

**Municipality/Organization:** Town of Weymouth

---

**EPA NPDES Permit Number:** MA041070

---

**MaDEP Transmittal Number:** W-035571

---

**Annual Report Number  
& Reporting Period:** No. 13: April 1, 2015 – March 31, 2016

---

## NPDES PII Small MS4 General Permit Annual Report

### Part I. General Information

Contact Person: Andrew P. (Chip) Fontaine, P.E. Title: Town Engineer

---

Telephone #: 781-337-5100, ext. 43718 Email: cfontaine@weymouth.ma.us

---

#### 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: Robert L. Hedlund \_\_\_\_\_

Title: Mayor \_\_\_\_\_

Date: 4/29/16 \_\_\_\_\_

## **Part II. Self-Assessment**

In 2001, the Town of Weymouth (“Town”) entered into a \$200,000 contract with engineering consultants BETA Group, Inc. (“BETA”), to develop a watershed master plan for Whitman’s Pond which, in separate sections, is both a recreational resource and part of the Town’s drinking water supply. That project included analysis of stormwater impacts and recommendations to mitigate stormwater pollution. Half of the funding for that project was provided by the Massachusetts (MA) Department of Environmental Management (“DEM”).

In 2002, the Town fully funded a \$330,000 contract with BETA to create the first draft of the Town’s Storm Water Management Plan (SWMP). A major component of both of these projects was to clean all town catch basins and inspect the entire drain system. The inspection data was used to create town-wide drain system mapping and data management in a Geographic Information System (GIS).

Although these projects represent a major financial commitment by the Town, as well as a significant technical data collection and analysis effort, these accomplishments are in addition to pre-existing Town stormwater management activities (nowadays referred to as Best Management Practices or “BMPs”). Some of these BMPs have been performed by the Town itself while others are being performed by grassroots organizations. These existing BMPs are identified in Part III of this report.

In July of 2004, Town representatives involved with development of the SWMP met with USEPA representatives to review our program thus far. SWMP development efforts have since included work on the items identified in the EPA letter as identified below.

In 2008, the Mayor and Town Council approved two new ordinances relative to stormwater management: the Stormwater Management Ordinance and the Illicit Connection/Discharge Ordinance. These ordinances establish requirements per the NPDES General Permit for Storm Water Discharges from Small MS4s, including procedures to apply for town permitting and penalties for violations.

During the reporting period the Town again had two very productive household hazardous waste collection days. Some of the items collected were aerosols, various paints, flammable liquids, pesticides, mercury containing equipment and antifreeze. Quantities of the collected materials can be found in section 1-4. Although difficult to quantify, benefits to the quality of stormwater will be realized in the future.

During the reporting period the Weymouth Department of Public Works Engineering Division prepared design plans for roadway and drainage improvements in Ericson Road, Klasson Lane and Sundin Road. The scope of work included the removal of 14 existing drainage structures and 485 linear feet of drainage pipe, installation of 22 drainage structures, including 10 catch basins with deep sumps and oil separator hoods, and 915 linear feet of drainage pipe. The project went to bid in August 2015. The total project cost was approximately \$200,000 and was 100% funded by a Community Development Block Grant (CDBG). The drainage improvements were completed in November 2105.

## Notice of Intent (NOI)

The Town has obtained plans of Massachusetts Highway Department (MHD) drainage in Weymouth in the past and will continue to do so. MHD has completed mapping the locations of all of their outfalls as part of their SWMP effort and we have received a GIS file of those locations. The Town had already provided Mass. Highway's consultant engineer (ENSR) with Town of Weymouth GIS data layers showing Town drainage along MHD corridors for use in developing MHD's SWMP. We will continue to coordinate storm water management with MHD, including obtaining updated drain system/outfall mapping and providing them with our GIS drain system layer when they have a need for it.

Our SWMP prioritizes identification and removal/reduction of bacteria levels in storm water, particularly where pathogens are identified as impacting certain receiving waters. Our SWMP does identify the water bodies that are identified as Category 5 (impaired/threatened, requiring a TMDL) in the MA Integrated List of Waters [Clean Water Act Sections 303(d) and 305(b)] although MA DEP has yet to develop final TMDLs for these water bodies. A Draft Pathogen TMDL Report for the Boston Harbor Watershed (excluding the Neponset River Sub-Basin), which includes the Weymouth and Weir Rivers Sub-basin which encompasses most of the Town of Weymouth, is posted on the MA DEP website.

