

**Municipality/Organization:** Town of Swampscott, Massachusetts

**EPA NPDES Permit Number:** \_\_\_\_\_

**MassDEP Transmittal Number:** W- 041272

**Annual Report Number** Year 14

**& Reporting Period:** April 1, 2016 – March 31, 2017

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

**Part I. General Information**

**Contact Person:** Gino A. Cresta, Jr.

**Title:** Director of Public Works

**Telephone #:** 781-596-8860

**Email:** gcresta@town.swampscott.ma.us

**Mailing Address:** 22 Monument Avenue, Swampscott MA 01907

**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:** Sean R. Fitzgerald

**Title:** Town Administrator

**Date:** 2/15/18

## **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, with the minor exception of where implementation of our minimum control measures did not meet our stated schedule documented as part of the Notice of Intent. In these instances, alternative BMPs have been performed or proposed as described below:**

- **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 entered into a Consent Decree with EPA in August, 2015. The EPA Consent Decree superseded Consent Decree DEP ACOP-NE-07-1N001 issued by MADEP in June, 2008. When the EPA Consent Decree was executed, the Town was relieved of the requirements set forth in the DEP Consent Decree for reasons of paperwork duplication. Although the Town's efforts fall short of televising the entire storm drain system as proposed in BMP 3-4, the Town continues to move towards elimination of illicit connections under the guidance of EPA.**
- **BMP 6-5: In this permit year, the Town completed the second third of the three-part town-wide tree survey.**

### 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 14                                                                                                  | Planned Activities – Permit Year 15                                                                               |
|-------------------------------------------------------|----------------------------------------------------|----------------------------------------|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>1. Public Education and Outreach</b>               |                                                    |                                        |                                                   |                                                                                                                                       |                                                                                                                   |
| 1-1                                                   | Speakers                                           | Director of Public Works               | Call two schools per year                         | Posted stormwater posters in public buildings. Will continue through permit 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.                                                                                              |
| <b>2. Public Involvement and Participation</b>        |                                                    |                                        |                                                   |                                                                                                                                       |                                                                                                                   |
| 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                           | Household hazardous waste collection days June 4 and November 5, 2016.                                                                | Household hazardous waste collection days June 3 and November 4, 2017.                                            |
| 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 monitor the condition of the 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, 2016. Town planted 25 trees during this permit year and continues to be a Tree City USA member. | Plant ceremonial tree on Arbor Day 2017 and continue to plant public shade trees.                                 |
| <b>3. Illicit Discharge Detection and Elimination</b> |                                                    |                                        |                                                   |                                                                                                                                       |                                                                                                                   |
| 3-1                                                   | Map outfalls and receiving waters                  | Director of Public Works               | Updated map by the end of the second year         | A Town-wide \$350,000 drainage study is underway to improve GIS                                                                       | Town-wide drainage study is scheduled to be completed by January, 2018.                                           |
| 3-2                                                   | Stormwater bylaw                                   | Director of Public Works               | Draft completed in time to submit to Town Meeting | Review of subdivision specs proved that road width is already specified at 28'.                                                       | No activity planned.                                                                                              |
| 3-3                                                   | Dry weather screening of outfalls                  | Director of Public Works               | Two rounds of sampling in 2004                    | The Board of Health, DPW and an Engineering Consultant continue to take water samples from area beaches during the summer.            | Continue to investigate sources of high bacterial counts. Study areas of concerns and remedy as soon as possible. |

| BMP ID #                                              | BMP Description                       | Responsible Dept./Person Name                 | Measurable Goal(s)                                      | Progress on Goal(s) – Permit Year 14                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Planned Activities – Permit Year 15                                                                                                                     |
|-------------------------------------------------------|---------------------------------------|-----------------------------------------------|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3-4                                                   | Illicit discharge elimination         | Director of Public Works                      | Televis the entire system by the end of the term        | In accordance with the EPA Consent Order, the Town inspected 33 underdrain manholes and dye tested 11 of these manholes for interconnection to the MS4. The Town also CCTV inspected over 20,000 LF of sewer, and inspected 263 combined sewer and underdrain manholes for interconnection. The Town completed 21,000 LF of targeted smoke testing and completed 13 associated building inspections. All of the inspection work identified deficiencies for which repairs were outlined in the Phase I Preliminary Design Report (PDR) submitted to EPA on July 1, 2016. Final design of the Phase I work was submitted to EPA on October 28, 2016. The work was publicly procured and the Town awarded the Phase I work in February, 2017. | Complete the Phase I work and publicly bid Phase 1B which will include CIPP of approximately 32,100 LF main line sewers within the Stacey's Brook area. |
| <b>4. Construction Site Stormwater Runoff Control</b> |                                       |                                               |                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                         |
| 4-1                                                   | Construction site bylaw and ordinance | Planning Board, Building Inspector, DPW, ERAC | Present draft bylaw to Town Meeting in 2004             | In compliance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No further action required.                                                                                                                             |
| 4-2                                                   | Public Comment                        | ZBA, ConComm, Planning Board, DPW             | Receive input on draft bylaw at public meetings         | In compliance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No further action required.                                                                                                                             |
| 4-3                                                   | Review site plans                     | Building Inspector, DPW, ZBA, ConComm         | Add stormwater management to scope of review            | In compliance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No further action required.                                                                                                                             |
| 4-4                                                   | Enforcement Procedures                | Planning Board, ConComm                       | Notification to the boards about enforcement procedures | Enforcement limited to 60 day remedy of privately held pipes. Town repairs and liens house if not remedied in 60 days.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Continue to implement enforcement.                                                                                                                      |

