



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 62-624.600, F.A.C.
- Submit this fully completed and signed form and any REQUIRED attachments by email to the NPDES Stormwater Program Administrator or to the MS4 coordinator (<http://www.dep.state.fl.us/water/stormwater/npdes/contacts.htm>). Files larger than 10MB may be placed on the FTP site at: ftp://ftp.dep.state.fl.us/pub/NPDES_Stormwater/. After uploading files, email the MS4 coordinator or NPDES Program Administrator to notify them the report is ready for downloading; or by mail to the address in the box at right.
- Refer to the Form Instructions for guidance on completing each section.
- **Please print or type information in the appropriate areas below.**

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

SECTION I. BACKGROUND INFORMATION

A.	Permittee Name: Lee County		
B.	Permit Name: Lee County MS4		
C.	Permit Number: FLS000035-004		
D.	Annual Report Year: Year 1 Year 2 Year 3 ☒ Year 4 ☐ Year 5 ☐ Other, specify Year:		
E.	Reporting Time Period (month/year): May/ 2019 through April / 2020		
F.	Name of the Responsible Authority: David Harner		
	Title: Deputy County Manager		
	Mailing Address: 1500 Monroe Street		
	City: Ft Myers	Zip Code: 33901	County: Lee
	Telephone Number: 239-533-7408		Fax Number: 239-533-8335
	E-mail Address: dharner@leegov.com		
G.	Name of the Designated Stormwater Management Program Contact (if different from Section I.F above): Lisa Kreiger		
	Title: Operations Manager		
	Department: Natural Resources		
	Mailing Address: 1500 Monroe Street		
	City: Ft Myers	Zip Code: 33901	County: Lee
	Telephone Number: 239-533-8706		Fax Number: 239-485-8408
	E-mail Address: lkreiger@leegov.com		

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

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

SECTION 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. <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> Name and date of the approved plan: Lee County Watershed Monitoring Plan, May 2018. Lee County continues to monitor water quality from 100 sampling sites in both State waters and the County's MS4. A number of sampling sites are in State waters and tidal waters. Sampling sites associated with previous projects and those sites within close proximity to others in the same waterway are being reviewed for value. No changes have been made to this point.
B.	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> Please see attachment.
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. <i>DEP Note: Analysis must be specific to the permittee's SWMP.</i> Attached.

SECTION IV. FISCAL ANALYSIS

A.	Total expenditures for the NPDES stormwater management program for the current reporting year: \$32,271,480
B.	Total budget for the NPDES stormwater management program for the subsequent reporting year:\$50,503,423

C.	Did subsequent program resources decrease from the current reporting period? N
	If program resources decreased, provide a discussion of the impacts on the implementation of the SWMP.

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):

<u>Attached</u>	<u>N/A</u>	Required Attachments	Permit Citation	Attachment Number/Title
	X	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	
	X	If program resources have decreased from the previous year, a discussion of the impacts on the implementation of the SWMP.	Part II.F	
	X	An explanation of why the minimum inspection frequency in Table II.A.1.a. was not met, if applicable.	Part II.A.1	
X		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	1
X		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 VI.B.2.	2
	X	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	
	X	YEAR 2: A summary review of codes and regulations to reduce the stormwater impact from development.	Part III.A.2	
	X	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	
	X	YEAR 3: Summary of TMDL Monitoring Results (if applicable).	Part VIII.B.2	
	X	YEAR 3: Bacteria Pollution Control Plan (if applicable).	Part VIII.B.3	
X		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	3
	X	YEAR 4: A report on any amendments to the applicable legal authority (if applicable).	Part III.A.7.a	
X		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	4
X		YEAR 4: TMDL Supplemental SWMP (if applicable).	Part VIII.B.3	5

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

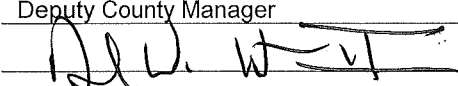
SECTION VI. CERTIFICATION STATEMENT AND SIGNATURE

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): David Harner

Title: Deputy County Manager

Signature: 

Date: 10/15/21

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
Part III.A.1	Structural Controls and Stormwater Collection Systems Operation								
	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. <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>								
	Type of Structure	Number of Structures	Number of Inspections	Percent Inspected	Number of Maintenance Activities	Percent Maintained			
	Grass treatment swales (miles)	22	67	100	67	100	Doraine Wetzel Cartegraph Query	Lee County DOT Doug Busbee dbusbee@leegov.com	Once every three years minimum
	Wet detention systems	148	155	100	155	100	Doraine Wetzel Cartegraph Query		Once every three years A & W BULB, Daniels, Three Oaks, Corkscrew
	Pollution control boxes	24	31	100	25	100	Doraine Wetzel Cartegraph Query		Annual inspections
	Major outfalls	36	36	100	0	0	Hubbard, DNR	Collection s Attribute Table	Annual Inspections
	Weirs or other control structures	24	27	100	88	100			Weirs with gates. Annual Inspections
	pipes / culverts (miles)	710	2347	100	2328	100			10%/year
	Canals (mi)	120	188	100	1321	100			Annual Inspections
	Inlets / catch basins / grates	18,752	18,752	100	493	3			10%/year or 100% every 2 cycles
	Ditches / conveyance swales (miles)	2,327	2,327	100	183	8			10%/year
	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.								

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Part III.A.1 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.3 of the permit.				
	Strengths: Lee County DOT has transitioned from a pencil and paper work order system to a web-based computer program to track inventory, inspection and maintenance of the municipal stormwater system. This is working well. Storm structure inventory is slowly increasing as existing structures are added to the system. Reporting activities to the program gets better over time.				
	Limitations: The Covid pandemic has affected staff and hiring.				
	SWMP revisions implemented to address limitations: None.				
Part III.A.2	Areas of New Development and Significant Redevelopment				
	Report the number of significant development projects, including new and redevelopment, reviewed and approved by the permittee for post-development stormwater considerations.				
	Number of significant development projects reviewed	49	Redevelopment DO List FY21.xlsx	Jessica Sulzer Development Review, jsulzer@leegov.com	
	Number of significant development projects approved	38			
	Provide in the Year 2 Annual Report the summary report of the review activity. Provide in the Year 4 Annual Report the follow-up report on plan implementation.				
	Year 2 ONLY: Attach the summary report of the review activity	☐			
	Year 4 ONLY: Attach the follow-up report on plan implementation	X			See Attachment 3
Part III.A.2 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.3 of the permit.				
	Strengths: Per the Lee County Land Development Code all project are required to be designed in accordance with the SFWMD requirements and provided for attenuation/retention of stormwater from the site.				
	Limitations: Site constraints for redevelopment.				
	SWMP revisions implemented to address limitations: None at this time.				
Part III.A.3	Roadways				
	Report on the litter control program, including the frequency of litter collection, an estimate of the total number of road miles cleaned or amount of area covered by the activities, and an estimate of the quantity of litter collected. <i>Note: If the permittee does not contract activities, delete CONTRACTOR activities.</i>				
	PERMITTEE Litter Control: Frequency of litter collection	Daily	Litter Collection SOP	LDOT, Doraine Wetzel	
	PERMITTEE Litter Control: Estimated amount of area maintained (mi)	2,623	Cartegraph Query		
	PERMITTEE Litter Control: Estimated amount of litter collected (tons)	216			
	CONTRACTOR Litter Control: Frequency of litter collection	0			In-house activity only
	CONTRACTOR Litter Control: Estimated amount of area maintained (mi)	0			
	CONTRACTOR Litter Control: Estimated amount of litter collected (tons)	0			
	OPTIONAL: If an Adopt-A-Road or similar program is implemented, report the total number of road miles cleaned and				

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	
	an estimate of the quantity of litter collected. If you do not participate in an Adopt-A-Road program, report "0".					
	Keep Lee County Beautiful: Total miles cleaned	380	Mike Thomas 10/7 email	Volunteers	Roadway and shoreline	
	Keep Lee County Beautiful: Estimated amount of litter collected (tons)	30				
	Adopt-A-Road: Total miles cleaned	29	Cartegraph Query, Doraine Wetzel	LDOT	Volunteers for this program have been significantly affected by the Covid Pandemic resulting in low numbers.	
	Adopt-A-Road: Estimated amount of litter collected (tons)	10				
	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.					
	Frequency of street sweeping	Daily	SOP	LDOT		
	Total miles swept	2,816	Cartegraph Query, Doraine Wetzel			
	Estimated quantity of sweeping material collected (tons)	671				
	Estimated quantity of material from catch basins (tons)	2,643				
	Total phosphorous loadings removed (pounds)	2,444	MS4 Load Reduction Tool		446 SS 1998 CB	
	Total nitrogen loadings removed (pounds)	4,969			819 SS 4150 CB	
	Report the equipment yards and maintenances shops that support road maintenance activities and the number of inspections conducted for each facility.					
	Name of Facility		Number of Inspections			
	LDOT Operations, Zip Drive		1	S:\NPDES\Proactive - High Risk - Industrial Facilities\Lee County Municipal\Equipment-Maintenance Yards	DNR Simmons	
	Fleet Satellite Bay - Detar		1			
	Fleet Management, Van Buren Street		1			

