

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

EPA NPDES Permit Number: **MAR041063**

MassDEP Transmittal Number: **W-035130**

Annual Report Number & Reporting Period: **Year 11
May 1, 2013 – April 29, 2014**

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2014)

Part I. General Information

Contact Person: Marc J. Tisdelle, P.E.

Title: Town Engineer

Telephone #: 781.232.9263

Email: mtisdelle@stoughton-ma.gov

Mailing Address: 10 Pearl Street, Stoughton, MA 02072

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: Michael Hartman

Title: Town Manager

Date: April 29, 2014



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Part II. Self-Assessment

The Town has been working diligently for the last several years to continue mapping the storm water infrastructure in Town. For the Fiscal Year of 2013, the Town allocated \$100,000.00 for complying with NPDES MS4 Permit Program. The funds were used this to GPS locate all catch basins and manholes that were not previously mapped and then begin to obtain pipe connectivity from the inlet to the outfall. For the Fiscal Year of 2014, the Town allocated \$60,000 for complying with the NPDES MS4 Permit Program. Specifically, these funds have been used to hire a consultant to perform inspections on sixteen (16) town-owned facilities. A final report will be submitted to the Town documenting issues such as indoor/ outdoor storage of material, spill prevention plans, employee training, waste management, fueling of vehicles, vehicle washing and any other potential stormwater related issues. Additionally, these funds will be used to complete a Spill Prevention Control and Countermeasure Plan for the Stoughton Highway Garage. Lastly, the remaining portion of the funds will be used to field verify drainage information from record drawings and to further develop the Town-Wide Drainage Connectivity Mapping and GIS internal attribute data. The end result will be an actual storm water network map depicting all catch basins, manholes, BMP's, and outfalls. All data will be incorporated into our GIS database. These maps will aid the Town in locating and controlling any future illicit discharges. Additionally, these maps will aid the Town in the hydrologic and hydraulic modeling of our storm water network; therefore, understanding the hydraulic effectiveness of the drainage system under storm events.

Among other efforts, the Town of Stoughton has continued to focus efforts on the control measures that were slated for the entire permit term that include enforcing the Storm Water By-Law, enforcing the Illicit Discharge By-Law, performing continuous construction inspections, enforcing the submittal of Stormwater Pollution Prevention Plans for all projects greater than 1 acre in size, and a comprehensive review of all construction documents. The Town continues to review single lot construction (projects less than 1 acre) that require the use of Best Management Practices and Erosion Controls under certain circumstances, perform Good Housekeeping Best Management Practices as part of ongoing operation and maintenance of facilities, roadways, storm drains and open spaces. The Public Works Department regularly monitors, cleans and inspects the catch basins and roadway surfaces in Town. Also, many new drainage improvements have been constructed within the Town. We also provided the Public Works Department staff with a presentation on the MS4 requirements, the need to comply with the permit, and other general stormwater issues.

Town of Stoughton has agreed to partnership with the Neponset River Watershed Association (NepRWA) as the Town moves forward in compliance with the new MS4 permit. The Town is working with NepRWA seeking ways and means to comply with the permit requirement by identifying new sites for installing BMP's, applying for grants to construct new BMP's, and creating new updated educational and outreach material for different audiences. Of particular importance, we applied for and were awarded a Collaborative Stormwater Grant through NepRWA. The grant will aid Stoughton in with many tools to further comply with the NPDES MS4 Permit Program. We also applied for and received another Collaborative Stormwater Grant through the Southeast Regional Services Group that will provide Stoughton with information to help comply with the NPDES MS4 Permit Program. Please reference items listed as 1.11 and 1.12 for more detailed information regarding these grants.



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In order to get funding allocated at Town Meeting, it is essential to educate the Town on the importance of maintaining a functional stormwater network that does not pollutant surrounding water bodies and wetland areas. Thus far, we believe we have been successful as the Town has voted for considerable funding over the last several years. This year the Engineering Department presented to the Board of Selectmen and the Finance Committee on the requirements of the current NPDES MS4 Program and the future issuance of a new permit with additional requirements. We have been presenting Articles at Town meeting for the last several years to comply with the NPDES MS4 permit. This year we revised the budget to account for a Stormwater Coordination budget line item. We generated a 5-year plan to supplement this request. We are now awaiting Town Meeting approval for the budget adjustment. We anticipate having to educate the Town meeting representatives on Town Meeting floor on these issues.

Household Hazardous Waste Days were held. We held two days this year. Public was strongly educated and involved in many committees involving maintaining and protecting wetland areas and protecting the Earth. Furthermore, the Town has chosen to participate once again in the Septic Betterment Program which helps to provide funding to property owners in need of repairing a failed septic system. Since the program was implemented, the Town has seen a dramatic increase in the number of septic repair applications. Furthermore, the Town has an article proposed for this year's Town Meeting to prepare a Sewer Priority Plan for the expansion of municipal sewer in Town.

The remaining portions of this report list many more Best Management Practices conducted by the Town of Stoughton. Over the permit term, Stoughton has completed or progressed on many of our goals. The Town acknowledges that there are many more goals to accomplish and will continue to meet these goals.



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Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Duration | Progress on Goal(s) – Permit Year 10 |
|----------|--|---|--|--|--|
| 1.1 | Classroom Education | Engineering Dept. & Stormwater Tech Committee | <ol style="list-style-type: none"> Stormwater presentation to Middle and High Schools Provide Schools with Stormwater materials. | <p>Permit Term</p> <p>Ongoing</p> <p>Ongoing</p> | <p>Presentations were made to Middle School during Years 2 and 3. In Year 5, the Engineering Department provided schools with stormwater materials to incorporate with materials. In Year 8, Engineering Department conducted one day seminar at the High School Science Class.</p> <p>Continue to perform presentations and provide school materials.</p> <p>Continue to improve and enhance materials.</p> |
| 1.2 | Prepare Stormwater Video | Engineering Dept. & Stormwater Tech Committee | <ol style="list-style-type: none"> Air "After the Storm" video on local access television. Present video in Local TV | <p>Years 4-5</p> <p>Year 9</p> | <p>Two appearances in stormwater forums (summer 2007, one in fall 2007); "After the Storm" aired on local cable access television in spring 2008.</p> <p>Present video on television.</p> |
| 1.3 | Stencil specified storm drains | Public Works Dept. | Identified individual watersheds and stencil catch basins | <p>Year 2-4</p> <p>Year 6</p> <p>Year 10</p> | <p>Catch Basins Stenciled (Year 2-4); Complete.</p> <p>Stencils were checked and re-painted as necessary during Year 6.</p> <p>All catch basins' stencil condition were evaluated to determine the stencil condition and need.</p> |
| 1.4 | Create Stormwater Fliers/ Posters/ Pamphlets | Engineering Dept. & Stormwater Tech Committee | Install stormwater posters and brochures in public buildings | <p>Year 3 – Ongoing</p> <p>Year 10-11</p> | <ol style="list-style-type: none"> Stormwater posters continue to be displayed in Town Hall. Brochures are available at Town Hall, Library, PWD. Working with NepRWA in creating new outreach material written specifically for different types of audience per the new draft permit. |
| 1.5 | Educational signage at high-use recreational areas | Conservation Commission, Recreation Dept., Public Works Dept. | Install signage at Town beach | Year 8 | Install signage at Town beach. Maintain signs as needed. |



