

Municipality/Organization: Town of Canton

EPA NPDES Permit Number: MA 0410311

MassDEP Transmittal Number: W-03622

Annual Report Number Year 11

& Reporting Period: April 1, 2013 – March 31, 2014

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2013)

Part I. General Information

Contact Person: Michael Trotta

Title: Superintendent of Public Works

Telephone #: 1-781-821-5023

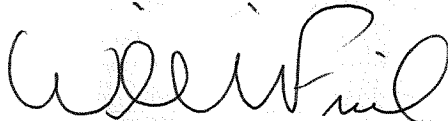
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Mailing Address: 801 Washington St Canton MA 02021

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: William Friel

Title: Town Administrator

Date: April 23, 2013

Part II. Self-Assessment

The Town of Canton has completed its annual report as summarized below:

1. Public Education and Outreach

- Mailed landscaping and outdoor water use brochures as part of Spring water bills
- With Neponset River Valley Watershed Association hosted water programs for elementary schools
- Applied for and obtained Sustainable Water Management Initiative grant that includes a Stormwater Utility Feasibility Study

2. Public Involvement and Participation

- Worked with Neponset River Valley Watershed Association on MA DEP water conservation grant
- Partnered with NRVWA to hold public meeting to discuss Sustainable Water Management Initiative

3. Illicit Discharge Detection and Elimination

- Completed and updated Illicit Discharge Detection and Elimination plan documentation
- Prioritized catchments for investigation

4. Construction Site Storm Water Runoff Control

- Continue plan review, permitting, and site inspection

5. Post Construction Storm Water Management

- Contracted with Kleinfelder to update O&M Manual

6. Good Housekeeping in Municipal Operations

- Continue catch basin cleaning and street sweeping programs
- Held Household Hazardous Waste Day
- Contracted to complete update to Town O&M manual for all infrastructure operations

7. BMP's for Meeting TMDL

- Developing public education material specific to pathogen contamination based on existing TMDL and anticipated permit conditions

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 |
|----------------|-----------------------------|-------------------------------|--------------------|--|---|
| 1-1 Revised | Design Distribute Brochures | DPW | Spring | Outside watering tips mailed in spring water bills. Stormwater brochure distributed at DPW Office and Con Comm. meetings | Reassess activity under new MS4 permit |
| 1-2 Revised | CATV | DPW | On going | Town Engineer discussed storm water with Con Comm. | Reassess activity under new MS4 permit |
| 1-3 Revised | Storm Water Comm. | Con Comm. DPW | On going | Completed Stormwater Map update. | Work with Kleinfelder on NOI for NPDES MS4 Permit |
| 1-4 Revised | Label Catch Basins | DPW | On going | Labeled basins as part of CB cleaning program. | Continue activity. |
| 1-5 Revised | High School Educ. | Con Comm. | | No action | Review BMP |
| Revised | | | | | |

1a. Additions

| | | | | | |
|-------|---|-----|----------------------------------|---|---|
| 1 – 6 | Evaluate Stormwater Utility Feasibility | DPW | Obtain funding to complete study | Sought and obtained SWMI grant funding to conduct study | Complete study by end of Year 12 reporting period |
| | | | | | |

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 |
|----------------|-----------------------|-------------------------------|--------------------|--|---|
| 2-1 Revised | Storm Water Comm. | SWC | On going | Presented Outfall maintenance NOI and program to Canton Con Comm. | Assist in preparation for next MS4 General Permit |
| 2-2 Revised | Label Catch Basins | DPW | On going | Continue labeling under CB cleaning program. | Continue activity. |
| 2-3 Revised | Technical Comm. | | On going | Worked with Kleinfelder to update map and O&M manual | Develop comprehensive water resource plan focus on stormwater |
| 2-4 Revised | Review General Permit | DPW | On going | Prepared annual report | Prepare for new MS4 General Permit |
| Revised | | | | | |
| Revised | | | | | |

2a. Additions

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|--|--|--|--|--|--|
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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 |
|----------------|--------------------------------|-------------------------------|-----------------------------------|--|---|
| 3-1 Revised | Drainage System Map | DPW | On Going | Redrew system map. | Review map requirements of new MS4 General Permit |
| 3-2 Revised | Article XVI By-Law | | Completed | | |
| 3-3 Revised | Enforce By-Law | Con Comm. DPW | On going | Reviewed site and subdivision storm water and grading plans | Continue activity |
| 3-4 Revised | Train Staff | DPW | On going | Attended storm water seminar presented by NRVWA and MAPC | Attend seminars and view web casts |
| 3-5 Revised | Dry Weather Outfall Inspection | DPW | Complete Annual Round Inspections | Sampled and Tested 20 Locations | Continue activity |
| | | | | | |
| Revised | | | | | |

3a. Additions

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4. Construction Site Stormwater Runoff Control

