



# 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/](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**

<b>A.</b>	Permittee Name:		
<b>B.</b>	Permit Name: Palm Beach County MS4		
<b>C.</b>	Permit Number: FLS000018-004		
<b>D.</b>	Annual Report Year: <input type="checkbox"/> Year 1 <input type="checkbox"/> Year 2 <input type="checkbox"/> Year 3 <input type="checkbox"/> Year 4 <input type="checkbox"/> Year 5 <input type="checkbox"/> Other, specify Year:		
<b>E.</b>	Reporting Time Period (month/year):        /        through        /		
<b>F.</b>	Name of the Responsible Authority:		
	Title:		
	Mailing Address:		
	City:	Zip Code:	County:
	Telephone Number:		Fax Number:
	E-mail Address:		
<b>G.</b>	Name of the Designated Stormwater Management Program Contact (if different from Section I.F above):		
	Title:		
	Department:		
	Mailing Address:		
	City:	Zip Code:	County:
	Telephone Number:		Fax Number:
E-mail Address:			

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

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

**SECTION III. PART V.B. ASSESSMENT PROGRAM**

<b>A.</b>	<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: Status:</p>
<b>B.</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>
<b>C.</b>	<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>

**SECTION IV. FISCAL ANALYSIS**

<b>A.</b>	Total expenditures for the NPDES stormwater management program for the current reporting year: \$
<b>B.</b>	Total budget for the NPDES stormwater management program for the subsequent reporting year: \$
<b>C.</b>	<p>Did the current reporting year resources decrease from the previous year? Y <input 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>

**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 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 type="checkbox"/>	<input checked="" 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	
<input type="checkbox"/>	<input checked="" 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	
<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	No Changes
<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	No amendments
<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"> <li>The monitoring plan (with revisions, if applicable).</li> <li>If the total annual pollutant loadings have not decreased over the past two permit cycles, revisions to the SWMP, as appropriate.</li> </ul>	Part V.B.3 Part V.A.3	Refer to Joint Report
<input type="checkbox"/>	<input type="checkbox"/>	YEAR 4: TMDL Supplemental SWMP (if applicable).	Part VIII.B.3	Refer to the Assessment Program Report

**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): Missie Barletto  
 Title: Public Works Director  
 Signature: Missie Barletto Date: 3/30/21

**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	Documentation / Record	Entity Performing the Activity	Comments				
<b>Part III.A.1</b>	<b>Structural Controls and Stormwater Collection Systems Operation</b>								
	<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>								
	<p style="text-align: center;"><b>Type of Structure</b></p>	<p><b>Number of Structures</b></p>	<p><b>Number of Inspections</b></p>	<p><b>Percent Inspected</b></p>	<p><b>Number of Maintenance Activities</b></p>	<p><b>Percent Maintained</b></p>			
	<p style="text-align: center;"> <b>Dry retention systems</b>  <b>Underdrain filter systems</b>  <b>Exfiltration trench / French drains (lf)</b>  <b>Grass treatment swales (miles)</b>  <b>Dry detention systems</b>  <b>Wet detention systems</b>  <b>Detention with filtration systems</b>  <b>Alum Injection systems</b>  <b>Pollution control boxes</b>  <b>pump stations</b>  <b>Major outfalls</b>  <b>Weirs or other control structures</b>  <b>pipes / culverts (miles)</b>  <b>Canals</b>  <b>Inlets / catch basins / grates</b>  <b>Ditches / conveyance swales (miles)</b> </p>								
	<p style="text-align: center;">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>	<input type="checkbox"/>							