Updates to previous submitted information:

Part I.B.2(e) In our Year 1 annual report ('03 – '04), the Town reported to have determined that we meet Criteria D from Appendix A (EPA Endangered Species Act) of the MA NPDES General Permit based on information provided by BETA, our SWMP consultant. It has now come to our attention that we actually meet Criteria A based on the fact that there are no endangered or threatened species or critical habitat in proximity to our MS4 or points where authorized discharges reach the receiving waters.

The Town has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions.

**Part III. Summary of Minimum Control Measures**

**1. Public Education and Outreach**

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 12</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Permit Year 13</b>
1-1	Classroom Education	School Dept.	High school Environmental Science class will include stormwater management issues.	Stormwater pollution awareness and management issues have been included in this class for the last 22+ years. The major topics covered are: watersheds and land uses, impact of impervious surface on I/R ratios, types of non point source pollution, storm water pollutants, storm water infrastructure, storm water management and BMPs, impact of storm water on surface waters, sanitary sewers, sewage treatment and septic tanks, eutrophication and several labs dealing with testing storm water quality and the quality of the receiving surface waters. Weymouth’s 5 <sup>th</sup> graders also participated in the “Water All Around You” educational program created by Greenscapes and NSRWA, which included classroom presentations, hands-on activities and a tour of the water treatment plant.	This classroom training will continue.
Revised					
1-2	Flyer and Brochure Distribution	DPW	Obtain stormwater-related flyers and distribute them to the public	The town continued its partnership with the Greenscapes program and the North and South Rivers Watershed Association (NSRWA), other environmental agencies, and various South Shore communities. Recycling flyers were distributed in water & sewer bills. Also made available to all residents by placement at various public buildings was the Greenscapes Guide (see <a href="http://www.greenscapes.org/">http://www.greenscapes.org/</a> ). The DPW also has stormwater flyers and other environmental information available to the public at several locations in the building.	Relevant flyers will continue to be developed or obtained and will be distributed to the public.
Revised					
1-3	Using the Media	DPW	Once a year, do a local cable TV public service announcement. Twice a year do a newspaper press release/article.	Household hazardous waste day, which is held in fall and spring, was announced on cable TV, emailed to members of a town email list, posted on the South Shore Recycling Cooperative website, and published in the newspaper. A Town-wide “Community Clean Up Day” was also advertised in the newspaper. The local cable TV station has previously been provided with the EPA educational videos “After the Storm”, “Building Green: A Success Story in Philadelphia”, “Reduce Runoff: Slow it Down, Spread it Out, Soak it In” and “RiverSmart Homes: Getting Smart about Runoff in Washington, DC” to be run periodically based on available programming space.	This practice will continue with increasing focus on specific stormwater management issues.
Revised					

1-4	Hazardous Waste Management	DPW	Conduct Household Hazardous Waste Collection Day twice a year. Will be advertised in newspaper. Quantity of waste collected will be tracked.	Household Hazardous Waste Collection Days are conducted in the spring and in the fall and are advertised in the newspaper, posted on the town website, and sent to all subscribers of the town email list. During the reporting period HHWCD's were held on October 24, 2015 and April 9, 2016. The town hires a contractor who specializes in hazardous material clean up and collection to operate the collection days and dispose of all of the collected materials. A total of 392 cars (339 Weymouth residents) participated. Some of the quantities collected at the two days are: 10-55 Gal. drums aerosols, 12-CY boxes of various paints, 17-55 Gal. drums of flammable liquids, 5-55 Gal. drums acidic corrosive liquid, 10-55 Gal. drums basic corrosive liquid, 4-55 Gal. drums oxidizing solid, 5-55 Gal. drums solid pesticides, 14-55 Gal. drums liquid pesticides, 9-55 Gal. drums antifreeze, 1-5 Gal. drum mercury and 1-5 Gal. drums asbestos. Additionally, during the rest of the year, residents were allowed to drop off the following hazardous materials at the DPW which were then picked up and disposed of by qualified contractors: flammable and combustible paint (total of 31-CY boxes), latex paint (1-CY boxes) lithium batteries, cadmium batteries, mercury thermostats, TVs, computer monitors, refrigerators, air conditioners, microwave ovens, assorted other electronic items, tires and propane tanks. Records of quantities of hazardous materials collected are kept on file at the DPW.	These practices will continue.
Revised					

