Municipality/Organization: City of Taunton

EPA NPDES Permit Number: MAR041164

MassDEP Transmittal Number: W-041086

Annual Report Number Year 15
& Reporting Period: April 1, 2017 – March 31, 2018

NPDES PII Small MS4 General Permit Annual Report

(Due: May 1, 2018)

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: Signature:
Printed Name: Frederic Cornaglia
Title: Commissioner
Date: 4 25 18

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 III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	Planned Activities – Permit Year 16
ID#				(Reliance on non-municipal partners indicated, if any)	
1-1 Revised	Conduct an Annual Household Hazardous Waste Collection Day	Taunton Pollution Prevention Control Facility	 Spring '04/05/06/07 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 wasted collected each year. Track the number of Taunton vehicles that participate in the event each year. 	 The hazardous waste collection day was held on April 29, 2017. The event was advertised in the <i>Taunton Gazette</i>, local cable access station, and a flyer was distributed in the yearly DPW mailing for trash collection days. In addition, a flyer was 	 The hazardous waste collection day is scheduled for Saturday, April 28, 2018. Continue to offer a medical hazardous waste day throughout the year. The most recent collection was held on July 15, 2017, and was sponsored by the Taunton Board of Health. Continue to distribute recycling bins to residents.
1-2	Distribute a Series of Educational Flyers	Taunton Conservation Commission Taunton Environmental Awareness Movement Taunton Municipal Lighting Plant Taunton Webmaster	 Summer '06/07 Track number of flyers distributed each year. Post the electronic version of the flyer on the City's web page. 	 Continued to make the educational flyers titled "After the Storm" available at the Department of Public Works. Continued to display a poster titled "Stormwater and the Construction Industry" in 	The City of Taunton will continue to make the "After the Storm" flyer and will continue to display the "Stormwater and the Construction Industry" poster at the Department of Public Works.
Revised				 the Department of Public Works. An electronic version of the flyers and posters are available on the City of Taunton's web page. 	
1-3	Post Educational Information on the City's Stormwater Web Site	Taunton Department of Public Works Taunton Conservation Commission Taunton Planning Department Taunton Ecology Awareness Movement	Spring '03 – Winter '07/08 Post stormwater related information on the Green Page web site. Update web site regularly.	 The City of Taunton has created a webpage dedicated to stormwater. The page includes links to environmental websites and provides a variety of environmental information related to stormwater. The City of Taunton continued to maintain the stormwater web page. The City of Taunton is part of the Southeastern Massachusetts Stormwater Collaborative (SEMSWC) which was established in 2014. The SEMSWC has a website with general information about stormwater and links to other websites. 	 The City of Taunton will continue to maintain the stormwater web page. The City of Taunton will revise the stormwater webpage to include the stormwater ordinance, a link to the Southeastern Massachusetts Stormwater
Revised			Post stormwater related information on the City of Taunton web site.		Collaborative's webpage.

1-4 Revised	Promoting Water Conservation Practices for Homeowners	Taunton Water Department	 Spring '03 – Winter '07/08 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. 	Water conservation tips have been included on the stormwater webpage.	The City of Taunton will continue to maintain the stormwater web page including water conservation tips.
1-5 Revised	Participate in the Annual Ecology Fair (No longer taking place)	Taunton Conservation Commission Taunton Department of Public Works Taunton Water Department Taunton Ecology Awareness Movement	 Fall '04, Fall '06, Spring '07 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. 	There was no ecology fair or Taunton River Festival held in Year 15.	Research similar events in area to distribute educational materials.

1a. Additions

There are no additions at this time.

Pooper scooper laws/regulations/prohibitions are being investigated for use in the City.

