

Municipality/Organization: Town of Stoughton, Massachusetts

EPA NPDES Permit Number: MAR041063

MassDEP Transmittal Number: W-035130

Annual Report Number & Reporting Period: Year 15
May 1, 2017 – April 30, 2018

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2018)

Part I. General Information

Contact Person: Craig A. Horsfall, P.E.

Title: Interim Town Engineer

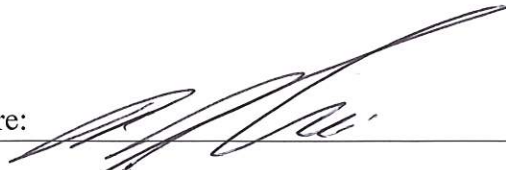
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Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: 

Printed Name: Marc J. Tisdelle

Title: Interim Town Manager

Date: April 25, 2018



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Part II. Self-Assessment

The Town has been working diligently for the last several years to comply with the current stormwater permit. As you will see in the following report, we believe we have been successful completing and progressing on many of our goals.

For the current fiscal year, the following major tasks have been completed:

1. Town Meeting approved \$50,000 in Stormwater Coordination Funds.
2. Continuation of Outfall Sampling Program of 17 outfalls.
3. Continuation of Town-wide Connectivity Mapping to include all missing information and gaps in the MS4 Stormwater Infrastructure.
4. Preparation of Stormwater Management Plan (SWMP) for upcoming permit compliance.
5. Preparation of the Notice of Intent for FY18
6. Staff GPS Field Training
7. Continued subscription with the Neponset Stormwater Partnership (Annual Fee)
8. GIS Mapping and Updates (internally and on Staff website)
9. Performed Herbicide Treatment for Harris Pond
10. Performed Vegetation Study for Albert's Pond
11. Perform a Household Hazardous Waste Day
12. Perform electronic stormwater inspections that are linked to the GIS system
13. Public Education to Town Officials and Children on various stormwater issues.
14. Maintenance of Stormwater System (Catch basins, outfalls, etc.)

Additional Town funds have been utilized to complete the following items:

1. Provided in-kind match of survey and engineering services and construction materials of \$99,440 for Stormwater improvements at the Gibbons Elementary School as a part of the 319 Non-Point Source Pollution Grant Program
2. Provided in-kind match of survey and engineering services of approximately \$4,540 toward the MassDEP Stormwater Recharge Grant for stormwater improvements at the Dawe Elementary School.
3. Provide survey services for the generation of a Topographic Survey Plan to be used for the design of the replacement of an existing stone culvert on South Street. A consultant has been hired to analyze the existing culvert and design an appropriate replacement.
4. Maintenance of Stormwater System

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. For projects less than one acre in size (single lot construction, commercial development), the Town performs a comprehensive stormwater review to ensure compliance with local and state stormwater requirements. All site development plans are required to provide proper erosion controls. All



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commercial site development is required to comply with the Department of Environmental Protection's Stormwater Management Regulations. Town staff performs inspections on construction projects to ensure all work being performed is in compliance with the approved plans. Additionally, the Public Works Department regularly monitors, cleans and inspects the catch basins and roadway surfaces in Town.

This past year we continued with the Neponset Stormwater Partnership. Additionally, we have continued to provide in-house survey and design as part of the awarded 319 Stormwater Grant through the Neponset River Valley Association for stormwater improvements at a Town-owned property (elementary school).

Additionally, with a great amount of help from the Neponset Stormwater Partnership, we applied for and were awarded a DEP Stormwater Grant for 30% Stormwater Improvement Design Plans for three sites in Stoughton (Dawes School, Hansen School, and Central/ West Street intersection). The Town has provided in-house survey and soil evaluations as part of the in-kind match.

