



Annual Report Form For Individual NPDES Permits For Municipal Separate Storm Sewer Systems (RULE 62-624.600(2), F.A.C.)

- This Annual Report Form must be completed and submitted to the Department to satisfy the annual reporting requirements established in Rule 62-621.600, F.A.C.
- Submit this fully completed and signed form and any REQUIRED attachments by email to the NPDES Stormwater Program Administrator or to the MS4 coordinator (<http://www.dep.state.fl.us/water/stormwater/npdes/contacts.htm>). Files larger than 10MB may be placed on the FTP site at: ftp://ftp.dep.state.fl.us/pub/NPDES_Stormwater/. After uploading files, email the MS4 coordinator or NPDES Program Administrator to notify them the report is ready for downloading; or by mail to the address in the box at right.
- Refer to the Form Instructions for guidance on completing each section.
- **Please print or type information in the appropriate areas below.**

Submit the form and attachments to:
 Florida Department of Environmental Protection
 Mail Station 3585
 2600 Blair Stone Road
 Tallahassee, Florida 32399-2400

SECTION I. BACKGROUND INFORMATION

A.	Permittee Name: City of Boca Raton		
B.	Permit Name: Palm Beach County MS4		
C.	Permit Number: FLS000018-004		
D.	Annual Report Year: <input type="checkbox"/> Year 1 <input type="checkbox"/> Year 2 <input type="checkbox"/> Year 3 <input checked="" type="checkbox"/> Year 4 <input type="checkbox"/> Year 5 <input type="checkbox"/> Other, specify Year:		
E.	Reporting Time Period (month/year): October / 2019 through September / 2020		
F.	Name of the Responsible Authority: Maurice Morel, PE		
	Title: City Civil Engineer		
	Mailing Address: 201 West Palmetto Park Road		
	City: Boca Raton	Zip Code: 33432	County: Palm Beach
	Telephone Number: 561-416-3425		Fax Number: 561-416-3343
E-mail Address: MMorel@ci.boca-raton.fl.us			
G.	Name of the Designated Stormwater Management Program Contact (if different from Section I.F above): n/a		
	Title: n/a		
	Department: n/a		
	Mailing Address: n/a		
	City: n/a	Zip Code: n/a	County: n/a
	Telephone Number: n/a		Fax Number: n/a
E-mail Address: n/a			

SECTION II. MS4 MAJOR OUTFALL INVENTORY (Not Applicable in Year 1)

A.	Number of outfalls ADDED to the outfall inventory in the current reporting year (insert "0" if none): 0 (Does this number include non-major outfalls? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable)
B.	Number of outfalls REMOVED from the outfall inventory in the current reporting year (insert "0" if none): 0 (Does this number include non-major outfalls? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable)
C.	Is the change in the total number of outfalls due to lands annexed or vacated? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable

SECTION III. PART V.B. ASSESSMENT PROGRAM

A.	<p>Provide a brief statement as to the status of water quality monitoring plan implementation. Status may include sampling frequency changes, monitoring location changes, or sampling waiver conditions. <i>DEP Note: If permittee participates in a collaborative monitoring plan, permittee may refer to a joint response as defined by the interlocal agreement.</i></p> <p>Name and date of the approved plan: 5/15/2018 (via email) Status: The monitoring program is carried out jointly by the PBC Co-permittees. See the PBC Joint Annual Report. The information relevant to the City's outfalls is addressed within the Annual Assessment Report document, provided herewith.</p>
B.	<p>Provide a brief discussion of the monitoring and loading results to date which includes a summary of the water quality monitoring data and / or stormwater pollutant loading changes from the reporting year. <i>DEP Note: Results must be specific to the permittee's SWMP.</i></p> <p>The information relevant to the City's outfalls is addressed within the Annual Assessment Report document, provided herewith.</p>
C.	<p>Attach a monitoring data summary as required by the permit. An analysis of the data discussing changes in water quality and/or stormwater pollutant loading from previous reporting years. <i>DEP Note: Analysis must be specific to the permittee's SWMP.</i></p> <p>See provided Annual Assessment Report.</p>

SECTION IV. FISCAL ANALYSIS

A.	Total expenditures for the NPDES stormwater management program for the current reporting year: \$2,848,032
B.	Total budget for the NPDES stormwater management program for the subsequent reporting year: \$10,897,000
C.	<p>Did subsequent program resources decrease from the current reporting period? Y <input checked="" type="checkbox"/> / N <input type="checkbox"/></p> <p>If program resources decreased, provide a discussion of the impacts on the implementation of the SWMP.</p> <p>See attached.</p>

SECTION V. MATERIALS TO BE SUBMITTED WITH THIS ANNUAL REPORT FORM

Only the following materials are to be submitted to the Department along with this fully completed and signed Annual Report Form (check the appropriate box to indicate whether the item is attached or is not applicable):

