

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 (<u>http://www.dep.state.fl.us/water/stormwater/npdes/contacts.htm</u>). Files larger than 10MB may be placed on the FTP site at: <u>ftp://ftp.dep.state.fl.us/pub/NPDES_Stormwater/</u>. 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

SEC1	TION I. BACKGROUND INFORMATION				
Α.	Permittee Name: City of Greenacres				
В.	Permit Name: Palm Beach County MS4				
C.	Permit Number: FLS000018-004				
D.	Annual Report Year: 🗌 Year 1 🛛 Year 2	Year 3 [Year 4 🗌	Year 5	Other, specify Year:
Е.	Reporting Time Period (month/year): 10	/ 2017 throug	n 09 /20	018	
	Name of the Responsible Authority: Carlos C	Cedeño			
	Title: Public Works Director				
-	Mailing Address: 5750 Melaleuca Lane	v			
F.	City: Greenacres	Zip Code: 3346	3	County:	Palm Beach
	Telephone Number: 561-642-2074		Fax Number:	: 561-642-	2094
	E-mail Address: ccedeno@greenacresfl.gov				
	Name of the Designated Stormwater Manage Michael Grimm	ement Program C	ontact (if differ	ent from S	ection I.F above):
	Title: Building Director/Chief Building Official				_
	Department: Building Department				
G.	Mailing Address: 5800 Melaleuca Lane				
	City: Greenacres	Zip Code: 33463	3	County: I	Palm Beach
	Telephone Number: 561-642-2061		Fax Number:	561-642-2	2049
3 f	E-mail Address: mgrimm@greenacresfl.gov		/=		
SECT	ION II. MS4 MAJOR OUTFALL INVENT	ORY (Not Applica	able in Year 1)	

SECI	ION II. INIGA MAJOR OUTPALE INVENTORY (NOT Applicable in Tear 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?
В.	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?
C.	Is the change in the total number of outfalls due to lands annexed or vacated? 🗌 Yes 🔲 No 🛛 Not Applicable

SECT	ION III. PART V.B. ASSESSMENT PROGRAM
A.	 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. <u>DEP Note:</u> If permittee participates in a collaborative monitoring plan, permittee may refer to a joint response as defined by the interlocal agreement. Name and date of the approved plan: Group monitoring plan submitted September 8, 2016 (with issuance of the Cycle 4 permit). Status: The group monitoring report is included in the Cycle 4 Joint Annual Report.
В.	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. <u>DEP Note:</u> Results must be specific to the permittee's SWMP. The newly developed assessment program is currently under review by FDEP and will be implemented once approved. Please refer to the Cycle 4, Year 2 Joint Annual Report for a summary of the Group Water Quality Monitoring Results for the reporting period. The individual assessment plan will be implemented during Year 3 of Cycle 4 Note that in any future reporting year, the Group's water quality monitoring data for the reporting period may not be available for 4 to 6 months after the reporting period has ended.
C.	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. <u>DEP Note:</u> Analysis must be specific to the permittee's SWMP. See response to Section III.B, above.

SECT	TION IV. FISCAL ANALYSIS
Α.	Total expenditures for the NPDES stormwater management program for the current reporting year: \$1,063,630.72
В.	Total budget for the NPDES stormwater management program for the subsequent reporting year: \$1,090,651.00
	Did the current reporting year resources decrease from the previous year? Y \square / N \boxtimes
	If program resources decreased, provide a discussion of the impacts on the implementation of the SWMP.
C.	

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	<u>N/A</u>	Required Attachments	Permit Citation	Attachment Number/Title
		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	
	\boxtimes	An explanation of why the minimum inspection frequency in Table II.A.1.a. was not met, if applicable.	Part II.A.1	
		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	
	\boxtimes	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	
	\boxtimes	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	
\boxtimes		YEAR 2: A summary review of codes and regulations to reduce the stormwater impact from development.	Part III.A.2	
	\boxtimes	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	
	\boxtimes	YEAR 3: Summary of TMDL Monitoring Results (if applicable).	Part VIII.B.2	
	\boxtimes	YEAR 3: Bacteria Pollution Control Plan (if applicable).	Part VIII.B.3	
	\boxtimes	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	
	\boxtimes	YEAR 4: A report on any amendments to the applicable legal authority (if applicable).	Part III.A.7.a	
		 YEAR 4: Permit re-application information in accordance with Rule 62-624.420(2), F.A.C. 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	
	\boxtimes	YEAR 4: TMDL Supplemental SWMP (if applicable).	Part VIII.B.3	

(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 Re	sponsible Authority (type or print):	Carlos Cedeño			
Title:	Public Works Director		 		
Signature:	_pp		 Date:	04 / 15/ 2019	
	10				

