

Municipality/Organization: City of Taunton

EPA NPDES Permit Number: MAR041164

MassDEP Transmittal Number: W-041086

**Annual Report Number Year 9
& Reporting Period:** April 1, 2011 – March 31, 2012

**NPDES PII Small MS4 General Permit
Annual Report
(Due: May 1, 2012)**

Part I. General Information

Contact Person: Anthony Abreau **Title:** Assistant Commissioner

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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: Anthony Abreau

Title: Assistant Commissioner

Date: 4/9/12

Part II. Self-Assessment

The City of Taunton has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions, except for the following provisions:

Part II.B.1-6 Any Provisions of Part II.B.1-6 that have not been met are detailed in Part III below.

Part II.B.8 The Town encourages BMPs that promote groundwater recharge and Standard 3 of the state Storm Water Management Policy. However, specific groundwater recharge/infiltration policies have not yet been developed. The Subdivision Rules and Regulations include the following statement: “All drainage must comply with the Massachusetts Department of Environmental Protection’s stormwater regulations.”

1-5	Participate in the Annual Ecology Fair	Taunton Conservation Commission Taunton Department of Public Works Taunton Water Department Taunton Ecology Awareness Movement	Fall '04, Fall '06, Spring '07 <ul style="list-style-type: none"> • Submit a press release advertising the event to the <i>Taunton Gazette</i>. • Track the number and type of educational materials that are distributed by the City's Storm Water Quality Booth at the Taunton Ecology Fair. 	<ul style="list-style-type: none"> • The Taunton River Festival was held on Saturday, June 4, 2011. 	<ul style="list-style-type: none"> • The Taunton River Festival will be held on Saturday, June 2, 2012. Taunton River Watershed Alliance is planning to host an educational booth at this event.
Revised					

1a. Additions

There are no additions at this time.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
2-1	Public Access to SWMP & Receipts of Comments	Taunton Superintendent of Public Works Taunton Webmaster	Summer '03 <ul style="list-style-type: none"> • Make draft SWMP available to the public and conduct public comment period. • Finalize SWMP. Summer '04 – Winter '07/08 <ul style="list-style-type: none"> • Make the Final SWMP accessible to the public via the City's public library, Craig C. Sherman Operations Center, and web page. 	<ul style="list-style-type: none"> • The Final SWMP is located at the City's public library. 	<ul style="list-style-type: none"> • Activities to proceed as noted in the Measurable Goal's column.
Revised					
2-2	Co-sponsor Annual River Cleanup	Taunton Conservation Commission Taunton Department of Public Works Taunton Ecology Awareness Movement	Fall '03/04/05/06/07 <ul style="list-style-type: none"> • Send press releases to the <i>Taunton Gazette</i>, the <i>Brockton Enterprise</i> and other local newspapers. • Track the number of cleanup volunteers and supporting businesses. • Track the number/length of streams cleaned. • Track the quantity and types of waste collected as a result of the cleanup event. • Indicate the water quality at the river cleanup sites. 	<ul style="list-style-type: none"> • As part of the Citywide Cleanup, a portion of the Mill River was cleaned on April 16, 2011. • Press releases were sent to local newspapers. • The number of volunteers, supporting businesses, number/length of streams, and quantity and type of waste collected were tracked. Approximately 120 to 130 volunteers participated in the event. • The water quality monitoring was performed by the Taunton River Watershed Alliance and Veolia Water. 	<ul style="list-style-type: none"> • Activities to proceed as noted in the Measurable Goal's column. • The City of Taunton will be holding the Citywide Cleanup in April 2012. The Mill River and/or Three Mile River will be included.
Revised					
2-3	Co-sponsor Annual Citywide Cleanup	Taunton Conservation Commission Taunton Department of Public Works Taunton Ecology Awareness Movement	Spring '03/04/05/06/07 <ul style="list-style-type: none"> • Send press releases to the <i>Taunton Gazette</i>, the <i>Brockton Enterprise</i> and other local newspapers. • Track the number of cleanup participants. • Track the areas cleaned. • Track the quantity and types of waste collected as a result of the cleanup event. 	<ul style="list-style-type: none"> • A Citywide Cleanup occurred on April 16, 2011. • Press releases were sent to local newspapers. • The number of volunteers, supporting businesses, areas cleaned, and quantity and type of waste collected were tracked. 	<ul style="list-style-type: none"> • Activities to proceed as noted in the Measurable Goal's column. • The City of Taunton will be holding the Citywide Cleanup in April 2012. The Mill River and/or Three Mile River will be included.
Revised					
2-4	Conduct Local Water Quality Monitoring Activities	Taunton Department of Public Works USFilter Taunton River Watershed Alliance	Spring '04 – Winter '07/08 <ul style="list-style-type: none"> • Identify sampling areas. • Collect and analyze samples. • Report high fecal coliform counts to responsible parties. • Draft an annual Water Quality Report for the City of Taunton. 	<ul style="list-style-type: none"> • As part of a contract, Veolia Water conducts water quality monitoring activities. • A Water Quality Report for the City of Taunton has been drafted. • High fecal coliform counts were reported to the responsible parties. 	<ul style="list-style-type: none"> • Activities to proceed as noted in the Measurable Goal's column.
Revised					
2-5	Conduct Attitude Surveys	Taunton Conservation Commission Taunton Ecology Awareness Movement	Summer – Fall '04 & '07 <ul style="list-style-type: none"> • Identify the locations throughout the City where the stormwater awareness survey is available for completion. • Send a press release explaining the stormwater awareness survey to the local newspapers. • Track the number of completed surveys. • Compile surveys in order to gauge any change in attitude/behavior regarding stormwater issues. 	No activities were scheduled for Permit Year 9.	<ul style="list-style-type: none"> • Activities to proceed as noted in the Measurable Goal's column.
Revised					

