

Municipality/Organization: City of Taunton

EPA NPDES Permit Number: MAR041164

MassDEP Transmittal Number: W-041086

**Annual Report Number Year 6
& Reporting Period:** April 1, 2008 – March 31, 2009

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2009)

Part I. General Information

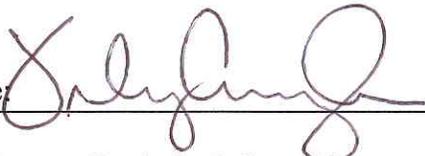
Contact Person: Frederic J. Cornaglia Title: Commissioner

Telephone #: 508-821-1434 Email: dpwcomm@comcast.net

Mailing Address: 90 Ingell Street, Taunton, MA 02780

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: Frederic J. Cornaglia

Title: Commissioner

Date: 4/29/09

Part II. Self-Assessment

The City of Taunton has determined that our municipality is in compliance with all permit conditions.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
1-1	Conduct an Annual Household Hazardous Waste Collection Day	Taunton Pollution Prevention Control Facility	Spring '04/05/06/07 <ul style="list-style-type: none"> Sponsor an annual household hazardous waste collection day. Continue to develop the Taunton Recycling Information brochure and distribute to all Taunton residents via a mass mailing on an annual basis. Track the number of brochures distributed to residences via the mass mailing each year. Annually send a press release advertising the event to the <i>Taunton Gazette</i> and track whether or not it was published. Advertise the event on the local cable access station on an annual basis. Maintain and update the City's web page. Track the amounts and types of waste collected each year. Track the number of Taunton vehicles that participate in the event each year. 	<ul style="list-style-type: none"> The hazardous waste collection day was held on April 26, 2008. The event was advertised in the <i>Taunton Gazette</i>, on local cable access station, and a flyer was distributed. A Taunton Recycling Information brochure was created and mailed to all residences. The legal size brochure summarized recycling information along with hazardous waste information. The City of Taunton tracked the amounts and types of waste collected. This list is kept at the wastewater treatment plant. Some of the items collected include solvents, paint thinners, gasoline, kerosene, fluorescent light bulbs, and antifreeze. The City of Taunton distributes recycling bins to residents at the Department of Public Works. 	<ul style="list-style-type: none"> Activities to proceed as noted in the Measurable Goal's column. The hazardous waste collection day is scheduled for Saturday, April 25, 2009.
Revised					
1-2	Distribute a Series of Educational Flyers	Taunton Conservation Commission Taunton Environmental Awareness Movement Taunton Municipal Lighting Plant Taunton Webmaster	Summer '06/07 <ul style="list-style-type: none"> Track number of flyers distributed each year. Post the electronic version of the flyer on the City's web page. 	<ul style="list-style-type: none"> Educational flyers were created and distributed at various events to the community. 	<ul style="list-style-type: none"> Activities to proceed as noted in the Measurable Goal's column. The City of Taunton is looking into distributing stormwater flyers with the Recycling Information brochures.
Revised					
1-3	Post Educational Information on the City's Web Site	Taunton Department of Public Works Taunton Conservation Commission Taunton Planning Department Taunton Ecology Awareness Movement	Spring '03 – Winter '07/08 <ul style="list-style-type: none"> Post stormwater related information on the Green Page web site. Update web site regularly. 	<ul style="list-style-type: none"> The City of Taunton is in the process of updating their website. A page dedicated to stormwater will be available that includes links to environmental websites and provides a variety of environmental information related to stormwater. 	<ul style="list-style-type: none"> Activities to proceed as noted in the Measurable Goal's column.
Revised			<ul style="list-style-type: none"> Post stormwater related information on the City of Taunton web site. 		
1-4	Promoting Water Conservation Practices for Homeowners	Taunton Water Department	Spring '03 – Winter '07/08 <ul style="list-style-type: none"> Maintain and update the water conservation tips on the Water Department's web page. Continue to use local newspapers to promote water conservation and track the number of water conservation reminders that are placed in newspapers each year. 	<ul style="list-style-type: none"> The City of Taunton is in the process of updating their website. The Water Department's webpage will include water conservation tips. 	<ul style="list-style-type: none"> Activities to proceed as noted in the Measurable Goal's column.
Revised					
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 Ecology Fair was held in conjunction with the Harvest Festival on October 2008. The festival was held at the Boyden Refuge. A press release advertised the event. 	<ul style="list-style-type: none"> Activities to proceed as noted in the Measurable Goal's column.
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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
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, the Mill River and Three Mile River were cleaned on April 26, 2008. • 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. • 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. On May 2, 2009, City of Taunton will be holding the Citywide Cleanup and 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 26, 2008. • 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. On May 2, 2009, City of Taunton will be holding the Citywide Cleanup and 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 6.	<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. 	No activities were scheduled for Permit Year 6.	<ul style="list-style-type: none"> • Activities to proceed as noted in the Measurable Goal's column.
Revised					