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any) | Planned Activities |
|----------|---------------------------------|-------------------------------|-----------------------|--|----------------------|
| 4-1 | Draft Erosion / Sediment By-Law | Con Comm. | Completed | | |
| Revised | | | | | |
| 4-2 | Erosion / Sediment By-Law | Con Comm. | Article XX TOC By-Law | On going review | On going review |
| Revised | | | | | |
| 4-3 | Procedures for Site Waste | Con Comm. | Article XX TOC By-Law | On going review | On going review |
| Revised | | | | | |
| 4-4 | Procedure for Site Plan Review | Con Comm. | Article XX TOC By-Law | On going review | On going review |
| Revised | | | | | |
| 4-5 | By-Law Enforcement | Con Comm. | Article XX TOC By-Law | On going enforcement | On going enforcement |
| Revised | | | | | |
| | | | | | |
| Revised | | | | | |

4a. Additions

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|--|--|--|--|--|--|
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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 |
|----------------|-------------------------------|-------------------------------|--------------------|--|--|
| 5-1 Revised | Storm Water Management Policy | Building DPW Con Comm. | On going | Review Drain Connection Permits. Site plan reviews and follow up inspections. | Continue activity |
| 5-2 Revised | Review Storm Water BMP's | DPW SWC | Winter 2013 | Partnered with Kleinfelder to develop BMP's. | Quantify BMP's and include in CIP plan |
| 5-3 Revised | Review Long Term O&M | DPW SWC | On going | Partnered with Kleinfelder to develop BMP's | O&M manual update is included in scope of work assigned to Kleinfelder |
| | | | | | |
| Revised | | | | | |
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| 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 |
|----------------|-------------------------------------|-------------------------------|---------------------------------|--|--------------------------|
| 6-1 Revised | Catch Basin Cleaning | DPW | Clean 1100 / Year | Cleaned 925 catch basins | Continue activity |
| 6-2 Revised | Street Sweeping | DPW | Complete Spring and Fall Sweeps | Completed 3 full sweeps of all streets. Swept CBD twice monthly. Swept low areas after .5” rain. | Continue activity |
| 6-3 Revised | Hazard Waste Materials | DPW | Yearly Collection | Held HHW Day May 11, 2013 | Hold HHW Day May 3, 2014 |
| 6-4 Revised | Procedure for Catch Basin Cleanings | DPW | Yearly | Recycle sweepings and catch basins with compost or gravel fill | Continue activity |
| Revised | | | | | |
| Revised | | | | | |

6a. Additions

| | | | | | |
|-----|----------------------------------|-----|---------|--|--|
| 6-5 | Revise and update O&M Ops Manual | DPW | Year 12 | Partnered with Kleinfelder to review stormwater procedures | All municipal ops will be reviewed in update of O&M manual |
| | | | | | |

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 |
|----------------|-----------------------------------|-------------------------------|----------------------|--|---|
| 7-1 Revised | Identify and Categorize Outfalls | DPW | Spring and Fall | Worked with Kleinfelder to revise map | Identify changes needed to meet SWMI and permit changes |
| 7-2 Revised | Test Outfalls | DPW | Test 50% of Outfalls | Sampled 20 locations | Continue activity |
| 7-3 Revised | Identify Illicit Drainage Source | DPW Con Comm. | Sample as needed | One Identified | Continue Activity |
| 7-4 Revised | Eliminate Illicit Drainage Source | DPW Con Comm. | Sample as needed | One Removed | Continue Activity |
| Revised | | | | | |
| Revised | | | | | |

7a. Additions

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|--|--|--|--|--|--|
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7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

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, 2014)

Programmatic

| | (Preferred Units) | Response |
|---|-------------------|--------------|
| Stormwater management position created/staffed | (y/n) | N |
| Annual program budget/expenditures ** | (\$) | 348,000 |
| Total program expenditures since beginning of permit coverage | (\$) | |
| Funding mechanism(s) (General Fund, Enterprise, Utility, etc) | | General Fund |
| | | |

Education, Involvement, and Training

| | | |
|--|---------------|--------------|
| Estimated number of property owners reached by education program(s) | (# or %) | 6100 |
| 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 ** | (#) | May 11, 2013 |
| ▪ community participation ** | (# or %) | 134 Cars |
| ▪ material collected ** | (tons or gal) | |
| School curricula implemented | (y/n) | |
| | | |