L	ty ng the Com	Activity		.1.a, and the percentage of	uctural control to be		 Ramblewood Ramblewood Retention Pond, Harwhich Ct Retention Pond, PBSO 16/FR94 Retention Pond, Retention Conglas Complex Retention Alleyways (7 total), Municipal Complex Retention 			Public Works Public Works Public Works (west side of Department Roads & Centurian Drainage Division Side of side of
c	ion	A		ure included in Table II.A	neasurement for each stru cres, etc.		Employee daily worksheets Drain			Employee daily De worksheets Drain
	er of ties	med		s of struct	n unit of n ar feet, ac	Activities Percent Maintained	00	0	0	100
	Number of Activities	Performed		able type	se its owr niles, line	Number of Maintenance	170	0	0	157
				ch applic	ay choos Iclude: m	Percent Perceted	170	0	0	100
ABLE			n	ed for ead. I.	nittee m ptions ir	Number of Number of	8 4	0	0	157
AARY T	ctivity	1000	Operation	conducte aintained	The pen n. Unit c	Number of Structures	7		0	0.82
STORMWATER MANAGEMENT PROGRAM (SWMP) SUMMARY TABLE	Permit Requirement/Quantifiable SWMP Activity	Churching Control Character Callerdian Canada	Structural Controls and Stormwater Collection Systems Uperation	Report the current known inventory. 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.	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.	Type of Structure	Dry retention systems	Underdrain filter systems	Exfiltration trench / French drains (If)	Grass treatment swales (miles)
SECTION VII.	Permit Citation/		Part III.A.1							

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SECTION VII. A.	STORMWATER MANAGEMENT PROGRAM (SWMP) SUMMARY TABLE	RY TAB	Щ		Ĺ		c		
Permit Citation/	Permit Requirement/O	4			Number of	-	Documentation	Entity	2
SWMP Element		È		_	Activities	م 0	/ Record	Performing the Activity	Comments
									Gladiator Lake) • Empire Way II (Lake Worth Rd to L-12 Canal, west side of road)- 0.34 mile • Centurian Way (Haverhill to Empire Way, south side of road)- 0.12 mile Dodd Rd (Jog Rd to Rd to Rd to Noodlake Blvd, north side of road)- 0.36 mile
	systems	0	0	0	0	0			
		0	0	0	0	0			
		0	0	0	0	0			
		0	0	0	0	0			
		7		100	7	100	Employee daily worksheets and storm sewer repair and maintenance inspection tracking log found at <u>2018</u> <u>Stormwater</u> <u>Inspection with</u> Additions.xlsx	Public Works Department Roads & Drainage Division	
	Weirs or other control structures	4	4	100	0	100	Employee daily worksheets and storm sewer repair and maintenance	Public Works Department Roads & Drainage Division	
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SECTION VII.	STORMWATER MANAGEMENT PROGRAM (SWMP) SUMMARY TABLE	ARY TAI	BLE						
A.	B.				ы С		D.	ij	F.
Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	tivity			Number of Activities Performed	و م م	Documentation / Record	Entity Performing the Activity	Comments
							inspection tracking log found at 2018 Stormwater Inspection with Additions.xlsx		
	pipes / culverts (miles)	675'	-	100	. 	100	Employee daily worksheets and storm sewer repair and maintenance inspection tracking log found at <u>2018</u> <u>Stormwater</u> <u>Inspection with</u> Additions.xlsx	Public Works Department Roads & Drainage Division	
	Canals	7	,	100%	12	100	Employee daily worksheets and storm sewer repair and maintenance inspection tracking log found at <u>2018</u> <u>Stormwater</u> <u>Inspection with</u> Additions.xlsx	Public Works Department Roads & Drainage Division	
	Inlets / catch basins / grates	496	496	100	0 Q	18	Employee daily worksheets and storm sewer repair and maintenance inspection tracking log found at <u>2018</u> <u>Stormwater</u> <u>Inspection with</u> <u>Additions.xlsx,</u> <u>Purchase Order</u> # 2018-68	Public Works Department Roads & Drainage Division, Shenandoah Construction Company	23 repaired on Swain Blvd
	Ditches / conveyance swales (miles)	6.07	334	100	334	100	Employee daily worksheets and	Public Works Department	Biscayne Blvd (.04 miles)
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A. B. B. Permit Citation/ Permit Citation/ SWMP Element SWMP Activity		<			
		ز	D.	ш	u
		Number of Activities Performed	Documentation / Record	Entity Performing the Activity	Comments
			storm sewer repair and maintenance inspection found at <u>2018</u> <u>Stormwater</u> <u>Additions.xlsx</u>	Roads & Drainage Division	Biscayne Drive (0.9 miles) Swain Blvd (1 mile) Empire Way (0.34 miles) Centurian Way (0.12 miles) 57 th Ave from 10 th Ave to Lake Worth Rd. (0.33 miles) Bowran Rd. (0.47 miles) Sherwood Forest Blvd. (2.87 miles);
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.	ion frequencies set forth in ovide as an attachment an lot and a description of the nsure that they will be met.				