2. Public Involvement and Participation

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16
2-1 Revised	Public Access to SWMP & Receipts of Comments	Taunton Superintendent of Public Works Taunton Webmaster	 Summer '03 Make draft SWMP available to the public and conduct public comment period. Finalize SWMP. Summer '04 – Winter '07/08 Make the Final SWMP accessible to the public via the City's public library, Craig C. Sherman Operations Center, and web page. 	The Final SWMP is located at the City's public library.	Activities to proceed as noted in the Measurable Goal's column.
2-2 Revised	Co-sponsor Annual River Cleanup	Taunton Conservation Commission Taunton Department of Public Works Taunton Ecology Awareness Movement	 Fall '03/04/05/06/07 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. 	 A River Cleanup occurred on April 29, 2017. 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. Materials collected included household trash, litter, construction and demolition debris, tires, furniture, and dead-fall debris. The water quality monitoring was performed by the Taunton River Watershed Alliance and Veolia Water. 	 Activities to proceed as noted in the Measurable Goal's column. The City of Taunton will be holding the River Cleanup on Saturday, April 28, 2018. The Taunton River, Mill River and/or Three Mile River will be included.
2-3 Revised	Co-sponsor Annual Citywide Cleanup	Taunton Conservation Commission Taunton Department of Public Works Taunton Ecology Awareness Movement	 Spring '03/04/05/06/07 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. 	 A Citywide Cleanup occurred on Earth Day, April 29, 2017. Press releases were sent to local newspapers. The number of volunteers, supporting businesses, areas cleaned, and quantity and type of waste collected were tracked. 	 Activities to proceed as noted in the Measurable Goal's column. The City of Taunton will be holding the Citywide Cleanup on April 28, 2018. The Taunton River, Mill River and/or Three Mile River will be included.
2-4 Revised	Conduct Local Water Quality Monitoring Activities	Taunton Department of Public Works Veolia Taunton River Watershed Alliance	 Spring '04 – Winter '07/08 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. 	 As part of a contract, Veolia Water conducts water quality monitoring activities. A Water Quality Report for the City of Taunton has been drafted. Volunteer Sampler Training was offered by the TRWA on February 24, 2018. 	Activities to proceed as noted in the Measurable Goal's column.

2. Public Involvement and Participation

2-5	Conduct Attitude Surveys	Taunton Conservation Commission Taunton Ecology Awareness Movement	 Summer – Fall '04 & '07 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 additional activities were scheduled for Permit Year 15.	Activities to proceed as noted in the Measurable Goal's column.
2-6 Revised	Co-sponsor Storm Drain Stenciling/Plating Activities	Taunton Conservation Commission Taunton Department of Public Works Taunton Ecology Awareness Movement	Summer '05/07 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 15. There were no storm drains stenciled or recorded.	The City of Taunton is planning to install metal plates instead of stenciling because they will last longer. The City is planning for 500 plates to be installed in Permit Year 16.

2a. Additions

3. Illicit Discharge Detection and Elimination

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16
3-1 Revised	Field Verify Outfall Locations	Taunton Department of Public Works	 Spring '06 – Winter '07/08 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. Spring '11 – Spring '14 Update GIS drainage system mapping through visual inspection of drain structures. Drain manholes, catch basins, and outfalls will be inspected and mapped. Approximately 25% of the drain system will be inspected each year. 	 The City of Taunton has updated the storm drainage system map as new components were added. Outfall sampling is ongoing in an effort to investigate connectivity and identify illicit 	 The City of Taunton plans to restart dry-weather sampling of outfalls during Permit Year 16. The City of Taunton plans to continue drainage inspections during Permit Year 16.
3-2 Revised	Adopt a Stormwater Ordinance	Taunton Planning Department Taunton Conservation Commission Taunton Engineering Department	 Winter '09/10 Draft the Stormwater Ordinance. Spring '10 Present the Stormwater Ordinance for a vote of acceptance at the Municipal Council. Spring '10 – Winter '10/11 Track the number of enforcement actions taken. Post Stormwater Ordinance on City's web site. 	One violations of the storm water ordinance was reported in Permit Year 15.	The City of Taunton will draft stormwater rules and regulations to enforce the stormwater ordinance.
3-3 Revised	Implement an Illicit Discharge Detection and Elimination Plan	Taunton Department of Public Works	Spring '11-Spring '14 Perform dry weather screening of outfalls as part of outfall field verification.	 The City of Taunton is working to resolve and determine the source of illicit discharges. Outfalls that previously tested positive for illicit connections were re-sampled in collaboration with MassDEP. One direct connection to a storm drain which discharges to the Taunton River. The illicit connection was terminated and the business was connected to the City sewer system. 	 Activities to proceed as noted in the Measurable Goal's column. The MS4 2017-2018 program will continue in 2018. The City of Taunton will inspect 25% of the outfalls. The City of Taunton will continue to resolve the source of potential illicit discharges.
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 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. 	 The Board of Health and Office of Economic and Community Development track the required information. There were 31 septic system pumping companies and 50 septic system installers licensed by the City of Taunton. For 2017, 102 Disposal Work Construction Permits were issued. Approximately 28 failed septic systems were identified during 2017. 	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 Develop and implement a program to separate the sanitary and stormwater sewer systems.	 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 	 Activities to proceed as noted in the Measurable Goal's column. In Permit Year 16, the City of Taunton will continue to develop and implement projects to separate the
Revised			stormwater sewer systems. The City of Taunton performed the following stormwater work: Completed separation of sewer and drain on Ingell Street, Chestnut Street, and First Street. Reduced infiltration on Ingell Street and Winthrop Street, with cured in place pipe rehabilitation. Remove underdrain connections from the sewer system (First Street).	sanitary and stormwater sewer systems. Currently, the scope of the MS4 2017-2018 work includes the following stormwater and wastewater work: CIPP/SIPP – 5,100 LF Combined manhole separation/replacement Installation of 50 drain service laterals Replacement/rehabilitation of two culverts Replace 1,000 LF of brick drain