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| 1.6 | "No-Dumping" Signs | Conservation Commission, Public works Dept. | Installing "No- Dumping" Signs in all major watershed areas | Year 8-9 | Signs were installed in all major watershed areas. Fixing and reinstalling damaged signs. |
| 1.7 | Earth Day | Conservation Commission, Public Works Dept. | Generate public awareness to prevent non-point source pollution in the water shed and water conservation | Year 6- Ongoing | Educational presentations by qualified environmental professional. Fliers and brochures provided by DEP were handed out. Mass division of fish and wild life provided information on protecting vernal resources areas. |
| 1.8 | Collecting and storing of roof generated runoff for domestic irrigation (Rain Barrel) | Conservation Commission | Educating public to collect and store roof runoff for on site irrigation and ground water replenishment. | Ongoing Ongoing | Educate public of the benefit for collecting and storing roof generated runoff for domestic irrigation. Sold about 100 units. Continue to sell rail barrels and educate public. |
| 1.9 | Compost Generator | Conservation Commission | Reduce the volume of solid waste by generating compost to improve vegetated cover in yards in the watershed to reduce sediment / nutrient deposition and pollution of surface water bodies and streams | Year 8-9 | Educate public of the compost generator and benefits of having non chemical fertilization for yards that will improve vegetation and eliminate pollution to the ground water. Sold about 50 units. |
| 1.10 | Stormwater Presentation to DPW Staff | Engineering Dept/ Public Works Dept. | Educate DPW staff to become more knowledgeable on the MS4 Permit requirements | Year 11 | Educated the PWD employees on the current requirements of the MS4 Permit, areas of Town covered by Permit, and general BMP maintenance and record keeping. Date of presentation 2/12/14. |



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| 1.11 | <p>Applied for Community Innovation Challenge Collaborative Grant through the Neponset River Watershed Association</p> <p>Grant awarded to group April 2014.</p> | Engineering Dept | Implementation of completed Tasks 1-8 | Year 11- Ongoing | <p>Collaborative Tasks</p> <p>Task 1: Regional Stormwater Collaborative</p> <ul style="list-style-type: none"> • Establish a regional collaborative • Future work plan priorities • Webpage for collaborative materials <p>Task 2: Education/ Public Participation Materials</p> <ul style="list-style-type: none"> • Prepare model SWMP covering outreach/ public participation • Prepare outreach materials targeting commercial/ industrial • Expand regional outreach website covering residential. <p>Task 3: Analysis of IDDE Requirements/ Model SWMP Language</p> <ul style="list-style-type: none"> • Prepare model language for IDDE section of required SWMP • Map/ data table summary for receiving water status • Report initial assessment/ rankings of catchments <p>Task 4: Bylaw Evaluation</p> <ul style="list-style-type: none"> • Stormwater by-law evaluation worksheet/ checklist • Report recommending by-law revisions for communities <p>Task 5: Prelim Eval & Ranking of Parcel and Roadway retrofits</p> <ul style="list-style-type: none"> • Rank town-owned parcels and roads for potential retrofits <p>Task 6: Good Housekeeping Tools</p> <ul style="list-style-type: none"> • Assemble standard operating procedures (SOPS) • Prepare stormwater pollution prevention plan template <p>Task 7: Evaluate Regional O&M Database for Private Permit Conditions</p> <p>Task 8: Stormwater Financing Pilot</p> |
| 1.12 | <p>Applied for Southeastern Stormwater Collaborative Grant through the Southeastern Regional Services Group (SERSG)</p> <p>Grant awarded to group April 2014.</p> | Engineering Dept | Implementation of completed Tasks 1-3 | Year 11 - Ongoing | <p>Collaborative Tasks</p> <p>Task 1: Initiate development of a Training Session and DVD/ CD.</p> <p>Task 2: Development of an educational website</p> <p>Task 3: Prepare template RFP for General Consulting Services</p> |



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| 1.13 | Allied for 319 Grant Application through the Neponset River Watershed Association Grant not awarded to Stoughton | Engineering Dept | Not Applicable | Year 11 | The grant would provide supplemental funding to the Town to construction stormwater BMP's on and near a school site in Town. The Town was going to provide in-house engineering design and construction to match grant funding. The grant was not awarded to the Stoughton. |
| 1.14 | Stormwater Presentation | Engineering Department, PWD | Attended Seminar | Year 11 | Attended Stormwater Presentation by the Environmental Partners Group at a Plymouth County Highway Association meeting. Presentation was on the current and projected MS4 Permit requirements. |



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2. Public Involvement and Participation