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SECTION VII.	STORMWATER MANAGEMENT PROGRAM (SWMP) SUMMARY TABLE				
A.	B	J	D.	ц	н.
Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentation / Record	Entity Performing the Activity	Comments
	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.	3.2 of the permit.			
Part III.A.1	Strengths: Proactively schedule inspections and repairs Limitations: Labor resources and capital funding				
	SWMP revisions implemented to address limitations: Staff members added to the code enforcement and Planning & Engineering Dept. to monitor residential and commercial construction.	the code enforce	ment and Planninç	g & Engineering De	spt. to monitor
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.	nent, reviewed an	d approved by the p	bermittee for post-de	svelopment
	Number of significant development projects reviewed	4	New World	Building Dept.	
	Number of significant development projects approved 4 New World Building Dept. 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.	4 de in the Year 4 A	New World nnual Report the fol	Building Dept. low-up report on pla	E.
	Year 2 ONLY: Attach the summary report of the review activity	⊠[
	Year 4 UNLY: Attach the follow-up report on plan implementation				
	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit	B.2 of the permit.			
Part III.A.2 Summary	Strengths: Strong documentation, training and implementation of program.				
	SWMP revisions implemented to address limitations: Staffing issues in Building Dept.	ig Dept.			
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.	imate of the total r	number of road mile	s cleaned or amoun	t of area
	Note: If the permittee does not contract activities, delete CONTRACTOR activities.				
	PERMITTEE Litter Control: Frequency of litter collection		Employee daily		
		452	worksheets and DOC tracking log found at X:\DOC	Roads & Drainage Staff	
	PERMITTEE Litter Control: Estimated amount of area maintained (If)	180.2 acres	Employee daily worksheets and DOC tracking log found at	Roads & Drainage Staff	
	PERMITTEE Litter Control: Estimated amount of litter collected (cy)		Employee daily	Roads &	
		13,560 lbs.	worksheets and DOC tracking log found at X:\DOC	Drainage Staff	
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Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentation / Record	Entity Performing the Activity	Comments
		186 days	Employee daily worksheets and DOC tracking log found at X:NDOC	Parks Maint Staff and DOC Work Squad	
	CONTRACTOR Litter Control: Estimated amount of area maintained (If)	180.	Employee daily worksheets and DOC tracking log found at X:\DOC	Parks Maintenance Staff and DOC Work Squad	
	CONTRACTOR Litter Control: Estimated amount of litter collected (cy)	170,490 lbs.	Employee daily worksheets and DOC tracking log found at X:DOC	Parks Maintenance Staff and DOC Work Squad	
	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".	umber of road mile	es cleaned and an e	stimate of the quant	tity of litter
	Trash Pick-up Events: Total miles cleaned		X:\Office of Director\Public		
		3 Miles	Director/NPDE S Project Management/G AC 2018 SITE REPORT		Great American Cleanup
	Trash Pick-up Events: Estimated amount of litter collected (cy)	1,800 lbs,	X:\Office of Director\Public Works Director\NPDE S Project Management\G AC 2018 SITE		Great American Cleanup
	Adopt-A-Road: Total miles cleaned	0	REPORT	None within Greenacres	
	Adopt-A-Road: Estimated amount of litter collected (cy)	0	None	None within Greenacres	
	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.	ll miles swept, an e veepings. If no str	estimate of the quai eet sweeping progr	ntity of sweepings co am is implemented,	ollected, and the provide the
	Frequency of street sweeping	0			
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SECTION VII.	STORMWATER MANAGEMENT PROGRAM (SWMP) SUMMARY TABLE				
A.	B	Ċ	D.	ш	L.
Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentation / Record	Entity Performing the Activity	Comments
	Total miles swept	0		Palm Beach Countv	
	Estimated quantity of sweeping material collected (cy / tons)	0		Palm Beach Countv	
	Total phosphorous loadings removed (pounds)	0		Palm Beach County	
	Total nitrogen loadings removed (pounds)	0		Palm Beach County	
	Report the equipment yards and maintenances shops that support road maintenance activities, and the number of inspections conducted for each facility.	activities, and the	e number of inspect	ions conducted for e	ach facility.
	Name of Facility	Number of Inspections			
	Public Work Maintenance Facility	24	Log book in Vehicle Maintenance Supervisor's office	Vehicle Maintenance Staff	
		:			
	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.	3.2 of the permit.			
Part III.A.3	Strengths:				
Summary	Limitations:				
	SWMP revisions implemented to address limitations:				
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 was not included with an explanation for each of why it was not.	ee during the repo here stormwater	rting period and the treatment was not i	e number of those pr ncluded with an expl	ojects that did anation for each
	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.	on of retrofitting p	rojects to reduce st	ormwater pollutant lc	ads from
	Flood control projects completed during the reporting period	4	Various Purchase Orders	Contractors	FY 18 CIP 304- 152, 301-180 and 305-106
	Flood control projects completed that did not include stormwater treatment	0	None	None	
	Stormwater retrofit projects planned/under construction	0	None	None	
	Stormwater retrofit projects completed	0	Purchase Orders	Contractors	
	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.				
Part III.A.4	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit	3.2 of the permit.			
Summary	Strengths: Program is proactively address flooding issues				
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SECTION VII.	STORMWATER MANAGEMENT PROGRAM (SWMP) SUMMARY TABLE				
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Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentation / Record	Entity Performing the Activity	Comments
	Limitations: Pollution reduction SWMP revisions implemented to address limitations: Proactively locking for around reduction mothode	a roduction	othode	•	
Part III.A.5	Municipal Waste Treatment, Storage, and Disposal Facilities Not Covered by an NPDES Stormwater Permit	NPDES Stormw	ater Permit		
	Report the applicable facilities and the number of the inspections conducted for each facility.	acility.			
	Name of Facility	Number of Inspections			
	None				
	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.	.2 of the permit.			
Part III.A.5 Summary	Strengths: I imitations:				
	SWMP revisions implemented to address limitations:				
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.	licators of pestici	des and herbicides	who are FDACS cer	rtified / 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.	ndustry BMP Pro	gram and the numl	ber of contracted cor	mmercial
	PERSONNEL: FDACS public applicators of pesticides/herbicides		Located in		
		7	personnel records in	Florida Dept. of	
		-	City's Laserfiche	Agriculture	
			System		
	CONTRACTORS: FDACS commercial applicators of pesticides/ herbicides	7	Located in Public Works' Contractor Files	Gulfstream Termite and Environmental Services, LLC	License numbers on file
	PERSONNEL: Green Industry BMP Program training completed		Located in personnel		Includes Public
		27	City's Laserfiche	Xcal Videos	Works and Building Dept. Staff
	CONTRACTORS: FDACS certified / licensed applicators of fertilizer	7	Located in Located in Public Works' Contractor Files	Gulfstream Termite and Environmental Services, LLC	License numbers on file
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A.	B	C	D.	μi	E.
Permit Citation/ SWMP Element	Permit Requirement/Quantifiable	Number of Activities Performed	Documentation / Record	Entity Performing the Activity	Comments
	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.	sion is not applicab	le because the perr	mittee is not within t	he watershed of
	Year 2 ONLY: Attach copy of adopted Florida-friendly ordinance				
	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).	ed by the permittee and number of act	e within the permitte ivities conducted, th	ee's jurisdiction to e ne type and number	ncourage · of materials
	Public Education and Outreach Program	The public outread the Palm Beach C County Joint Annu information.	ch and education plicentiate county Co-permittee La Report for the pu	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.	a joint effort by ^{>} alm Beach outreach
	Brochures/Flyers/Fact sheets distributed				Hand written
			: : : : :		log noted on the first of the
		772	Department	Building	month Permit tech counts the
		0	monthly	Department	number of brochures
			brochure log		taken from the
					display and enters into log.
	Neighborhood presentations: Number conducted	-	ICC Site report	Building Department	Original section during ICC Cleanup
	Neighborhood presentations: Number of participants	78	ICC Site report	Building Department	Original section during ICC Cleanup
	Newspapers & newsletters: Number of articles/notices published		Log kept in NPDES file	Building Dept.	None
		0	cabinet at Building Dept.		
	Newsletters: Number of newsletters distributed		Log kept in NPDES file	Building Dept.	None
		0	cabinet at Building Dept.		
	Public displays (e.g., kiosks, storyboards, posters, etc.)		Log kept in	Building Dept.	None
		0	NPUES The cabinet at Building Dept.		
	Radio or television Public Service Announcements (PSAs)	0	Log kept in NPDES file	Building Dept.	None
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Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentation / Record	Entity Performing the Activity	Comments
			cabinet at Building Dept.		
	School presentations: Number conducted		Log kept in	Building Dept.	None
		0	NPUES TILE		
			Building Dept.		
	School presentations: Number of participants		Log kept in	Building Dept.	None
		0	NPUES tile		
			Building Dept.		
	Seminars/Workshops: Number conducted		Log kept in	Building Dept.	None
		0			
			capinet at Building Dept.		
	Seminars/Workshops: Number of participants		Log kept in	Building Dept.	
		0	NPDES file		None
			capinet at Building Dept.		
	Special events: Number conducted	-	ICC Cleanup	Building	Clean up
			d	Department	9/15/18
	Special events: Number of participants	78	ICC Cleanup	Building Department	9/15/18
	Number of visitors to stormwater-related pages		Log kept in	Building Dept.	The City
			NPDES file		currently does
			Cabinet at		not have a
		c	pulialing pept.		counter on the
		C			Webpage.
					to add on in
					the future.
	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit	.B.2 of the permit.			
Part III.A.6	Strengths: Capitalize on opportunities when they arise				
summary	Limitations: Labor resources				
	SWMP revisions implemented to address limitations: Proactively search for additional opportunities	dditional opportu	nities		
Part III.A.7.a	Illicit Discharges and Improper Disposal — Inspections, Ordinances, and Enforcement Measures	rcement Measure	ø		
	Report amendments in Year 4.				
	Year 4 ONLY: Attach a report on amendments to applicable legal authority				
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A.	B	ن	D.	ш	ц,
Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentation / Record	Entity Performing the Activity	Comments
Part III.A.7.c	Illicit Discharges and Improper Disposal — Investigation of Suspected Illicit Discharges and/or Improper Disposal	charges 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.	lucted by the perr	nittee, the number o	of illicit activities four	nd, and the
	Proactive inspections for suspected illicit discharges	35	Scanned in LF under NPDES FY 2018	Building Department	
27	Illicit discharges found during a proactive inspection	1	Scanned in LF under NPDES FY 2018	Building Department	
	NOV/WL/citation/fines issued for illicit discharges found during proactive inspection	.	Scanned in LF under NPDES FY 2018	Building Department	
	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.	suspected illicit di ber and type of e	scharges, including nforcement actions	the number of repor taken.	rts received, the
			Code enforcement	Building Dept.	
			New World Svstems		
	Reports of suspected illicit discharges received	ŝ	module and		
			scanned in Laserfiche		
			under NPDES FY 2018		
			Code	Building Dept.	
			enforcement New World		
		c	Systems		
	Reactive investigations of reports of suspected illicit discharges etc.	n	scanned in		
			Laserfiche		
			FY 2018		
			Code	Building Dept.	
			enforcement New World		
		¢	Systems		
	Illicit discharges etc. found during reactive investigation	n	scanned in		
			Laserfiche under NPDES		
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SECTION VII.	STORMWATER MANAGEMENT PROGRAM (SWMP) SUMMARY TABLE				
A.	B	ن	D.	ш	L.
Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentation / Record	Entity Performing the Activity	Comments
	NOV/WL/citation/fines issued for illicit discharges etc. found during reactive investigation	ო	Code enforcement New World Systems module and scanned in Laserfiche under NPDES FY 2018	Building Dept.	
11	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.	tractors trained (bo	oth in-house and out	tside training) within	the reporting
	Personnel trained	m	Scanned in Laserfiche under NPDES FY 2018	Building Dept.	
	Contractors trained	0	None	none	
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.	addressed.			
	Hazardous and non-hazardous material spills responded to	None			
	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.	tractors trained (bo	oth in-house and out	tside training) within	the reporting
	Personnel trained	ņ	Scanned in Laserfiche under NPDES	Building Dept	
44 ²			FY 2018		
		D			
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).	ed by the permitte cluding the type an	e within the permitte d number of activitie	se's jurisdiction to en es conducted, the tyr	icourage the be and number
	Public Education and Outreach Program	The public outrea the Palm Beach C County Joint Annu information.	ch and education pla county Co-permittee Lal Report for the pu	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.	a joint effort by alm Beach outreach
	Brochures/Flyers/Fact sheets distributed	145	Building Department counter	Building Department	

