

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

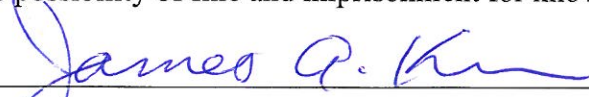
Part I. General Information

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 Leeside 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 . |

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| 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. |

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 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. |

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| 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. |
| Revised | | | | | |
| 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. |
| Revised | | | | | |
| 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 |
| Revised | | | | | |

3a. Additions

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| 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. | |
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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 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

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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 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, Tourisett 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 | | | | | |
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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 funding 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 |

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|----|------------------------------------------------------------------------------------------|--------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| 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

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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 11 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 12 |
|---------------|----------------------------------------------------------------|-------------------------------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| 24 Revised | 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

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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 |
| <ul style="list-style-type: none"> ▪ 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 | | | | |
| Outfalls inspected/screened | | | X | |
| Illicit discharges identified | | | All | |
| Illicit connections removed | | | 0 | |
| % of population on sewer | | | 0 | |
| % of population on septic systems | | | 100 | |
| | | | | |
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Construction

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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 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

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|--------------------------------------------------------------------------------------------------------------------------|-----|
| 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

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|------------------------------------------------------------------------------------------------|------------|
| 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) |
| | |

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