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Duration | Progress on Goal(s) – Permit Year 10 |
|----------|---|--|--|--------------------|---|
| 2.1 | Create Stormwater Committee | Selectmen | Creation of Stormwater | Year 1-2 | Created Stormwater Committee consisting of members of PWD, Engineering and Conservation Commission Department. Major focus to identify stormwater related problem areas in Town and develop game plan for correcting problem and to comply with EPA requirements. |
| 2.2 | Review NOI | Technical Committee | Stormwater goals prioritized and published | Year 1-2 | Technical committee Mission Statement; Complete. |
| 2.3 | Stormwater Committee creates Technical Committee | Stormwater Committee | Technical Committee meetings | Year 2 Year 4 | Create of Committee. Town Meeting Article passed; Complete. |
| 2.4 | Technical Committee Rules and Regulations | Technical Committee | Publication of Rules and Regulations | Year 2-3 | HAZMAT and Stormwater Bylaws are published in "Code of Town of Stoughton" and are available on Town's website. Complete. |
| 2.5 | Household Hazardous Waste Day | Board of Health, Conservation Commission, Public Works Dept. | Hold household hazardous waste collection day per year | Ongoing Year 11 | Household hazardous waste days held every year. We held two HazMat Collection Days |
| 2.6 | Public Hearing / Meetings Posted | Town Manager / Board of Selectmen | Information on public meetings posted in accordance with MGL Section 23B | Ongoing | Public meeting information has continued to be posted in accordance with MGL Section 23B. |
| 2.7 | Ames Pond Citizens Committee | Conservation Commission | Form committee to increase awareness and support to restore Ames Long Pond | Year 5 | Committee formed to increase awareness of nutrient problem at Ames Pond. Information published on Town website. Committee sponsor and support efforts to mitigate nutrient pollution of Ames pond. |
| 2.8 | Harris Pond Citizen Committee (Pinewood Lake Association) | Conservation Commission | Form committee to increase awareness and support to restore Harris Pond | Year 7-9 | Committee formed to increase awareness of nutrient problem at Harris Pond. Information published on Town website. Committee sponsor and support efforts to mitigate nutrient pollution of Harris pond. |



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| 2.9 | Outdated/Unwanted Prescription Program | Board of Health | Provide an opportunity for residents to dispose of these materials to protect the environment. Plan to hold it twice a year | Year 7-10 | Outdated/Unwanted Prescription Program was held in October. OASIS group helped out. |
| 2.10 | Prepared and distribute handout on installation and Maintenance of On-Site Sewage disposal Systems | Board of Health | Educate the public to prevent contamination to the environment and ground water | Year 8 - Ongoing | Educating the public, owners and operators of septic tanks by handing out informational materials. |
| 2.11 | Developing and implementing program for removing mercury from the Municipal solid waste stream | Conservation Commission, Board of Health, Public Works Dept. | Developing and implementing program to eliminate elements and mercury from municipal solid waste stream | Year 8- Ongoing | 1. A program was developed and implemented. 2. Continue to monitor existing program effectiveness and implementation. |
| 2.12 | Implementing and Maintaining the Septic Betterment Program | Board of Health | Replacing failed septic systems, and trying to obtain additional funding to continue the program for next year and beyond | Year 8-Ongoing | Replacing of individual septic systems. The program has grown up to offer Sewer Connection for many individuals as an alternative of replacing existing septic system. There has been a substantial increase in septic repair and upgrade applications. This has helped to eliminate ground water contamination in these areas. |
| 2.13 | Presentation by the Town Engineer to Board of Selectmen and Finance Committee | Engineering Department | Presentation by the Town Engineer to Board of Selectmen and Finance Committee | Year 11 - Year 12 | Presented to Board of Selectmen and Finance Committee on the need to increase the Engineering Department Operating Budget to include a Stormwater Coordination budget line item in order to comply with MS4 permit conditions. Presented 5-year plan. BOS and FC approved. Awaiting Town Meeting approval. |
| 2.14 | Promote Use of LID Techniques into Site Development Plans | Engineering Dept. | Continue to promote the use of LID Techniques into Site Development Plans | Year 11 - Ongoing | The Engineering Department performs Technical Reviews for the Planning Board and Conservation Commission. Conformance of design to the local by-laws, regulations, and the DEP Stormwater Management Regulations is of Top Priority during the review. We consider the use of LID techniques for all stormwater designs. |



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3. Illicit Discharge Detection and Elimination

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Duration | Progress on Goal(s) – Permit Year 10 |
|-----------------|--|--------------------------------------|--|---|---|
| 3.1 | Map existing drain facilities in Stoughton (catch basins, manholes, BMP's, outfalls) | Engineering Dept. | <ol style="list-style-type: none"> 1. GPS Locate Manholes and Catch Basins. 2. Evaluate the current visual condition. 3. Field Verify Record Drawings 4. Prepare Town wide Drainage Connectivity Map | <p>Year 5</p> <p>Year 1-4</p> <p>Year 7 - Ongoing</p> <p>Year 9-10</p> <p>Year 10-11</p> <p>Year 10-11</p> <p>Year 11 -12</p> <p>Year 11 - 12</p> | <ol style="list-style-type: none"> 1. Many outfalls locations have been mapped using GPS units. Data has been incorporated into the Town-wide GIS to form a stormwater data layer. 2. Approximate locations of many catch basins and manholes where incorporated into the GIS database based upon aerial photographs. 3. Continue to gather information and GPS locations on all outfalls in Town. 4. Awarded contract to consulting firm to obtain accurate GPS locations for all catch basins and drain manholes. Each structure will be visually evaluated, categorized and captured. The data will then be incorporated into the Town-wide GIS to form a stormwater data layer with exact coordinate locations. 5. Awarded contract to consulting firm to gather all the available data for the storm water structures and create the stormwater network connectivity based on the available engineering record drawing – Phase II. 6. Awarded contract to consulting firm to field verify 200 structures' data – Phase II. 7. Field Verification of digitized stormwater infrastructure from Record Plans. Consultant will provide updated geo-database with field verification of approximately 800 structures. 8. Supplement the data compiled from record drawings by collecting internal data from structures (catch basins/ manholes) to provide structure condition, connectivity, and additional attribute data for approximately 2,200 structures that did not have drainage information from the record drawings. |
| 3.2 | Create software application for flow direction determination | Engineering Dept. | Begin mapping outfalls and generate stormwater data layer for Town-wide GIS; research drainage system modeling options | Year 4- Ongoing | Hired GIS Coordinator – some data entry from existing plans completed (Year 4). Researched purchase of prepared stormwater system modeling software. Mapped all stormwater outfalls that were visual. Complete |