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Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentation / 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.				
	<b>Strengths:</b>				
	<b>Limitations:</b>				
	<b>SWMP revisions implemented to address limitations:</b>				
Part III.A.2	<b>Areas of New Development and Significant Redevelopment</b>				
	Report the number of significant development projects, including new and redevelopment, reviewed and approved by the permittee for post-development stormwater considerations.				
	<b>Number of significant development projects reviewed</b>				
	<b>Number of significant development projects approved</b>				
	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.				
	<b>Year 2 ONLY: Attach the summary report of the review activity</b>		<input type="checkbox"/>		
	<b>Year 4 ONLY: Attach the follow-up report on plan implementation</b>		<input type="checkbox"/>		
Part III.A.2 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.				
	<b>Strengths:</b>				
	<b>Limitations:</b>				
	<b>SWMP revisions implemented to address limitations:</b>				
Part III.A.3	<b>Roadways</b>				
	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>				
	<b>PERMITTEE Litter Control: Frequency of litter collection</b>				
	<b>PERMITTEE Litter Control: Estimated amount of area maintained (lf)</b>				
	<b>PERMITTEE Litter Control: Estimated amount of litter collected (cy)</b>				
	<b>CONTRACTOR Litter Control: Frequency of litter collection</b>				
	<b>CONTRACTOR Litter Control: Estimated amount of area maintained (lf)</b>				
	<b>CONTRACTOR Litter Control: Estimated amount of litter collected (cy)</b>				
	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".				
	<b>Trash Pick-up Events: Total miles cleaned</b>				
	<b>Trash Pick-up Events: Estimated amount of litter collected (cy)</b>				
	<b>Adopt-A-Road: Total miles cleaned</b>				
	<b>Adopt-A-Road: Estimated amount of litter collected (cy)</b>				
	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.				

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Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentation / Record	Entity Performing the Activity	Comments
	Frequency of street sweeping				
	Total miles swept				
	Estimated quantity of sweeping material collected (cy / tons)				
	Total phosphorous loadings removed (pounds)				
	Total nitrogen loadings removed (pounds)				
	Report the equipment yards and maintenances shops that support road maintenance activities, and the number of inspections conducted for each facility.				
	<b>Name of Facility</b>	<b>Number of Inspections</b>			
<b>Part III.A.3 Summary</b>	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.				
	<b>Strengths:</b>				
	<b>Limitations:</b>				
	<b>SWMP revisions implemented to address limitations:</b>				
<b>Part III.A.4</b>	<b>Flood Control Projects</b>				
	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.				
	<b>Flood control projects completed during the reporting period</b>				
	<b>Flood control projects completed that did <u>not</u> include stormwater treatment</b>				
	<b>Stormwater retrofit projects planned/under construction</b>				
	<b>Stormwater retrofit projects completed</b>				
	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 type="checkbox"/>			
<b>Part III.A.4 Summary</b>	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.				
	<b>Strengths:</b>				
	<b>Limitations:</b>				
	<b>SWMP revisions implemented to address limitations:</b>				

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Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentation / Record	Entity Performing the Activity	Comments
<b>Part III.A.5</b>	<b>Municipal Waste Treatment, Storage, and Disposal Facilities Not Covered by an NPDES Stormwater Permit</b>				
	Report the applicable facilities and the number of the inspections conducted for each facility.				
	<b>Name of Facility</b>	<b>Number of Inspections</b>			
<b>Part III.A.5 Summary</b>	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.				
	<b>Strengths:</b>				
	<b>Limitations:</b>				
	<b>SWMP revisions implemented to address limitations:</b>				
<b>Part III.A.6</b>	<b>Pesticides, Herbicides, and Fertilizer Application</b>				
	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.				
	<b>PERSONNEL: FDACS public applicators of pesticides/herbicides</b>				
	<b>CONTRACTORS: FDACS commercial applicators of pesticides/ herbicides</b>				
	<b>PERSONNEL: Green Industry BMP Program training completed</b>				
	<b>CONTRACTORS: FDACS certified / licensed applicators of fertilizer</b>				
	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.				
	<b>Year 2 ONLY: Attach copy of adopted Florida-friendly ordinance</b>	<input type="checkbox"/>			
	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).				
	<b>Public Education and Outreach Program</b>	The public outreach and education plan is carried out as a joint effort by the Palm Beach County Co-permittees. Please see the Palm Beach County Joint Annual Report for the public education and outreach information.			
	<b>Brochures/Flyers/Fact sheets distributed</b>				
	<b>Neighborhood presentations: Number conducted</b>				
	<b>Neighborhood presentations: Number of participants</b>				
	<b>Newspapers &amp; newsletters: Number of articles/notices published</b>				
	<b>Newsletters: Number of newsletters distributed</b>				
	<b>Public displays (e.g., kiosks, storyboards, posters, etc.)</b>				
	<b>Radio or television Public Service Announcements (PSAs)</b>				
	<b>School presentations: Number conducted</b>				