Attached	N/A	Required Attachments	Permit Citation	Attachment Number/Title
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Any additional information required to be submitted in this current annual reporting year in accordance with Part III.A of your permit that is not otherwise included in Section VII below.	Part III.A	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	If program resources have decreased from the previous year, a discussion of the impacts on the implementation of the SWMP.	Part II.F	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	An explanation of why the minimum inspection frequency in Table II.A.1.a. was not met, if applicable.	Part II.A.1	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	A list of the flood control projects that did not include stormwater treatment and an explanation for each of why it did not (if applicable).	Part III.A.4	See "Part III.A.4 - Flood Control Projects Completed without WQ.pdf"
<input checked="" type="checkbox"/>	<input type="checkbox"/>	A monitoring data summary as directed in Section III.C above and in accordance with Rule 62-624.600(2)(c), F.A.C.	Part V.B.3	See PBC group's Joint Annual Report & City's Annual Assessment Report
<input type="checkbox"/>	<input checked="" type="checkbox"/>	YEAR 1 ONLY: An inventory of all known major outfalls and a map depicting the location of the major outfalls (hard copy or CD-ROM) in accordance with Rule 62-624.600(2)(a), F.A.C.	Part III.A.1	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	YEAR 2: A summary review of codes and regulations to reduce the stormwater impact from development.	Part III.A.2	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Year 3 ONLY: The estimates of pollutant loadings and event mean concentrations for each major outfall or each major watershed in accordance with Rule 62-624.600(2)(b), F.A.C.	Part V.A	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	YEAR 3: Summary of TMDL Monitoring Results (if applicable).	Part VIII.B.2	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	YEAR 3: Bacteria Pollution Control Plan (if applicable).	Part VIII.B.3	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	YEAR 4: A follow-up report on plan implementation of changes to codes and regulations to reduce the stormwater impact from development.	Part III.A.2	See "Part III.A.2 - Year 4 Follow-up Report.pdf"
<input type="checkbox"/>	<input checked="" type="checkbox"/>	YEAR 4: A report on any amendments to the applicable legal authority (if applicable).	Part III.A.7.a	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	YEAR 4: Permit re-application information in accordance with Rule 62-624.420(2), F.A.C. <ul style="list-style-type: none"> The monitoring plan (with revisions, if applicable). If the total annual pollutant loadings have not decreased over the past two permit cycles, revisions to the SWMP, as appropriate. 	Part V.B.3 Part V.A.3	See PBC group's Joint Annual Report
<input type="checkbox"/>	<input checked="" type="checkbox"/>	YEAR 4: TMDL Supplemental SWMP (if applicable).	Part VIII.B.3	

DO NOT SUBMIT ANY OTHER MATERIALS
(such as records and logs of activities, monitoring raw data, public outreach materials, etc.)

SECTION VI. CERTIFICATION STATEMENT AND SIGNATURE

The Responsible Authority listed in Section I.F above must sign the following certification statement, as per Rule 62-620.305, F.A.C.:

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 gathered and evaluated the information submitted. Based upon 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.

Name of Responsible Authority (type or print): Maurice Morel, PE

Title: City Civil Engineer

Signature: Maurice Morel Date: 03/18/2021

SECTION VII. STORMWATER MANAGEMENT PROGRAM (SWMP) SUMMARY TABLE

A.	B.	C.	D.	E.	F.				
Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentatio n / Record	Entity Performing the Activity	Comments				
Part III.A.1	Structural Controls and Stormwater Collection Systems Operation								
	<p>Report the current known inventory.</p> <p>Report the number of inspection and maintenance activities conducted for each applicable type of structure included in Table II.A.1.a, and the percentage of the total inventory of each type of structure inspected and maintained.</p> <p><i>Note: Delete structures that are not in your MS4's inventory. The permittee may choose its own unit of measurement for each structural control to be consistent with the unit of measurement in the documentation. Unit options include: miles, linear feet, acres, etc.</i></p>								
	Type of Structure	Number of Structures	Number of Inspections	Percent Inspected	Number of Maintenance Activities	Percent Maintained			
	Dry retention systems	3	18	100	0	0	Work Orders/ Inspection Forms	Streets Supervisor	Systems mowed, but no restoration done
	Underdrain filter systems	0							
	Exfiltration trench / French drains (miles)	3.33	1	100	0	0	Work Orders/ Inspection Forms	Streets Supervisor	
	Grass treatment swales (miles)	18*	0.6	3.3	0	0	Work Orders	Streets Supervisor	*Swales are still being re- inventoried and evaluated for those that provide treatment.
	Dry detention systems	1	7	100	0	0	Work Orders/ Inspection Forms	Streets Supervisor	Systems mowed, but no restoration done
	Wet detention systems	6	36	100	0	0	Work Order Forms	Streets Supervisor	Banks mowed, but no restoration done
	Detention with filtration systems	0							
	Alum Injection systems	0							
	Pollution control boxes	0							
	Pump Stations	1	2	100	0	0	Insp. Forms	Engineering Insp	Texas Trail
	Major outfalls	16	79	100	0	0	Work Order	Streets	

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Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity					Number of Activities Performed		Documentatio n / Record	Entity Performing the Activity	Comments
	Weirs or other control structures	13	13	100	0	0	Forms	Supervisor		
							Insp. Forms	Engineering Insp		
		29	6.19	21.4	3.4	11.7	Work Orders/ Inspection Forms	Streets Supervisor		
		6	42	100	0	0	Work Orders/ Inspection Forms	Streets Supervisor		
		3,149	383	12.16	1,022	32.4	Inspection Forms	Streets Supervisor		
		0								
	<p>If the minimum inspection frequencies set forth in Table II.A.1.a. were not met, provide as an attachment an explanation of why they were not and a description of the actions that will be taken to ensure that they will be met.</p>					□				