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Part III.A.3 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.3 of the permit.				
	Strengths: Lee County's litter collection program has been an important part of keeping our MS4 clean. Daily streetsweeping and litter collection are considered essential. Lee County DNR purchased a street sweeper for LCDOT to increase streetsweeping efforts.				
	Limitations: The Covid Pandemic affected staff activities. Hiring staff has been difficult. The new street sweeper needed accessories to make it efficient for the job needed.				
	SWMP revisions implemented to address limitations: None at this time.				
Part III.A.4	Flood Control Projects				
	Report the total number of flood control projects that were constructed by the permittee during the reporting period and the number of those projects that did NOT include stormwater treatment. The permittee shall provide a list of the projects where stormwater treatment was not included with an explanation for each of why it was not.				
	Report on any stormwater retrofit planning activities and the associated implementation of retrofitting projects to reduce stormwater pollutant loads from existing drainage systems that do not have treatment BMPs.				
	Flood control projects completed during the reporting period	17	S:\NPDES\Annual Reports\Cycle 4, Year 4 2020-2021\Surface Water\NatRes_CIP_Program Schedule_	DNR, Phil Gillogly pgilgoly@lee.gov.com	
	Flood control projects completed that did <u>not</u> include stormwater treatment	15			
	Stormwater retrofit projects planned/under construction	8			Bob Janes, Caloosahatchee Canal Rehab, Deep Lagoon Preserve, Lakes Park Water Quality, Powell Creek/Old Bridge Park Restoration, Sunniland/Nine Mile Run, Yellow Fever Creek Restoration/Gator Slough, Palm Creek FM
	Stormwater retrofit projects completed	0			All on going.
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.	☒			See Attachment 1	
Part III.A.4 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.3 of the permit.				
	Strengths: Lee County continues to have an active CIP division investing in major water quality treatment projects as well as many annual maintenance projects to reduce flooding. Those projects that provide water storage and treatment include a water quality element. Those projects not containing storage are for flooding projects only and contain incidental water quality treatment. Lee County has several projects planned and/or under construction for the upcoming reporting year.				
	Limitations: None at this time.				
	SWMP revisions implemented to address limitations: None				

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Part III.A.5	Municipal Waste Treatment, Storage, and Disposal Facilities Not Covered by an NPDES Stormwater Permit				
	Report the facilities and the number of the inspections conducted for each facility.				
	Name of Facility	Number of Inspections			
	Alva Storage	1	S:\NPDES\Proactive - High Risk - Industrial Facilities\Lee County Municipal\Non-permitted Municipal Storage\Cycle 4, Year 4	DNR, Hubbard	Ditching Material Temporary Storage
	Buckingham Storage	1			
	Six Mile Storage	1			
	Lehigh Depot	1			
	Polishing Ponds	1			
	Orchid Storage	1			
Part III.A.5 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.3 of the permit.				
	Strengths: Lee County DOT and DNR have initiated stormwater management techniques on these sites to control material run-off during rain events. Maintenance and retrofit are ongoing as conditions change.				
	Limitations: None at this time.				
	SWMP revisions implemented to address limitations: None.				
Part III.A.6	Pesticides, Herbicides, and Fertilizer Application				
	Report the number of permittee personnel applicators and contracted commercial applicators of pesticides and herbicides who are FDACS certified / licensed.				
	Report the number of permittee personnel who have been trained through the Green Industry BMP Program and the number of contracted commercial applicators of fertilizer who are FDACS certified / licensed.				
	PERSONNEL: FDACS public applicators of pesticides/herbicides	35	Pest Applicator Parks Staff.xlsx LDOT Staff	LDOT/Parks	11 LDOT 24 Parks and Rec
	CONTRACTORS: FDACS commercial applicators of pesticides/ herbicides	8	Pest Applicator Staff.xlsx 9/28/21 Diana Khan LC Purchasing 344-5450	Tony's Lawn & Landscaping, Landscape Dimensions, Big Tree, P&T Lawn & Tractor	
	PERSONNEL: Green Industry BMP Program training completed	90	http://fyn.ifas.ufl.edu/professionals/certification_lists/cert_county_name.shtml#Lee	Lee County Staff	Total Staff
	CONTRACTORS: FDACS certified / licensed applicators of fertilizer	660	Tamara James FDACS LF Licenses October	Contractors	All Lee County

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	CONTRACTORS: Green Industry BMP Program training completed	3	Pest Applicator Staff.xlsx 9/28/21 Diana Khan LC Purchasing 344-5450	P&T Lawn & Tractor, Big Tree, Tony's Lawn & Landscaping	
	Provide a copy of the adopted ordinance with the Year 2 Annual Report. If this provision is not applicable because the permittee is not within the watershed of a nutrient-impaired water body, indicate that in Column F.				
	Year 2 ONLY: Attach copy of adopted Florida-friendly ordinance	n/a			
	Report on the public education and outreach activities that are performed or sponsored by the permittee within the permittee's jurisdiction to encourage citizens to reduce their use of pesticides, herbicides and fertilizers including the type and number of activities conducted, the type and number of materials distributed, and the number of Web site visits (if applicable).				
	Brochures/Flyers/Fact sheets distributed	205,384	2020 Fertilize Smart Campaign e-mail 10/15/21	DNR, Kurt Harclerode KHarclo@leegov.com	Fertilize Smart Campaign (Billboards had 8,288,985 impressions)
	Public displays (e.g., billboards etc.)	4			
	Radio or television Public Service Announcements (PSAs)	921			
	WET PLAN Web Events	21	DNR, Maria Romero email 9/2/21	mromero@leegov.com	Website page, Facebook, YouTube
	Number of visitors to stormwater-related pages	474	Jeff Bristow JBristow@leegov.com 9/21/21; Kurt Harclerode, KHarclo@leegov.com Stephen Brown BROWNSH@leegov.com 10/5/21		Fertilizesmart.com, YouTube-UF extension services, Lee County Home and Yard Care
	FYN: Brochure/Flyers/Fact sheets distributed	426	FYN Coordinator Stephen Brown BROWNSH@leegov.com 10/5/21	FYN, Stephen Brown	Consultations
	FYN: Newspapers & newsletters: Number of articles/notices published	72,000			Newspapers
	FYN: Newsletters: Number of web views	51,862			
	FYN: Seminars/Workshops: Number conducted	18			
	FYN: Seminars/Workshops: Number of participants	964			
	FYN: Special events: Number conducted	35			
	FYN: Special events: Number of participants	943			

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Part III.A.6 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.3 of the permit.				
	Strengths: Lee County proactively passed a Comprehensive Landscape/Fertilizer Ordinance on May 13, 2008 with a mandatory fertilizer blackout period during the rainy season. The Ordinance is enforced by Lee County DNR staff. Lee County's Fertilize Smart campaign continued this year with new radio, television and billboard spots educating the public on the impacts of over fertilization.				
	Limitations: A full-time position, intended to be the enforcement element of the ordinance, was eliminated due to Reduction in Force personnel cuts.				
	SWMP revisions implemented to address limitations: None expected.				
Part III.A.7.a	Illicit Discharges and Improper Disposal — Inspections, Ordinances, and Enforcement Measures				
	Report amendments in Year 4.				
	Year 4 ONLY: Attach a report on amendments to applicable legal authority				No amendments to the Lee County Land Development Code on Clean Water Provisions occurred this year.
Part III.A.7.c	Illicit Discharges and Improper Disposal — Investigation of Suspected Illicit Discharges and/or Improper Disposal				
	Report on the proactive inspection program, including the number of inspections conducted by the permittee, the number of illicit activities found, and the number and type of enforcement actions taken.				
	Proactive inspections for suspected illicit discharges Illicit discharges found during a proactive inspection NOV/WL/citation/fines issued for illicit discharges found during proactive inspection	80	GIS Attribute Table, Collector App S:\Natural Resources\N PDES\Enforcement\Citation and Stop Work Data	DNR Hubbard, Simmons	
		14			
		5			
	P2 Proactive Small generator Inspections P2 Number of Violations Found and Resolved P2 Number of citations issued	3,008	Becky Alexander, alexander@leegov.com	P2	
		42			
		21			
	Report on the reactive investigation program as it relates to responding to reports of suspected illicit discharges, including the number of reports received, the number of investigations conducted, the number of illicit activities found, and the number and type of enforcement actions taken.				
	Reports of suspected illicit discharges received Reactive investigations of reports of suspected illicit discharges etc. Illicit discharges etc. found during reactive investigation	173	Intranet2\dotrfa\rfa_results.asp,, CarteGraph Doraine Wetzel DOT	DNR Hubbard, Simmons	
		173			
		144			