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Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentation / Record	Entity Performing the Activity	Comments
	School presentations: Number of participants Seminars/Workshops: Number conducted Seminars/Workshops: Number of participants Special events: Number conducted Special events: Number of participants Number of visitors to stormwater-related pages				
Part III.A.6 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.				
	<b>Strengths:</b>				
	<b>Limitations:</b>				
	<b>SWMP revisions implemented to address limitations:</b>				
Part III.A.7.a	<b>Illicit Discharges and Improper Disposal — Inspections, Ordinances, and Enforcement Measures</b>				
	Report amendments in Year 4.				
	<b>Year 4 ONLY: Attach a report on amendments to applicable legal authority</b>	<input type="checkbox"/>			
Part III.A.7.c	<b>Illicit Discharges and Improper Disposal — Investigation of Suspected Illicit Discharges and/or Improper Disposal</b>				
	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.				
	<b>Proactive inspections for suspected illicit discharges</b> <b>Illicit discharges found during a proactive inspection</b> <b>NOV/WL/citation/fines issued for illicit discharges found during proactive inspection</b>				
	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.				
	<b>Reports of suspected illicit discharges received</b> <b>Reactive investigations of reports of suspected illicit discharges etc.</b> <b>Illicit discharges etc. found during reactive investigation</b> <b>NOV/WL/citation/fines issued for illicit discharges etc. found during reactive investigation</b>				
	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.				
	<b>Personnel trained</b>				
	<b>Contractors trained</b>				
Part III.A.7.d	<b>Illicit Discharges and Improper Disposal — Spill Prevention and Response</b>				
	Report on the spill prevention and response activities, including the number of spills addressed.				
	<b>Hazardous and non-hazardous material spills responded to</b>				
	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.				



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<b>A.</b>	<b>B.</b>	<b>C.</b>	<b>D.</b>	<b>E.</b>	<b>F.</b>
<b>Permit Citation/ SWMP Element</b>	<b>Permit Requirement/Quantifiable SWMP Activity</b>	<b>Number of Activities Performed</b>	<b>Documentation / Record</b>	<b>Entity Performing the Activity</b>	<b>Comments</b>
	<b>Personnel trained</b>				
	<b>Contractors trained</b>				
<b>Part III.A.7.e</b>	<b>Illicit Discharges and Improper Disposal — Public Reporting</b>				
	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).				
	<b>Public Education and Outreach Program</b>	The public outreach and education plan is carried out as a joint effort by the Palm Beach County Co-permittees. Please see the Palm Beach County Joint Annual Report for the public education and outreach information.			
	<b>Brochures/Flyers/Fact sheets distributed</b>				
	<b>Neighborhood presentations: Number conducted</b>				
	<b>Neighborhood presentations: Number of participants</b>				
	<b>Newspapers &amp; newsletters: Number of articles/notices published</b>				
	<b>Newsletters: Number of newsletters distributed</b>				
	<b>Public displays (e.g., kiosks, storyboards, posters, etc.)</b>				
	<b>Radio or television Public Service Announcements (PSAs)</b>				
	<b>School presentations: Number conducted</b>				
	<b>School presentations: Number of participants</b>				
	<b>Seminars/Workshops: Number conducted</b>				
	<b>Seminars/Workshops: Number of participants</b>				
	<b>Special events: Number conducted</b>				
	<b>Special events: Number of participants</b>				
	<b>Number of visitors to stormwater-related pages</b>				
<b>Part III.A.7.f</b>	<b>Illicit Discharges and Improper Disposal — Oils, Toxics, and Household Hazardous Waste Control</b>				
	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).				
	<b>Public Education and Outreach Program</b>	The public outreach and education plan is carried out as a joint effort by the Palm Beach County Co-permittees. Please see the Palm Beach County Joint Annual Report for the public education and outreach information.			
	<b>Brochures/Flyers/Fact sheets distributed</b>				
	<b>Neighborhood presentations: Number conducted</b>				
	<b>Neighborhood presentations: Number of participants</b>				
	<b>Newspapers &amp; newsletters: Number of articles/notices published</b>				
	<b>Newsletters: Number of newsletters distributed</b>				
	<b>Public displays (e.g., kiosks, storyboards, posters, etc.)</b>				