## 2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
2-1	Adopt-A-Stream/Drain Program	DPW	All town water bodies will be adopted. Track amount of trash removed.	The Whitman’s Pond Association, the Herring Run Warden and the Isaac Walton Fishing Association continue to “adopt” Whitman’s Pond, the Herring Run and Old Swamp River, respectively. The Fore River Watershed Association has adopted the Fore River and the Back River Watershed Association has adopted the Back River. The DPW provides support to these associations, when requested, in the form of manpower and trucks for clean-up events. The amount/volume of collected miscellaneous debris, trash bags and chipped brush is tracked.	Will continue to provide support to these associations. Amount of trash removed will be tracked.
Revised			Continue supporting the various associations that have adopted water bodies and continue to track amount of trash removed.		
2-2	Pond & Stream Cleanup & Monitoring	DPW	Coordinate and track cleanup activities.	Cleanup days were held for Whitman’s Pond, the Herring Run, Old Swamp River, the Back River and the Fore River. The Whitman’s Pond Association, the Herring Run Warden and the Back River and Fore River Watershed Associations are non-municipal partners.	With assistance from the DPW, these cleanups will continue. Additional pond and stream cleanups will also be arranged as much as possible.
Revised					
2-3	Stencil Storm Drains	DPW	Stencil 300 or more catch basins each year.	New “No Dumping – Drains to Pond” and “No Dumping – Drains to River” stencils were purchased by the DPW in 2011. The Whitman’s Pond Association and Weymouth Herring Run Committee assist the DPW with stenciling.	Additional catch basins will be stenciled.
Revised					
2-5	Community Hotline/Weblink	DPW	Create a Stormwater Hotline/Weblink. Track # of calls and remedied problems.	The town continued to maintain a Stormwater web page with a hotline/weblink. It is part of the DPW web page on the town website (see <a href="http://www.weymouth.ma.us/">http://www.weymouth.ma.us/</a> ). There is also a link to contact the Mayor or DPW for emergencies and there is a Mayor’s Hotline (800-297-5733). There is also a town emailing list which residents can sign up for to be notified of town activities, including cleanups. The Greenscapes Newsletter is also accessible from the town DPW web page and contains a link to the Greenscapes website.	Continue to update the SWMP webpage on the town web site. Track calls and problem remedies.
Revised					

2-6	Public Workshops	DPW	Develop and advertise public workshops to disseminate information to and receive input from the public.	The DPW Water & Sewer Division continues to be a partner in Greenscapes Massachusetts and through that partnership, has sponsored several free workshops relative to stormwater management. For more information, see the Greenscapes Massachusetts website and the past issues of the Greenscapes E-Newsletter that described the workshops.	Public workshops, particularly those put on by Greenscapes Massachusetts, will continue to be planned and advertised with a frequency goal of at least one per year.
Revised					
2-8	Pet Waste Collection	Town Council	Create and enforce an ordinance. Track # of signs posted.	The town has an ordinance that requires people to clean up after their dog (Ordinance 6-801). The town also continues to provide pet waste warning signs and "Mutt Mitt" dispensers at various sites in town where dog walking is common to encourage dog owners to clean up their pet's waste. Mutt Mitt dispensers now exist at O'Sullivan, Negus, Great Esker, Webb (town) and Weston Parks, Legion, Julia, and Humphrey Fields, the School House Road soccer fields and Webb State Park. Local athletic clubs provide bags at the dispensers.	Continued placement of pet waste warning signs and Mutt Mitt dispensers as new desirable locations are identified. Continued stocking of bags in the dispensers.
Revised		Town Council & DPW			