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	NOV/WL/citation/fines issued for illicit discharges etc. found during reactive investigation	15	S:\NPDES\Enforcement\Citation and Stop Work Data		
	Report the type of training activities, and the number of permittee personnel and contractors trained (both in-house and outside training) within the reporting year.				
	Personnel trained	127	Sign-in Sheets, ETraining – Victoria Abes 9/2/21	Simmons DNR	17 took eTraining
	Contractors trained	74	Access Query	Hubbard, Simmons, DNR	In field, no FSESCI Class this year due to Covid
Part III.A.7.d	Illicit Discharges and Improper Disposal — Spill Prevention and Response				
	Report on the spill prevention and response activities, including the number of spills addressed.				
	Hazardous and non-hazardous material spills responded to	40	Doraine Wetzel Cartegraph Query	Lee County DOT	Most spills under the auspices of State Fire. No municipal fire department.
	Report the type of training activities, and the number of permittee personnel and contractors trained (both in-house and outside training) within the reporting year.				
	Personnel trained	132	Sign-in Sheet	Simmons, DNR	100 July 22 LDOT, 32 Fleet
	Contractors trained	23	Sign-in sheets, S:\NPDES\Construction Sites\Active\ConstrInspdata.mdb	Hubbard, Simmons, DNR	in field
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).				
	Brochures/Flyers/Fact sheets distributed	10,062	Becky Alexander, ralexander@leegov.com 9/22/21; S:\NPDES\Annual Reports\Cycl	DNR	SQG Assessment handouts, Solid Waste event, Science Fair St. Francis, Conservation 20/20 Celebration,

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	Public displays (e.g., kiosks, storyboards, posters, etc.)	2	e 4, Year 4, 2020-2021Public Education		Lee County Science Fair, Alva School 5 th grade
	Pet Waste Bags distributed	8,375			Animal Services, plus the above events
	Number of visitors to stormwater-related pages	1623	Jeff Bristow JBristow@leegov.co 9/21/21		NPDES, P2 Web pages
Part III.A.7.f	Illicit Discharges and Improper Disposal — Oils, Toxics, and Household Hazardous Waste Control				
	Report on the public education and outreach activities that are performed or sponsored by the permittee within the permittee's jurisdiction to encourage the proper use and disposal of oils, toxics, and household hazardous waste, including the type and number of activities conducted, the type and number of materials distributed, the amount of waste collected / recycled / properly disposed, and the number of Web site visits (if applicable).				
	Brochures/Flyers/Fact sheets distributed	25,770	Molly Schweers, Solid Waste, mschweers@leegov.com , 10/1/21	Lee County Solid Waste	Materials distributed
	Publicize the Lee County Home Chemical Collection Program	365	Lee-county.com/solidwaste		
	HHW Collection Day: Amount collected/recycled/properly disposed(tons)	710	Amanda Condomina email acondomina@leegov.com 9/28/21		
	Public displays (e.g., kiosks, storyboards, posters, etc.)	13	Molly Schweers, Solid Waste, mschweers@leegov.com , 9/28/21		Booth at events
	Radio or television Public Service Announcements (PSAs)	1			Recycle Events
	School presentations: Number conducted	15			Classroom Presentation
	School presentations: Number of participants	809			Speaking Engagement
	Seminars/Workshops: Number conducted	1			Tours
	Seminars/Workshops: Number of participants	10			60 ID, 25 Pet, Cape Royal CDD
	Special events: Number conducted	3			
	Special events: Number of participants	70			
	Storm sewer inlets newly marked/replaced	85	lsimmons@leegov.com		
	Number of visitors to stormwater-related pages	25,926	Jeff Bristow JBristow@leegov.co 9/21/21		HCW and Household Hazardous Waste Web

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		
							page		
Part III.A.7.g	Illicit Discharges and Improper Disposal — Limitation of Sanitary Sewer Seepage								
	Report on the type and number of activities undertaken to reduce or eliminate SSOs and inflow/ infiltration, the number of SSOs or inflow / infiltration incidents found and the number resolved, and the name of the owner of the sanitary sewer system within the permittee's jurisdiction. Report only the SSOs and inflow / infiltration incidents into the MS4.								
	Owner of the sanitary sewer system Activity to reduce/eliminate SSOs and I&I: (Lined Pipe) ft Activity to reduce/eliminate SSOs and I&I: (Manholes sealed and coated) SSO incidents discovered SSO incidents resolved Inflow / infiltration incidents discovered Inflow / infiltration incidents resolved			Lee County, Florida Governmental Utility Authority 11,744 19 40 40 87 87	Jason Brown 239-634-7902 email NPDES 10/4/021 Natalie Harvey nharvey@uswatercorp.net t 9/21/21	LCU LCU & FGUA LCU	Pipe Lined 6 LCU 34 FGUA Lateral and main line repairs		
Part III.A.7 Summary	For activities required by Part III.A.7: Provide an evaluation of the Stormwater Management Program according to Part VI.B.3 of the permit. Strengths: LCU continues to maintain the system – 7,211 manholes were inspected this year. Limitations: Storm events. Illegal draining into the sanitary system are problematic. SWMP Revisions implemented to address limitations: None at this time.								
Part III.A.8.a	Industrial and High-Risk Runoff — Identification of Priorities and Procedures for Inspections								
	Report on the high-risk facilities inventory, including the type and total number of high-risk facilities and the number of facilities newly added each year. Report on the high-risk facilities inspection program, including the number of inspections conducted and the number and type of enforcement actions taken.								
	Type of Facility	Number of Facilities	Number of Inspections	Enforcement Actions					
	Operating municipal landfills	0							
	Hazardous waste treatment, storage, disposal and recovery (HWTSDR) facilities	0							M W Horticulture, Premier Portables
	EPCRA Title III, Section 313 facilities (TRI)	0							
	Facilities determined as high risk by the permittee	2	3	2	Proactive Reports	DNR Simmons			
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							

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	
Part III.A.8 Summary	For activities required by Part III.A.8: Provide an evaluation of the Stormwater Management Program according to Part VI.B.3 of the permit.					
	Strengths: Lee County has no High-Risk landfills, HWTSDR, or TRI facilities. However, the County has selected one facility that has a history of illicit discharges and properties that require annual inspections for quality of stormwater run-off.					
	Limitations: staffing and budget					
	SWMP revisions implemented to address limitations: One facility has been entitled High-Risk so that it receives extra staff time.					
Part III.A.9.a	Construction Site Runoff — Site Planning and Non-Structural and Structural Best Management Practices					
	Report the number of permittee and private pre-construction site plans reviewed for stormwater, erosion, and sedimentation controls, and the number approved.					
	PERMITTEE SITES: Construction site plans reviewed	27	Simmons, Hubbard, DNR	S:NPDES /Annual Reports/ Cycle 4 Year 4 Municipal		
		PERMITTEE SITES: Construction site plans approved			22	
	PRIVATE SITES: Construction site plans reviewed	265	Hubbard, Simmons, DNR	S:NPDES /Annual Reports/ Cycle 4 Year 4 Private		
		PRIVATE SITES: Construction site plans approved			156	
	Report the number of development permit applicants notified of the ERP and CGP, and the number of applicants who confirmed ERP and CGP coverage.					
	Notified of ERP stormwater permit requirements	152	Accela Search, Community Development Reviewers, DNR	Community Development; DO Requirements	152 ePlan Query 46 in field	
		Confirmed ERP coverage			198	
	Notified of CGP stormwater permit requirements	152		Access Inspections Search	152 Development Order requirement, 60 in field	
		Confirmed CGP coverage				212
	Part III.A.9.b	Construction Site Runoff — Inspection and Enforcement				
		Report on the inspection program for privately-operated and permittee-operated construction sites, including the number of active construction sites during the reporting year, the number of inspections of active construction sites, the percentage of active construction sites inspected, and the number and type of enforcement actions / referrals taken.				
		PERMITTEE SITES: Active construction sites	13	Hubbard, Simmons, DNR		
		PERMITTEE SITES: Pre-, During, and Post inspections of active construction sites for E&S and waste control BMPs	73		Access Inspections	

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
	PERMITTEE SITES: Percentage of active construction sites inspected		100		Access Search	5 Average / site
	PRIVATE SITES: Active construction sites		192			
	PRIVATE SITES: Pre-, During, and Post inspections of active construction sites for E&S and waste control BMPs		1479			
	PRIVATE SITES: Percentage of active construction sites inspected		100			7 Average / site
	Enforcement Action		21		S: NPDES Enforcement	citations
Part III.A.9.c	Construction Site Runoff — Site Operator Training					
	Report the type of training activities, the number of inspectors, site plan reviewers and site operators trained (both in-house and outside training).					
		DEP Certification	Annual Training			
	Permittee construction site inspectors	0	2	NPDES Staff		No new inspectors, refresher only
	Permittee construction site plan reviewers		2		Simmons DNR	Refresher only
	Permittee construction site operators		0			No LC site operators
Part III.A.9 Summary	For activities required by Part III.A.9: Provide an evaluation of the Stormwater Management Program according to Part VI.B.3 of the permit.					
	Strengths: Lee County staff has a strong in-field presence.					
	Limitations: Staff and time required for the FSESCI class is significant. Covid 19 restrictions eliminated any classes.					
	SWMP revisions implemented to address limitations: None.					