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	Radio or television Public Service Announcements (PSAs) School presentations: Number conducted School presentations: Number of participants Seminars/Workshops: Number conducted Seminars/Workshops: Number of participants Special events: Number conducted Special events: Number of participants Storm sewer inlets newly marked/replaced Number of visitors to stormwater-related pages				
<b>Part III.A.7.g</b>	<b>Illicit Discharges and Improper Disposal — Limitation of Sanitary Sewer Seepage</b>				
	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 Activity to reduce/eliminate SSOs and I&I: (description) Activity to reduce/eliminate SSOs and I&I: (description) SSO incidents discovered SSO incidents resolved Inflow / infiltration incidents discovered Inflow / infiltration incidents resolved				
<b>Part III.A.7 Summary</b>	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.				
	<b>Strengths:</b>				
	<b>Limitations:</b>				
	<b>SWMP Revisions implemented to address limitations:</b>				
<b>Part III.A.8.a</b>	<b>Industrial and High-Risk Runoff — Identification of Priorities and Procedures for Inspections</b>				
	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				
	Hazardous waste treatment, storage, disposal and recovery (HWTSDR) facilities				

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	<b>EPCRA Title III, Section 313 facilities (TRI)</b>						
	<b>Facilities determined as high risk by the permittee</b>						
<b>Part III.A.8.b</b>	<b>Industrial and High-Risk Runoff — Monitoring for High Risk Industries</b>						
	Report the number of high risk facilities sampled.						
	<b>High risk facilities sampled</b>						
<b>Part III.A.8 Summary</b>	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.						
	<b>Strengths:</b>						
	<b>Limitations:</b>						
	<b>SWMP revisions implemented to address limitations:</b>						
<b>Part III.A.9.a</b>	<b>Construction Site Runoff — Site Planning and Non-Structural and Structural Best Management Practices</b>						
	Report the number of permittee and private pre-construction site plans reviewed for stormwater, erosion, and sedimentation controls, and the number approved.						
	<b>PERMITTEE SITES: Construction site plans reviewed</b>						
	<b>PERMITTEE SITES: Construction site plans approved</b>						
	<b>PRIVATE SITES: Construction site plans reviewed</b>						
	<b>PRIVATE SITES: Construction site plans approved</b>						
	Report the number of development permit applicants notified of the ERP and CGP, and the number of applicants who confirmed ERP and CGP coverage.						
	<b>Notified of ERP stormwater permit requirements</b>						
	<b>Confirmed ERP coverage</b>						
	<b>Notified of CGP stormwater permit requirements</b>						
	<b>Confirmed CGP coverage</b>						
<b>Part III.A.9.b</b>	<b>Construction Site Runoff — Inspection and Enforcement</b>						
	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.						
	<b>PERMITTEE SITES: Active construction sites</b>						
	<b>PERMITTEE SITES: Pre-, During, and Post inspections of active construction sites for E&amp;S and waste control BMPs</b>						
	<b>PERMITTEE SITES: Percentage of active construction sites inspected</b>						
	<b>PRIVATE SITES: Active construction sites</b>						
	<b>PRIVATE SITES: Pre-, During, and Post inspections of active construction sites for E&amp;S and waste control BMPs</b>						
	<b>PRIVATE SITES: Percentage of active construction sites inspected</b>						
	<b>Enforcement Action</b>						

<b>SECTION VII. STORMWATER MANAGEMENT PROGRAM (SWMP) SUMMARY TABLE</b>					
<b>A.</b>	<b>B.</b>	<b>C.</b>	<b>D.</b>	<b>E.</b>	<b>F.</b>
<b>Permit Citation/ SWMP Element</b>	<b>Permit Requirement/Quantifiable SWMP Activity</b>	<b>Number of Activities Performed</b>	<b>Documentation / Record</b>	<b>Entity Performing the Activity</b>	<b>Comments</b>
<b>Part III.A.9.c</b>	<b>Construction Site Runoff — Site Operator Training</b>				
	Report the type of training activities, the number of inspectors, site plan reviewers and site operators trained (both in-house and outside training).				
		<b>DEP Certification</b>	<b>Annual Training</b>		
	<b>Permittee construction site inspectors</b>				
	<b>Permittee construction site plan reviewers</b>				
	<b>Permittee construction site operators</b>				
<b>Part III.A.9 Summary</b>	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.				
	<b>Strengths:</b>				
	<b>Limitations:</b>				
	<b>SWMP revisions implemented to address limitations:</b>				