### 3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
3-1	Inspect and sample all town discharges	DPW	Continue program to locate, sample and test.	All outfalls were inspected and dry weather flows sampled and tested in Year 1. We continue to obtain and test additional samples when requested by the Health Dept. or when any potential surface water pollution is suspected.	When identified, suspect discharges will be sampled and tested.
Revised					
3-2	System mapping development	DPW	Complete system map. Add soils and land use maps.	Townwide GIS drain system mapping was completed in 2004 and we continue to publish a printed atlas set of drain system maps. Soil and land use exists as GIS layers. The DPW Engineering Division and GIS staff update the GIS drain layer annually as the system is modified, expanded or as discrepancies are discovered.	The GIS drain system mapping will continue to be kept up to date.
Revised					
3-3	Illegal dumping enforcement/education	DPW	Flyers; track and prosecute illegal dumping.	Existing ordinances prohibit discharge of untreated waste, garbage, etc. Signs prohibiting dumping of waste are posted at various locations throughout town. A container for residents to dispose of their motor oil exists next to the DPW building. “No dumping” signs exist at yard waste drop off locations, town beaches and at the entrance to the capped Wharf St. landfill. Video and still cameras have also been installed in the Weymouth Landing and East Weymouth parking lots, O’Sullivan Playground, and the DPW. Violators have been identified and prosecuted.	Will continue to post signs in areas known for illegal dumping. Will continue to set up cameras and prosecute offenders. Will continue to work on creating and distributing flyers.
Revised		DPW, Health and Police Depts.			
3-4	Septic system controls	Health Dept.	Track #, location and inspection of septic systems.	During the reporting period, 16 septic system sites were switched to the town sewer system, leaving 408 septic systems currently still in use. Town Ordinance 8-201 requires properties with septic systems to connect to the town sanitary sewer system when certain conditions exist.	The locations of septic systems will continue to be tracked and inspection records will be obtained whenever they are available. Continue converting properties on septic systems to sewer.
Revised		Health Dept. & DPW			

3-5	Create illicit discharge ordinance	DPW	Eliminate illicit discharges to the drain system.	Ordinance 8-702 (Illicit Connection/Discharge Ordinance) was added to the town ordinances 8 years ago. Existing ordinances already prohibited discharge of untreated waste, garbage, etc. (Ordinances 6-901, 6-1214, 7-401, 11-101 and 12-103).	These ordinances will be used to control illicit discharges.
Revised		DPW, Town Council			

#### 4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
4-1	Ordinance review and update	Town Council & Planning Dept.	Develop erosion and sediment control ordinance/regulation.	Ordinance 8-701 (Stormwater Management Ordinance) was added to the town ordinances 8 years ago to control erosion and sedimentation at construction sites.	Together with assistance from the Conservation Administrator, Building Inspector, and Planning Dept., this ordinance will be used to control erosion and sedimentation at construction sites.
Revised		DPW, Town Council			
4-2	Construction inspection	DPW & Building Dept.	Track inadequate sites/plans and # of non-compliant permit.	The Building, Public Works and Conservation Depts. inspected various construction projects as required under existing procedures and addressed stormwater related issues where noted. Under the Stormwater Management Ordinance, as well as existing permit procedures, stormwater quality issues will be monitored and addressed through the construction inspection process.	These responsible departments will continue to perform construction inspection and will continue to monitor and address stormwater quality issues.
Revised		DPW, Conservation, Planning & Building Depts.			

##### 4a. Additions


## 5. Post-Construction Stormwater Management in New Development and Redevelopment

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
5-1	Regulations for post-construction runoff	Town Council/DPW	Develop public works construction rules and regulations, including storm drain connection regulation.	The DPW storm drain connection regulation was utilized for permit issuance under the Stormwater Management Ordinance when required.	As applicable, projects will be reviewed to ensure compliance with the Stormwater Management Ordinance.
Revised		DPW			
5-2	BMP inspection and maintenance	DPW	Inspect structural BMPs once a year; document problems.	Drainage structures were inspected where deemed necessary. The DPW structural BMP tracking spreadsheet is used to identify structure characteristics and track inspections.	Continue identification of structural BMPs in the Drain GIS and the BMP tracking spreadsheet. Continue inspecting structural BMPs.
Revised					