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| 3.3 | Perform closed circuit TV inspection of suspect areas | Public Works Dept. | Inspect and correct problem areas in drainage network | Year 2-6 | All drains Inspected. Replaced failed drainage on Ross Avenue. Cleaned sediment from Red Wing Brook (York Street area). South Street culvert repair, Gay Street equalization pipe, School Street equalization pipe, Replace drains on West Street. Approximately half of the Town's public drains have been inspected. Additional areas continued to be completed as necessary to investigate flow restrictions or failures. Continuously inspecting. Damaged pipes are repaired immediately. |
| 3.4 | Create and Enforce Illicit Connection By-Law | Engineering Dept., Board of Health, Public Works Dept. | <ol style="list-style-type: none"> 1. Pass By-Law at Annual Town Meeting. 2. Enforce By-Law. | Years 3-4 | Illicit Discharge Detection and Elimination By-Law created, approved and adopted. Completed. |
| 3.5 | Information Distributed on Proper Waste Management | Engineering Dept., Board of Health, Public Works Dept. | <ol style="list-style-type: none"> 1. Provide targeted information regarding proper hazardous waste material disposal directly to local businesses. 2. Ensure compliance with local HAZMAT regulations. | Ongoing | <ol style="list-style-type: none"> 1. Inspection in field during utility tie-ins and during project reviews (residential, subdivision, site plan review). 2. Continue to enforce By-law. <p>Continue to provide information to local businesses on proper hazardous waste material disposal. (ongoing)</p> |
| 3.6 | Outfall Screening & Monitoring | Engineering Dept., Technical Committee | Perform inspection of known outfalls | Year 2-5, 9-10 | <p>Provided brochures from Northeast Waste Management to local businesses, auto body shops, etc.; all related businesses are regulated by the Town's HAZMAT bylaw with oversight by Board of Health.</p> <ol style="list-style-type: none"> 1. During GPS of outfalls structures, collected data to create comprehensive database on outfalls. Data collected included structure type/material, presence of dry weather flow, flow characteristics, presence of sediment, etc. 2. Continue to develop the list of outfalls requiring further investigation regarding the potential for illicit discharge. |
| 3.7 | Draft Stormwater Action Plan | Stormwater Committee, Engineering Dept. | 10 Year Plan for Stormwater Management | Year 4 | Established revolving fund, passed by-law, enforced erosion control, completed several improvement projects, perform inspections, etc. Complete. |



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| 3.8 | Public and Semi-Public swimming pool back wash discharge | Board of Health | <p>1. Insure that back wash water is discharged properly in pre-approved location so it does not contaminate the ground water.</p> <p>2. Enforce current by-law requirements.</p> | Ongoing | Continue to enforce Public and Semi-Public swimming pool back wash discharge regulations and bylaw. |
| 3.9 | Floor Drain Regulation | Board of Health, Engineering Dept. | Enforce the commercial and industrial hazardous waste floor drain regulations. | Ongoing | Enforcing the commercial and industrial hazardous waste floor drain regulations to prevent the discharge of hazardous waste and other pollutants from industrial and commercial establishments to surface and ground water resources. |
| 3.10 | Hazardous Waste Ground water protection bylaw | Board of Health | Enforce the Hazardous Waste Groundwater Protection By-law | Ongoing | Continue to enforce the Hazardous Waste Ground water protection bylaw to preserve and maintain existing and potential groundwater supply and groundwater recharge. |
| 3.11 | Gay Street Drainage Improvements | Engineering Dept., Public Works Dept. | Survey, Design, and Construct Improvements | Year 8 | 1. Engineering Department surveyed and designed improvement plans in enhance flood storage and water quality for problem area. New grading, deep sump catch basins, re-paved roadway. |
| 3.12 | Bay Street Culvert | Engineering Dept., Public Works Dept. | Survey, Design, and Construct Improvements | Year 8 | 2. PWD constructed project. Project is complete. |
| 3.13 | Central Street sewer extension | Engineering Dept., Public Works Dept. | Eliminate contamination caused by sewerage system in Central Street | Year 8 | Installed large culvert, deep sump catch basins, providing infiltration and replicating wetlands to improve hydraulic and hydrologic issues. Design and implement sewer extension in Central Street that replaced failed septic tanks that were contaminating the ground water due to soil factor. Project is completed. |
| 3.14 | Installing Curbs and Berms | Engineering Dept., Public Works Dept. | Eliminate contamination by installing street curbs and berms to contain runoff | Year 8-9 Ongoing | Installed approximately 9,000 l.f of curbing in Canton Street. Continuously repairing curbs and berms in need of repair in roads and town owned sites. |
| 3.15 | Implementing and Maintaining the Septic Betterment Program | Board of Health | Replacing failed septic systems, and trying to obtain additional funding to continue the program for next year and beyond | Year 8 - Ongoing | Replacing of individual septic systems. The program has grown up to offer Sewer Connection for many individuals as an alternative of replacing existing septic system. There has been a substantial increase in septic repair and upgrade applications. This has helped to eliminate ground water contamination in these areas. |
| 3.16 | Pratt's Court Culvert | Engineering Dept., Public Works Dept. | Design and Install new culverts | Year 9-10 | Installing culverts, deep catch basins, providing infiltration and replicating wetlands to improve hydraulic and hydrologic issues. |



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| 3.17 | Sewer street extension in Park Street | Engineering Dept., Public Works Dept. | Eliminate contamination caused by septic systems in southern part of Park Street | Year 9-10 | Design of sewer extension in southern part of Park St, Campanelli Parkway, Shuman Ave, Tenth St and southern part of Turnpike Street. This will reduce contamination to the groundwater aquifer due to the high number of failed septic systems in the area. |
| 3.18 | Drainage Improvements to Cedar Hill Golf Course | Engineering Dept., Public Works Dept. | <ol style="list-style-type: none"> Survey subject area. Create Design Plans to remedy runoff issue. PWD to construct improvements. | <p>Year 9-10</p> <p>Year 9-10</p> <p>Projected to be Year 12</p> | <ol style="list-style-type: none"> Engineering Department has completed a topographic survey of the area. Engineering Department has completed the design plans to improve runoff issues associated with the Cedar Hill Golf Course. PWD will construct the drainage improvements. |
| 3.19 | Stormwater Infrastructure Repairs | Public Works Dept. | Repair catch basins as needed | Year 9 - Ongoing | Repair or replace catch basin in need of repair. Year 11: CB's: Walnut Court, Parkview Avenue Flared End: Powell Street |
| 3.20 | Site Plan Review/ Subdivision Control | Engineering Dept, Planning Board, Conservation Commission | <ol style="list-style-type: none"> Enforce site plan review procedures. | Ongoing | <ol style="list-style-type: none"> Continue to enforce Site Plan Review By-law procedures. Require Erosion and Sediment Control Plan for all projects. Monitor site plans for illicit connections. |
| 3.21 | ID all MS4 outfalls | Engineering Dept. / GIS | Continue to screen outfalls for data inventory, outfall condition, dry weather flow and flow characteristics | Year 3-5 | Most outfall structures have been screened to collect data to create comprehensive database on outfalls. Data collected included structure type/material, presence of dry weather flow, flow characteristics, presence of sediment, et. Develop listing of outfalls requiring further investigation regarding the potential for illicit discharge. |
| 3.22 | Upgrade sewer system | PWD, Engineering | Eliminate all known sewer issues of existing infrastructure | Ongoing | <ol style="list-style-type: none"> Design and implement new sewer connections and extensions when feasible. Constantly evaluating town system for future upgrades or repairs. Engineering Department inspects all sewer connections. Many pipes are being lined to reduce infiltration and inflow issues. |
| 3.23 | Establish Town wide Sewer Priority Plan | Engineering, PWD | Create Townwide Sewer Priority Plan | Year 12 Projected | Update and build upon previous 1980's Sewer Needs Analysis. Goal of the plan is to analyze all remaining areas of Town without sewer and set a priority ranking to further implement sewer expansion in Town. Pending Town Meeting approval of funds. |
| 3.24 | Inspect Isolated Lands subject to Flooding | Engineering | Inspect Isolated Lands subject to flooding | Year 11 | Environmental Affairs Officer continues to inspect ILSF's and potential vernal pools for possible contamination from stormwater runoff. |