<b>SECTION VIII. CHANGES TO THE STORMWATER MANAGEMENT PROGRAM (SWMP) ACTIVITIES (Not Applicable in Year 4)</b>		
<b>A.</b>	<b>Permit Citation/ SWMP Element</b>	<b>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.</b>
<b>B.</b>	<b>Permit Citation/ SWMP Element</b>	<b>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)</b>

**SECTION IX. TMDL Status Report**

<b>A.</b>	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
				<input type="checkbox"/> / <input type="checkbox"/>		1		(Year 3 AR)	(Year 4 AR; N/A) if BPCP)
				<input type="checkbox"/> / <input type="checkbox"/>					
<b>B.</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				
			(Year 3 AR)	(Year 4 AR; N/A if BPCP)					
<b>C.</b>	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):								

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# **CITY OF DELRAY BEACH**

## **MS4 STORMWATER MANAGEMENT PROGRAM (SWMP) ASSESSMENT PROGRAM ANNUAL RESULTS REPORT CYCLE 4, YEAR 4**

**March 2020**

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## 1. City of Delray Beach MS4 Assessment Report

### 1.1 Introduction

The Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) permit is part of a federal program designed to reduce stormwater pollutant discharges to receiving waters of the United States. In 1987, the United States Environmental Protection Agency (EPA) was required under Section 402 (p) of the Clean Water Act to develop the NPDES. In 1997, EPA issued the first 5-year permit (No. FLS000018) to Palm Beach County's permittees, The City of Delray Beach (City) is one of the joint permittees of this permit under an Inter-local Agreements with Northern Palm Beach County Improvement District. In 2001, the Florida Department of Environmental Protection (FDEP) received delegation from EPA for the MS4 Programs. In November 2002, FDEP issued the Cycle 2 MS4 Permit. The Cycle 3 permit was issued on March 2, 2011 and the Cycle 4 Permit was issued on September 8, 2016. This report is to document the assessment results under the permit requirements Part V-A. and B.

### 1.2 Goals

The City's goal is to reduce the nutrient loadings to receiving water bodies to the maximum extent possible. This report discusses the water quality monitoring program and ambient water quality trends that the City's MS4 discharges, so that the overall effectiveness of City's Stormwater Management Program (SWMP) can be assessed. Current data available, trends observed and conclusions that can be drawn from this data are summarized in this report.

## 2. Florida Department of Environmental Protection's Impaired Waters

### 2.1 Water Quality Monitoring

FDEP conducts a statewide water quality-monitoring program with the purpose of assessing Florida's rivers, lakes, springs, and estuaries to determine whether they meet publicly adopted water quality standards. The data used for this monitoring program includes both theirs and others. For analysis purposes, the state has been divided into five distinct hydrologic "Basin Groups". Each basin group's water quality data is assessed every five years, The City of Delray Beach is in Basin Group No. 3. Basin No. 3's last assessment was concluded in 2016.

The goal of FDEP's water quality assessment is to update their comprehensive water quality listing system, within each Basin Group. Each Basing group is further divided into Water Body Identification Numbers (WBIDs) or assessment areas.



By reviewing the water quality data for a Water Body Identification (WBID) as compared to water quality standards found in the Chapters 62-302, 62-303, 62- 303.720, and 62-303.390 of the Florida Administrative Code (F.A.C), impaired WBIDs are added to or removed from lists. Five typical outcomes can result from the cycle review.

- A WBID stays in its *current status* listed or unlisted,
- A WBID can be added to or delisted from the *Comprehensive Study List*,
- A WBID can be added to or delisted from *Impaired Waters*,
  - A WBID can be delisted if a previously identified impairment cannot be verified or a Total Maximum Daily Load (TMDL) has been adopted.
- A TMDL development: adoption represents the maximum amount of pollutant loading that can be discharged to a water body and have its designated uses still be met.
- BMAP Development: Once a TMDL is develop, watershed stakeholders and FDEP staff develop a Basin Management Action Plan (BMAP) that specifies the activities, schedule, and funding sources that will be undertaken to restore the water body.