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"> 1. Stormwater presentation to Middle and High Schools 2. Provide Schools with Stormwater materials. 	Permit Term Ongoing Ongoing	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. Continue to perform presentations and provide school materials. Continue to improve and enhance materials.
1.2	Prepare Stormwater Video	Engineering Dept. & Stormwater Tech Committee	<ol style="list-style-type: none"> 1. Air "After the Storm" video on local access television. 2. Present video in Local TV 	Years 4-5 Year 9	Two appearances in stormwater forums (summer 2007, one in fall 2007); "After the Storm" aired on local cable access television in spring 2008. Present video on television.
1.3	Stencil specified storm drains	Public Works Dept.	Identified individual watersheds and stencil catch basins	Year 2-4 Year 6 Year 10	Catch Basins Stenciled (Year 2-4); Complete. Stencils were checked and re-painted as necessary during Year 6. All catch basins' stencil condition was evaluated to determine the stencil condition and need.
1.4	Create Stormwater Fliers/ Posters/ Pamphlets	Engineering Dept. & Stormwater Tech Committee	Install stormwater posters and brochures in public buildings	Year 3 – Ongoing Year 10-13 Year 12 - 14	<ol style="list-style-type: none"> 1. Stormwater posters continue to be displayed in Town Hall. 2. Brochures are available at Town Hall, Library, PWD. 3. Working with NepRWA in creating new outreach material written specifically for different types of audience per the new draft permit. 4. Provided updated children stormwater materials (brochures, posters, and coloring books) at Town Hall, Library and DPW.



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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.
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 watershed 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 Year 14	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 Year 12	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. 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. Presentation by EPG/ SERSG group through the CIC Grant. Date of presentations 8/13/14.



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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- Year 12	<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 – Year 12	<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	Applied for 319 Grant Application through the Neponset River Watershed Association	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.
	Grant not award to Stoughton				
	Applied for 319 Grant Application through the Neponset River Watershed Association				
	Grant Awarded			Year 13	
	Survey & Design Phase			Year 14	The Stoughton Engineering Department has completed a Topographic Survey of the Project, completed Soil Evaluations, and has begun preparing Design Plans. Design Plans and construction specifications were completed. The project was publically bid and was awarded to Green Acres Landscape and Construction co. Inc. Construction began in the fall of 2017 and will be 100% complete in the spring of 2018.
				Year 15	
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.
1.15	Stormwater Training	Eng Dept, PWD, Planning, BOH, Conservation, Building	Attended Training	Year 12	Stormwater training on MS4 Permit Management and Compliance for Town Department Heads. Presentation through the SERSG CIC Grant on 11/19/14.
1.16	Stormwater Seminar	Engineering Dept	Attended Seminar	Year 12	Stormwater seminar on MS4 Permit Management and Compliance. EPA presented on DRAFT stormwater permit requirements for the next term. Date: 8/7/2014



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1.17	Applied for Community Innovation Challenge Collaborative Grant through the Neponset River Watershed Association Grant awarded to group April 2015	Engineering Dept	Implementation of Tasks	Year 12	Scope of Work not yet determined.
1.18	Create Aquifer Protection Map	Engineering Dept.	Create Aquifer Map	Year 13	We hired a consultant to create a new aquifer map to reflect current wells, watersheds, and environmentally sensitive areas.
1.19	Low Impact Design Education to Town Employees	Engineering Dept.	Educate staff on various types of LID techniques	Year 13 & Year 14	Recommend and perform technical reviews for all LID designs proposed on new and re-development projects in Town.
1.20	Applied for DEP SWWMI Stormwater Grant	Engineering Dept.	Complete Tasks in Grant	Year 14 Year 15	We applied for a Stormwater Grant that funds 30% Stormwater Improvement Design Plans for three sites in Stoughton (Dawes School, Hansen School, and Central/ West Street Intersection). We recently got awarded the grant. The Stoughton Engineering Department is providing in-kind services for topographic land survey and soil evaluations. Design Plans are currently being prepared. Soil evaluations and survey services were completed for the Dawes School site. A topographic base plan was generated by the Engineering Department staff for the design of stormwater improvements.
1.21	Presentation	Engineering Department	Complete presentation	Year 14	Presentation to Board of Selectmen and Finance Committee to justify \$50,000 in Engineering Budget for Stormwater Coordination
1.22	Revise By-law for new Permit	Engineering Department	Town Meeting to approve By-law	Year 14	In Preparation of the New Permit in July, we have started looking at revising our existing Stormwater By-law address the requirements of the new permit. Public Outreach will be required.
1.23	Neponset Stormwater Partnership Membership	Engineering Department	Join Partnership	Year 14 Year 15	We joined the Neponset Stormwater Partnership. We attend several meetings a year and collaborate with other towns on MS4 matters. Membership in the Neponset Stormwater Partnership is on-going.