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

A.	Permit Citation/ SWMP Element	Proposed Changes to the Stormwater Management Program Activities Established as Specific Requirements (Including the Rationale for the Change) — REQUIRES DEP APPROVAL PRIOR TO CHANGE IF PROPOSING T ACTIVITY.
		No change.
B.	Permit Citation/ SWMP Element	Changes to the Stormwater Management Program Activities NOT Established as Specific Requirements Unde (Including the Rationale for the Change)
		No change.

SECTION IX. TMDL Status Report

A.	YEAR 1 Provide a table summarizing the status of the TMDL process. Include a list of prioritized TMDLs and their monitoring and implementation. 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	Monitoring Summary / BPCP Due Date	S
B.	YEAR 3 and annually thereafter, provide a summary of the estimated load reductions that have occurred for the pollutant(s) of concern being 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			
C.	Provide a brief statement as to the status of TMDL implementation according to Part VIII.B. of the permit (e.g. status of monitoring to validate implementation). Please see Attachment 5							

Attachments

Attachment 1	Part III.A.4	Flood Control Projects
Attachment 2	Part IV.B.2	Water Quality Monitoring Summary
Attachment 3	Part III.A.2	Changes to Codes to Reduce Stormwater Impact
Attachment 4	Part V.A.3	Increased Pollutant Loading Year 3
Attachment 5	Part VIII.B.3	Bacterial Pollution Control Plan Update

ATTACHMENT 1: FLOOD CONTROL PROJECTS

Flood Control Projects 2020-2021	
Project Name	
South Lee County Mitigation Plan	
Orange River – Coyle Tributary / Tice Power line	
Edwards Creek	
Chapel Branch	
Orange River Loop Tributary	
Johnson/ Popash Creek	
Palm Creek @ Ruden	
Bum Bum Creek	
San Carlos Park Mitigation	
Alico Road Drainage	
Canal H7 Mitigation	
Industrial Park Berm	
Homestead Lane to Orange River	
Olga Creek Drainage	
E Daughtrey Creek Drainage	

These projects are maintenance issues only for flow associated with flood control, essentially through vegetation removal, structure repairs and replacement and dredging. There is little opportunity to include additional stormwater treatment.

ATTACHMENT 2: WATER QUALITY MONITORING SUMMARY

Nine watersheds with water quality sampling sites at major County outfalls have been assessed over ten years. Sampling results for 2021 are for a partial year through the end of permit Year 4. Total Nitrogen and Total Phosphorus are annual geometric means; all others are arithmetic means. Numeric Nutrient Criteria lines have been included for Total Nitrogen and Total Phosphorus. The benchmark levels depicted for Biological Oxygen Demand (BOD), Copper, Total Suspended Solids (TSS) and Zinc reflect Table 5 - Parameter Benchmark Values in the Federal Register. Beginning Cycle 5, Year One, Copper and Zinc parameters will reflect those included in the Florida Impaired Surface Waters Rule. This will only reflect the Parameter line, not trend values and will be noted in the Water Quality Monitoring Assessment Report.

Results for Total Phosphorus show four watersheds; Billy Creek, Marsh Point, Yellow Fever Creek, and Deep Lagoon, above the Numeric Nutrient Criteria (NNC) of 0.116 mg/L. Deep Lagoon watershed, while under the parameter limit last year, has increased in average concentration. The contributing land uses are mixed mobile home and older, densely packed quarter-acre lots. Phosphorus is found in human and animal waste, phosphorus rich bedrock, industrial effluents, and fertilizer runoff.

All Total Nitrogen sampling results for Year 4 remain below the Numeric Nitrogen Criteria for peninsular Florida (1.54 mg/L). All watersheds exhibit a decreasing trend line since 2012.

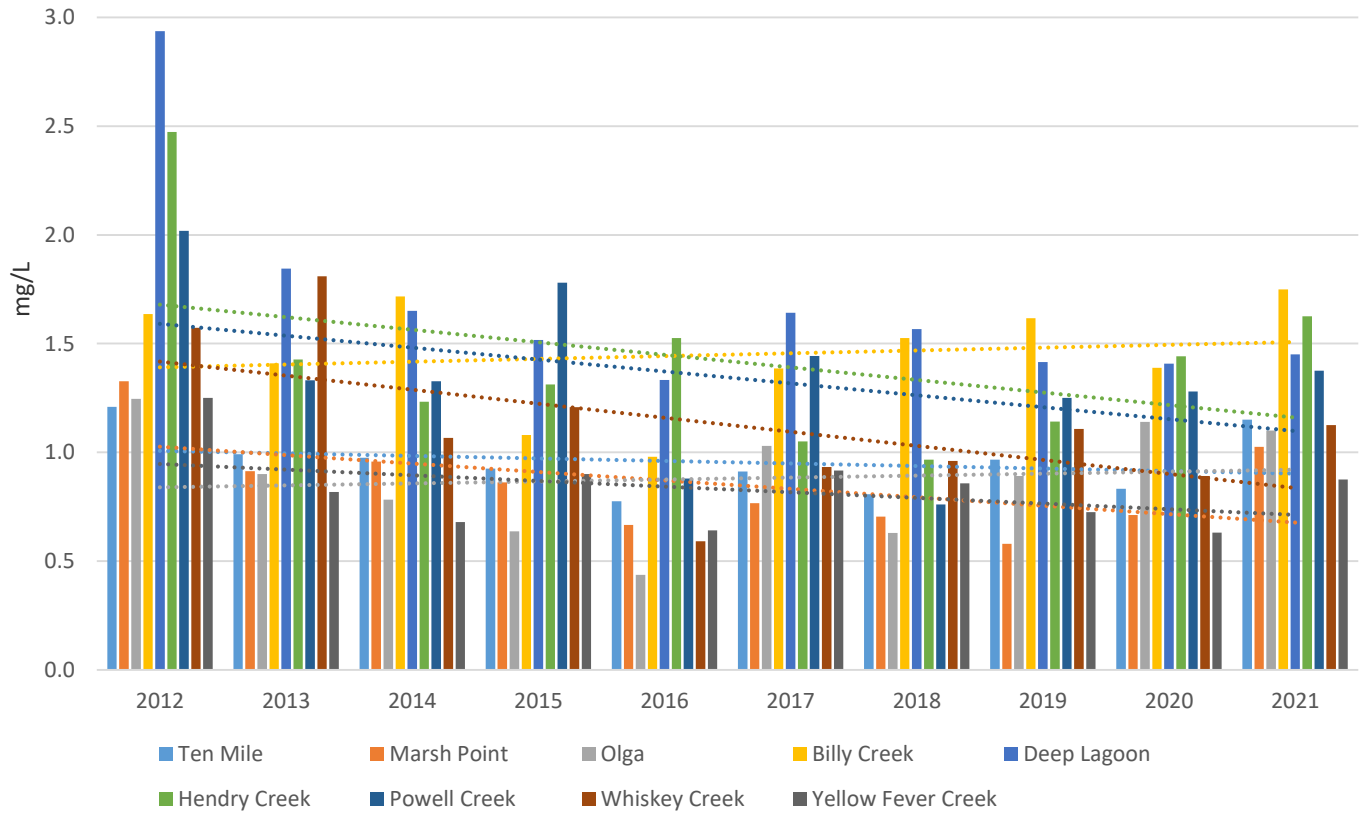
Of the metals, both Copper and Zinc are well below set standards set in the Federal Register. As stated, the parameters to be used in Cycle5 Annual Reports will be based on FDEP Impaired Waters criteria. Copper results are steady or slightly increasing. Lee County has a limited number of industrial sites as it is primarily a tourist location, however, boats and boatyards have been implicated in copper pollution. Anti-fouling paint, used to prevent algae and mollusks from adhering to boats, contains copper.