3a. Additions

4. Construction Site Stormwater Runoff Control

BMP	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	Planned Activities – Permit Year 16
ID#				(Reliance on non-municipal partners indicated, if	
				any)	
4-1	Develop a Site	Taunton Planning Board	Spring '07 – Winter '07/08	No additional activities scheduled for Permit Year	Activities to proceed as noted in the Measurable
	Inspection Form and	Taunton Engineering Department	Develop a Site Inspection Form that reflects the ESC.	15.	Goal's column.
	Conduct Site	Taunton Conservation Commission	Track the frequency of inspections conducted for each site.		
	Inspections		· Track the completion of inspection forms.		
			Track the number of failed ESC BMPs discovered on each site.		
Revised					
4-2	Develop and Implement	Taunton Department of Public Works	Spring '06 – Winter '07/08	· The DPW handles all calls concerning	· Activities to proceed as noted in the Measurable
	a Citizen Tip Line	Taunton Web Master	· Advertise that DPW will accept calls on stormwater issues.	stormwater issues.	Goal's column.
			• Track the number of complaints received at the DPW regarding stormwater issues.	· The complaints and remedies concerning	
			Track the problems/incidents remedied as a result of calls to the DPW.	stormwater issues have been tracked.	
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 15 (Reliance on non-municipal partners indicated, if	Planned Activities – Permit Year 16
				any)	
5-1	Revise Site Plan	Taunton Planning Department	Winter '05/06	No activities scheduled for Permit Year 15.	Activities to proceed as noted in the Measurable
	Review Submission	Taunton Planning Board	• Develop the amendment to Section XV of the Zoning Ordinance (Site Plan Review).		Goal's column.
	Requirements &	Taunton Municipal Council	Spring '07		
	Procedures		· 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.		
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 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16
6-1	Develop a Formal Training Program for DPW Staff	Taunton Department of Public Works	Spring '06 Revise date to Spring '07 Establish a formal training program for DPW employees. Spring '06 – Winter '07/08 Revise date to Spring '07 – Winter '07/08 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.	The City of Taunton trains new employees on practices within the DPW Garage. The City started a stormwater audit for the DPW Garage.	 Activities to proceed as noted in the Measurable Goal's column. The City of Taunton plans to finish the stormwater audit of the DPW Garage in Permit Year 16. As part of the audit, a formal stormwater training program will be formalized.
6-2	Develop a Formal Catch Basin Cleaning Program	Taunton Department of Public Works Highway Division	 Spring '06 – Winter '07/08 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. 	 The City and private contractors have continued to clean catch basins and manholes. The cleaning activities have been documented. 	 Activities to proceed as noted in the Measurable Goal's column. Continue to clean catch basins and storm drain pipes using city employees and private contractors during
Revised			· · · · · · · · · · · · · · · · · · ·		Permit Year 16.
6-3	Upgrade the Existing Parking Lot and Street Sweeping Program	Taunton Department of Public Works Highway Division	 Spring '04 Purchase a second street sweeper. Summer '04 – Winter '07/08 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. 	 An inventory of all publicly owned streets and parking lots has been conducted. The sweeping activities have been documented. The City maintains a map that delineates the street sweeping program. The City swept the impervious surfaces in the downtown area on a regular basis. 	 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 16.
6-4	Develop a Vehicle & Equipment Maintenance Policy	Taunton Department of Public Works	 Spring '06 Develop and implement a vehicle and equipment maintenance policy and incorporate policy requirements into the DPW employee training programs. 	 A Vehicle Maintenance Garage and associated area has been designated. The DPW has designated a "Spill Coordinator" 	 Activities to proceed as noted in the Measurable Goal's column. The City of Taunton plans to finish the stormwater
Revised				that responds to all spills. New employees are informed of these policies. The City started a stormwater audit for the DPW Garage.	audit of the DPW Garage in Permit Year 16. As part of the audit, a vehicle and equipment maintenance policy will be formalized.
6-5 Revised	Develop a Vehicle & Equipment Cleaning Policy	Taunton Department of Public Works	Spring '06 Develop and implement a vehicle and equipment cleaning policy and incorporate policy requirements into the DPW employee training programs.	 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. 	 Activities to proceed as noted in the Measurable Goal's column. The City of Taunton plans to finish the stormwater audit of the DPW Garage in Permit Year 16. As part of the audit, a vehicle and equipment cleaning policy will be formalized.