2. Public Involvement and Participation

2-6	Co-sponsor Storm Drain Stenciling Activities	Taunton Conservation Commission Taunton Department of Public Works Taunton Ecology Awareness Movement	Summer '05/07 <ul style="list-style-type: none"> • Identify areas where stenciling will take place and establish schedule for the activity. • Track the number of drains stenciled each year. • Track the number of volunteers assisted in the stenciling activity. • Summarize the condition of the inlet surveyed. • Publicize storm drain stenciling event(s) via a press release to local newspapers. 	Storm drains were stenciled during Permit Year 9. Approximately 500 storm drains were stenciled.	<ul style="list-style-type: none"> • Continue to stencil storm drains during Permit Year 10. The City of Taunton will stencil 100 storm drains during Permit Year 10.
Revised					

2a. Additions

There are no additions at this time.

3-4	Establish a Formal Septic System Management Program (SSMP)	Taunton Board of Health Office of Economic and Community Development	Spring '03 – Winter '07/08 <ul style="list-style-type: none"> Track the number of septic system pumping companies licensed by the City each year. Track the number of septic system installers that are licensed by the City each year. Track the number of Certificates of Compliance issued each year. Track the number of failed septic systems identified each year and action taken. Track the number of property owners that participate in the Water Pollution Abatement Trust (WPAT). Provide pamphlets that summarize requirements of the Title V program. Board of Health employees will attend trainings on the septic systems. 	<ul style="list-style-type: none"> The Board of Health and Office of Economic and Community Development track the required information. There were 35 septic system pumping companies with a total of 115 trucks and 53 septic system installers licensed by the City of Taunton. For 2012, about 102 Disposal Work Construction Permits were issued. Approximately 20 failed septic systems were identified during 2010. 16 property owners participated in the Septic Loan Program. There are 8 more property owners waiting to participate in the program. The City of Taunton has been waiting for the approval of more funding from MassDEP. 	<ul style="list-style-type: none"> Activities to proceed as noted in the Measurable Goal's column.
Revised					
3-5	Conduct a Sewer Separation Program	Taunton Department of Public Works	Winter '07/08 – Winter '13 <ul style="list-style-type: none"> Develop and implement a program to separate the sanitary and stormwater sewer systems. 	<ul style="list-style-type: none"> The City of Taunton is tracking the sanitary sewer capital improvement projects conducted. The City of Taunton has continued to implement projects to separate the sanitary and stormwater sewer systems. Phase 7 SSES program replaced the drain pipe and structures (130 feet of pipe, 2 structures) on Bradley Avenue to remove drain from sewer, removed 5 catch basins from the sewer system on Danforth St, W. Britannia St., Broadway and Washington St. Replaced and up-sized drain from the intersection of Broadway and Purchase St to the outfall at the Mill River. Total work included 1,500 feet of pipe replacement from 21" to 42" in diameter with associated structures, and the installation of a new water quality unit in Hopewell Park. 	<ul style="list-style-type: none"> Activities to proceed as noted in the Measurable Goal's column. In permit year 10, the City of Taunton will continue to develop and implement projects to separate the sanitary and stormwater sewer systems.
Revised					