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SECTION VII.	STORMWATER MANAGEMENT PROGRAM (SWMP) SUMMARY TABLE				
A.	B	ن	D.	ш	Ľ
Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentation / Record	Entity Performing the Activity	Comments
			monthly brochure log		
	Neighborhood presentations: Number conducted	-	ICC Cleanup 9/15/18		Original Section during ICC Cleanup
	Neighborhood presentations: Number of participants	28	Log kept in NPDES file cabinet at	Building Dept.	
			Building Dept	::	
	newspapers & newsletters: Number of articles/notices published	0	Log kept in NPDES file	Building Dept.	
			Building Dept		
	Newsletters: Number of newsletters distributed		Log kept in NPDFS file	Building Dept.	
		183	cabinet at Building Dept		
	Public displays (e.g., kiosks, storyboards, posters, etc.)	1	In City Hall	Building Department	
	Radio or television Public Service Announcements (PSAs)		Log kept in	Building Dept.	
		0	cabinet at Building Dept		
	School presentations: Number conducted		Log kept in NPDFS file	Building Dept.	
		0	cabinet at Building Dept		
	School presentations: Number of participants		Log kept in	Building Dept.	
		0	cabinet at Building Dept		
	Seminars/Workshops: Number conducted		Log kept in NPDFS file	Building Dept.	
		0	cabinet at Building Dent		
	Seminars/Workshops: Number of participants	c	Log kept in NPDES file	Building Dept	
		5	cabinet at Building Dept		
	Special events: Number conducted	0	Log kept in NPDES file	Building Dept	
			capinet at Building Dept		
DEP Form 62-624.60	DEP Form 62-624.600(2), Effective January 28, 2004	ıf 22			Revised 9/8/2016