2a. Additions

There are no additions at this time.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
3-1	Field Verify Outfall Locations	Taunton Department of Public Works	Spring '06 – Winter '07/08 <ul style="list-style-type: none"> Develop a schedule for outfall verification and outfall identification activities. Perform and track the outfall verification and outfall identification activities as scheduled. Continuously update the storm drainage system map as new components are added to the municipal storm drainage system. 	<ul style="list-style-type: none"> The City of Taunton has updated the storm drainage system map as new components were added. 	<ul style="list-style-type: none"> Activities to proceed as noted in the Measurable Goal's column.
Revised					
3-2	Adopt a Stormwater Ordinance	Taunton Planning Department Taunton Conservation Commission Taunton Engineering Department	Winter '06/07 <ul style="list-style-type: none"> Draft the Stormwater Ordinance. Spring '07 <ul style="list-style-type: none"> Present the Stormwater Ordinance for a vote of acceptance at the Municipal Council. Spring '07 – Winter '07/08 <ul style="list-style-type: none"> Track the number of enforcement actions taken. Post Stormwater Ordinance on City's web site. 	<ul style="list-style-type: none"> The Stormwater Ordinance has not been drafted. 	<ul style="list-style-type: none"> Activities to proceed as noted in the Measurable Goal's column.
Revised			Winter '09/10 <ul style="list-style-type: none"> Draft the Stormwater Ordinance. Spring '10 <ul style="list-style-type: none"> Present the Stormwater Ordinance for a vote of acceptance at the Municipal Council. Spring '10 – Winter '10/11 <ul style="list-style-type: none"> Track the number of enforcement actions taken. Post Stormwater Ordinance on City's web site. 		
3-3	Implement an Illicit Discharge Detection and Elimination Plan	Taunton Department of Public Works	Spring '06 – Fall '06 <ul style="list-style-type: none"> Based on the results of the Phase II survey, the City will expend \$400,000 on sewer rehabilitation. Activities will include sealing pipes and manholes and replacing leaking frames and covers. It is estimated this project will remove approximately 150,000 to 200,000 gpd of I/I. At Lake Sabbatia, homes along the lake will be tied into the sewer extension. 	<ul style="list-style-type: none"> Phase IV SSES program took place in 2008. This program concentrated on I/I removal from the sanitary sewer system. This removal was accomplished by lining sewer pipes, removing a few cross-connected catch basins, manhole rehabilitation, a replacement of "vented" manhole covers with a solid cover. In addition, a sewer extension on Winthrop St., Davenport Terrace, and Williams Street connected approximately 180 houses into the sanitary sewer system. 	<ul style="list-style-type: none"> Activities to proceed as noted in the Measurable Goal's column. The Phase V SSES program will take place in 2009.
Revised					
3-4	Establish a Formal Septic System Management Program (SSMP)	Taunton Board of Health Mayor's Office of 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 HSRLP. Host the Septic System Maintenance Workshop. Track the number of attendees at each Septic System Maintenance Workshop. 	<ul style="list-style-type: none"> There are 49 septic system pumping companies with a total of 121 trucks and 48 septic system installers licensed by the City of Taunton. For this year, about 111 Disposal Work Construction Permits were issued. Approximately 25 failed septic systems were identified. 17 property owners participated in the Water Pollution Abatement Trust. 	<ul style="list-style-type: none"> Activities to proceed as noted in the Measurable Goal's column.