Legal/Regulatory

| | In Place Prior to Phase II | Reviewing Existing Authorities | Drafted | Draft in Review | Adopted |
|--|----------------------------------|--------------------------------------|---------|-----------------------|---------|
| Regulatory Mechanism Status (indicate with “X”) | | | | | |
| ▪ Illicit Discharge Detection & Elimination | | | | | X |
| ▪ Erosion & Sediment Control | | | | | X |
| ▪ Post-Development Stormwater Management | | | | | X |
| 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 | (%) | 100 |
| Estimated or actual number of outfalls | (#) | 270 |
| System-Wide mapping complete (complete storm sewer infrastructure) | (%) | |
| Mapping method(s) | | |
| ▪ Paper/Mylar | (%) | |
| ▪ CADD | (%) | |
| ▪ GIS | (%) | 100 |
| Outfalls inspected/screened ** 2013 | (# or %) | 20 |
| Outfalls inspected/screened (Since beginning of permit coverage) | (# or %) | 893 |
| Illicit discharges identified ** | (#) | 1 |
| Illicit discharges identified (Since beginning of permit coverage) | (#) | 1 |
| Illicit connections removed ** | (#); and (est. gpd) | |
| Illicit connections removed (Since beginning of permit coverage) | (#); and (est. gpd) | 1 |
| % of population on sewer | (%) | 75 |
| % of population on septic systems | (%) | 25 |

Construction

| | (Preferred Units) | Response |
|--|-------------------|----------|
| Number of construction starts (>1-acre) ** | (#) | 1 |
| Estimated percentage of construction starts adequately regulated for erosion and sediment control ** | (%) | 100 |
| Site inspections completed ** | (# or %) | 6 |
| Tickets/Stop work orders issued ** | (# or %) | 0 |
| Fines collected ** | (# and \$) | 0 |
| Complaints/concerns received from public ** | (#) | 1 |
| | | |
| | | |

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) | Y |
| Low-impact development (LID) practices permitted and encouraged | (y/n) | Y |
| | | |
| | | |

Operations and Maintenance

| | | |
|--|----------------|------------|
| Average frequency of catch basin cleaning (non-commercial/non-arterial streets) ** | (times/yr) | 1 |
| Average frequency of catch basin cleaning (commercial/arterial or other critical streets) ** | (times/yr) | 2 |
| Qty of structures cleaned ** | (#) | 920 |
| Qty. of storm drain cleaned ** | (%, LF or mi.) | |
| Qty. of screenings/debris removed from storm sewer infrastructure ** | (lbs. or tons) | 1105 T |
| Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) ** | (location) | Beneficial |

| | | |
|---|-------------------------|---------|
| Basin Cleaning Costs | | |
| • Annual budget/expenditure (labor & equipment)** | (\$) | 126,000 |
| • Hourly or per basin contract rate ** | (\$/hr or \$ per basin) | |
| • Disposal cost** | (\$) | |
| Cleaning Equipment | | |
| • Clam shell truck(s) owned/leased | (#) | 1 Owned |
| • Vacuum truck(s) owned/leased | (#) | |
| • Vacuum trucks specified in contracts | (y/n) | |
| • % Structures cleaned with clam shells ** | (%) | 100 |
| • % Structures cleaned with vacator ** | (%) | |

| | (Preferred Units) | Response |
|---|--------------------|----------------|
| Average frequency of street sweeping (non-commercial/non-arterial streets) ** | (times/yr) | 3 |
| Average frequency of street sweeping (commercial/arterial or other critical streets) ** | (times/yr) | 14 |
| Qty. of sand/debris collected by sweeping ** | (lbs. or tons) | 435 T |
| Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) ** | (location) | Beneficial Use |
| Annual Sweeping Costs | | |
| • Annual budget/expenditure (labor & equipment)** | (\$) | 120,000 |
| • Hourly or lane mile contract rate ** | (\$/hr. or ln mi.) | |
| • Disposal cost** | (\$) | |
| Sweeping Equipment | | |
| • Rotary brush street sweepers owned/leased | (#) | 1 Owned |
| • Vacuum street sweepers owned/leased | (#) | |
| • Vacuum street sweepers specified in contracts | (y/n) | |
| • % Roads swept with rotary brush sweepers ** | % | 100 |
| • % 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) | Y |
| | | |

| | (Preferred Units) | Response |
|--|---|------------------------------|
| Average Ratio of Anti-/De-Icing products used ** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas) | % NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand | 80 20 |
| Pre-wetting techniques utilized ** | (y/n or %) | N |
| Manual control spreaders used ** | (y/n or %) | Y |
| Zero-velocity spreaders used ** | (y/n or %) | N |
| Estimated net reduction or increase in typical year salt/chemical application rate | (±lbs/l _n mi. or %) | |
| Estimated net reduction or increase in typical year sand application rate ** | (±lbs/l _n mi. or %) | |
| % of salt/chemical pile(s) covered in storage shed(s) | (%) | 100 |
| 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) | Y |
| | | |
| | | |

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 | |

| | | |
|---|----------|--|
| <ul style="list-style-type: none"> • Treatment units induce infiltration within 500-feet of a wellhead protection area | # or y/n | |
|---|----------|--|