6a. Additions

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

BMP	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	Planned Activities – Permit Year 16
ID#				(Reliance on non-municipal partners indicated, if	
				any)	
7-1				During Permit Year 15, the City of Taunton	Develop and distribute educational materials on pet
				researched educational materials on pet waste.	waste at the Animal Shelter.
Revised	Pooper Scooper	Department of Public Works	Spring/Summer 2013		
	Educational Materials		Develop educational materials on pet waste.		
			Spring/Summer 2014		
			Distribute educational materials at Animal Shelter and with dog licenses.		

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. After the end of the year, a report titled <u>TRWA Taunton River Watershed 2017</u> <u>Monitoring Summary</u> was completed to document the sampling activities and results.

For 2017, sampling was performed on the second Tuesday of the month from April through November (weather dependent) between the hours of 4:30 a.m. and 8:30 a.m. Sampling was supposed to be performed in March, however, was canceled due to snow. Sampling was not performed in January, February, and December 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 2017, the sampling team tested nineteen sites in Taunton River Watershed from April through November. A new location was also added but sampling only occurred from July through October. 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 2017.

STREET/BRIDGE LOCATION	RIVER	GPS Location	ID
CENTER ST., BERKLEY BRIDGE	TAUNTON RIVER	N41°50' 6.1/W71°06' 28.7	TNT 01
PLAIN ST., TAUNTON	TAUNTON RIVER	N41°53' 9.7/W71°05' 20.5	TNT 02
BEDFORD ST., RT 18, BRIDGEWATER	TAUNTON RIVER	N41°56' 12/W70°57' 56	BED 01 (TNT 3)
CHERRY ST., BRIDGEWATER	TAUNTON RIVER	N41°58' 42.3/W70°54' 44	CHE 01 (TNT 04)
RT. 79, ASSONET CENTER BRIDGE	ASSONET RIVER	N 41°47' 37.9/W 71°04' 3.6	ASO 01
SEGREGANSETT RIVER BRIDGE, BROOK ST., DIGHTON	SEGREGANSETT RIVER	N 41°49' 32/W 71°07' 37	SEG
CHICKAMUCKETSETT BROOK BRIDGE, BERKLEY ST., BERKLEY	CHICKAMUCKSETT BROOK	N 41°49' 58.3/W 71°06' 25	BER 01
SOMERSET AVE, RT. 138	THREE MILE	N41°51' 19.9/W71°06' 56	TMR 01
ROUTE 44/COHANNET ST.	THREE MILE	N41°53' 11.4/W71°08	TMR 02
CRANE ST., NORTON	THREE MILE	N41°56' 48.3/W71°09' 38	TMR 03
INGELL ST./TAUNTON	MILL RIVER	N41°58' 46/W71° 04' 55.6	MIL 01
WASHINGTON ST./TAUNTON	MILL RIVER	N41°54' 11.7/W71°05' 51	MIL02
WHITTENDON ST./TAUNTON	MILL RIVER	N41°55' 24/W71° 06' 21.5	MIL03
ROUTE 44, RAYNHAM	FORGE RIVER	N41°54' 18.3/W71°03' 35	FORGE
MIDDLEBOROUGH AVE., TAUNTON	COTLEY RIVER	N41°53/W71°01'28.4	COTLEY
RIVER ST., ROUTE 44	FURNACE BROOK	N41°53'35/W71°00' 04.7	FBR 01
HIGHSTONE ST., E. TAUNTON	THOMPSON BROOK	N41°51'46/W70°58'40.6	TBR 01
HAYWOOD ST., BRIDGEWATER	TOWN RIVER	N41°59'51/W70°57'13.2	TWH 01
HIGH ST., BRIDGEWATER	MATFIELD RIVER	N41°59'58.1/W70°56'16	MAT 01
NEMASKET RIVER, MURDOCK ST., MIDDLEBORO	NEMASKET RIVER	N41°56'1.19/W70°55'23.87	NEM 01