SECTION VII.					
A.	ö	Ċ	D.	ш	u.
Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentation / Record	Entity Performing the Activity	Comments
	Special events: Number of participants	0	Log kept in NPDES file cabinet at Building Dept	Building Dept	
	Number of visitors to stormwater-related pages	0	Log kept in NPDES file cabinet at Building Dept	Building Dept	
Part III.A.7.f	Illicit Discharges and Improper Disposal — Oils, Toxics, and Household Hazardous Waste Control	lous Waste Cont	rol		
	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).	ed by the permitte e type and numbe nd the number of \	e within the permitt r of activities condu Veb site visits (if ap	ee's jurisdiction to e cted, the type and n plicable).	ncourage the umber of
	Public Education and Outreach Program	The public outrea the Palm Beach (County Joint Ann information.	ch and education p County Co-permittee ual Report for the p	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.	a joint effort by Palm Beach outreach
	Brochures/Flyers/Fact sheets distributed				
	Neighborhood presentations: Number conducted				
	Noncorrection of participants				
	newspapers a newsiences. Number of a ucles/nouces published Newsletters: Number of newsletters distributed				1
	Public disnlave (a n kineke storwhoarde metare atc.)				
	Radio or television Public Service Announcements (PSAs)				
	School presentations: Number conducted				
	School presentations: Number of participants				
	Seminars/Workshops: Number conducted				
	Seminars/Morkshops: Number of participants				
	Special events: Number conducted				
	Special events: Number of participants				
	Number of visitors to stormwater-related pages				
Part III.A.7.g	Illicit Discharges and Improper Disposal — Limitation of Sanitary Sewer Seepage	ge			
	Report on the type and number of activities undertaken to reduce or eliminate SSOs and influx/ inflitration, the number of SSOs or inflow / inflitration 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 / inflitration incidents into the MS4.	and inflow/ infiltra stem within the pe	tion, the number of rmittee's jurisdictior	SSOs or inflow / infl . Report only the St	Itration inciden SOs and inflow
	Owner of the sanitary sewer system		Palm Bea	Palm Beach County	
	Activity to reduce/eliminate SSOs and I&I: (description) Activity to reduce/eliminate SSOs and I&I: (description)	0	See PBC	PBC	