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Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentatio n / Record	Entity Performing the Activity	Comments
Part III.A.1 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.				
	Strengths: Insp. and maint. of structural components of the MS4 enhance water quality and flood protection. The inspections also identify drainage areas that are problematic and that may require additional programs.				
	Limitations: The mandate to meet the specified minimum number of inspections may not be appropriate for all components within a system. This leads to wasted time and resources that could be better spent elsewhere.				
	SWMP revisions implemented to address limitations: None.				
Part III.A.2	Areas of New Development and Significant Redevelopment				
	Report the number of significant development projects, including new and redevelopment, reviewed and approved by the permittee for post-development stormwater considerations.				
	Number of significant development projects reviewed	19	N:\DEVELOPMENT SERVICES\Land Development\ PWR\2019	Engineering	
	Number of significant development projects approved	19	N:\DEVELOPMENT SERVICES\Land Development\ PWR\2019	Engineering	
	Provide in the Year 2 Annual Report the summary report of the review activity. Provide in the Year 4 Annual Report the follow-up report on plan implementation.				
	Year 2 ONLY: Attach the summary report of the review activity	<input type="checkbox"/>			N/A this year
	Year 4 ONLY: Attach the follow-up report on plan implementation	<input checked="" type="checkbox"/>			N/A this year
Part III.A.2 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.				
	Strengths: The review of Land Development Regulations to ensure they are as relevant as they should be is beneficial.				
	Limitations: Annual tracking and reporting of the number of projects reviewed does not improve water quality.				
	SWMP revisions implemented to address limitations: None.				
Part III.A.3	Roadways				
	Report on the litter control program, including the frequency of litter collection, an estimate of the total number of road miles cleaned or amount of area covered by the activities, and an estimate of the quantity of litter collected.				
	<i>Note: If the permittee does not contract activities, delete CONTRACTOR activities.</i>				
	PERMITTEE Litter Control: Frequency of litter collection	None			Majority of swales maintained by
PERMITTEE Litter Control: Estimated amount of area maintained (lf)	0	Municipal Code 10-27	Engineering		

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Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentatio n / Record	Entity Performing the Activity	Comments
	<p align="center">PERMITTEE Litter Control: Estimated amount of litter collected (cy)</p>	0	Municipal Code 10-27	Engineering	adjacent property owner (City code 10-27). For swales mowed & maintained by City, litter is collected during mowing and is a negligible amount.
<p>OPTIONAL: If an Adopt-A-Road or similar program is implemented, report the total number of road miles cleaned and an estimate of the quantity of litter collected. If you do not participate in an Adopt-A-Road program, report "0".</p>					
<p align="center">Trash Pick-up Events: Total miles cleaned</p>		0			City does not participate in these events
<p align="center">Trash Pick-up Events: Estimated amount of litter collected (cy)</p>		0			
<p align="center">Adopt-A-Road: Total miles cleaned</p>		0			City does not have this program
<p align="center">Adopt-A-Road: Estimated amount of litter collected (cy)</p>		0			
<p>Report on the street sweeping program, including the frequency of the sweeping, total miles swept, an estimate of the quantity of sweepings collected, and the total nitrogen and total phosphorus loadings that were removed by the collection of sweepings. If no street sweeping program is implemented, provide the explanation of why not in column F.</p>					
<p align="center">Frequency of street sweeping</p>		Weekly	Naviline Work Order System	Supervisor of Streets	
<p align="center">Total miles swept</p>		405	Naviline Work Order System	Supervisor of Streets	
<p align="center">Estimated quantity of sweeping material collected (cy)</p>		467	Naviline Work Order System	Supervisor of Streets	
<p align="center">Total phosphorous loadings removed (pounds)</p>		387	e-copy of Speadsheet	Stormwater Manager	Calculated using FDEP Nutrient Load Reduction Assessment Tool
<p align="center">Total nitrogen loadings removed (pounds)</p>		603	e-copy of speadsheet	Stormwater Manager	
<p>Report the equipment yards and maintenances shops that support road maintenance activities, and the number of inspections conducted for each facility.</p>					
<p align="center">Name of Facility</p>		Number of Inspections			
<p>Municipal Services Complex</p>		11	Safety Inspection Reports	Risk Management Safety Officer	
<p>Municipal Services Complex</p>		11	Yard Inspection Reports	Supervisor of Streets/Municipal Services	

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Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentatio n / Record	Entity Performing the Activity	Comments	
Part III.A.3 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.					
	Strengths: The street sweeping program definitely removes potential pollutants from receiving waters.					
	Limitations: None noted.					
	SWMP revisions implemented to address limitations: None.					
Part III.A.4	Flood Control Projects					
	Report the total number of flood control projects that were constructed by the permittee during the reporting period and the number of those projects that did NOT include stormwater treatment. The permittee shall provide a list of the projects where stormwater treatment was not included with an explanation for each of why it was not.					
	Report on any stormwater retrofit planning activities and the associated implementation of retrofitting projects to reduce stormwater pollutant loads from existing drainage systems that do not have treatment BMPs.					
	Flood control projects completed during the reporting period		5	Q:\ENGINEERING\CIP DESIGN - ROW\2019-20 CIP	Engineering	
	Flood control projects completed that did <u>not</u> include stormwater treatment		3	Q:\ENGINEERING\CIP DESIGN - ROW\2019-20 CIP	Engineering	
	Stormwater retrofit projects planned/under construction		0	Q:\ENGINEERING\CIP DESIGN - ROW\2019-20 CIP	Engineering	
	Stormwater retrofit projects completed		0	Q:\ENGINEERING\CIP DESIGN - ROW\2019-20 CIP	Engineering	
If there were projects that did not include stormwater treatment, provide as an attachment a list of the projects and an explanation for each of why it did not.		<input checked="" type="checkbox"/>			See attached list	
Part III.A.4 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.					
	Strengths: None.					
	Limitations: This tracking requirement is unhelpful in improving water quality. Permitting with the SFWMD requires the inclusion of water quality features whenever possible/feasible for a project.					
	SWMP revisions implemented to address limitations: None at this time.					

