.	Board of Health	Complete by end of year 1	Outfalls continue to be tested by the Division of Marine Fisheries as a result of the program to re-open the Swansea shellfish beds.	Continue to test outfalls when complaint is received. Continue to seek other parties to continue this project throughout the coastal area.
10	Conduct storm water sampling at suspected outfalls.	Board of Health	Years 1 through 2, Investigate Compton's Corner Area – Years 3 –4 Investigate other suspected illicit connections	Mass Division of Marine Fisheries conducted sampling of outfalls in effort to determine whether shellfish beds would be re-opened for taking of shellfish.	Board of Health to develop program for continued monitoring of suspected outfalls.
11	Train Highway Dept. employees to recognize illicit connections	Highway Department	Conduct Annual training	Trained Highway Department employees using visual and olfactory senses, report potential illicit connections which are jointly re-inspected by Highway Dept Director and Board of Health	Continue with program of trained Highway Department employees reporting potential illicit connections which are jointly re-inspected by Highway Dept and Board of Health

3a. Additions

11A	Notify citizens of MA and local regulation which prohibits illicit discharges	Conservation Commission		Notice of Intent application requires all applicants who propose work that triggers compliance with stormwater standards of the prohibition.	

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
12	Update Town bylaws and regulations to include storm water ordinances	Conservation Agent/Planner	Year 1 – Review existing by-laws Year 2 Propose changes Year 3 implement changes, subject to Town meeting approval	Reviewed existing by laws and proposed by-laws. Developing stormwater by-law for town meeting approval Updating Conservation regulations to comply with state standards of erosion and sediment control.	Propose changes for town meeting approval
Revised					
13	Develop an ordinance requiring developers to prepare an Erosion and Sedimentation Control Plan for all sites disturbing more than 1 acre. Require that the plan be reviewed and approved by the Planning Board	Conservation Agent/ Planner	Year 1 – Review existing by-laws Year 2 Propose changes Year 3 implement changes, subject to Town meeting approval	Reviewed existing by laws and proposed by-laws. Developing stormwater/erosion control by-law for town meeting approval.	Propose changes for town meeting approval
Revised					
14	Periodically check erosion control measures and construction material management on-site inspection	Town Planner/Highway Department Conservation Commission	Keep stormwater within boundaries of new construction sites via erosion control system and treatments	Conservation Commission implemented policy of stormwater control for all jurisdictional construction projects. Continues to seek enforcement action against violators. Highway Department inspects all erosion control affecting town roadways. Contracted engineer inspects within new subdivisions	Conservation Commission will continue stormwater policy in Order of Conditions for jurisdictional projects. Highway Department inspects all erosion controls affecting town roadways, notifying responsible party to clean spills and overflows. Contracted engineer inspects within new subdivisions
Revised					
Revised					

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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
15	Develop an Ordinance requiring stormwater controls for all new and redevelopment projects disturbing more than 1 acre	Conservation Agent/Town Planner	Year 1 Review existing by-laws & regulations Year 2 Propose changes Year 3 Implement changes subject to town meeting approval	Reviewed existing by laws and proposed by-laws. Developing stormwater/erosion control by-law for town meeting approval.	Review proposed changes to regulations for presentation to Town Meeting
Revised					
16	Inspect and maintain the storm water controls required under BMP ID #15	Building Inspector, Town Planner, Highway Dept., Home Owner Association Commercial Property Owners	Inspect and maintain storm water controls annually (pending funding)	Inspected as many catch basins, detention ponds, and storm water controls as possible with town funds. Cleaned all catch basins, noted all deficiencies Repaired approximately 15 structurally unsound catch basins. Replaced and constructed new catchbasins and new stormwater BMPs in areas of Seaview Ave, Touisset Rd, Hortonville Rd, Wilder Stt, Norwood St and Gardners Neck Rd	Continue to inspect as many existing and newly added catch basins, detention ponds and storm water controls as possible with town funds Clean all catch basins, note deficiencies, repair structurally deficient catch basins.
Revised					
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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
17 Revised	Street sweeping	Highway Department	Keep ice and snow control sediments from entering drainage structures	Conduct a program of sweeping the streets of the town at least once per year	Continue street sweeping program
18 Revised	Catch basin cleaning	Highway Department	Remove sediments from stormwater structures	Conduct a program of cleaning the catch basins of the streets of the town at least once per year	Continue a program of cleaning the catch basins of the streets of the town at least once per year
19 Revised	Purchase new vacuum truck to augment existing mechanical catch basin cleaner	Highway Department	Purchase by end of Year 5 (pending finding availability)	Lease vacuum truck when needed for cleaning of catch basins in critical areas contributing to outfalls	Plan to purchase a vacuum truck of funding is available
20 Revised	Yard waste Program	Highway Department	Divert yard waste from solid waste stream	Conduct weekly curbside pickup from April 1 through December 1	Continue weekly curbside pickup from April 1 through December 1
21 Revised	Household Hazardous Waste program	Solid Waste Committee, Fire, Highway and Conservation	Hold bi-annual collection days	Town instituted a pharmaceutical drug recovery program in cooperation with the Swansea Police Dept.	Schedule Hazardous Waste Day scheduled for 04-2014 .
22 Revised	Animal control program	Animal Control Officer	Track the number of dead animals collected	Number of dead animals collected are tracked in daily logs	Continue to track the number of dead animals collected on a daily basis