SECTION VII.	STORMWATER MANAGEMENT PROGRAM (SWMP) SUMMARY TABLE					
Α.	B.	°.		D.	Ë	Ľ.
Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	· of es ied	Documentation / Record	Entity Performing the Activity	Comments
	SSO incidents discovered	0		See PBC	PBC	
	SSO incidents resolved			See PBC	PBC	
				See PBC	PBC	
	Inflow / infiltration incidents resolved	0		See PBC	PBC	
	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.	nagement Pro	gram ac	cording to Part VI.	B.2 of the permit.	
Part III.A.7	Strengths:					
Summary	Limitations:					
	SWMP Revisions implemented to address limitations:					
Part III.A.8.a	Industrial and High-Risk Runoff — Identification of Priorities and Procedures for Inspections	s for Inspection	suc			
	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.	nigh risk faciliti	es and t	he number of facil	ities newly added ea	ch year.
	Report on the high-risk facilities inspection program, including the number of inspections conducted and the number and type of enforcement actions taken.	ections conduc	sted and	the number and ty	ype of enforcement a	actions taken.
		_			No. of the second second	and a contraction
	Type of Facility	Facilities Number of Inspections	Enforcement Actions			
	Operating municipal landfills 0	None	e Non			
	Hazardous waste treatment, storage, disposal and recovery 0 (HWTSDR) facilities	None	Non e			
	EPCRA Title III, Section 313 facilities (TRI) 0	None	Non e			
	Facilities determined as high risk by the permittee 0	None	Non e			
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		None	None	
	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2	VI.B.2 of the permit	bermit.			
Part III.A.8	Strengths: N/A					
summary	Limitations: N/A					
	SWMP revisions implemented to address limitations:				0.0	
Part III.A.9.a	Construction Site Runoff — Site Planning and Non-Structural and Structural Best Management Practices	l Best Manage	ement P	ractices		
	Report the number of permittee and private pre-construction site plans reviewed for stormwater, erosion, and sedimentation controls, and the number approved.	or stormwater,	erosion	, and sedimentatic	on controls, and the r	number
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SECTION VII.	STORMWATER MANAGEMENT PROGRAM (SWMP) SUMMARY TABLE				
A.	B	ö	D.	ш	Ľ
Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentation / Record	Entity Performing the Activity	Comments
	PERMITTEE SITES: Construction site plans reviewed	o	Scanned in Laserfiche under NPDES FY 2018	Building Dept	
	PERMITTEE SITES: Construction site plans approved	0	Scanned in Laserfiche under NPDES FY 2018	Building Dept	
	PRIVATE SITES: Construction site plans reviewed	٢	Scanned in Laserfiche under NPDES FY 2018	Building Dept	
	PRIVATE SITES: Construction site plans approved	~	Scanned in Laserfiche under NPDES FY 2018	Building Dept	
	Report the number of development permit applicants notified of the ERP and CGP, and the number of applicants who confirmed ERP and CGP coverage.	ind the number of	applicants who conf	firmed ERP and CG	P coverage.
	Notified of ERP stormwater permit requirements	-	Located in Planning & Engineering Dept Files	Planning & Engineering Dept.	Scanned in Laserfiche under NPDES FY 2018
	Confirmed ERP coverage	.	Located in Planning & Engineering Dept Files	Planning & Engineering Dept	Scanned in Laserfiche under NPDES FY 2018
	Notified of CGP stormwater permit requirements	٢	Log kept in NPDES file cabinet at Building Dept	Building Dept	Scanned in Laserfiche under NPDES FY 2018
	Confirmed CGP coverage	۲	Log kept in NPDES file cabinet at Building Dept	Building Dept	Scanned in Laserfiche under NPDES FY 2018
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.	struction sites, inc e of active constru	luding the number o ction sites inspected	if active construction I, and the number a	r sites during the nd type of
	PERMITTEE SITES: Active constructio	o	Scanned in Laserfiche under NPDES FY 2018	Building Dept	
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SECTION VII.	STORMWATER MANAGEMENT PROGRAM (SWMP) SUMMARY TABLE				
A.	B.	J	D.	ij	E.
Permit Citation/ SWMP Element	Permit Requirement/Quantifiabl	Number of Activities Performed	Documentation / Record	Entity Performing the Activity	Comments
	PERMITTEE SITES: Pre-, During, and Post inspections of active construction sites for E&S and waste control BMPs	o	Scanned in Laserfiche under NPDES FY 2018	Building Dept	
	PERMITTEE SITES: Percentage of active construction sites inspected	o	Scanned in Laserfiche under NPDES FY 2018	Building Dept	
	PRIVATE SITES: Active construction sites	0	Scanned in Laserfiche under NPDES FY 2018	Building Dept	
	PRIVATE SITES: Pre-, During, and Post inspections of active construction sites for E&S and waste control BMPs	24	Scanned in Laserfiche under NPDES FY 2018	Building Dept	
	PRIVATE SITES: Percentage of active construction sites inspected	100%	Scanned in Laserfiche under NPDES FY 2018	Building Dept	
	Enforcement Action	O	Scanned in Laserfiche under NPDES FY 2018	Building Dept	
Part III.A.9.c					
	Report the type of training activities, the number of inspectors, site plan reviewers and site operators trained (both in-house and outside training).	ind site operators t	rained (both in-house	e and outside trainin	ig).
	DEP Certification	Annual Training			
	Permittee construction site inspectors 3	Q	Scanned in Laserfiche under NPDES FY 2018	Building Dept	
	Permittee construction site plan reviewers	5	Scanned in Laserfiche under NPDES FY 2018	Planning & Engineering Dept	
	Permittee construction site operators	o	Scanned in Laserfiche under NPDES FY 2018	Building Dept	