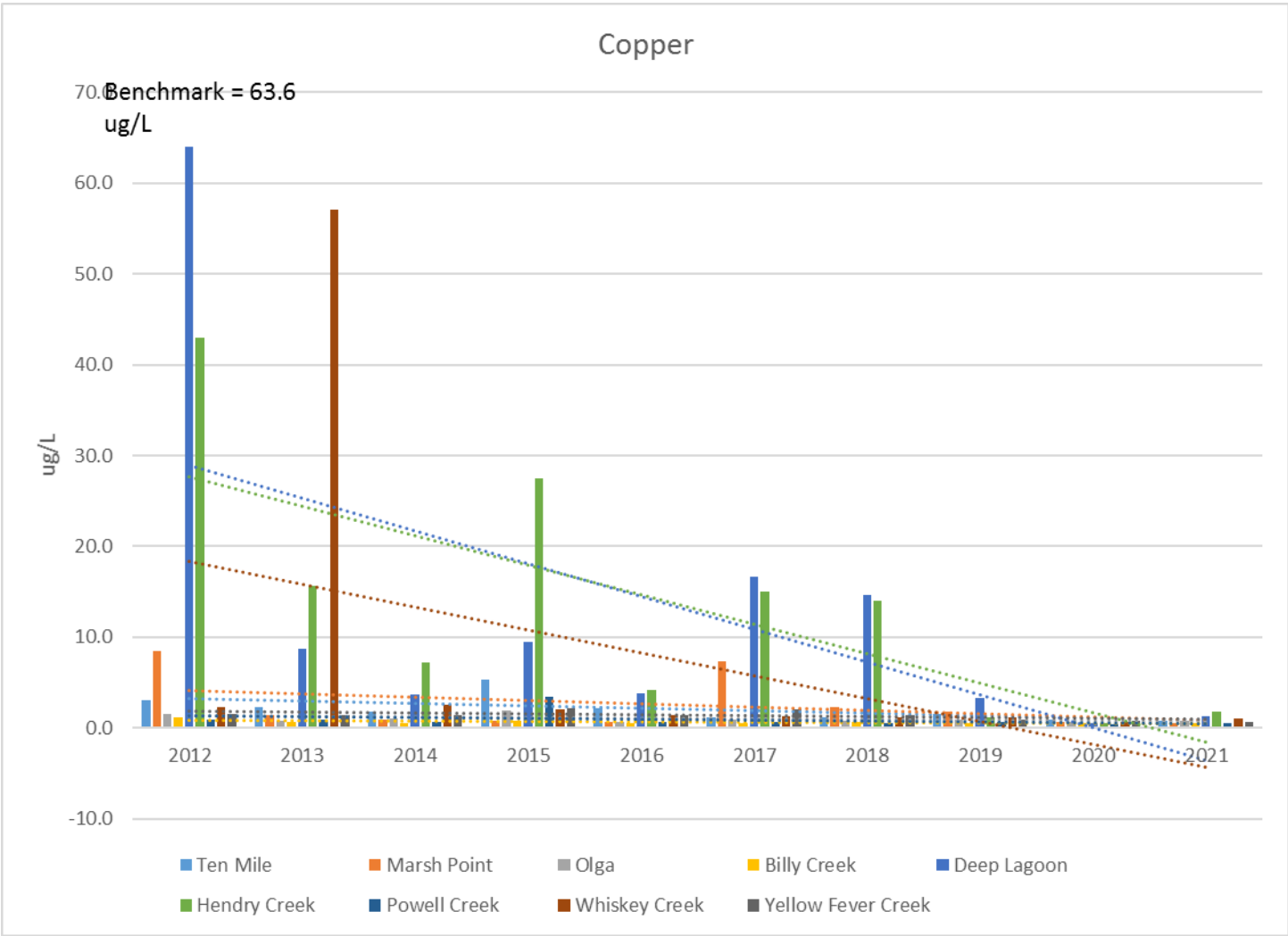
This permit year, Zinc has more than doubled in concentration (while still well below the standard) in the Hendry Creek, Deep Lagoon and Ten Mile Watersheds. The Lee County Laboratory improved the process for zinc sensitivity in water quality analysis in 2019, which should have affected zinc results upwards since then. The source of zinc pollution can be wide-ranging and not readily apparent. Building materials may contribute; Lee County is experiencing an increase in construction this permit year. Zinc pollution may also emanate from boats and boatyards, indicating a need to provide treatment for discharge from these sites. As this is the first reporting year showing this spike, it will be further evaluated if Zinc continues this upward trend next permit year.

Biological Oxygen Demand and Total Suspended Solid results in all watersheds are low and not trending upward.