### 5a. Additions


## 6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
6-1 Revised	Catch basin cleaning program	DPW	Develop program, collect data, refine program.	The DPW is currently utilizing 1 vacuum truck and 1 clamshell to clean catch basins throughout the town for most of the year, as needed. A total of 241 catch basins were cleaned by DPW staff and contractors hired by the DPW. Catch basins are prioritized for cleaning based on the greater sensitivity of areas such as the Great Pond and Whitman's Pond watersheds.	We expect a much greater number of basins to be cleaned this year as a result of an increase in CDL-licensed staff and our expectation of hiring a contractor to supplement in-house manpower.
6-2 Revised	Street sweeping	DPW	Sweep all roads annually, track quantity of sweepings.	All roads were swept. DPW swept approximately 394 CY of material from Weymouth's roads during the reporting period. Street sweepings collected during the current reporting period were stored at the DPW, 120 Winter Street. During the reporting period approximately 439 Tons of street sweepings were transported to the Cranston Sanitary Landfill for disposal by contractor EZ Disposal & Recycling.	Sweep all roads. Continue to track quantity of sweepings.
6-3 Revised	Pipe inspections	DPW	Inspect drain lines on as-needed basis.	Numerous drain lines were inspected. At times, this is accomplished with the town's own pipe video camera. However, more often a contractor, such as NEPCCo or Heitkamp, is hired to perform this work.	Continue inspections as needed.
6-4 Revised	Pipe cleaning Pipe and drainage ditch cleaning	DPW DPW/ NCMCP	Clean and flush drain lines as needed. Clean/flush drain lines and clean drainage ditches as needed	Numerous drain lines were cleaned out by flushing with high pressure hose. Like the pipe inspections, this was done at times by DPW staff with DPW equipment but more often a contractor was hired to perform this work, particularly lines with significant root growth in them. The DPW hired a contractor to clear 150 feet of drainage ditch located off Essex Street.	Continue to clean pipes and drainage ditches as needed.

6-5	New pipe & structural installations	DPW	Replace drain pipes, catch basins and other drain structures as needed.	Repairs to the town stormwater collection system were performed as needed. A Town contract administered by the DPW's consultant EPG installed 10 catch basins with deep sumps and oil separator hoods, 12 drain manholes and 915 feet of drain pipe.	Drain structures will be replaced or repaired where required and as funding allows.
Revised					

**6a. Additions**

6-6	Employee Training	DPW/ Planning	Develop and implement employee SWMP training program.	Construction inspectors have received SWMP training.	SWMP training will continue as needed.
Revised					
6-7	Spill Containment	DPW/Fire	Implement structural components and training to address spill containment at the DPW	In 2009 the Town received an oil spill response trailer from the MA DEP for use by Weymouth emergency personnel in the event of an oil spill along Weymouth's coastline. Town fire apparatus carry spill containment pads and socks and have additional spill control supplies at stations. In addition to action by town departments and in accordance with DEP regulations, once the responsible party is identified they are directed to immediately contact a qualified hazardous material spill cleanup company to take over the containment and cleanup. A SPCC Plan was developed for the DPW facility at 120 Winter Street and forwarded to the USEPA Region 1 SPCC Compliance Coordinator October 2012.	Additional spill containment equipment, training and procedures will be implemented at the DPW as required. DPW will continue to coordinate with the Fire Dept. on their spill containment procedures for spills at any location in town.
Revised					

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<if applicable>>

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
1-1	Classroom Education	School Dept.	High school Environmental Science class will include stormwater management issues.	Stormwater pollution awareness and management issues have been included in this class for the last 22+ years. The major topics covered are: watersheds and land uses, impact of impervious surface on I/R ratios, types of non point source pollution, storm water pollutants, storm water infrastructure, storm water management and BMPs, impact of storm water on surface waters, sanitary sewers, sewage treatment and septic tanks, eutrophication and several labs dealing with testing storm water quality and the quality of the receiving surface waters.	This classroom training will continue.
Revised					
2-2	Pond & Stream Cleanup & Monitoring	DPW	Coordinate and track cleanup activities.	Cleanup days were held for Whitman’s Pond, the Herring Run, Old Swamp River, the Back River and the Fore River. The Whitman’s Pond Association, the Herring Run Warden and the Back River and Fore River Watershed Associations are non-municipal partners.	With assistance from the DPW, these cleanups will continue. Additional pond and stream cleanups will also be arranged as much as possible.
Revised					
2-3	Stencil Storm Drains	DPW	Stencil 300 or more catch basins each year.	New “No Dumping – Drains to Pond” and “No Dumping – Drains to River” stencils were purchased by the DPW in 2011. The Whitman’s Pond Association and Weymouth Herring Run Committee assist the DPW with stenciling.	Additional catch basins will be stenciled.
Revised					
3-1	Inspect and sample all town discharges	DPW	Continue program to locate, sample and test.	All outfalls were inspected and dry weather flows sampled and tested in Year 1. We continue to obtain and test additional samples when requested by the Health Dept. or when any potential surface water pollution is suspected.	When identified, suspect discharges will be sampled and tested.
Revised					