## 2.2 Lake Worth Lagoon Cycle 3 Verified List of Impairments

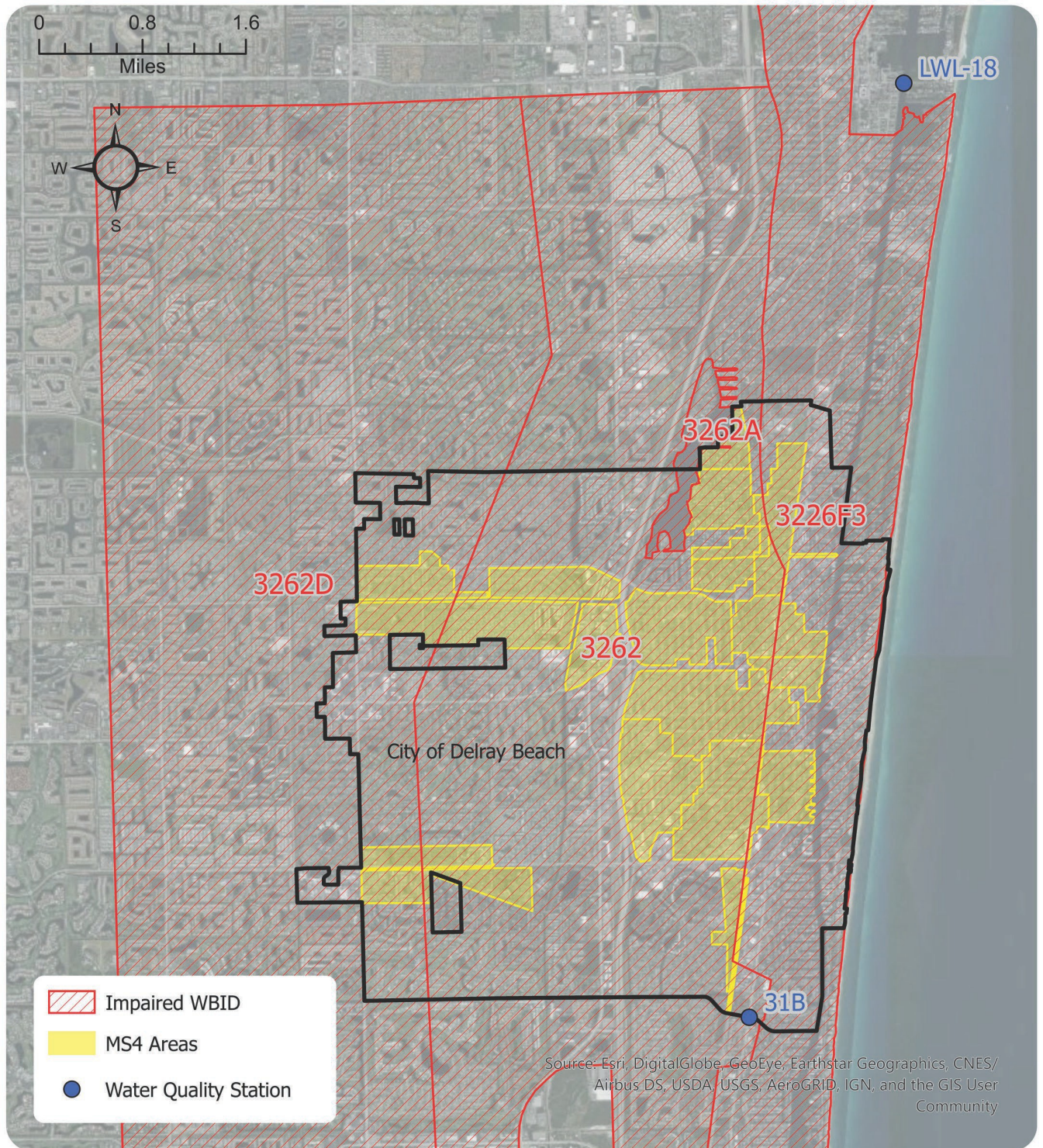
Currently the City has no WBIDs on the study list. There are four (4) WBIDs on the impaired waters list below and in Figure 1.