| BMP ID #                                                                               | BMP Description                                                  | Responsible Dept./Person Name          | Measurable Goal(s)                                                  | Progress on Goal(s) – Permit Year 14                                                                     | Planned Activities – Permit Year 15                                            |
|----------------------------------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| <b>5. Post-Construction Stormwater Management in New Development and Redevelopment</b> |                                                                  |                                        |                                                                     |                                                                                                          |                                                                                |
| 5-1                                                                                    | BMP manual                                                       | DPW, ConComm                           | BMP manual selected                                                 | In compliance, continue to recommend BMP manual to local developers                                      | Continue to recommend BMP manual to local developers                           |
| 5-2                                                                                    | Runoff Controls                                                  | Director of Public Works               | Draft bylaw to Town Meeting                                         | In compliance.                                                                                           | No further action required.                                                    |
| <b>6. Pollution Prevention and Good Housekeeping in Municipal Operations</b>           |                                                                  |                                        |                                                                     |                                                                                                          |                                                                                |
| 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 2016.                                             | Continue to clean 25% of catch basins yearly.                                  |
| 6-3                                                                                    | Sweep Streets twice per year                                     | Director of Public Works               | Sweep each street twice per year.                                   | All streets were swept twice during this permit year 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 the second third of trees in Town.                                                              | Complete the final third of the tree survey.                                   |
| 6-6                                                                                    | Implement long-term forestation plan                             | Director of Public Works / Tree Warden | Implement long-term forestation plan                                | Planted 25 trees throughout Town. Continued membership in Tree City USA.                                 | 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 is trained in the 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.                                                                                           | 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 | Calibrated salt spreaders in 2016. Secured funding for new salt shed and began to develop bid documents. | Calibrate salt spreaders as needed. Procure and install new salt shed.         |

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

### **Television inspection**

In accordance with the EPA Consent Order, the Town CCTV inspected over 20,000 LF of sewer during this permit year. The Town also completed 21,000 LF of targeted smoke testing and completed 13 associated building inspections. All of the inspection work identified deficiencies for which repairs were outlined in the Phase I Preliminary Design Report (PDR) submitted to EPA on July 1, 2016. Final design of the Phase I work was submitted to EPA on October 28, 2016. The work was publicly procured and the Town awarded the Phase I work in February, 2017.

### **Dry Weather Sampling**

The Board of Health samples waters from local beaches on a regular basis during the summer. Wet weather sampling at outfalls is performed by an Engineering consultant in accordance with the EPA Consent Order.

### **Manhole Inspections**

In accordance with the EPA Consent Order, the Town inspected 33 underdrain manholes and dye tested 11 of these manholes for interconnection to the MS4. The Town also inspected 263 combined sewer and underdrain manholes for interconnection. All of the inspection work identified deficiencies for which repairs were outlined in the Phase I Preliminary Design Report (PDR) submitted to EPA on July 1, 2016. Final design of the Phase I work was submitted to EPA on October 28, 2016. The work was publicly procured and the Town awarded the Phase I work in February, 2017.

### **Beach Closings**

During this permit year there were no beach closings 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, 2009 through March 31, 2010)

**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<br>Prior to<br>Phase II | Reviewing<br>Existing<br>Authorities | Drafted | Draft<br>in<br>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<br>(est. gpd) |          |
| Illicit connections removed (Since beginning of permit coverage)   | (#); and<br>(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 **<br><br>(also identify chemicals and ratios used in specific areas, e.g., water supply protection areas) | % NaCl<br>% CaCl <sub>2</sub><br>% MgCl <sub>2</sub><br>% CMA<br>% Kac<br>% KCl<br>% 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/l <sub>n</sub> mi.<br>or %)                                                         |          |
| Estimated net reduction or increase in typical year sand application rate **                                                                             | (±lbs/l <sub>n</sub> mi.<br>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 |  |