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4. Construction Site Stormwater Runoff Control

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Duration | Progress on Goal(s) – Permit Year 10 |
|----------|---|---|--|--------------------------------------|--|
| 4.1 | Selection of Town owned BMP's | Technical Committee, Engineering Dept., Public Works Dept., Conservation Commission | Establish and Publish standards | Year 3 Year 4 Year 5 – Ongoing | <ol style="list-style-type: none"> 1. Established and published standards. Complete. 2. Applied to new development under site plan review By-Law (IKEA, Target, Page Place) 3. Enforce use of BMP's during site plan review. |
| 4.2 | Selection of Stormwater Management Measures & Guidelines | Technical Committee, Engineering Dept., Conservation Commission | Enforce compliance with local Conservation and Stormwater By-laws and DEP Stormwater Management Regulations via project reviews (Conservation, Site Plan Review, Subdivision Projects) | Years 2-4 Ongoing | <ol style="list-style-type: none"> 1. Enforced during all construction by Conservation Committee and Engineering Department. 2. Subdivision and Site Plan Review reference DEP Stormwater Management Regulations for compliance procedures; 3. Stormwater and Conservation By-law approved at Town Meeting and several orders issued by Conservation Committee (Year 4). Complete. 4. Permit is required for new construction. 5. Continue to review all development to ensure compliance with the by-laws and regulations. |
| 4.3 | Technical Committee creates Stormwater Erosion Guidelines | Technical Committee | Publish guidelines | Year 2 | Publish standards (Year 2-3), By-law approved at Town Meeting (Year 4). Complete. |
| 4.4 | Enforcement of Wetlands and Environmental Regulations | Engineering Dept., Conservation Commission | Enforced during all construction | Year 4-9 Ongoing | <p>Enforced during all construction by Conservation Commission (Year 2-3); enforcement orders issued, fines imposed (Year 5); No enforcement orders were issued and no fines were imposed during Year 7.</p> <p>Continue to enforce Wetland Regulations.</p> |
| 4.5 | Require Construction Period Pollution Plan for all subdivisions and commercial development > 1 acre | Engineering Dept., Planning Board, Conservation Commission | Require submittal of Construction Period Pollution Prevention Plan in accordance with the EPA General Permit for Construction Activities for all projects > 1 acre | Ongoing | <ol style="list-style-type: none"> 1. Review all Construction Period Pollution Plans for compliance with EPA General Permit for Construction Activities. 2. Perform periodic inspections to ensure compliance with General Permit. |



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|-----|---|---|--|---------|--|
| 4.6 | Require Erosion Control Measures on all projects | Conservation Commission, Engineering Dept. | Enforce compliance with local Conservation and Stormwater By-laws and DEP Stormwater Management Regulations via project reviews (Conservation, Site Plan Review, Subdivision Projects) | Ongoing | <ol style="list-style-type: none"> 1. Enforced by Conservation Commission and Engineering Department during all construction activities. 2. Require Erosion Control plan for all applicable projects. 3. Stormwater By-law and Conservation By-laws established and continue to be enforced. 4. Subdivision and Site Plan Review reference DEP Stormwater Management Regulations for compliance procedures. 5. Continue to enforce By-laws and compliance with DEP Stormwater Management Regulations. |
| 4.7 | Vegetated Buffer | Conservation Commission | Reduce nonpoint source pollution in watershed of drainage and surface runoff | Ongoing | Enforced by Conservation Commission during all construction activities |
| 4.8 | Site Plan Review/ Subdivision Control | Engineering Dept, Planning Board, Conservation Commission | <ol style="list-style-type: none"> 1. Enforce site plan review procedures. | Ongoing | Continue to enforce Site Plan Review By-law procedures. |
| 4.9 | Erosion Control & Stormwater Site Inspections during Construction | Engineering Dept, Conservation Commission | Perform weekly site inspections on all previously permitted projects to help eliminate sediment conveyance to drainage facilities, public area, and wetland resource areas. | Ongoing | <ol style="list-style-type: none"> 1. Continue to inspect construction projects for compliance with approved site plans and By-laws; 2. Implemented inspection program consistent with bylaw and regulations. 3. Monitor and record all issues. |