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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 Committee	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 Year 14	Household hazardous waste days held every year. We held two HazMat Collection Days We held a HazMAT Collection Day and have another one planned.
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 14	Presented to Board of Selectmen and Finance Committee on the use and need of 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. Town Meeting approved.
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.
2.15	Begin Preparation of Notice of Intent and Stormwater Management Plan	Engineering Dept.	Complete Preparation of NOI and SMP	Year 14 Year 15	In preparation of the new permit, we hired our consultants to aid the Town in preparing a revised NOI and SMP. Consultant has prepared NOI and SMP.



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2.16	Revise By-law for new Permit	Engineering Department	Town Meeting to approve By-law	Year 14	In Preparation of the New Permit in July, we have started looking at revising our existing Stormwater By-law to address the requirements of the new permit. Public Outreach will be required.
2.17	Harris Pond Invasive Plant Treatment	Conservation Commission	Treat pond for invasive species	Year 14	Hired Consultant to analyze Harris Pond for herbicide treatment for invasive plant control. Pond will be treated within the next year for removal of invasive species.
2.18	Neponset Stormwater Partnership Membership	Engineering Department	Join Partnership	Year 14 Year 15	We joined the Neponset Stormwater Partnership. We attend several meetings a year and collaborate with other towns on MS4 matters. Membership in the Neponset Stormwater Partnership is on-going. Additionally, we have expanded our contracted service with the Partnership to include Educational Mailing and School outreach (5 th grade and High School)



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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> <p>Year 12-15</p> <p>Year 14-15</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 were 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. 9. Continue Connectivity Mapping. Field verify and inspect additional outfalls 10. Continue Connectivity Mapping for problem areas with missing information.



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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
3.3	Perform closed circuit TV inspection of suspect areas	Public Works Dept.	Inspect and correct problem areas in drainage network	Year 2-6 Year 6- Ongoing Ongoing	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.	1. Pass By-Law at Annual Town Meeting. 2. Enforce By-Law.	Years 3-4 Ongoing Ongoing	Illicit Discharge Detection and Elimination By-Law created, approved and adopted. Completed. 1. Inspection in field during utility tie-ins and during project reviews (residential, subdivision, site plan review). 2. Continue to enforce By-law.
3.5	Information Distributed on Proper Waste Management	Engineering Dept., Board of Health, Public Works Dept.	1. Provide targeted information regarding proper hazardous waste material disposal directly to local businesses. 2. Ensure compliance with local HAZMAT regulations.	Ongoing Year 2-5, 9-10	Continue to provide information to local businesses on proper hazardous waste material disposal. (ongoing) 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.
3.6	Outfall Screening & Monitoring	Engineering Dept., Technical Committee	Perform inspection of known outfalls	Year 5-8 Ongoing	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	1. Ensure that back wash water is discharged properly in pre-approved location so it does not contaminate the ground water. 2. Enforce current by-law requirements.	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 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.
3.12	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.
3.13	Central Street sewer extension	Engineering Dept., Public Works Dept.	Eliminate contamination caused by sewerage system in Central Street	Year 8	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 extension in Park Street	Engineering Dept., Public Works Dept.	Eliminate contamination caused by septic systems in southern part of Park Street	Ongoing	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"> 1. Survey subject area. 2. Create Design Plans to remedy runoff issue. 3. PWD to construct improvements. 	Year 9-10 Year 9-10 Ongoing	<ol style="list-style-type: none"> 1. Engineering Department has completed a topographic survey of the area. 2. Engineering Department has completed the design plans to improve runoff issues associated with the Cedar Hill Golf Course. 3. PWD will construct the drainage improvements.
3.19	Stormwater Infrastructure Repairs	Public Works Dept.	Repair Infrastructure as needed	Year 9 – Ongoing Year 12 Year 13 Year 15	Repair or replace catch basin in need of repair. Year 11: CB's: Walnut Court, Parkview Avenue Flared End: Powell Street Year 12 Outfall: Plain Drive (new rip rap, clear vegetation, clean channel) Repaired various catch basin, manhole, and pipes Installed connection for existing dry-wells on Ewing Drive to drainage system on Charles Ave. Ext.
3.20	Site Plan Review/ Subdivision Control	Engineering Dept, Planning Board, Conservation Commission	<ol style="list-style-type: none"> 1. Enforce site plan review procedures. 	Ongoing	<ol style="list-style-type: none"> 1. Continue to enforce Site Plan Review By-law procedures. 2. Require Erosion and Sediment Control Plan for all projects. 3. 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, etc. 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"> 1. Design and implement new sewer connections and extensions when feasible. 2. Constantly evaluating town system for future upgrades or repairs. 3. Engineering Department inspects all sewer connections. 4. Many pipes are being lined to reduce infiltration and inflow issues.