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SEC ⁻	SECTION VII.	STORM	STORMWATER MANAGEMENT PROGRAM (SWMP) SUMMARY TABLE				
1000	Α.		B.	IJ	D.	ш	H.
Perm SWM	Permit Citation/ SWMP Element		Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentation / Record	Entity Performing the Activity	Comments
		Provid	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.	B.2 of the permit.			
Pa	Part III.A.9	Streng	Strengths: Pro-active in the permitting process				
มี	Summary	Limita	Limitations: Labor shortage				
		SWMF	SWMP revisions implemented to address limitations: Considering re-structuring of Dept. to meet needs.	ng of Dept. to me	et needs.		
SECT	SECTION VIII.	CHANG	CHANGES TO THE STORMWATER MANAGEMENT PROGRAM (SWMP) ACTIVITIES (Not Applicable in Year 4)	ES (Not Applicat	ole in Year 4)		
¥	Permit Citation/ SWMP Element	itation/ ement	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.	Established as S _I . PRIOR TO CHAN	pecific Requiremer	nts Under Part III.A G TO REPLACE OF	of the Permit R DELETE AN
	Permit Citation/ SWMP Element	itation/ ement	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)	lished as Specifi	c Requirements Ur	ıder Part III.A of th∉	e Permit

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SECTION IX. TMDL Status Report

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 ldentification number of the outfall prioritized for TMDL monitoring.

				,					
Ŕ	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
						1		(Year 3 AR)	(Year 4 AR; N/A) if BPCP)
	YEAR 3 an TMDL wate	d annually thereafter ir body during the rep	YEAR 3 and annually thereafter, provide a summary of the estim TMDL water body during the reporting period and cumulatively s	YEAR 3 and annually thereafter, provide a summary of the estimated load reductions that have occurred for the pollutant(s TMDL water body during the reporting period and cumulatively since the date the Supplemental SWMP was implemented.	lated load reductions that have occurred for the pollutant(s) of concern being discharged from the MS4 to the ince the date the Supplemental SWMP was implemented.	e occurred for the po al SWMP was impler	illutant(s) of concern mented.	being discharged froi	m the MS4 to the
	Year 3: Sul	omit a Monitoring dat	Year 3: Submit a Monitoring data summary or BPCP (if applicable).	' (if applicable).					
	Year 4: Sul	bmit a Supplemental	Year 4: Submit a Supplemental SWMP (if applicable).	.(i					
mi	WBID Number	Pollutant of Concern	Monitoring Summary / BPCP Submitted	Supplemental SWMP Submitted	ā	rojected load reduc	Projected load reductions OR Actual load reductions to date	d reductions to dat	Q
			(Year 3 AR)	(Year 4 AR; N/A if BPCP)					
Ö		prief statement as to	the status of TMDL ir	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):	ding to Part VIII.B of t	the permit (e.g. statu	s of monitoring to val	idate WLA):	

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REVIEW OF GREENACRES CODES AND REGULATIONS THAT REDUCE STORMWATER IMPACTS

CITY OF GREENACRES PLANNING AND ENGINEERING DEPARTMENT OCTOBER 31, 2012 REVISED JANUARY 7, 2015 REVISED MAY 24, 2018 REVISED APRIL 4, 2019 In accord with the requirements of the City's MS4 Permit, this report will serve as documentation of the required review of current codes and land development regulations to identify changes that will reduce the stormwater impact of new development and significant redevelopment. To conduct the review, the following documents were used:

- 1. Chapter 16, Article IV of the City Code concerning patios and driveways, with revisions included in Ordinance 2010-09 adopted June 7, 2012.
- 2. City Code Chapter 4, Article I concerning land clearing; Chapter 7, Article II concerning property maintenance; and Chapter 16, Article VII concerning landscaping, with revisions included in Ordinance 2011-06 adopted May 16, 2011.
- 3. Chapter 12 of the City Code concerning subdivisions and land development regulations, with revisions included in Ordinance 2012-16 adopted October 12, 2012.
- 4. Planning and Engineering Department Policy and Procedure Manual.
- 5. Chapter 7, Article V of the City Code concerning fertilizer use, with revisions included in Ordinance 2012-20 adopted December 3, 2012.