3a. Additions

There are no additions at this time.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
4-1	Develop a Site Inspection Form and Conduct Site Inspections	Taunton Planning Board Taunton Engineering Department Taunton Conservation Commission	Spring '07 – Winter '07/08 <ul style="list-style-type: none"> • Develop a Site Inspection Form that reflects the ESC. • Track the frequency of inspections conducted for each site. • Track the completion of inspection forms. • Track the number of failed ESC BMPs discovered on each site. 	No activities scheduled for Permit Year 9.	<ul style="list-style-type: none"> • Activities to proceed as noted in the Measurable Goal's column.
Revised					
4-2	Develop and Implement a Citizen Tip Line	Taunton Department of Public Works Taunton Web Master	Spring '06 – Winter '07/08 <ul style="list-style-type: none"> • Advertise that DPW will accept calls on stormwater issues. • Track the number of complaints received at the DPW regarding stormwater issues. • Track the problems/incidents remedied as a result of calls to the DPW. 	<ul style="list-style-type: none"> • The DPW handles all calls concerning stormwater issues. • The complaints and remedies concerning stormwater issues have been tracked. 	<ul style="list-style-type: none"> • Activities to proceed as noted in the Measurable Goal's column.
Revised					

4a. Additions

There are no additions at this time.

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
5-1	Revise Site Plan Review Submission Requirements & Procedures	Taunton Planning Department Taunton Planning Board Taunton Municipal Council	Winter '05/06 <ul style="list-style-type: none"> • Develop the amendment to Section XV of the Zoning Ordinance (Site Plan Review). Spring '07 <ul style="list-style-type: none"> • Submit the amendment to the Planning Board and hold a public hearing. • Submit the proposed amendment to the Municipal Council for acceptance into the Zoning Bylaw. 	No activities scheduled for Permit Year 9.	<ul style="list-style-type: none"> • Activities to proceed as noted in the Measurable Goal's column.
Revised					

5a. Additions

There are no additions at this time.