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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) | Duration | Progress on Goal(s) – Permit Year 10 |
|----------|--|--|--|--|--|
| 5.1 | Technical Committee to educate Planning Board & ZBA | Technical Committee | Identify Needed changes in existing Rules and Regulations/By-Laws | Year 3-4 | By-Law approved. Complete. |
| 5.2 | Draft required changes | Stormwater Committee | Creation of new By-Laws | Year 3-4 | By-Law approved; Complete. |
| 5.3 | Ongoing Review of Stormwater Impact | Stormwater Committee | Each project to be reviewed prior to construction | Year 5 - Ongoing | Engineering staff on Stormwater Committee continue to participate in comprehensive development site plan review prior to project approval. Ongoing. |
| 5.4 | Required Deed restrictions | Boards | Ensure long term maintenance by property owner | Year 4- Ongoing | All new site development in Stoughton continues to require post construction stormwater management with operation and maintenance manuals submitted prior to project approval. Ongoing |
| 5.5 | Require Long Term Operation and Maintenance & Pollution Prevention Plans for all subdivisions and commercial development >1 acre | Engineering Dept., Planning Board, Conservation Commission | <ol style="list-style-type: none"> Require submittal of Long Term Operation and Maintenance Plan & Pollution Prevention Plan. Review plans for compliance with local, state, and federal regulations. Ensure long term maintenance by property owner. | <p>Ongoing</p> <p>Year 5-Ongoing</p> <p>Year 4-Ongoing</p> | <ol style="list-style-type: none"> Continue to require submittal of Long Term Operation and Maintenance Plan & Pollution Prevention Plan. Continue to review plans for compliance with local, state, and federal regulations. Require Deed Restrictions for future projects referencing Long Term Operation & Maintenance Plan for drainage facilities. |
| 5.6 | Asbestos Removal | Board of Health | Enforce asbestos removal regulations and by-law | Ongoing | Enforcing asbestos removal regulations and bylaw. |
| 5.7 | Lead paint Removal | Board of Health | Enforcing lead paint removal regulations and bylaw | Ongoing | Enforcing Lead paint removal regulations and bylaw. |



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|------|--|---|--|--|--|
| 5.8 | Drainage Improvements to Cedar Hill Golf Course | Engineering Dept., Public Works Dept. | 4. Survey subject area. 5. Create Design Plans to remedy runoff issue. 6. PWD to construct improvements. | Year 9 Year 9-10 Projected to be Year 10 | 1. Engineering Department has completed a topographic survey of the area. 2. Engineering is currently designing a plan to improve runoff issues associated with the Cedar Hill Golf Course. 3. Once designed, the PWD will construct the drainage improvements. |
| 5.9 | Selection of Stormwater Management Measures & Guidelines | Technical Committee, Engineering Dept., Conservation Commission | Enforce compliance with local Conservation and Stormwater By-laws and DEP Stormwater Management Regulations via project reviews (Conservation, Site Plan Review, Subdivision Projects) | Years 2-4, Ongoing | 1. Enforced during all construction by Conservation Committee and Engineering Department. 2. Subdivision and Site Plan Review reference DEP Stormwater Management Regulations for compliance procedures. 3. Stormwater and Conservation By-law approved at Town Meeting (Year 4). Complete. Several orders issued by Conservation Committee. 4. Continue to review all development to ensure compliance with the by-laws and regulations. |
| 5.10 | Vegetated Buffer | Conservation Commission | Reduce nonpoint source pollution in watershed of drainage and surface runoff | Ongoing | Enforced by Conservation Commission during all construction activities |
| 5.11 | Collecting and storing of roof generated runoff for domestic irrigation (Rain Barrel) | Conservation Commission | Educating public to collect and store roof runoff for on site irrigation and ground water replenishment. Plans to increase awareness next year by doubling the sale | Year 8 – 9 Ongoing | Educate public of the benefit for collecting and storing roof generated runoff for domestic irrigation. Sold about 100 units. Continue to sell rain barrels and educate public about benefits. |
| 5.12 | Gay Street Drainage Improvements | Engineering Dept., Public Works Dept. | Survey, Design, and Construct Improvements | Year 8 Year 8 | 1. Engineering Department surveyed and designed improvement plans in enhance flood storage and water quality for problem area. New grading, deep sump catch basins, re-paved roadway. 2. PWD constructed project. Project is complete. |
| 5.13 | Bay Street Culvert | Engineering Dept., Public Works Dept. | Survey, Design, and Construct Improvements | Year 8 | Installed large culvert, deep sump catch basins, providing infiltration and replicating wetlands to improve hydraulic and hydrologic issues. |
| 5.14 | Installing Curbs and Berms | Engineering Dept., Public Works Dept | Eliminate contamination by installing street curbs and berms to contain runoff | Year 8-9 Ongoing | Installed approximately 9,000 l.f of curbing in Canton Street. Continuously repairing curbs and berms in need of repair in roads and town owned sites. |



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| 5.15 | Pratt's Court Culvert | Engineering Dept., Public Works Dept | Design and Install new culverts | Year 9-10 | Installing culverts, deep catch basins, providing infiltration and replicating wetlands to improve hydraulic and hydrologic issues. |
| 5.16 | Drainage Improvements to Cedar Hill Golf Course | Engineering Dept., Public Works Dept | <ol style="list-style-type: none"> 1. Survey subject area. Create Design Plans to remedy runoff issue. 2. PWD to construct improvements. | <p>Year 9-10</p> <p>Year 9-10</p> <p>Projected to be Year 10</p> | <ol style="list-style-type: none"> 1. Engineering Department has completed a topographic survey of the area. 2. Engineering is currently designing a plan to improve runoff issues associated with the Cedar Hill Golf Course. Water quality and increased infiltration will be incorporated into design. 3. Once designed, the PWD will construct the drainage improvements. |
| 5.17 | Create listing of "Hot Spot" drainage areas in Town | Public Works Dept. | <ol style="list-style-type: none"> 1. Create listing of "Hot Spot" drainage areas in Town. 2. Clean Catch Basins and Roadway Sweeping more often. Monitor closely. | <p>Year 9 - Ongoing</p> | <ol style="list-style-type: none"> 1. PWD has created list of these areas. 2. PWD clean catch basin and sweeps roadways in these areas more often and than other areas. |
| 5.18 | Operation & Maintenance Plan Enforcement | Engineering, Planning Board, Conservation Commission | Require recording of OM Plan for all applicable developments | Year 11 - Ongoing | Standard condition of approval shall be to record approved Long Term Operation and Maintenance Plan in all Planning Board and Conservation Commission approvals. Proof of recording shall be submitted to Town. |



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6. Pollution Prevention and Good Housekeeping in Municipal Operations