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Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentatio n / Record	Entity Performing the Activity	Comments
Part III.A.5	Municipal Waste Treatment, Storage, and Disposal Facilities Not Covered by an NPDES Stormwater Permit				
	Report the applicable facilities and the number of the inspections conducted for each facility.				
	Name of Facility	Number of Inspections			
	Municipal Services Complex Washrack	6	Inspection Forms	Supervisor of Streets	washrack is inspected during cleaning
Part III.A.5 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.				
	Strengths: Good housekeeping practices decrease the chance of unwanted pollutant discharges into the MS4.				
	Limitations: None.				
	SWMP revisions implemented to address limitations: None.				
Part III.A.6	Pesticides, Herbicides, and Fertilizer Application				
	Report the number of permittee personnel applicators and contracted commercial applicators of pesticides and herbicides who are FDACS certified / licensed.				
	Report the number of permittee personnel who have been trained through the Green Industry BMP Program and the number of contracted commercial applicators of fertilizer who are FDACS certified / licensed.				
	PERSONNEL: FDACS public applicators of pesticides/herbicides	21	Personnel Records	Muni Services & Rec Services	
	CONTRACTORS: FDACS commercial applicators of pesticides/ herbicides	2	Contracts	Muni Services & Rec Services	
	PERSONNEL: Green Industry BMP Program training completed	66	Attendance Records	Rec Services	
	CONTRACTORS: FDACS certified / licensed applicators of fertilizer	1	Contracts	Rec Services	
	Provide a copy of the adopted ordinance with the Year 2 Annual Report. If this provision is not applicable because the permittee is not within the watershed of a nutrient-impaired water body, indicate that in Column F.				
	Year 2 ONLY: Attach copy of adopted Florida-friendly ordinance	<input type="checkbox"/>			N/A
	Report on the public education and outreach activities that are performed or sponsored by the permittee within the permittee's jurisdiction to encourage citizens to reduce their use of pesticides, herbicides and fertilizers including the type and number of activities conducted, the type and number of materials distributed, and the number of Web site visits (if applicable).				
	Public outreach and education is funded and carried out as a joint program by the Palm Beach County MS4 co-permittees. Please see the Joint Annual Report for a description of the public education and outreach activities.				
	Number of visitors to Best Landscape Practices page	57	web stats report	IT Network Analyst	page on City website

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Part III.A.6 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.				
	Strengths: Training and education improve the chance that proper procedures and application of chemicals will occur. Local training for municipal staff and the state requirements that licensed contractors be certified should prove beneficial.				
	Limitations: Public Education on this topic should be state-wide, not just local.				
	SWMP revisions implemented to address limitations: None at this time.				
Part III.A.7.a	Illicit Discharges and Improper Disposal — Inspections, Ordinances, and Enforcement Measures				
	Report amendments in Year 4.				
	Year 4 ONLY: Attach a report on amendments to applicable legal authority	<input checked="" type="checkbox"/>			
Part III.A.7.c	Illicit Discharges and Improper Disposal — Investigation of Suspected Illicit Discharges and/or Improper Disposal				
	Report on the proactive inspection program, including the number of inspections conducted by the permittee, the number of illicit activities found, and the number and type of enforcement actions taken.				
	Proactive inspections for suspected illicit discharges	209	Inspection Reports & Logs	Supervisor of Streets	
	Illicit discharges found during a proactive inspection	0	Inspection Reports	Supervisor of Streets	
	NOV/WL/citation/fines issued for illicit discharges found during proactive inspection	0	Code Enforcement HTE System	Code Enforcement	
	Report on the reactive investigation program as it relates to responding to reports of suspected illicit discharges, including the number of reports received, the number of investigations conducted, the number of illicit activities found, and the number and type of enforcement actions taken.				
	Reports of suspected illicit discharges received	0	Inspection Forms	Engineering	
	Reactive investigations of reports of suspected illicit discharges etc.	0	Inspection Forms	Engineering	
	Illicit discharges etc. found during reactive investigation	0	Inspection Forms	Engineering	
	NOV/WL/citation/fines issued for illicit discharges etc. found during reactive investigation	0	Code Enforcement HTE System	Code Enforcement	
	Report the type of training activities, and the number of permittee personnel and contractors trained (both in-house and outside training) within the reporting year.				
	Personnel trained	0	Sign-in Sheets	Supervisor of Streets	Due to COVID-19, all training sessions were cancelled for 2020
	Contractors trained	0	Sign-in Sheets		Due to COVID-

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					19, all training sessions were cancelled for 2020
Part III.A.7.d	Illicit Discharges and Improper Disposal — Spill Prevention and Response				
	Report on the spill prevention and response activities, including the number of spills addressed.				
	Hazardous and non-hazardous material spills responded to	31	NFIRS Fire Reports	City Fire Rescue Services	
	Report the type of training activities, and the number of permittee personnel and contractors trained (both in-house and outside training) within the reporting year.				
	Personnel trained (Fire Dept)	0	Dept records & class certifications	Training & Safety Division Chief	All staff typically receive annual training; however, due to COVID-19, no training sessions were conducted during the permit reporting period.
	Personnel trained (other)	0	Sign-in Sheets	Supervisor of Street	Due to COVID-19, all training sessions were cancelled for 2020
	Contractors trained	0	Sign-in Sheets		Due to COVID-19, all training sessions were cancelled for 2020
Part III.A.7.e	Illicit Discharges and Improper Disposal — Public Reporting				
	Report on the public education and outreach activities that are performed or sponsored by the permittee within the permittee's jurisdiction to encourage the public reporting of suspected illicit discharges and improper disposal of materials, including the type and number of activities conducted, the type and number of materials distributed, and the number of Web site visits (if applicable).				
	Number of visitors to stormwater-related pages		Public outreach and education is funded and carried out as a joint program by the Palm Beach County MS4 co-permittees. Please see the Joint Annual Report for a description of the public education and outreach activities.		
		353	web stats report	IT Network Analyst	Stormwater pages on City