3-3	Illegal dumping enforcement/education	DPW	Flyers; track and prosecute illegal dumping.	Existing ordinances prohibit discharge of untreated waste, garbage, etc. Signs prohibiting dumping of waste are posted at various locations throughout town. A container for residents to dispose of their motor oil exists next to the DPW building. "No dumping" signs exist at yard waste drop off locations, town beaches and at the entrance to the capped Wharf St. landfill. Video and still cameras have also been installed in the Weymouth Landing and East Weymouth parking lots, O'Sullivan Playground, and the DPW. Violators have been identified and prosecuted.	Will continue to post signs in areas known for illegal dumping. Will continue to set up cameras and prosecute offenders. Will continue to work on creating and distributing flyers.
Revised		DPW, Health and Police Depts.			

**7a. Additions**

--	--	--	--	--	--

**7b. WLA Assessment**

The MA DEP has not yet developed final TMDLs for any of Weymouth's water bodies that are identified as Category 5 (impaired/threatened, requiring a TMDL) in the MA Integrated List of Waters [Clean Water Act Sections 303(d) and 305(b)]. However, a Draft Pathogen TMDL for the Boston Harbor Watershed, which includes the Weymouth and Weir Rivers Sub-basin which in turn encompasses most of the Town of Weymouth, is now posted on the MA DEP website.

Continued cleaning of town catch basins provides a tremendous benefit by removing waste and pollutants from the stormwater that then flows into water resources. Sweeping all town streets likewise prevents the sand, dirt and road debris that carries pollutants from entering the drain system and eventually polluting the environment. A record keeping procedure was initiated in December '06 to track what catch basins are cleaned and note any structural deficiencies, which will improve catch basin maintenance and functionality.

The Town will continue to utilize, and update when needed, the Whitman's Pond watershed master plan and the SWMP, both developed by BETA. Although numerous BMPs are currently in use and more will be implemented per the recommendations in the BETA reports, a detailed Waste Load Allocation Assessment has not yet been done. The Town will continue to work towards performing this assessment.

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

As the GIS-based Drain Atlas maps are used by various departments, we are constantly updating and correcting the existing data. Each year, updates are accomplished by DPW and GIS staff. This work will continue to enhance the accuracy and completeness of this data. This data includes identification and database data management for all town structural BMPs.

The significant quantities of hazardous waste and recycled materials collected during town Household Hazardous Waste Days, as well as those received at and/or collected by the DPW throughout the year, (as described in Section III.1-4) confirms that the town is providing an important service to residents who are very willing to properly dispose of these materials when a means to do so is available. The impact on storm water quality and the environment in general from these programs, as well as the various water body adoptions, clean-up days, Mutt Mitt dispensers, and conversions from septic system to sewer, is difficult to quantify, but an undeniable benefit.

#### 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, 2015 through March 31, 2016)

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

## Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	
Site inspections (for proper BMP installation & operation) completed **	(# or %)	
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	
Low-impact development (LID) practices permitted and encouraged	(y/n)	

## Operations and Maintenance

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

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)	
• Disposal cost**	(\$)	

Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	
• Vacuum truck(s) owned/leased	(#)	
• Vacuum trucks specified in contracts	(y/n)	
• % Structures cleaned with clam shells **	(%)	
• % Structures cleaned with vector **	(%)	

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

Reduction (since beginning of permit coverage) in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	
Integrated Pest Management (IPM) Practices Implemented	(y/n)	

	(Preferred Units)	Response
Average Ratio of Anti-/De-Icing products used **  (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)	% NaCl % CaCl <sub>2</sub> % MgCl <sub>2</sub> % 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	
Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	