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
6-1	Develop a Formal Training Program for DPW Staff	Taunton Department of Public Works	Spring '06 Revise date to Spring '07 <ul style="list-style-type: none"> Establish a formal training program for DPW employees. Spring '06 – Winter '07/08 Revise date to Spring '07 – Winter '07/08 <ul style="list-style-type: none"> Conduct training sessions with all current employees. Train all new DPW employees in accordance with the training program requirements. Track the number of employees trained. Conduct refresher training for employees after every two years of employment. 	<ul style="list-style-type: none"> A formal employee training program was not developed due to the concentration on other parts of the SWMP. 	<ul style="list-style-type: none"> Activities to proceed as noted in the Measurable Goal's column. The City of Taunton plans to start to develop a formal employee training program for stormwater pollution prevention during Permit Year 10. The City of Taunton will start the training during Permit Year 11.
Revised					
6-2	Develop a Formal Catch Basin Cleaning Program	Taunton Department of Public Works Highway Division	Spring '06 – Winter '07/08 <ul style="list-style-type: none"> Use a street inventory to prioritize catch basins for cleaning by street. Clean a minimum of ten percent of catch basins per year. Document annual cleaning activities. 	<ul style="list-style-type: none"> The City cleaned over 1,500 catch basins by the city and private contractors in permit year 9. The cleaning activities have been documented. 	<ul style="list-style-type: none"> Activities to proceed as noted in the Measurable Goal's column. Continue to clean catch basins using city employees and private contractors during permit year 10.
Revised					
6-3	Upgrade the Existing Parking Lot and Street Sweeping Program	Taunton Department of Public Works Highway Division	Spring '04 <ul style="list-style-type: none"> Purchase a second street sweeper. Summer '04 – Winter '07/08 <ul style="list-style-type: none"> Conduct an inventory of all publicly owned streets and parking lots. Annually update and prioritize streets and lots for sweeping activities. Develop a schedule for conducting sweeping activities. Track the streets and lots that are swept each year. Maintain a log of the disposed materials. 	<ul style="list-style-type: none"> An inventory of all publicly owned streets and parking lots has been conducted. The sweeping activities have been documented. 	<ul style="list-style-type: none"> Activities to proceed as noted in the Measurable Goal's column. The City plans to continue to sweep publicly owned streets and parking lots during permit year 10.
Revised					
6-4	Develop a Vehicle & Equipment Maintenance Policy	Taunton Department of Public Works	Spring '06 <ul style="list-style-type: none"> Develop and implement a vehicle and equipment maintenance policy and incorporate policy requirements into the DPW employee training programs. 	<ul style="list-style-type: none"> A Vehicle Maintenance Garage and associated area has been designated. The DPW has designated a "Spill Coordinator" that responds to all spills. New employees are informed of these policies. 	<ul style="list-style-type: none"> Activities to proceed as noted in the Measurable Goal's column. The City of Taunton plans to start to develop a formal employee training program for stormwater pollution prevention during Permit Year 10. The City of Taunton will start the training during Permit Year 11. The vehicle and equipment maintenance policy will be included as part of the formal employee training program.
Revised					
6-5	Develop a Vehicle & Equipment Cleaning Policy	Taunton Department of Public Works	Spring '06 <ul style="list-style-type: none"> Develop and implement a vehicle and equipment cleaning policy and incorporate policy requirements into the DPW employee training programs. 	<ul style="list-style-type: none"> An area has been designated for the cleaning of vehicles and equipment. There's an oil/water separator that everything drains to. New employees are informed of these policies. 	<ul style="list-style-type: none"> Activities to proceed as noted in the Measurable Goal's column. The City of Taunton plans to start to develop a formal employee training program for stormwater pollution prevention during Permit Year 10. The City of Taunton will start the training during Permit Year 11. Vehicle and equipment cleaning policy will be included as part of the formal employee training program.
Revised					

6a. Additions

There are no additions at this time.

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
7-1					
Revised					

NOT APPLICABLE

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

The Taunton River Watershed Alliance (TRWA) and Veolia Water collect water samples throughout the Taunton River Watershed through a collaborative monitoring project. There are three purposes for the monitoring: develop baseline characterization data, measure changes in the watershed over time, and screen for water quality problems. At the end of the year, a report titled Annual Water Quality Report – Taunton River & Tributaries – 2011 was completed to document the sampling activities and results.

For 2011, sampling was performed on the second Tuesday of the month from March through December (weather dependent) between the hours of 4:30 a.m. and 8:30 a.m. Sampling was not performed in December 2011 due to inclement weather. Sampling was not performed in January and February due to safety concerns from snow and ice on the bridges and because colder water has higher dissolved oxygen content and so the oxygen stress on the river is greatly reduced. In 2011, the sampling team tested fourteen sites. These sites were chosen for several reasons including to cover a representative area of the City’s waterways, to include any known problem area or areas of critical concern, and to target areas where no previous water quality data existed. The following chart lists the monitoring locations for 2011.