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					website
Part III.A.7.f	Illicit Discharges and Improper Disposal — Oils, Toxics, and Household Hazardous Waste Control				
	Report on the public education and outreach activities that are performed or sponsored by the permittee within the permittee's jurisdiction to encourage the proper use and disposal of oils, toxics, and household hazardous waste, including the type and number of activities conducted, the type and number of materials distributed, the amount of waste collected / recycled / properly disposed, and the number of Web site visits (if applicable).				
		Public outreach and education is funded and carried out as a joint program by the Palm Beach County MS4 co-permittees. Please see the Joint Annual Report for a description of the public education and outreach activities.			
	Number of visitors to HHW-related pages	598	web stats report	IT Network Analyst	HHHW pages on City website
Part III.A.7.g	Illicit Discharges and Improper Disposal — Limitation of Sanitary Sewer Seepage				
	Report on the type and number of activities undertaken to reduce or eliminate SSOs and inflow/ infiltration, the number of SSOs or inflow / infiltration incidents found and the number resolved, and the name of the owner of the sanitary sewer system within the permittee's jurisdiction. Report only the SSOs and inflow / infiltration incidents into the MS4.				
	Owner of the sanitary sewer system	City of Boca Raton			
	Activity to reduce/eliminate SSOs and I&I: (repair/lining of SS pipe, LF)	40,304	Utility Services records	Utility Services	
	Activity to reduce/eliminate SSOs and I&I: (repair/lining of SS manholes, #)	97	Utility Services records	Utility Services	
	Activity to reduce/eliminate SSOs and I&I: (septic systems removed, #)	0	Utility Services records	Utility Services	
	Activity to reduce/eliminate SSOs and I&I: (emergency generators added, #)	5*	Utility Services records	Utility Services	*replacements. Total of 72 emergency generators (excludes WTP and WWTP fixed generators)
	Activity to reduce/eliminate SSOs and I&I: (Training)	1	Utility Services records	Utility Services	Annual SSO Response Plan Training; Grease Trap/Tracking Training
	Activity to reduce/eliminate SSOs and I&I: (Grease Trap Inspections)	1	Utility Services records	Utility Services	Ongoing grease trap inspection program
	SSO incidents discovered	0	Utility Services records	Utility Services	SWP, DOH, and FDEP

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Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity		Number of Activities Performed	Documentatio n / Record	Entity Performing the Activity	Comments	
	SSO incidents resolved		0	Utility Services records	Utility Services	Notifications SWP, DOH, and FDEP Notifications	
			Inflow / infiltration incidents discovered		0	Municipal Services wastewater system records	Engineering
			Inflow / infiltration incidents resolved		0	Municipal Services wastewater system records	Engineering
Part III.A.7 Summary	For activities required by Part III.A.7: Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.						
	Strengths: Training and education improve the chance that illicit discharges and illegal dumping will be reported. Local training for municipal staff is beneficial.						
	Limitations: Public education would be more effective with a wider (national or state-wide), more commercial message.						
	SWMP Revisions implemented to address limitations: None.						
Part III.A.8.a	Industrial and High-Risk Runoff — Identification of Priorities and Procedures for Inspections						
	Report on the high-risk facilities inventory, including the type and total number of high risk facilities and the number of facilities newly added each year. Report on the high-risk facilities inspection program, including the number of inspections conducted and the number and type of enforcement actions taken.						
	Type of Facility	Number of Facilities	Number of Inspections	Enforcement Actions			
	Operating municipal landfills	0	0	0		City has none	
	Hazardous waste treatment, storage, disposal and recovery (HWTSDR) facilities	30	0	0	High Risk Facilities GIS, Inspection log & photos	City SW Consultant (Mock•Roos)	
	EPCRA Title III, Section 313 facilities (TRI)	0	0	0	High Risk Facilities GIS & Inspection Reports	City SW Consultant (Mock•Roos)	
	Facilities determined as high risk by the permittee	0	0	0	High Risk Facilities GIS & Inspection	City SW Consultant (Mock•Roos)	

SECTION VII. STORMWATER MANAGEMENT PROGRAM (SWMP) SUMMARY TABLE					
A.	B.	C.	D.	E.	F.
Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentatio n / Record	Entity Performing the Activity	Comments
			Reports		
Part III.A.8.b	Industrial and High-Risk Runoff — Monitoring for High Risk Industries				
	Report the number of high risk facilities sampled.				
	High risk facilities sampled	0			Not needed
Part III.A.8 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.				
	Strengths: None. This SWMP element is repetitive to the IDDE program and provides no additional benefit to Water Quality.				
	Limitations: Program is redundant to the proactive illicit inspection program. The two programs need to be combined for increased effectiveness.				
	SWMP revisions implemented to address limitations: None.				
Part III.A.9.a	Construction Site Runoff — Site Planning and Non-Structural and Structural Best Management Practices				
	Report the number of permittee and private pre-construction site plans reviewed for stormwater, erosion, and sedimentation controls, and the number approved.				
	PERMITTEE SITES: Construction site plans reviewed	0	Public Works Review Agenda	Engineering	
	PERMITTEE SITES: Construction site plans approved	0	Public Works Review Agenda	Engineering	
	PRIVATE SITES: Construction site plans reviewed	19	Public Works Review Agenda	Engineering	
	PRIVATE SITES: Construction site plans approved	19	Public Works Review Agenda	Engineering	
	Report the number of development permit applicants notified of the ERP and CGP, and the number of applicants who confirmed ERP and CGP coverage.				
	Notified of ERP stormwater permit requirements	19	Permit Files	Engineering	
	Confirmed ERP coverage	19	Permit Files	Engineering	
	Notified of CGP stormwater permit requirements	19	Permit Files	Engineering	
	Confirmed CGP coverage	19	Permit Files	Engineering	
Part III.A.9.b	Construction Site Runoff — Inspection and Enforcement				
	Report on the inspection program for privately-operated and permittee-operated construction sites, including the number of active construction sites during the reporting year, the number of inspections of active construction sites, the percentage of active construction sites inspected, and the number and type of enforcement actions / referrals taken.				
	PERMITTEE SITES: Active construction sites	14	Inspection Reports	Engineering Inspectors	All projects < 1 acre
	PERMITTEE SITES: Pre-, During, and Post inspections of active construction sites for E&S and waste control BMPs	1	Inspection Reports	Engineering Inspectors	None of the projects included soil disturbance