Within the last few years, the City of Greenacres has worked to update the Zoning Code and Subdivision and Land Development Regulations of the City to incorporate modern practices and materials, integrate lessons learned through the NPDES program, and to codify various interpretive policies.

As described below, these recent updates to the City's Code and policies have put in place regulations to add many of the low-impact design practices; or have expanded upon support for these practices already present in the Code.

- 1. Grassed swales: The prescriptive design for local streets found in Section 12-67(r) calls for grass swales. The swales occupy the significant remainder of right-of-way left after the modest pavement and sidewalk widths have been subtracted. Most streets in the City have been built using this design or its predecessors. Section 7-29 requires that all swales have a complete groundcover of lawn grass in order to preclude the installation of various impervious materials which would compromise the functioning of the swale. A number of years ago, the City experimented with alternatives to sod for swales by allowing a developer to use a groundcover plant. The experiment was a failure due to washing out of the plants caused by the flow of runoff across the swale and water splashed on the planting area from the roadway. The plants were removed and replaced with sod.
- 2. Pervious pavement: The City's Subdivision and Land Development Regulations do not currently allow pervious pavement. The City has concerns about the long term performance and durability of this product. It is also our understanding that

the South Florida Water Management District does not allow this material to count towards required drainage. Given the added expense and maintenance concerns, we do not anticipate adding allowance for pervious pavement to the Code in the near term, but we will re-evaluate this if these circumstances change.

- 3. Green roofs: These are primarily a Building Code issue due to the structural loads imposed and related concerns. The City's Code does not prohibit green roofs and roof gardens.
- 4. Rain barrels / cisterns: The City's Code does not prohibit rain barrels or cisterns.
- 5. A minimum value of green / open space: The City's Landscape Code in Section 16-1286 requires large perimeter buffers of a prescribed width (typically not less than 10 feet and as wide as 25 feet in some cases) and in Section 16-1287 requires that a minimum of 10% of the parking area be landscaped. It has been our experience that these standards provide a reasonable balance between open space and the City's older suburban development pattern. Adding an overall green or open space percentage requirement would not be productive or conducive to redevelopment.
- 6. Bio-retention facilities / areas: The City's Code promotes the use of swales by requiring them as part of the standard local street cross section [Section 12-76(r)] and requiring that they be grassed (Section 7-29). As described in 1. above, we have not had good results using other materials for swale landscaping. To achieve cleaner water and provide wildlife habitat, Section 16-1291 requires the installation of littoral plants and wetland trees in all drainage ponds.
- Native landscaping / FYN program: Section 16-1307 of the Code requires that native trees be used for at least 50% of the required trees in a project and Sections 16-1307 and 16-1308 list the recommended native trees and shrubs that should be used.
- 8. Irrigation conservation: To help conserve irrigation water, the City has adopted xeriscape principles into the Code in Section 16-1305. Also, Section 16-1266 describes concepts which will conserve water and which should be incorporated into all proposed landscape designs such as preservation of existing plants, re-establishment of native plant communities, limiting lawn grass areas, use of plants suitable for the growing conditions to be encountered, provision of shade trees to reduce transpiration of understory plants, and retention of stormwater. In addition, in Section 16-1246 of the Code, rain sensors and certain other design features are included to eliminate wasted irrigation.
- Infiltration trenches: The City's Code does not prohibit infiltration trenches. Also, our local soil conditions are typically such that retention and detention areas don't need a gravel bed or similar bottom to percolate well.
- 10. Retention of runoff: Retention of runoff as part of the design of a proper stormwater management system is required by Section 12-58(a), (b), and (i). In addition to the

swales and retention / detention ponds discussed above, the design of individual house lots contributes to retention of runoff. The City's Code requires that all lots be landscaped and limits the size of driveways and patios by imposing setback standards. This has the effect of reducing impervious area, which reduces runoff, and increasing retention of stormwater through preservation of pervious area.

11. Vegetative buffers / filters: Section 16-1291 requires the installation of littoral plants and wetland trees in all drainage ponds. These plants will help filter the stormwater prior to discharge from the lake.

In addition, on December 3, 2012 the City Council adopted Ordinance 2012-20 implementing into the City Code "Florida Friendly Fertilizer Use" regulations consistent with FDEP's model ordinance on appropriate fertilizer application controls.

Therefore, given the recent updates to the City's Code and given the limitations of the features listed above which have not been adopted, further changes to the City's Zoning, Landscaping, and Subdivision and Land Development Codes do not appear to be necessary.