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3.23	Establish Town wide Sewer Priority Plan	Engineering, PWD	Create Townwide Sewer Priority Plan	Year 12 – Year 13	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. Town Meeting has approved funds June of 2014. Project is completed and endorsed by the BOS.
3.24	Inspect Isolated Lands subject to Flooding	Engineering	Inspect Isolated Lands subject to flooding	Year 11 - Ongoing	Environmental Affairs Officer continues to inspect ILSF's and potential vernal pools for possible contamination from stormwater runoff.
3.25	Outfall Inspection	Engineering, Public Works Dept	Complete Report on findings	Year 12 – Year 13 Year 13 –14 Year 13-14	Inspect condition of additional outfalls verified by as-built plan digitization. Inspect and screen 134 remaining potential outfalls Prepare geodatabase with inspected structures and coordinate updates to the Town's internal GIS and PeopleGIS Staff mapping system.
3.26	Perform Hydraulic Study of Sanitary Sewer System	Engineering Dept.	Complete Hydraulic Study	Year 13-14	Town's consultant is performing a hydraulic study with metering. This will help to Town to fully understand the existing capacity of the system. The possibility of potential future overflows, if any, will result from this analysis.
3.27	ID additional MS4 outfalls	Engineering Dept.	Continue to screen outfalls for data inventory, outfall condition, dry weather flow and flow characteristics	Year 13-14	We located more outfalls. 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, etc. Develop listing of outfalls requiring further investigation regarding the potential for illicit discharge.
3.28	Map gaps in drainage connectivity	Engineering Dept.	Map gaps in drainage connectivity	Year 13-14	Continue to build the MS4 GIS data to map connectivity and direction of flow for drainage pipes in areas with missing information. Integrate data with internal GIS and PeopleGIS website.
3.29	Ames Pond Sampling Program through the Taunton River Watershed	Conservation Commission	Test Samples for nutrients, TSS, Fecal Coliform, and other parameters	Year 13	Results were evaluated and yielded that the Ames Pond Watershed runoff was not indicative of a problem with NPS.
3.30	Enforcement Orders	Environmental Affairs Officer	Issue Enforcement Orders/ Mitigation of Illicit Discharge	Year 13	Issuance Enforcement Order and Required Mitigation for: 1. Failing Septic System at #1333 Park Street 2. Failing Septic System at #1165 Park Street 3. Insufficient Construction Site Runoff Control for a large subdivision project off of Kelsey Drive 4. Insufficient Construction Site Runoff Control for large hotel site
3.31	Establish Cesspool Failure Regulation	Board of Health	Enforce Regulation	Year 13-Year 14	The Board of Health now requires all cesspools to be upgraded when a house sells no matter what conditions the system is in. A new compliant Title V system must be constructed.



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3.32	Revise By-law for new Permit	Engineering Department	Town Meeting to approve By-law	Year 14	In Preparation of the New Permit in July, we have started looking at revising our existing Stormwater By-law to address the requirements of the new permit. Public Outreach will be required.
3.33	Revise Stormwater Catchments and Connectivity Map	Engineering Department	Complete Revisions	Year 14	We received revised information from our consultants and have updated our Town GIS System to include the changes.
3.34	Outfall Inspection	Engineering Department	Complete Inspection	Year 14	Re-inspect condition, material, size, flow connectivity, photograph, and headwall for 199 previously mapped outfalls.
3.35	Outfall Sampling	Engineering Department	Complete Sampling	Year 14	Continued Outfall Sampling Program of 75 outfalls.
3.36	Outfall Sampling	Engineering Department	Complete Sampling	Year 15	Continued Outfall Sampling Program of 22 outfalls.