SECTION VII. STORMWATER MANAGEMENT PROGRAM (SWMP) SUMMARY TABLE					
A.	B.	C.	D.	E.	F.
Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentatio n / Record	Entity Performing the Activity	Comments
					in excess of 8 hours & pollution prevention practices were in place
	PERMITTEE SITES: Percentage of active construction sites inspected	100	Inspection Reports	Engineering Inspectors	
	PRIVATE SITES: Active construction sites	17	Inspection Reports	Engineering Inspectors	31 Projects < 1 acre
	PRIVATE SITES: Pre-, During, and Post inspections of active construction sites for E&S and waste control BMPs	9	Inspection Reports	Engineering Inspectors	
	PRIVATE SITES: Percentage of active construction sites inspected	100	Inspection Reports	Engineering Inspectors	
	Enforcement Action	0	Dept. Records	Code Enforcement	
Part III.A.9.c	Construction Site Runoff — Site Operator Training				
	Report the type of training activities, the number of inspectors, site plan reviewers and site operators trained (both in-house and outside training).				
		DEP Certification	Annual Training		
	Permittee construction site inspectors	10	0	Certifications/ Sign-In Sheets	FDEP Certified Training Class Training was cancelled due to COVID-19
	Permittee construction site plan reviewers		0	Certificate of Completion	FDEP Certified Training Class City SPR already certified
	Permittee construction site operators		0	Pre-Work Meeting Minutes	Engineering Inspectors
Part III.A.9 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.				
	Strengths: The program for inspecting sites that discharge to the MS4 is beneficial. The state's training program is beneficial. The inclusion of personnel from site plan reviewers, to operators, to inspectors is beneficial.				
	Limitations: None noted at this time.				
	SWMP revisions implemented to address limitations: None.				

SECTION VIII. CHANGES TO THE STORMWATER MANAGEMENT PROGRAM (SWMP) ACTIVITIES (Not Applicable in Year 4)

A.	Permit Citation/ SWMP Element	Proposed Changes to the Stormwater Management Program Activities Established as Specific Requirements Under Part III.A of the Permit (Including the Rationale for the Change) — REQUIRES DEP APPROVAL PRIOR TO CHANGE IF PROPOSING TO REPLACE OR DELETE AN ACTIVITY.
		None.
B.	Permit Citation/ SWMP Element	Changes to the Stormwater Management Program Activities NOT Established as Specific Requirements Under Part III.A of the Permit (Including the Rationale for the Change)
		None.

SECTION IX. TMDL Status Report

A.	YEAR 1 Provide a table summarizing the status of the TMDL process. Include a list of prioritized TMDLs and their monitoring and implementation schedule; and include the Identification number of the outfall prioritized for TMDL monitoring.								
	WBID Number	Segment/ Waterbody/ Basin	Pollutant of Concern	TMDL DEP / EPA	Percent Reduction (WLA)	Priority Rank	Priority Outfall	Monitoring Summary / BPCP Due Date	Supplemental SWMP Due Date
	NONE			<input type="checkbox"/> / <input type="checkbox"/>		1		(Year 3 AR)	(Year 4 AR; N/A) if BPCP)
B.	YEAR 3 and annually thereafter, provide a summary of the estimated load reductions that have occurred for the pollutant(s) of concern being discharged from the MS4 to the TMDL water body during the reporting period and cumulatively since the date the Supplemental SWMP was implemented. Year 3: Submit a Monitoring data summary or BPCP (if applicable). Year 4: Submit a Supplemental SWMP (if applicable).								
	WBID Number	Pollutant of Concern	Monitoring Summary / BPCP Submitted	Supplemental SWMP Submitted	Projected load reductions OR Actual load reductions to date				
	NONE		(Year 3 AR)	(Year 4 AR; N/A if BPCP)					
C.	Provide a brief statement as to the status of TMDL implementation according to Part VIII.B of the permit (e.g. status of monitoring to validate WLA): The City does not discharge to any water body with an FDEP adopted TMDL.								

**Dollars represented above Cycle 4, Year 4 Annual Report Form Section IV – Fiscal Analysis -
Explanation**

The 2019-2020 estimated budget (reporting in the C4Y3 ARF) was: \$5,289,000

The 2019-2020 actual program expenditure was: \$2,848,032.

The dollars represented above are heavily reliant upon the design, procurement and construction of Capital Improvement Program projects. Our ability to design, procure and construct was limited in 2019/2020 due to inefficiencies caused by COVID-19, including the inability to fill a vacant engineering position with a qualified candidate.

Cycle 4, Year 4 Follow-up Report for permit Section VII, Part III.A.2.

The Year 2 review of local codes and land development regulations resulted in no recommendations for change. No changes to the local codes or land development regulations have been made as a result.

Flood Control Projects Completed (10/1/2019 – 9/30/2020) that did NOT include stormwater runoff water quality treatment

2. NW 42nd Street Drainage Repair
Drainage Pipe Repair at 2845 NW 42nd Street.

No Water quality feature Included; the city replaced the damage pipe section.

3. SE 7th Dr – Slip-lined Pipe
Removed all PVC slip lined pipe and installed a 20' section of 18" HDPE pipe between the catch basin and existing CMP pipe and backfill/compact area. Clean existing 18" MP line and install 110' of 18" CIPP liner from catch basin to outfall. Cut out liner at canal with divers.

No Water quality feature Included, the city slip lined existing outfall pipe.