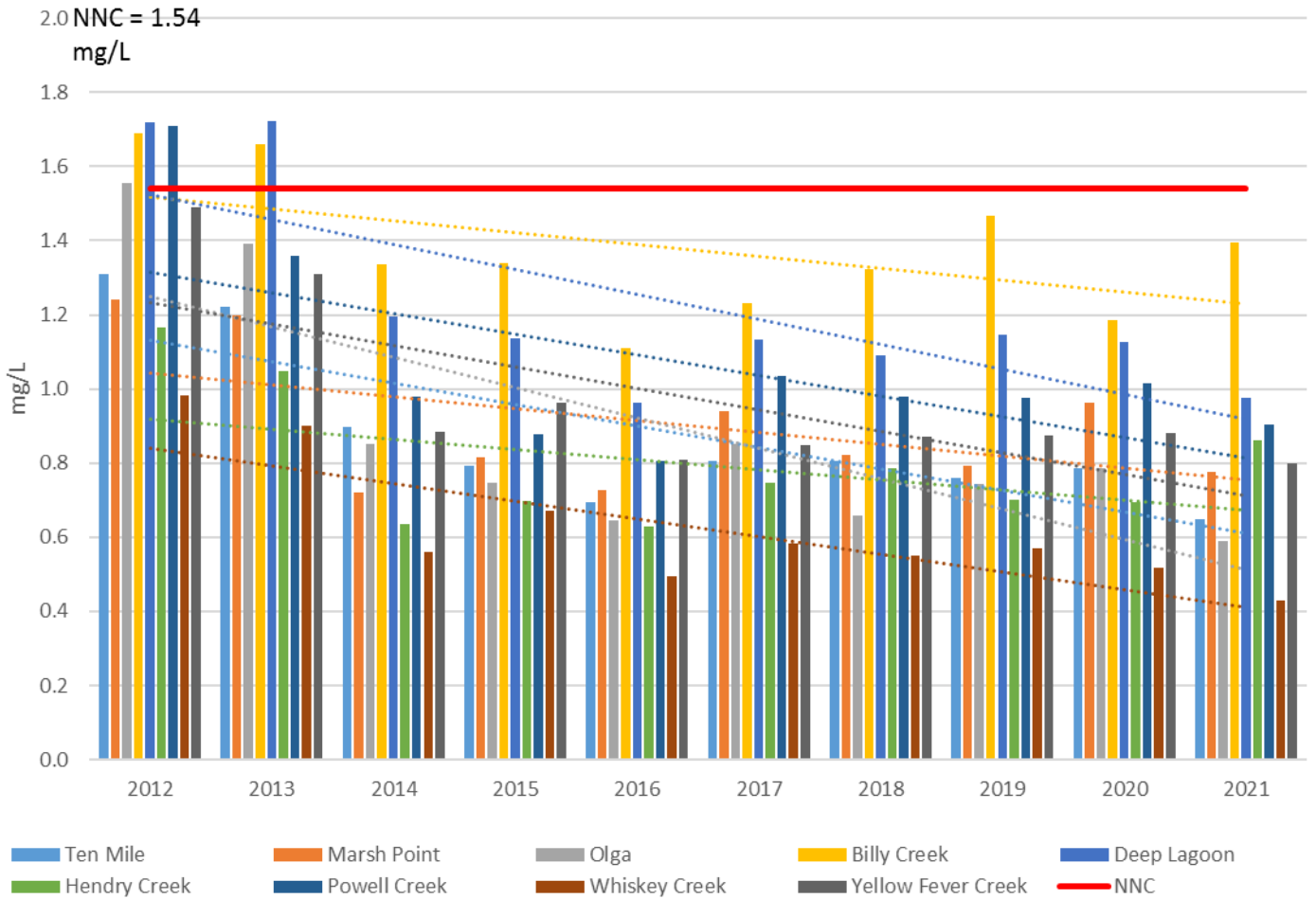
BOD

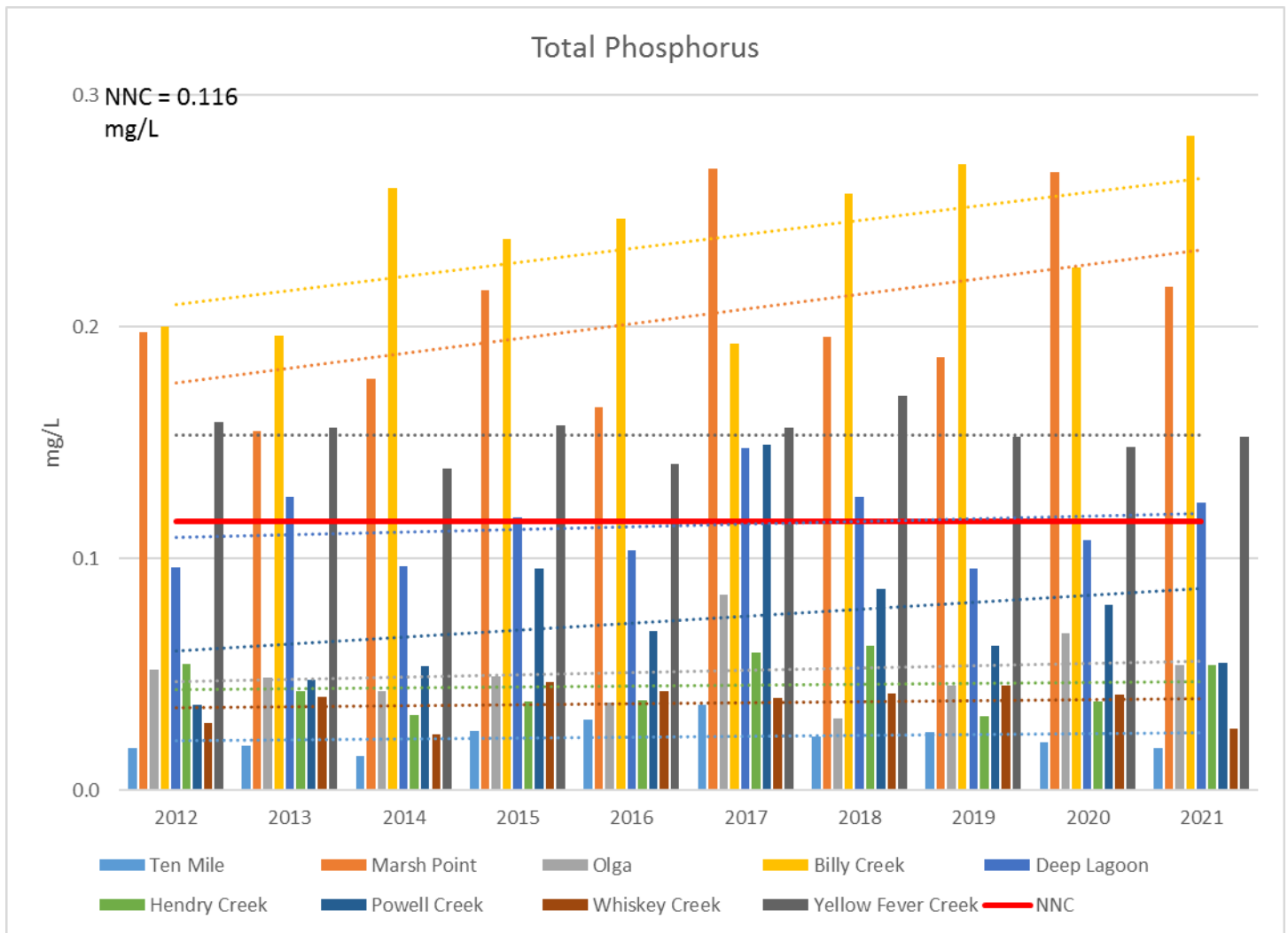
3.5 Benchmark = 30
mg/L



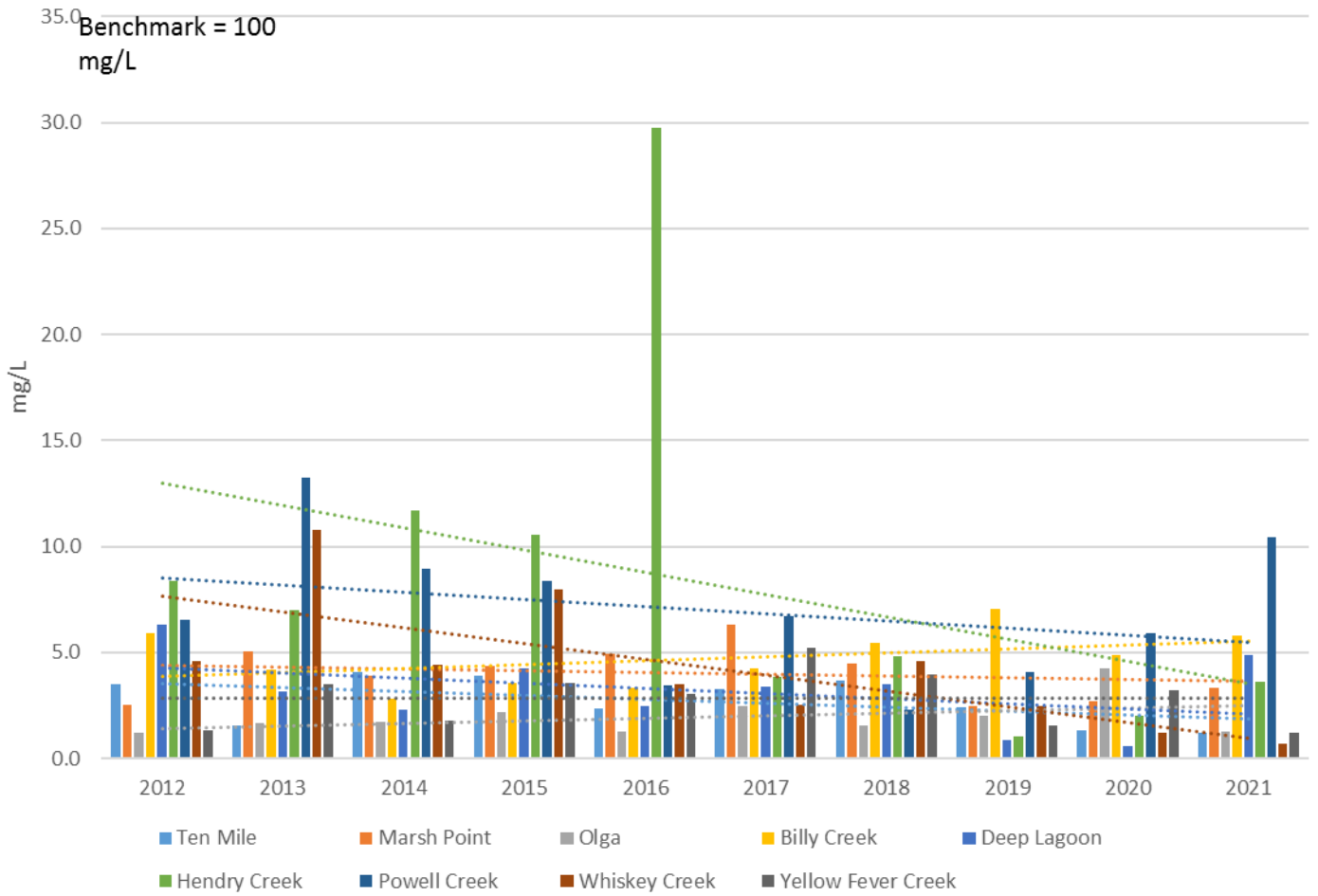


Total Nitrogen



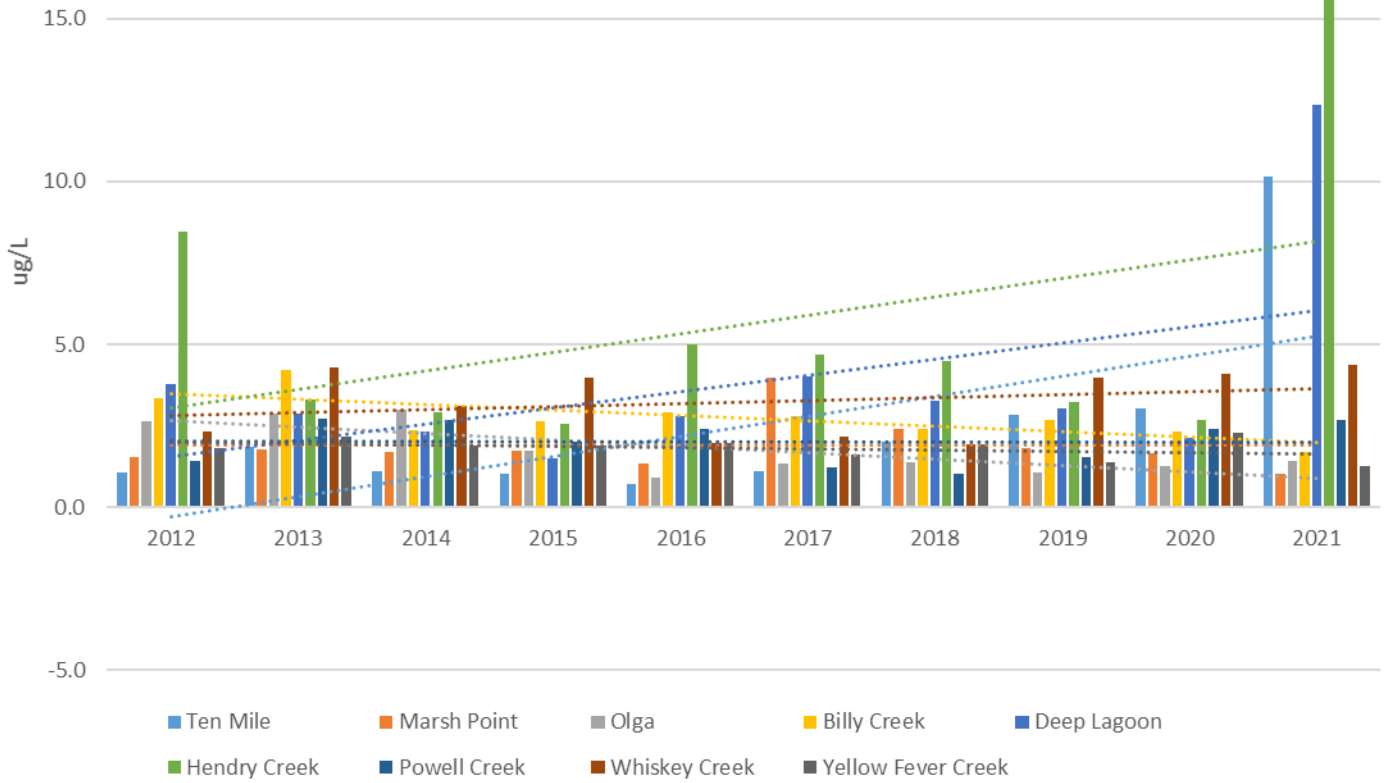


Total Suspended Solids



Zinc Graph

Benchmark = 65
ug/L



ATTACHMENT 3: CHANGES TO CODES TO REDUCE STORMWATER IMPACT

County staff continuous to view all submitted projects to the Lee County Land Development Code (LDC) regulations, ensuing consistency with State and Federal regulations. In this calendar year, staff has not identified any changes which must be made to the LDC regulations to remain consistent with applicable rules.

When South Florida Water Management District (SFWMD) has jurisdiction and regulates water quantity and water quality discharge, SFWMD standards continue to apply. When a project falls outside SFWMD's jurisdiction, the County applies the SFWMD basis of review through the development order review, in order to achieve the same standards.

Low impact developments (LID) are encouraged by the LDC. Through the County review processes, we ensure that LID projects are designed and the systems will continue to function properly per emphasis on continued maintenance.

Currently the LDC specifically requires that all stormwater management systems be designed in accordance with the SFWMD requirements; and further, specifies that the issuance of a SFWMD permit addressing stormwater attenuation/retention from a site will be deems to establish compliance with the surface water management chapter of the LDC. Consequently, no modification to the LDC to address the LID design best management practices (BMP) is indicated at this time.

Part III.A.2 Areas of New Development and Significant Redevelopment

Summary Report – Review of Local Codes

As required through the MS4 permit, FLS000035, Lee County has reviewed applicable land code and regulations citations within the Lee County LDC which authorize or prohibit land clearing and development.

Chapter 1 of the LDC provide the authority of the general provisions under which the Board of County Commissioners set the standards of regulations and citations.

Chapter 10, of the LDC applies to Development Standards:

The Board of County Commissioners finds that the present and probable future growth of the population, commerce and industry in the County is of such magnitude and complexity that the prudent regulations of land development is required in order to protect the public health, safety and welfare and to implement the County Comprehensive Plan.

Chapter 10, Article III details Specific Standards declaring”

Drainage and stormwater management. The development must be designed in accordance with applicable County and water management districts' runoff, retention and attenuation requirements and any other state and local drainage laws. The development must also be designed to avoid flooding or erosion damage to adjacent property and the County drainage system and to avoid the creation of stagnant pools that would encourage mosquito breeding. The development must provide a method of continual maintenance and operation through legal documentation and must ensure proper stormwater management so as to reduce the potential impacts of flooding.

ATTACHMENT 4: INCREASED POLLUTANT LOADING YEAR 3