Veolia Water tested the samples for eight parameters. The parameters are temperature, dissolved oxygen, pH, total phosphorus, nitrate-nitrogen, 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 2017 (colonies/100 ml)								
Site	April	May	June	July	Aug	Sept	Oct	Nov
TNT 01	<10	40	30	100	30	530	230	20
TNT 02	40	50	50	300	200	210	200	180
BED 01 (TNT 3)	10	10	<10	260	200	<10	120	240
CHE 01 (TNT 04)	10	160	30	170	1190	160	40	500
ASO 01	10	<10	100	110	40	120	70	50
SEG	30	30	20	-	300	note 3	150	150
BER 01	80	40	60	220	230	180	70	200
TMR 01	10	<10	100	40	330	110	280	50
TMR 02	10	30	70	160	300	140	220	120
TMR 03	10	30	360	350	270	80	130	80
MIL 01	<10	100	400	note 2	720	620	770	190
MIL02	10	40	110	1860	380	1700	1070	110
MIL03	20	180	70	1940	400	610	820	70
FORGE	10	30	110	1120	750	400	280	220
COTLEY	20	50	120	430	290	290	1620	520
FBR 01	<10	10	30	170	240	280	100	70
TBR 01	10	70	110	20	<10	690	370	<10
TWH 01	10	90	140	160	390	1830	210	1600
MAT 01	90	360	60	170	70	450	60	650
NEM 01	-	-	-	40	300	90	60	-

Note 1: "-" indicates no sample data provided

Note 2: Heavy rain and steep river bank made sampling unsafe

Note 3: Stream flow too low for sample collection

TOTAL PHOSPHORUS VALUES FOR 2017 (mg/l)								
Site	April	May	June	July	Aug	Sept	Oct	Nov
TNT 01	0.048	0.063	0.085	0.170	0.179	0.197	0.287	0.098
TNT 02	0.035	0.049	0.066	0.123	0.055	0.081	0.117	0.074
BED 01 (TNT 3)	0.039	0.058	0.091	0.084	0.049	0.056	0.055	0.084
CHE 01 (TNT 04)	0.043	0.063	0.140	0.094	0.063	0.065	0.080	0.086
ASO 01	0.012	0.029	0.040	0.043	0.116	0.063	0.420	0.051
SEG	0.019	0.023	0.040	-	0.039	note 3	0.038	0.022
BER 01	0.019	0.041	0.035	0.028	0.820	0.279	0.065	0.048
TMR 01	0.016	0.028	0.036	0.031	0.028	0.021	0.032	0.033
TMR 02	0.021	0.029	0.043	0.043	0.030	0.027	0.031	0.029
TMR 03	0.026	0.030	0.056	0.043	0.022	0.020	0.030	0.026
MIL 01	0.030	0.039	0.044	note 2	0.026	0.033	0.039	0.031
MIL02	0.026	0.028	0.036	0.052	0.020	0.021	0.020	0.028
MIL03	0.023	0.024	0.030	0.058	0.017	0.024	0.024	0.026
FORGE	0.024	0.052	0.070	0.122	0.071	0.028	0.030	0.051
COTLEY	0.011	0.019	0.034	0.033	0.028	0.035	0.035	0.023
FBR 01	0.020	0.033	0.033	0.024	0.018	0.012	0.020	0.016
TBR 01	0.021	0.023	0.037	0.067	0.039	0.041	0.066	0.015
TWH 01	0.026	0.050	0.081	0.101	0.107	0.139	0.133	0.091
MAT 01	0.041	0.072	0.089	0.085	0.055	0.056	0.057	0.049
NEM 01	-	-	-	0.063	0.028	0.022	0.028	-

Note 1: "-" indicates no sample data provided

Note 2: Heavy rain and steep river bank made sampling unsafe

Note 3: Stream flow too low for sample collection