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	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.



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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.
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.



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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	Engineering Dept, Stormwater Committee, Conservation Commission	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"> 1. Require submittal of Long Term Operation and Maintenance Plan & Pollution Prevention Plan. 2. Review plans for compliance with local, state, and federal regulations. 3. Ensure long term maintenance by property owner. 	Ongoing Year 5-Ongoing Year 4-Ongoing	<ol style="list-style-type: none"> 1. Continue to require submittal of Long Term Operation and Maintenance Plan & Pollution Prevention Plan. 2. Continue to review plans for compliance with local, state, and federal regulations. 3. 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.	<ol style="list-style-type: none"> 1. Survey subject area. 2. Create Design Plans to remedy runoff issue. 3. PWD to construct improvements. 	Year 9 Year 9-10 Ongoing	<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. 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	<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 (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	<ol style="list-style-type: none"> 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. 2. Create Design Plans to remedy runoff issue. 3. PWD to construct improvements. 	Year 9-10 Year 9-10 Projected to be Year 10	<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. 	Year 9 - Ongoing	<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.
5.19	Phase 1 Dam Safety Inspection	Engineering Dept.	Inspect Two (2) Town Owned Dams for deficiencies	Year 13	Inspected and created report for Two(2) Town Owned Dams: <ol style="list-style-type: none"> 1. Town Pond Dam 2. Woods Pond Dam
5.20	Low Impact Design Education to Town Employees	Engineering Dept.	Educate staff on various types of LID techniques	Year 13 & Year 14	Recommend and perform technical reviews for all LID designs proposed on new and re-development projects in Town.
5.21	Applied for DEP SWWMI Stormwater Grant	Engineering Dept.	Complete Tasks in Grant	Year 14 Year 15	We applied for a Stormwater Grant that funds 30% Stormwater Improvement Design Plans for three sites in Stoughton (Dawes School, Hansen School, and Central/ West Street Intersection). We were awarded the grant. The Stoughton Engineering Department has provided in-kind services for topographic land survey and soil evaluations. Design Plans are currently being prepared.
5.22	Revise By-law for new Permit	Engineering Department	Town Meeting to approve By-law	Year 14	In Preparation of the New Permit in July, we have started looking at revising our existing Stormwater By-law to address the requirements of the new permit. Public Outreach will be required.



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5.23	Revise Stormwater Catchments and Connectivity Map	Engineering Department	Complete Revisions	Year 14	We received revised information from our consultants and have updated our Town GIS System to include the changes.
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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	<p>"No exposure" rating obtained. Complete.</p> <p>Maintain "No Exposure" rating.</p>
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 Year 9-10	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.	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	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	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	Evaluation of existing procedures & recommend corrective action/ measures on the following for 16 Town Owned facilities: 1. Indoor/ outdoor storage & disposal of solid & hazardous waste as it effects 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 Services are underway.
6.21	Spill Prevention Control and Countermeasure Plan (SPCC) for Highway Garage	Public Works Dept.	Prepare SPCC Plan for Highway Garage	Year 11 – Year 12	SPCC Plan will be prepared for the Highway Garage in accordance with Tier 1 EPA template. Inspect site conditions and interview site managers. Completed in Year 12.
6.22	Formalize Catch Basin Cleaning Optimization Program	Public Works Dept.	Implement Plan	Year 12 - Ongoing	Evaluate current practices and techniques. Prepare report formalizing a catch basin cleaning optimization program custom to Stoughton.
6.23	Formalize Street Sweeping Program	Public Works Dept.	Implement Plan	Year 12 – Ongoing	Evaluate current practices and techniques. Prepare report formalizing a Street Sweeping Program custom to Stoughton.
6.24	Formalize Winter Road Maintenance Procedures	Public Works Dept.	Implement Plan	Year 12 – Ongoing	Evaluate current practices and techniques. Formalize Winter Road Maintenance Procedures
6.25	Inspection & Maintenance Plan	Public Works Dept.	Implement Plan	Year 12 – Ongoing	Creation of Inspection/ Maintenance frequencies and procedures for the various types of structural stormwater BMP's (i.e. swales, retention/detention basins, etc.) that the Town maintains.
6.26	Parks & Open Space Operation & Maintenance Plan	Public Works Dept., Recreation Dept.	Implement Plan	Year 12 – Ongoing	Creation of Operation and Maintenance procedures for the proper use, storage and disposal of pesticides, herbicides and fertilizers, including minimizing the use of these products.
6.27	Ames Pond Lake Management Plan	Conservation Commission	Implement Plan	Year 12- Year 13	Hire a consultant to establish a Lake Management Plan for Ames Pond. An article has been presented for the upcoming Town Meeting for the funding to prepare and implement the plan.
6.28	Vegetation Management Program in Town Lakes and Ponds	Conservation Commission	Implement Plans	Year 13 Year 15- Ongoing	This management will commence with a mitigation program of the resulting re-occurring organic sedimentation in Harris's Pond (Pinewood Lake). Performed Vegetation Study of Albert's Pond