Pollutant load modeling results from Year 3 calculations indicate that loads are increasing in the Ten Mile Canal watershed for BOD, TP, TN and Zinc. Modeling is based data collected in Ten Mile Canal within the County's MS4. Previous comprehensive inspections of the light industrial facilities along state road 739, which lines Ten Mile Canal, revealed no illicit discharges. Streetsweeping activities have increased in this last permit year by 44% along County roads with curbs in the Ten Mile Watershed. There are numerous older neighborhoods with onsite treatment and disposal systems (OSTDS). Approximately twenty-one percent of the watershed is industrial, much of it developed prior to 1982 and modern stormwater rules. These facilities have no onsite stormwater treatment, discharging directly to Ten Mile Canal.

Ten Mile Canal North watershed spans 7,890 acres. Sixty percent (4,679 acres) of the watershed lies within the City of Fort Myers. The County has evaluated pollutant-loading rates at the southern boundary of the City, which is approximately 3.8 miles upstream from the County border, and at several locations in the County MS4. These analyses show no appreciable difference between the pollutant loading rates from the City and the pollutant loading rates downstream. This suggests that meaningful reduction in pollutant loads in this watershed are most likely to occur in conjunction with the implementation of additional efforts within the City's jurisdiction. Coordination between the City of Ft Myers and Unincorporated Lee County is expected to be advantageous to the watershed.

ATTACHMENT 5: BACTERIAL POLLUTION CONTROL PLAN UPDATE

Year 4, Cycle 4 reflects the fifth year of the Lee County Bacterial Pollution Control Plan (BPCP) for Hendry Creek Marine WBID 3258B2. The initial TMDL identified fecal coliform as the pollutant of concern. Lee County discontinued testing for fecal coliform after the first year of the BPCP and began collecting data for Enterococci and E. coli. Hendry Creek Marine is tidal; Enterococci is the bacteria of concern. Three years of data have been collected thus far on eight existing water quality sample sites and three added temporary water quality sample sites. These sites were separated into three groups: A, B and C. Group A sample sites, situated on the east side of the watershed, requires little to no reduction in bacterial levels and will not be addressed here.

Sample Groups B and C reflect data from the west portion of the watershed where required reduction values are significant.

Table 1. Required Reduction Percentages for selected sampling sites

Note: Missing data indicates sampling site was dry.

HENDGR41

Collection Date	Enterococci Result	TPTV (130counts/100mL)	Required Reduction
5/3/2018	133	130	2%
6/13/2018	411	130	68%
7/23/2018	345	130	62%
8/15/2018	137	130	5%
9/18/2018	395	130	67%
10/23/2018	42	130	0%
11/5/2018	1414	130	91%
12/6/2018	488	130	73%
1/29/2019	1553	130	92%
2/12/2019	308	130	58%
3/6/2019	219	130	41%
4/9/2019	2420	130	95%
Year 2		Required reduction	55%
5/28/2019	89	130	0%
6/26/2019	162	130	20%
7/17/2019	1300	130	90%
8/21/2019	770	130	83%
9/24/2019	549	130	76%
10/17/2019	659	130	80%
11/20/2019	272	130	52%
12/17/2019	31	130	0%

1/21/2020	14	130	0%
2/4/2020	461	130	72%
3/12/2020	142	130	8%
4/14/2020	1542	130	92%
5/11/2020	132	130	2%
Year 3		Required reduction	44%
5/11/2020	132	130	2%
6/22/2020	199	130	35%
7/27/2020	2420	130	95%
8/13/2020	1300	130	90%
9/17/2020	980	130	87%
Year 4		Required reduction	62%