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Duration | Progress on Goal(s) – Permit Year 10 |
|----------|---|-------------------------------------|--|-------------|---|
| 6.1 | Catch Basin Cleaning | Public Works Dept. | Clean all catch basins in Town at least twice per year to prevent excess Total Suspended Solids for entering drainage system | Ongoing | <ol style="list-style-type: none"> All catch basins in the Urbanized Area have been cleaned in the past year but most are cleaned two times per year. Some basins more frequently cleaned based on need. PWD maintains records of catch basin cleaning. |
| 6.2 | Regular Street Sweeping | Public Works Dept. | Sweep all town roads at least twice per year to prevent excess sediment and TSS from entering storm system | Ongoing | All streets are swept twice per year (Spring and Fall). Problem areas are swept more frequently. Sidewalks and also swept. |
| 6.3 | Basin/Swale Maintenance | Public Works Dept. | Maintain all town owned basins and swales | Ongoing | Continue to maintain all town owned basins and swales as needed. |
| 6.4 | Inside storage of Hazardous Materials | Public Works Dept., Board of Health | No hazardous material leaks or spills | Ongoing | Fire Department licenses all business handling hazardous materials. Board of Health enforces Aquifer Protection By-Law. New Public Works Garage exceeds standards, has fully updated SPCC plan which is adhered to. All hazardous materials are stored inside. |
| 6.5 | Obtain "No exposure" rating from EPA for Multi-Sector General | Public Works Dept., Fire Dept. | Obtain "No exposure" rating from EPA | Ongoing | "No exposure" rating obtained. Complete. Maintain "No Exposure" rating. |
| 6.6 | Pesticide-free landscaping practices | Conservation Commission | Require pesticide-free landscaping practices as special requirement in Orders of Conditions | Permit Term | Require Pesticide-free landscaping practices as special requirement in Orders of Conditions. |
| 6.7 | Municipal Employee Training | Public Works Dept. | Provide two training sessions to Municipal employees | Year 5 | Conducted two training sessions for municipal employees. Topics included NPDES Phase II Stormwater program requirements, the Town's stormwater management plan. Illicit discharge detection and elimination and good house keeping practices. Aired video "After the Storm" for all employees at Town Hall. Complete. |



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| 6.8 | Ames Long Pond Hydro-raking Program | Conservation Commission | Examine the feasibility of management of an extensive exotic vegetation problem in Stoughton Ponds. | Year 6 | Performed aesthetic pond raking project with oversight by NHESP and other agencies, and turbidity monitoring. Remove the invasive vegetated overgrowth with special machinery to transport the material off-site to local agriculture operations for composite and organic soil fortification to reduce chemical contamination of drainage runoff in the watershed. Complete. Article submitted to 2011 Annual Town Meeting for purchasing the Hydro Rake. |
| 6.9 | Fixing leaking or damaged Sewer Pipe lines | Public Works Dept. | Eliminating I & I | Ongoing | All Sewer Pipe lines are being captured to detect any leakage to be eliminated and fixed. PWD constantly fixing various lines in Stoughton. |
| 6.10 | Outdated/Unwanted Prescription Program | Board of Health | Provide an opportunity for residents to dispose of these materials to protect the environment. | Ongoing | Program is held every year. |
| 6.11 | Maintain and remove exotic invasive vegetation problems in east basin of Ames Long Pond | Conservation Commission | Developing program for removing an extreme overgrowth of exotic invasive aquatic vegetation | Year 8-9 | Developing program for removing an extreme overgrowth of exotic invasive aquatic vegetation for the east basin of Ames Long Pond. |
| 6.12 | Inside storage of mercury | Public Works Dept. | Eliminate mercury pollution in Town Facilities. | Year 8 - ongoing | A specialized storage shed was built for mercury and other heavy material. |
| 6.13 | Site Plan Review/ Subdivision Control | Engineering Dept, Planning Board, Conservation Commission | Update Site Plan Review procedures to be consistent with other by-laws. | Year 9 | Update Site Plan Review stormwater procedures to be consistent with other by-laws. |
| 6.14 | By-law/ Regulation Review | Engineering Dept, Conservation Commission, Planning Board, Public Works Dept. | <ol style="list-style-type: none"> 1. Constantly evaluating regulations for improvement. 2. Evaluate and review current Stormwater By-Laws and regulations 3. Evaluate and review Stormwater related By-Laws and regulations | Ongoing Year 10-11 Year 10-11 | Constantly evaluating regulations and by-laws for consistency and improvement. Working with NepRWA to evaluate the current stormwater By-Law and regulation and incorporate any needed regulations to comply with the new proposed stormwater permit. Working with NepRWA and all involved Town departments to evaluate other departments' By-Laws or regulations that are stormwater related |
| 6.15 | Stencil specified storm drains | Public works Dept. | Identified individual watersheds and stencil catch basins. | Year 2-4 Year 6 | Catch Basins Stenciled. Complete. Stencils were checked and re-painted as necessary during Year 6. |



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| 6.16 | Compost Generator | Conservation Commission | Reduce the volume of solid waste by generating compost to improve vegetated cover in yards in the watershed to reduce sediment / nutrient deposition and pollution of surface water bodies and streams | Year 8-9 | Educate public of the compost generator and benefits of having non chemical fertilization for yards that will improve vegetation and eliminate pollution to the ground water. Sold about 50 units. |
| 6.17 | Implementing and Maintaining the Septic Betterment Program | Board of Health | Replacing failed septic systems, and trying to obtain additional funding to continue the program for next year and beyond | Year 8 -9 | Replacing of individual septic systems. The program has grown up to offer Sewer Connection for many individuals as an alternative of replacing existing septic system. There has been a substantial increase in septic repair and upgrade applications. This has helped to eliminate ground water contamination in these areas. |
| 6.18 | Selection of Town owned BMP's | Technical Committee, Engineering Dept., Public Works Dept., Conservation Commission | Establish and Publish standards | Year 3 Year 4 Year 5 – Ongoing | <ol style="list-style-type: none"> 1. Established and Published standards. Complete. 2. Applied to new development under site plan review By-Law (IKEA, Target, Page Place) 3. Enforce use of BMP's during site plan review. |
| 6.19 | Selection of Stormwater Management Measures & Guidelines | Technical Committee, Engineering Dept., Conservation Commission | Enforce compliance with local Conservation and Stormwater By-laws and DEP Stormwater Management Regulations via project reviews (Conservation, Site Plan Review, Subdivision Projects) | Years 2-4 Ongoing | <ol style="list-style-type: none"> 1. Enforced during all construction by Conservation Committee and Engineering Department. 2. Subdivision and Site Plan Review reference DEP Stormwater Management Regulations for compliance procedures; 3. Stormwater and Conservation By-law approved at Town Meeting and several orders issued by Conservation Committee (Year 4). Complete. 4. Permit is required for new construction. 5. Continue to review all development to ensure compliance with the by-laws and regulations. |