**Table 1: Listing of Impaired Waters Within City’s MS4**

WBID	Planning Unit	Water Segment	Parameter Impaired
3262	C15	E-4 Canal	Nutrients (Chlorophyll-a)
3262A	C15	Lake Ida	Nutrients (Chlorophyll-a and Total Phosphorus)
3262D	C15	E-3 Canal	Nutrients (Chlorophyll-a)
3226F3	Intracoastal	ICWWS	Copper

All marina estuaries along the Palm Beach County coastline are listed as impaired for copper; however, there are no identified copper impairments for any of the inflows from the freshwater tributaries. The copper impairments do not appear to be related to stormwater runoff. One possible source of copper may be related to the marina boating actives in the water body.

**Figure 1: WBID MS4 Area Water Quality Stations**



## 2.3 Total Maximum Daily Loads Program

A small area within the City of Delray Beach discharges to Lake Ida WBID 3262A. Refer to the MS4 Lake Ida TMDL status report included with the City of Delray Beach’s 2019 Annual Report.

## 3. Water Quality Monitoring Program

### 3.1 Description

The Palm Beach County NPDES MS4 water quality program includes the following components:

- ambient water quality sampling
- water quality data analyses
- trend analyses
- annual pollutant loading estimations in Year 3
- program modifications as needed

The Palm Beach County wide monitoring program includes 44 ambient water quality-monitoring sites, which were selected after coordination among the South Florida Water Management District (SFWMD), Palm Beach County Environmental Resource Management (ERM), the Loxahatchee River District (LRD), Broward County (BC), West Palm Beach (CWPB), and the Palm Beach County permittees (the group).

The monitoring sites are sampled and initially analyzed in-situ, by staff, using a multi-parameter water quality-analysis instrument. Water samples are collected, preserved, and stored in accordance with Standard Operating Procedures. Final analysis of samples is conducted in laboratory settings under the direction of the entities mentioned above.

### 3.2 Monitoring Sites

City of Delray Beach reviewed the available water quality data from the group’s water quality monitoring program sites. Figure 1 includes the two (2) selected sites (31B and LWL-18) for the City assessment program.

### 3.3 Water Quality Monitoring Results

The City does not have its own monitoring program and relies on the groups monitoring program for data sampling and analysis. The historical data on the selected two sites are provided to the City via the group’s website and can be found in the Group’s Cycle 4, Year 3 Joint Report ([www.pbco-npdes.org/annualreporting](http://www.pbco-npdes.org/annualreporting)).

### 3.4 Trend Analysis

Refer to NPDES MS4 website for graphs for the period of record for Total Nitrogen (TN), Total Phosphorus (TP), and Chlorophyll-a. A trend line provides a graphic indication if the TN, TP, and Chlorophyll-a are increasing (upward), decreasing (downward), or at a steady-state (near flat). A general summary of the trend and exceedances can be seen in Table 2 below.

**TABLE 2: Summary of Trends**

Watershed	Period of Record	Station	Total Nitrogen	Total Phosphorus	Chlorophyll-a
C15	2000-2019	31B	Decreasing	Consistent	Significant Decreasing
ICWWS	2000-2019	LWL-18	Decreasing	Consistent	Decreasing

Review of the trend graphs for the two water quality monitoring stations (C51 Basin and ICWW-S) show a decreasing trend for the primary nutrients (Total Nitrogen and Total Chlorophyll-a). Total Phosphorus, a surrogate for nutrients enrichments, has a consistent trend for both sites. City MS4 discharges to these two watersheds represents 7% of the contributing area. Both these watersheds receive discharges from other MS4 permittees (25 %) and the private entities (68 %). Monitoring should continue to be evaluated for any changes.

## 4. Pollutant Loading Estimates

### 4.1 Description

As part of the requirements in the joint permit, the average annual pollutant loading, and event mean concentration (EMC) estimates are to be provided for six water quality parameters. The six parameters identified by the FDEP are five-day biochemical oxygen demand (BOD<sub>5</sub>), total copper (Cu), total nitrogen (as N) (TN), total phosphorus (TP), total suspended solids (TSS), and total zinc (Zn), all in the units of (mg/L). Water Quality models provide a tool to compare the effects of pollutant loadings and varying contributing area conditions over a time interval. The permit allows the average annual pollutant loading estimates can be based on major outfalls or watersheds. Since the pollutant loading estimates for permit Cycles 1 through 3 were provided on a watershed basis, it was agreed with the FDEP that the Cycle 4 loading estimates would continue to be provided on a watershed basis.