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6.29	Phase 1 Dam Safety Inspection	Engineering Dept.	Inspect Two (2) Town Owned Dams for deficiencies	Year 13	Inspected and created report for Two(2) Town Owned Dams: 3. Town Pond Dam 4. Woods Pond Dam
6.30	Revise By-law for new Permit	Engineering Department	Town Meeting to approve By-law	Year 14	In Preparation of the New Permit in July, we have started looking at revising our existing Stormwater By-law address the requirements of the new permit. Public Outreach will be required.
6.31	Perform Electronic Site Inspections	Engineering Department	Use Inspection Application	Year 14- Ongoing	Continue to utilize electronic application to perform periodic stormwater inspections for private and public construction projects.
6.32	GPS Field Training	Engineering Department	Complete Training	Year 14	Hired Consultant to train the Engineering Department on how to inspect and collect data using the Town's GPS equipment.
6.33	Revise By-law for new Permit	Engineering Department	Town Meeting to approve By-law	Year 14	In Preparation of the New Permit in July, we have started looking at revising our existing Stormwater By-law address the requirements of the new permit. Public Outreach will be required.
6.34	Revise Stormwater Catchments and Connectivity Map	Engineering Department	Complete Revisions	Year 14	We received revised information from our consultants and have updated our Town GIS System to include the changes.

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.



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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	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	Applied for 319 Grant Application through the Neponset River Watershed Association Grant Awarded Construction	Engineering Dept	Complete Grant	Year 13 Year 14 Year 15	The grant would provide supplemental funding to the Town to construction stormwater BMP's on and near a school site in Town located within the Steep Hill Brook Watershed. The Town is going to provide in-house engineering design and construction to match grant funding. Engineering Department performed topographic survey, soil evaluations, and has begun Design Plans. Design complete, construction of project complete Spring 2018.
7.9	Applied for DEP SWWMI Stormwater Grant	Engineering Dept.	Complete Tasks in Grant	Year 14	We applied for a Stormwater Grant that funds 30% Stormwater Improvement Design Plans for three sites in Stoughton (Dawes School, Hansen School, and Central/ West Street Intersection). We were awarded the grant. The Stoughton Engineering Department is providing in-kind services for topographic land survey and soil evaluations. Design Plans are currently being prepared.
7.10	Require Private Projects to Implement Low Impact Design Features and/ or Enhanced Stormwater Treatment	Engineering Department	N/A	Year 14 - Ongoing	The Engineering Department performs technical drainage reviews for the Planning Board and Conservation Commission. We require projects implement Low Impact Design features, Infiltration Basins and Water Quality Units to treat at least the first flush of runoff (>1").



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7.11	Revise By-law for new Permit	Engineering Department	Town Meeting to approve By-law	Year 14 - Ongoing	In Preparation of the New Permit in July, we have started looking at revising our existing Stormwater By-law address the requirements of the new permit. Public Outreach will be required.
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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

Reviewing
Existing

Draft
in



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	Phase II	Authorities	Drafted	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 (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



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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	(#)	



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• Vacuum trucks specified in contracts	(y/n)	
• % Structures cleaned with clam shells **	(%)	
• % Structures cleaned with vactor **	(%)	

	(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



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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/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)	(%)	
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	