5. 1000 SW 1ST ST. 24" CIPP LINER

Install 135' of 24" CIPP from CB1 to Outfall at headwall (Canal). Cut out liner and re-instate, post video upon completion. Backfill around and rear of existing headwall and compact. Install geotextile fabric and sod with Bahia.

No Water quality feature Included, the city replaced the outfall pipe and headwall.



City of Boca Raton

NPDES MS4 Discharge Permit

SWMP Assessment Program Annual Report – 2019/2020 (Permit Cycle 4, Year 4)

Prepared: January 2021

Status of Water Quality Monitoring Plan

As noted in the approved Assessment Plan, the water quality data being used for the assessment is sourced from the Palm Beach County ambient water quality program, which includes reporting of water quality data from Broward County on the Hillsboro Canal.

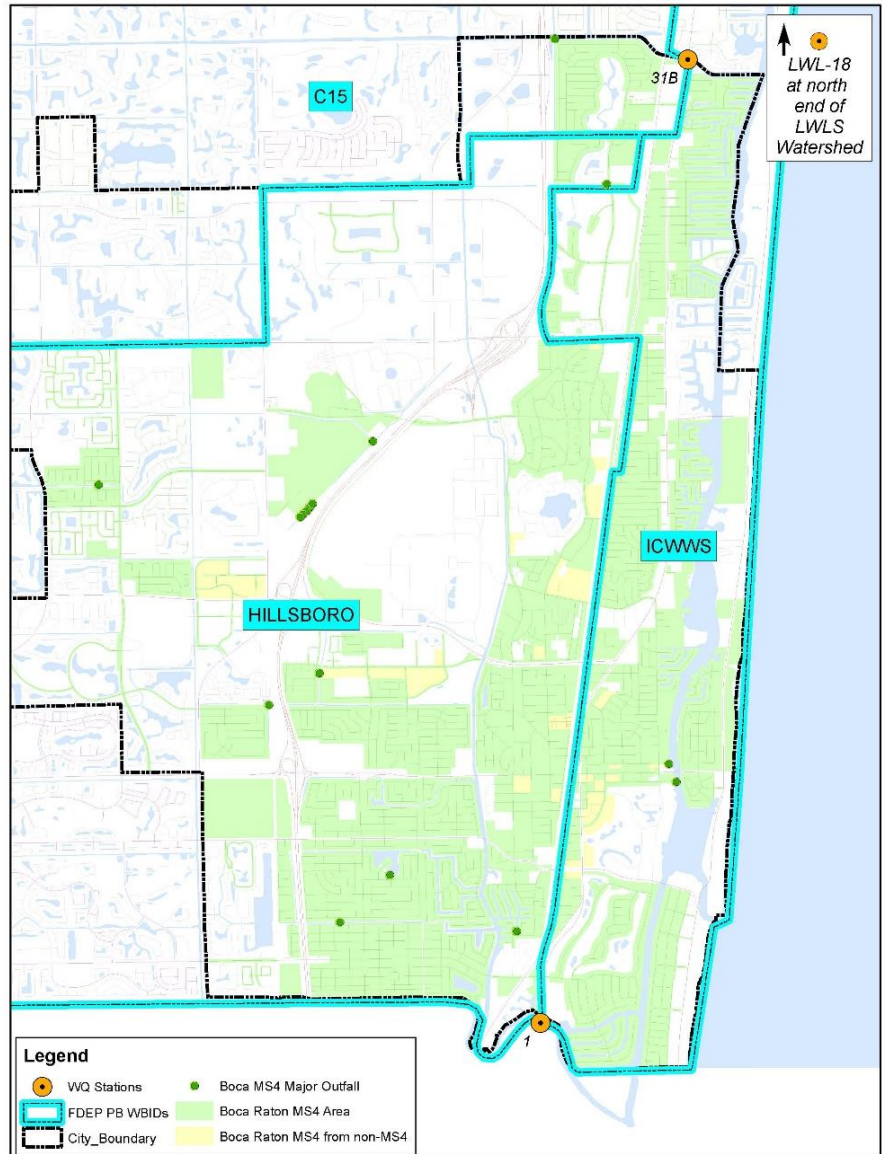
Discussion of Assessment Program Results

Overall

The City of Boca Raton's MS4, and its associated contributing area, lie within three watersheds: the Hillsboro, the Intracoastal Waterway South (ICWWS – f/k/a Lake Worth Lagoon South (LWLS)), and the C-15. The MS4 has at least one major MS4 outfall to each of these watersheds.

Water quality data for consideration in this assessment was sourced from the joint water quality monitoring program carried out by the Palm Beach County MS4 permittee group.

Similarly, the pollutant loading estimates that were done by the group were provided by MS4 contribution, allowing that analysis to be used for this assessment as well. It should be noted that the pollutant load estimating tool factors in land use, on-site septic systems, and best management practices (wet and dry detention or retention, exfiltration



trench, swales, pollution control devices, alum injection, etc.). It does not factor in the stormwater pollution prevention programs (MS4 permit requirements) that are carried out. However, several of these programs have results that can be represented in calculated load reduction values and that has been incorporated into this analysis.

FDEP allows for an assumed six percent reduction in loading if public education programs are carried out throughout the contributing area. As part of the Palm Beach County-wide MS4 group’s public education annual campaign, an additional six percent reduction in each parameter can be considered along with any other percentage change noted in the pollutant loading estimates.

Street sweeping is a directly measured activity, where the amount of material removed is documented. Since 2014, the City’s street sweeping program has documented the removal of 4,075 cubic yards of street sweeping debris and 917 cubic yards of catch basin sediments (includes only 2016-2019), which translate into the removal of 3.2 tons of total nitrogen and 2.2 tons of total phosphorus that would otherwise have been loaded into the receiving waters of the City’s MS4. These reductions are above what is estimated by the pollutant loading analyses.