During Year 2 of this permit cycle, the City of Delray Beach reviewed and provided updated information to the Palm Beach County MS4 permittee group for the MS4 contributing areas to each receiving water,

City limits delineation, land uses, and surface water quality Best Management Practices (BMPs).

A pollution-loading model was completed in October 2019 as a joint activity by the Palm Beach County MS4 Group “the Group”. Previous cycles pollutant-loading models were completed with Watershed Management Model (WMM) developed by CDM Smith to estimate pollutant loading. WMM is a public domain model used by the Florida Department of Environmental protection (FDEP). It provides high level planning simulations of pollutant loadings on both a seasonal and annual time step. It was decided by the Group to change to a Spatially Integrated Model for Pollutant Loading Estimates (SIMPLE) model for Cycle 4 of the permit. One of the major benefits of SIMPLE is it uses a GIS platform for the input of data and output of the estimated loadings. This allows for better spatial comparison of the input parameters. SIMPLE uses the same basic method of estimating pollutant loading as WMM. SIMPLE also incorporates work done by Environmental Research and Design, Inc. (ERD) and Jones, Edmunds, and Associates Inc. in development of the GIS functionality.

Estimates of average annual pollutant loading for each watershed are based on land use, EMCs, rainfall, soil type, base flow, septic system impact and best management practices (BMPs). To maintain consistency in the comparison of Cycles 3 and 4 pollutant loadings, data from Cycle 3 was migrated from WMM to the SIMPLE model and consistent event mean concentrations and rainfall averages were used for both. Results of the SIMPLE model are contained in the Cycle 4 Year 3 Joint Report- “Summary of Average Annual Pollutant Loading Model Activities”.

## 4.2 Delray Beach Cycle 3 and Cycle 4 Loadings

The City of Delray Beach MS4 discharges into two watersheds, the C15 and the Intracoastal Waterway South (ICWWS). The Cycle 3 and Cycle 4 pollutant loadings estimates for all six water quality parameters in the Delray Beach are shown in Table 3. Also included are loading reductions for the group’s county-wide public education programs and the City’s Street sweeping program. All six water quality parameters show a significant decrease in pollutant load reduction from Cycle 3 to Cycle 4.

**TABLE 3: Delray Beach Pollutant Loadings (lbs/year)**

Parameter	BOD <sub>5</sub>	TSS	TP	CU	ZN	TN
C15 Cycle 3 Loads	140,855	765,668	6,095	372	1,675	42,479
ICWWS Cycle 3 Loads	11,004	67,037	472	28	131	3,129
<b>Total Cycle 3 Loading</b>	<b>151,859</b>	<b>832,705</b>	<b>6,567</b>	<b>400</b>	<b>1,806</b>	<b>45,608</b>
C15 Cycle 4 Loads	120,652	585,783	5,362	312	1,346	36,699
ICWWS Cycle 4 Loads	10,212	59,571	444	26	121	3,020
<b>Total Cycle 4 Loads</b>	<b>130,864</b>	<b>645,354</b>	<b>5,806</b>	<b>338</b>	<b>1,467</b>	<b>39,719</b>
<b>Other Reductions:</b>						
Public Education (6%)	7,852	38,721	348	20	88	2,383
Street Sweeping*			702			1289
<b>Total Adjusted Cycle 4 Loads</b>	<b>123,012</b>	<b>606,633</b>	<b>4,606</b>	<b>318</b>	<b>1,379</b>	<b>36,734</b>
<b>Percent Reduction</b>	<b>19%</b>	<b>27%</b>	<b>30%</b>	<b>20%</b>	<b>24%</b>	<b>20%</b>

\*Reported Cycle 4 YR 2 Reductions

## 5. Conclusions

Water quality monitoring results are encouraging as nutrient trends for TN and TP are generally downward. Pollutant loading reductions are occurring for all six water quality parameters. In 2019, the City amended its Land Development Regulations to include Florida Friendly landscaping principles. The City will continue to monitor and evaluate if additional SWMP are needed in future Assessment Reports. No additional SWMP Programs are proposed at this time.