HENDGR40

Collection Date	Enterococci Result	TPTV (130counts/100mL)	Required Reduction
5/3/2018	980	130	87%
6/13/2018	344	130	62%
7/23/2018	1733	130	92%
8/15/2018	197	130	34%
9/18/2018	866	130	85%
10/23/2018	479	130	73%
11/5/2018	1986	130	93%
12/6/2018	140	130	7%
1/29/2019	117	130	0%
2/12/2019	260	130	50%
3/6/2019	411	130	68%
4/9/2019	2420	130	95%
Year 2		Required reduction	62%
5/28/2019	1046	130	88%
6/26/2019	330	130	61%
7/17/2019	613	130	79%
8/21/2019	830	130	84%
9/24/2019	2420	130	95%
10/17/2019	727	130	82%
11/20/2019	1300	130	90%
12/17/2019	436	130	70%
1/21/2020	66	130	0%
2/4/2020	208	130	37%
3/12/2020	228	130	43%
4/14/2020	1186	130	89%
5/11/2020	30	130	0%
Year 3		Required reduction	63%
5/11/2020	30	130	0%
6/22/2020	1414	130	91%
7/27/2020	1203	130	89%

8/13/2020	2420	130	95%
9/17/2020	1414	130	89%
2/17/2021	2420	130	95%
3/30/2021	528	130	75%
4/12/2021	1585	130	92%
Year 4		Required reduction	78%

HENDGR30

Collection Date	Enterococci Result	TPTV (130counts/100mL)	Required Reduction
5/3/2018	2420	130	95%
6/13/2018	154	130	16%
7/23/2018	649	130	80%
8/15/2018	548	130	76%
9/18/2018	126	130	0%
10/23/2018	159	130	18%
11/5/2018	1986	130	93%
12/6/2018	160	130	19%
1/29/2019	378	130	66%
2/12/2019	435	130	70%
3/6/2019	173	130	25%
4/9/2019	231	130	44%
Year 2		Required reduction	50%
5/28/2019	130	130	0%
6/26/2019	122	130	0%
7/17/2019	649	130	80%
8/21/2019	549	130	76%
9/24/2019	365	130	64%
10/17/2019	512	130	75%
11/20/2019	241	130	46%
12/17/2019	34	130	0%
1/21/2020	51	130	0%
2/4/2020	457	130	72%
3/12/2020	10	130	0%
4/14/2020	895	130	85%
5/11/2020	30	130	0%
Year 3		Required reduction	38%
5/11/2020	30	130	0%
6/22/2020	387	130	64%
7/27/2020	479	130	73%
8/13/2020	517	130	75%
9/17/2020	727	130	82%
1/24/2021	179	130	27%
2/17/2021	1300	130	90%
3/30/2021	161	130	19%
4/12/2021	3333	130	99%
Year 4		Required reduction	59%

HENDGR11A

Collection Date	Enterococci Result	TPTV (130counts/100mL)	Required Reduction
6/13/2018	1986	130	94%
7/23/2018	816	130	84%
8/15/2018	29	130	0%
9/18/2018	32	130	0%
1/29/2019	84	130	0%
Year 2		Required reduction	36%
6/26/2019	291	130	55%
7/17/2019	152	130	14%
8/21/2019	75	130	0%
9/24/2019	248	130	48%
10/17/2019	276	130	53%
11/20/2019	158	130	18%
12/17/2019	4	130	0%
1/21/2020	3	130	0%
2/4/2020	54	130	0%
Year 3		Required reduction	21%
6/22/2020	260	130	50%
7/27/2020	65	130	0%
8/13/2020	56	130	0%
9/17/2020	1011	130	87%
2/17/2021	1203	130	89%
Year 4		Required reduction	35%

HENDGR42

Collection Date	Enterococci Result	TPTV (130counts/100mL)	Required Reduction
5/2018	2420	130	95%
6/218	2420	130	95%
7/2018	2420	130	95%
8/2018	461	130	72%
9/2018	1120	130	88%
10/2018	157	130	17%
11/2018	2420	130	95%
12/2018	549	130	76%
1/2019	1300	130	90%
2/2019	461	130	72%
3/2019	435	130	70%
4/2019	548	130	76%
Year 2		Required reduction	78%
5/2019	2420	130	95%
6/2019	2420	130	95%
7/2019	724	130	82%
8/2019	921	130	86%

9/2019	2420	130	95%
10/2019	2420	130	95%
11/2019	770	130	83%
1/2020	38	130	0%
2/2020	1553	130	92%
3/2020	26	130	0%
4/2020	1986	130	93%
Year 3		Required reduction	74%
5/11/2020	1553	130	92%
6/22/2020	1986	130	94%
7/27/2020	2420	130	95%
8/13/2020	2420	130	95%
9/17/2020	442	130	69%
10/21/2020	3466	130	96%
11/17/2020	977	130	87%
12/22/2020	219	130	39%
2/17/2021	436	130	70%
3/30/2021	1986	130	94%
4/12/2021	2420	130	95%
Year 4		Required reduction	84%

HENDGR43

Collection Date	Enterococci Result	TPTV (130counts/100mL)	Required Reduction
5/2018	756	130	83%
6/218	816	130	84%
7/2018	770	130	83%
8/2018	1986	130	93%
9/2018	722	130	82%
10/2018	225	130	42%
11/2018	1986	130	93%
12/2018	118	130	0%
1/2019	1300	130	90%
2/2019	103	130	0%
3/2019	199	130	35%
4/2019	2420	130	95%
Year 2		Required reduction	65%
5/2019	548	130	76%
6/2019	1228	130	89%
7/2019	1986	130	93%
8/2019	1011	130	77%
9/2019	2420	130	95%
10/2019	1986	130	93%
11/2019	1046	130	88%
12/2019	111	130	0%
1/2020	16	130	0%

2/2020	579	130	78%
3/2020	89	130	0%
4/2020	272	130	52%
Year 3		Required reduction	62%
5/11/2020	756	130	83%
6/22/2020	1414	130	91%
7/27/2020	2420	130	95%
8/13/2020	2420	130	95%
9/17/2020	73	130	0%
10/21/2020	1454	130	91%
11/17/2020	2407	130	95%
12/22/2020	2827	130	95%
1/27/2021	220	130	40%
2/17/2021	1011	130	87%
3/30/2021	2420	130	95%
4/12/2021	2420	130	95%
Year 4		Required reduction	80%

HENDGR44

Collection Date	Enterococci Result	TPTV (130counts/100mL)	Required Reduction
6/218	101	130	0%
7/2018	292	130	55%
8/2018	649	130	80%
1/2019	2420	130	95%
2/2019	689	130	81%
Year 2		Required reduction	62%
7/2019	1986	130	93%
8/2019	571	130	77%
9/2019	145	130	10%
10/2019	2420	130	95%
11/2019	64	130	0%
12/2019	6	130	0%
1/2020	387	130	66%
2/2020	378	130	66%
Year 3		Required reduction	51%
6/22/2020	1120	130	78%
7/27/2020	1986	130	93%
8/13/2020	2420	130	95%
9/17/2020	3973	130	97%
10/21/2020	9678	130	99%
11/17/2020	1674	130	92%
12/22/2020	9678	130	99%
1/27/2021	104	130	0%
2/17/2021	2420	130	95%
4/12/2021	2420	130	95%
Year 4		Required reduction	75%



Figure 1. 2021 Required Reduction, Hendry Creek Marine. Red caption boxes are temporary sampling sites in septic neighborhoods. Stormwater flow for the temporary sites is southeast towards the creek.

It can be noted the percent reduction required has increased at all sample sites except HENDGR11A to the east of the creek. The westernmost sampling sites reveal the highest bacterial counts and these flow through the more central sampling sites to the creek. The red-captioned temporary sampling sites that were backed up into smaller drainage ditches from neighborhoods have the highest counts. This data appears to suggest that the source of bacterial pollution is emanating from a few older neighborhoods still on septic, mostly unbounded systems. In July of 2019, samples from sites HENDGR42 and HENDGR43 were analyzed for Bird, Dog and Human DNA. (Site HENDGR had been dry for these months.) Bird and Human fecal DNA were detected in both sites. Dog fecal DNA was not detected.

To address the finding of Human fecal DNA, Lee County Board of County Commissions has allocated \$650,000 to the Division of Natural Resources for the *Microbial Source Tracking Study in Lee County Waterways*. Sampling at sites Countywide has been completed in 20 different neighborhoods. Results and a draft report are expected in November 2021.

Over the last five years, Public Education alerting Lee County citizens to the potential harm of uncollected pet waste continues. As reported in Part III.A.6 billboards and TV spots brought the message to the public. County Ordinance 14-22 requires pet waste removal on public walks, recreation areas, private property or any other place where the pet waste may be damaging. Thousands of pet waste bags are distributed yearly to Lee County citizens. Several homeless camps have been removed. Municipal lift stations in the Hendry Creek Watershed have been inspected for five years, revealing no problems. Illicit discharge reports are investigated promptly.

Due to fiscal restraints, and being the fifth year of the five-year BPCP, the temporary sampling sites have been removed. Monitoring for bacteria from the permanent sites will continue as well as public education, proactive investigations and citizen complaints.