23	Implement and maintain the Highway Dept's Storm Water Pollution Prevention Plan (SWPPPP)	Highway Dept	Maintain SWPPPP at Highway garage	Separate all materials held in Highway Department yard in order to protect the adjacent BVW from run-off.	Continue the program of SWPPPP at Highway Garage for run-off protection

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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
24	Water quality program has been initiated for the Palmer River.			Swansea Wastewater Committee is working with the Mass DEP and RI Dept of Health in developing a water quality program for the Palmer River.	Swansea Wastewater Committee will continue to develop a wastewater plan with consultant and seeking funding for same.
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

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)	N
Annual program budget/expenditures	(\$)	N/A

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	99%
Stormwater management committee established	(y/n)	N
Stream teams established or supported	(# or y/n)	N
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	Y 2 miles
▪ days sponsored ▪ community participation ▪ material collected	(#)	2
	(%)	10
School curricula implemented	(tons or gal)	12.8
	(y/n)	N

Legal/Regulatory

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

Mapping and Illicit Discharges

Estimated or actual number of outfalls		
System-Wide mapping complete	N/A	
Mapping method(s)	65%	
▪ Paper/Mylar		
▪ CADD		
▪ GIS	X	
Outfalls inspected/screened	All	
Illicit discharges identified	0	
Illicit connections removed	0	
% of population on sewer	0	
% of population on septic systems	100	

Construction

Number of construction starts (>1-acre)	30	
Estimated percentage of construction starts adequately regulated for erosion and sediment control	100	
Site inspections completed	47	
Red Maple, Titania, Ryans Way, Sunnyfield, James Birch, East Meadow, Stephen French, Raymond Allard, Littlefield, Kickamuit Estates, Laima Estates, Bento, Adams, Buckingham, Red Maple, Oliver Way		
Complaints/concerns received from public	0	
	0	

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	100	
Site inspections completed		
Estimated volume of stormwater recharged		

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	1	
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	1 - 2	
Total number of structures cleaned	1548	
Storm drain cleaned	700 ft	
Qty. of screenings/debris removed from storm sewer infrastructure	7300	
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)	Recycle	
Cost of screenings disposal	0 (Barter)	

Average frequency of street sweeping (non-commercial/non-arterial streets)	1	
Average frequency of street sweeping (commercial/arterial or other critical streets)	2	
Qty. of sand/debris collected by sweeping	980 tons	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	Roadway base/shldr	
Cost of sweepings disposal	0 (Barter)	
Vacuum street sweepers purchased/leased	0	
Vacuum street sweepers specified in contracts	0	

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

Anti-/De-Icing products and ratios	33% NaCl 0% CaCl ₂ 0% MgCl ₂ 0% CMA 0% Kac 0% KCl 67% Sand
Pre-wetting techniques utilized	N
Manual control spreaders used	N
Automatic or Zero-velocity spreaders used	Y
Estimated net reduction in typical year salt application	0%
Salt pile(s) covered in storage shed(s)	Y