Analysis of Data

Watersheds

As noted above, the City’s MS4 is a contributor to three watersheds. Relevant information about each watershed is:

C-15 CANAL		Notes
Total Watershed Area (acres)	38,407	
City of Boca Raton Area w/I WBID boundary (acres)	357	Includes 39 acres that are not connected to the MS4
Percentage	+/- 0.9%	+/- 0.8% from MS4

ICWWS		Notes
Total Watershed Area (acres)	9,749	
City of Boca Raton Area w/I WBID boundary (acres)	+/- 2,300	Includes 1,100 acres that that have no connection to the MS4
Percentage	+/- 23.6 %	+/- 12.3 % from MS4

HILLSBORO CANAL		Notes
Total Watershed Area (acres)	39,954	
City of Boca Raton Area w/I WBID boundary (acres)	+/- 3,700	Includes 1,400 acres that that have no connection to the MS4
Percentage	+/- 9.3%	+/- 5.8% from MS4

TOTAL		Notes
City of Boca Raton Area w/I WBID boundary (acres)	+/- 6,357	Includes 2,539 acres that have no connection to the MS4

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Water Quality Information

The current MS4 discharge permit programs (SWMP) have been in place since 1997, with minor changes over the years. At the surface, the trend graphs do not appear to indicate a clear-cut determination of the benefits of the SWMP. However, the City's MS4 is a small percent of the contributing area to each of the watersheds into which it discharges. Furthermore, from 2010 to 2017, the City experienced an 11.3% increase in population (source: <https://www.towncharts.com/Florida/Demographics/Boca-Raton-city-FL-Demographics-data.html>); given that growth, a stable or improving trend in receiving water quality, is suggestive of a positive effect of the SWMP.

Water quality data for the reporting period for the receiving water bodies into which the City's MS4 discharges, is included with this report, and was extracted from the Joint Annual Report for the Palm Beach County Co-permittees. It is titled "Table 5-4." The water quality sampling results for the reporting period (October 1, 2019 through September 30, 2020) indicated no exceedances for the parameters tested in any of the receiving water bodies.

C-15 Watershed

The Palm Beach County group's WQ program station 31B in the C-15 Canal is the water quality station closest to the City's MS4 discharge to that waterbody. The water quality sampling result trends, for the period October 1, 2010 through September 30, 2020, for Station 31B indicate improving parameter values.

Intracoastal Waterway South (ICWWS) Watershed

The Palm Beach County group's WQ program station LWL-18 is located in the Intracoastal Waterway south of the discharge from the C-16 Canal in Boynton Beach and represents the southern extents of the ICWW system within the Palm Beach County ambient water quality monitoring program. This site is the closest existing ambient water quality station to the City's discharge into the ICWW. The water quality measured at the station may be more reflective of the discharge from the C-16 and C-15 Canals than of the direct discharge from the City. The water quality sampling result trends, for the period October 1, 2010 through September 30, 2020, for Station 31B indicate a mix of increasing and decreasing trends; however, it must be noted that even where there is a slight increasing trend, values are BELOW the established water quality standard.

Hillsboro Canal

The Palm Beach County Water Quality Sampling program does not include the collection of samples from the Hillsboro Canal, however, sampling data result information is obtained from Broward County and documented within our joint program. Station 1 in the Hillsboro Canal is the water quality station most closely located to the discharge from the City's MS4. However, it is the downstream end of all the contributions made to the Hillsboro Canal upstream of this sampling location. Therefore, it is not genuinely reflective of the City's MS4 discharge alone. The station is also downstream of the Hillsboro Canal's control structure and subject to tide.

The water quality sampling result trends, for the period October 1, 2010 through September 30, 2020, for Site 1, indicate a mix of increasing and decreasing trends; however, it must be noted that even where there is a slight increasing trend, values are BELOW the established water quality standard.

Pollutant Loading Information

The pollutant loading analysis may be a better indicator of the effectiveness of the SWMP implementation as it allows for the consideration of changes in land use, BMPs, and the measurable aspect of SWMP activities – all specific to the City’s MS4, rather than the receiving water body. The Year 3 Pollutant Loading Analysis compared 2018 SIMPLE model results to 2013. For the area contributing to the City’s MS4, the combined results were:

MS4	BOD ₅	TP	TN	TSS	CU	ZN
2013	174,497	7967	60,406	872,678	514	2081
2018	162,977	6,694	55,506	807,125	473	1,928
Change	-11,520	-1,273	-4,900	-65,553	-41	-153
% Change	-6.6%	-16.0%	-8.1%	-7.5%	-8.0%	-7.4%

This analysis indicates that in every watershed, and for each parameter, there has been a decrease in the estimated pollutant loading from the Boca MS4 system to the receiving water bodies, when comparing 2018 conditions to 2013 conditions. In addition to the estimated reductions from the SIMPLE model, the allowable public education reduction percentage and the calculated removal values for TN and TP were included. The reduced loading estimates from the model are the result of redevelopment with the inclusion of lower impact design, Best Management Practices, and the elimination of septic systems.

In the 2019-2020 reporting year, the City removed an additional 463 pounds of Total Phosphorus and 728 pounds of Total Nitrogen through its street sweeping and catchbasin cleanout and vacuuming.

Summary

The water quality information, including trend analyses, summarized in the Palm Beach County permittee group’s Joint Annual Report, along with the pollutant loading analysis completed for Cycle 4, support the conclusion that the City’s SWMP implementation is effective in reducing pollutant loads from the City’s MS4 to its receiving waters.

Identification of areas within MS4 that should be targeted for additional programs

No specific area of the City’s MS4 contributing area appears to require additional programs. The current SWMP, along with re-development requirements and criteria are anticipated to continue improving the water quality of the discharge from the MS4.

Request(s) for Changes to Approved Assessment Program

No changes to the approved assessment program are requested at this time.

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