Revised			<p>Spring '03 – Winter '07/08</p> <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"> Board of Health employees attended several trainings that covered several topics including ELGIN septic systems, reading Title V design plans, MEHA Conference, and MHOA Conference. 	
3-5	Conduct I/I Removal in the Sanitary Sewer System	Taunton Department of Public Works	<p>Fall '06</p> <ul style="list-style-type: none"> Complete the Comprehensive Wastewater Management Study. Evaluate the recommendations made in the Comprehensive Wastewater Management Study and develop a plan to perform the recommended activities. <p>Spring '07 – Winter '07/08</p> <ul style="list-style-type: none"> Track the City's sanitary sewer capital improvement projects conducted. 	<ul style="list-style-type: none"> The City of Taunton is tracking the sanitary sewer capital improvement projects conducted. The City of Taunton has begun implementing project to separate the sanitary and stormwater sewer systems. It is a 3 phase, 15 million dollar program for catch basin and other I/I removal under EPA Administrative Order 08-042. Cross-connected catch basins will be removed from the sanitary sewer system. 	<ul style="list-style-type: none"> Activities to proceed as noted in the Measurable Goal's column. In permit year 7, the City of Taunton is working on completing a report on "Roof Leader and Sump Pump Discharge Investigation." This report documents the smoke and dye testing of private inflow (roof leaders) to find and eliminate illicit connections to the sanitary sewer system. Also, the report outlines future plans for other inspections and eliminate of all private inflow.
Revised	Conduct a Sewer Separation Program	Taunton Department of Public Works	<p>Winter '07/08 – Winter '13</p> <ul style="list-style-type: none"> Develop and implement a program to separate the sanitary and stormwater sewer systems. 		

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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
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 6.	<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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
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 6.	<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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
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"> An 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.
Revised			The implementation schedule has been revised as shown above.		
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 2,000 catch basins by the city and private contractors in permit year 6. The cleaning activities have been documented. The City purchased a new vacator truck during Permit Year 6. 	<ul style="list-style-type: none"> Activities to proceed as noted in the Measurable Goal's column.
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.
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.
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.
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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
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 – 2008 was completed to document the sampling activities and results.

For 2008, sampling was performed on the second Tuesday of the month from March through December (weather dependent). 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 2008, the sampling team tested nine 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 2008.

STREET/BRIDGE LOCATION	RIVER	Miles from Taunton River	ID
SOMERSET AVE, RT. 138	THREE MILE	0.4	TMR 004
ROUTE 44/COHANNET ST.	THREE MILE	3.4	TMR 034
INGELL ST.	MILL	0.0	MIL 000
WASHINGTON ST.	MILL RIVER	1.4	MIL014
WHITTENDON ST.	MILL RIVER	3.0	MIL030
STREET/BRIDGE LOCATION	RIVER	Miles from Berkley Bridge	ID
CENTER ST., BERKLEY BRIDGE	TAUNTON RIVER	0.0	TNT 000
PLAIN ST., TAUNTON	TAUNTON RIVER	4.3 North	TNT 043
LAZY COVE	TAUNTON RIVER	4.5 South	LZ
RT. 79, ASSONET CENTER BRIDGE	ASSONET RIVER		ASO 030

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

FECAL COLIFORM BACTERIA 2008 (colonies/100 ml. sample)									
Site	March	April	May	June	July	August	Sept	Oct	Nov
TNT 000	303	63	164	920	124	160	215	135	104
TMR 004	7	13	47	180	140	132	145	64	17
TMR 034	7	7	67	96	92	108	275	28	20
ASO030	3	0	10	17	33	20	88	12	3
TNT 043	440	50	156	216	370	168	340	88	73
MIL 000	152	148	940	1360	1260	960	700	400	108
LZ	0	3	17	140	108	420	1400	316	20
MIL 014	47	77	460	500	196	333	155	56	216
MIL 030	23	13	67	148	164	400	215	135	43

NITRATE NITROGEN VALUES FOR 2008 (mg/l)									
Site	March	April	May	June	July	Aug	Sept	Oct	Nov
TNT 000	1	0.46	0.69	1.6	1.6	1.4	0.99	1.1	0.84
TMR 004	1.1	0.56	0.64	1.5	1.6	1.6	0.77	0.88	0.92
TMR 034	1.1	0.6	0.63	1.5	1.6	1.4	0.74	0.87	1.1
ASO030	0.87	0.08	0.18	0.58	0.59	0.56	0	0.52	0
TNT 043	1	0.39	0.62	1.2	1.4	1.8	0.89	0.88	0.8
MIL 000	1.1	0.31	0.46	0.6	0.64	0.63	0.63	0.54	0.28
LZ	1.9	1.3	1.4	2.2	2.6	2.5	2.4	2.5	2.1
MIL 014	1	0.33	0.33	0.56	0.61	0.55	0.59	0.51	0.3
MIL 030	1	0.28	0.21	0.63	0.66	0.54	0.6	0	0.27

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, 2008 through March 31, 2009)

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)	No
Stream teams established or supported	(# or y/n)	
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	Yes
Shoreline cleaned since beginning of permit coverage	(mi.)	
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	1
▪ 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 **	(%)	100
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)	Yes

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 **	(#)	2,037
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 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	Yes
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	Yes
<ul style="list-style-type: none">• Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	NA