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|------|--|--------------------|---|--|---|
| 6.20 | Town Owned Facility Inspections | Engineering Dept. | Perform inspections and prepare report summarizing findings and recommendations | Year 11 Contract Awarded to Consultant Year 12 Projected for Services | Evaluation of existing procedures & recommend corrective action/ measures on the following for 31 Town Owned facilities: 1. Indoor/ outdoor storage & disposal of solid & hazardous waste as it affects stormwater runoff. Inventory floor drains & storage maintenance of permittee-owned vehicles. 2. Spill Prevention Plans, if needed. 3. Employee training methods 4. Dumpster & other waste management measures. 5. Storage of permittee-owned vehicles 6. Fueling areas owned by the permittee 7. Vehicle washing |
| 6.21 | Spill Prevention Control and Countermeasure Plan (SPCC) for Highway Garage | Public Works Dept. | Prepare SPCC Plan for Highway Garage | Year 11 – Ongoing | SPCC Plan will be prepared for the Highway Garage in accordance with Tier 1 EPA template. Inspect site conditions and interview site managers. |



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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) | Duration | Progress on Goal(s) – Permit Year 10 |
|----------|----------------------------------|---|--|--------------------------------------|--|
| 7.1 | ID all MS4 outfalls | Engineering Dept. | Continue to screen outfalls for data inventory, outfall condition, dry weather flow and flow characteristics | Year 3-5 | Most outfall structures have been screened to collect data to create comprehensive database on outfalls. Data collected included structure type/material, presence of dry weather flow, flow characteristics, presence of sediment, et. Develop listing of outfalls requiring further investigation regarding the potential for illicit discharge. |
| 7.2 | Find source of pollutant loading | Engineering Dept. | Monitor state listing of impaired waters, adjust stormwater management plan accordingly | Year 4-5 | There are no currently established TMDLs for receiving waters within the Town of Stoughton. Complete. |
| 7.3 | Mitigate pollutant loading | Technical committee and Stormwater committee | Monitor state listing of impaired waters, adjust stormwater management plan accordingly | Year 5 | There are no currently established TMDLs for receiving waters within the Town of Stoughton. Complete. |
| 7.4 | Identify sites for BMP's | Engineering Dept. | Produce plans identifying potential sites | Year 8-9 | Working with Neponset River Watershed Association to identify the sites and select BMPs suited for each site. |
| 7.5 | Designing and constructing BMP | Engineering Dept., Public Works Dept., School | Applying for a grant to design and construct BMP | Year 10-11 | Applying for grant to design and construct a low impact BMP at school site based on previous study that was completed on Year 9. |
| 7.6 | Vegetated Buffer | Conservation Commission | Reduce nonpoint source pollution in watershed of drainage and surface runoff | Ongoing | Enforced by Conservation Commission during all construction activities |
| 7.7 | Selection of Town owned BMP's | Technical Committee, Engineering Dept., Public Works Dept., Conservation Commission | Establish and Publish standards | Year 3 Year 4 Year 5 – Ongoing | <ol style="list-style-type: none"> 1. Established and published standards. Complete. 2. Applied to new development under site plan review By-Law (IKEA, Target, Page Place) 3. Enforce use of BMP's during site plan review. |
| 7.8 | | | | | |



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Part IV. Summary of Information Collected and Analyzed

No data has been collected or analyzed yet.

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, 2011 through March 31, 2012)

Programmatic

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

Education, Involvement, and Training

| | | |
|--|---------------|--|
| Estimated number of property owners reached by education program(s) | (# or %) | |
| Stormwater management committee established | (y/n) | |
| Stream teams established or supported | (# or y/n) | |
| Shoreline clean-up participation or quantity of shoreline miles cleaned ** | (y/n or mi.) | |
| Shoreline cleaned since beginning of permit coverage | (mi.) | |
| Household Hazardous Waste Collection Days | | |
| ▪ days sponsored ** | (#) | |
| ▪ community participation ** | (# or %) | |
| ▪ material collected ** | (tons or gal) | |
| School curricula implemented | (y/n) | |

Legal/Regulatory

| In Place Prior to Phase II | Reviewing Existing Authorities | Drafted | Review | Adopted |
|----------------------------|--------------------------------|---------|----------|---------|
| | | | Draft in | |



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| | | | |
|--|--|--|--|
| 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 | (# or %) | |
| Outfalls inspected/screened ** | (# or %) | |
| Outfalls inspected/screened (Since beginning of permit coverage) | (#) | |
| Illicit discharges identified ** | (#) | |
| Illicit discharges identified (Since beginning of permit coverage) | (#); and (est. gpd) | |
| Illicit connections removed ** | (#); and (est. gpd) | |
| Illicit connections removed (Since beginning of permit coverage) | (#); and (est. gpd) | |
| % of population on sewer | (%) | |
| % of population on septic systems | (%) | |

Construction

| | (Preferred Units) | Response |
|--|-------------------|----------|
| Number of construction starts (>1-acre) ** | (#) | |



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|--|------------|
| 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** | (\$) |



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| | |
|--|-------|
| 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 vacor ** | (%) |

| | (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 In 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) |



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| | (Preferred Units) | Response |
|--|---|----------|
| Average Ratio of Anti-/De-Icing products used ** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas) | % NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand | |
| Pre-wetting techniques utilized ** | (y/n or %) | |
| Manual control spreaders used ** | (y/n or %) | |
| Zero-velocity spreaders used ** | (y/n or %) | |
| Estimated net reduction or increase in typical year salt/chemical application rate | (±lbs/ln mi. or %) | |
| Estimated net reduction or increase in typical year sand application rate ** | (±lbs/ln mi. or %) | |
| % of salt/chemical pile(s) covered in storage shed(s) | (%) | |
| Storage shed(s) in design or under construction | (y/n or #) | |
| 100% of salt/chemical pile(s) covered in storage shed(s) by May 2008 | (y/n) | |

Water Supply Protection

| | | |
|---|----------|--|
| Storm water outfalls to public water supplies eliminated or relocated | # or y/n | |
| Installed or planned treatment BMPs for public drinking water supplies and their protection areas | # or y/n | |
| <ul style="list-style-type: none"> Treatment units induce infiltration within 500-feet of a wellhead protection area | # or y/n | |