STREET/BRIDGE LOCATION	RIVER	GPS Location	ID
SOMERSET AVE, RT. 138	THREE MILE	N41°51/W71°06	TMR 01
ROUTE 44/COHANNET ST.	THREE MILE	N41°53/W71°08	TMR 02
SOLITUDE DRIVE/TAUNTON	THREE MILE	N41°56/W71°09	TMR 03
INGELL ST./TAUNTON	MILL	N41°89/W71°8	MIL 01
WASHINGTON ST./TAUNTON	MILL RIVER	N41°54/W71°5	MIL02
WHITTENDON ST./TAUNTON	MILL RIVER	N41°55/W71°6	MIL03
CENTER ST., BERKLEY BRIDGE	TAUNTON RIVER	N41°50/W71°06	TNT 01
PLAIN ST., TAUNTON	TAUNTON RIVER	N41°53/W71°05	TNT 02
RTE 140, NORTON	WADING RIVER	N41°56/W71°10	WAD 01
PINE, NORTON	WADING RIVER	N41°57/W71°04	WAD 02
RT. 79, ASSONET CENTER BRIDGE	ASSONET RIVER	N 41 47 45.2 W 71 03 56.7	ASO 01
HIGHSTONE ST., E. TAUNTON	TOMSON BROOK	N41°51-46/W70°58-40	TBR 01
PRECINCT ST., ROUTE 44	FURNACE BROOK	N41°53-35/W71°0-05	FBR 01
PAYNES COVE, 90 S. MAIN ST., ASSONET	ASSONET RIVER	N41°47/W71°05	PCO

Veolia Water tested the samples for nine parameters. The parameters are temperature, dissolved oxygen, pH, total phosphorus, nitrate-nitrogen, turbidity, fecal coliform bacteria, total suspended solids, and salinity. The following charts display a summary of the results for fecal coliform bacteria and total phosphorus.

FECAL COLIFORM BACTERIA 2011 (colonies/100 ml. sample)								
Site	April	May	June	July	August	Sept	Oct	Nov
TMR 02	26		380	176	1810	51	29	34
TMR 03	6		470	96	4130	84	60	31
TBR 01	9	104	84	63	550	31	31	37
FBR 01	14	235	2030	96	270	112	34	14
WAD 01		23	233		234	31	37	29
WAD 02		23	140		156	69	28	40
ASO 01	14		530	191	600	29	34	49
TNT 01	80	124	528	148	1100	230	120	400
TNT 02	63	74	370	201	2840	210	92	80
TMR 01	14	37	192	250	260	80	23	29
MIL 01		480	750	740	TNTC			120
MIL 02		148	470	630	550			96
MIL 03		108	290	400	780			2300
PCO	3		330	290		51	40	6

TOTAL PHOSPHORUS VALUES FOR 2011 (mg/l)

Site	April	May	June	July	Aug	Sept	Oct	Nov
TMR 02	0		0.05	0	0	0.18	0	0.08
TMR 03	0		0.07	0	0	0.06	0.06	0.09
TBR 01	0	0	0	0.52	0.071	0.08	0.06	0
FBR 01	0.05	0	0.08	0.07	0.06	0.09	0	0.1
WAD 01		0	0.07		0	0.05	0	0.11
WAD 02		0.05	0		0	0.07	0	0.11
ASO 01	0		0	0.1	0.06	0.11	0.06	0.11
TNT 01	0.06	0.14	0	0	0	0.1	0.1	0.08
TNT 02	0	0	0.14	0.09	0	0.11	0.07	0.08
TMR 01	0	0	0	0	0	0.08	0.05	0.07
MIL 01		0	0	0.05	0			0.07
MIL 02		0	0	0.06	0			0.19
MIL 03		0	0	0	0			0.12
PCO	0		0.07	0.08	0	0.11	0.06	0.16