



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

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

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

SECTION I. BACKGROUND INFORMATION

A.	Permittee Name: Town of Manalapan		
B.	Permit Name: Palm Beach County MS4		
C.	Permit Number: FLS000018-004		
D.	Annual Report Year: <input type="checkbox"/> Year 1 <input type="checkbox"/> Year 2 <input checked="" type="checkbox"/> Year 3 <input type="checkbox"/> Year 4 <input type="checkbox"/> Year 5 <input type="checkbox"/> Other, specify Year:		
E.	Reporting Time Period (month/year): 10 / 2018 through 9 / 2019		
F.	Name of the Responsible Authority: Linda Stumpf		
	Title: Town Manager		
	Mailing Address: 600 South Ocean Boulevard		
	City: Manalapan	Zip Code: 33462	County: Palm Beach
	Telephone Number: (561) 585-9477		Fax Number: (561) 585-9498
E-mail Address: lstumpf@manalapan.org			
G.	Name of the Designated Stormwater Management Program Contact (if different from Section I.F above): Kimberli Kile, Engenuity Group, Inc.		
	Title: Project Engineer		
	Department: Engineering		
	Mailing Address: 1280 N. Congress Avenue, Suite 101		
	City: West Palm Beach	Zip Code: 33409	County: Palm Beach
Telephone Number: (561) 655-1151		Fax Number: (561) 832-9390	
E-mail Address: kkile@engenuitygroup.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? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable)
B.	Number of outfalls REMOVED from the outfall inventory in the current reporting year (insert "0" if none): 0 (Does this number include non-major outfalls? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable)
C.	Is the change in the total number of outfalls due to lands annexed or vacated? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable

SECTION III. PART V.B. ASSESSMENT PROGRAM

A.	<p>Provide a brief statement as to the status of water quality monitoring plan implementation. Status may include sampling frequency changes, monitoring location changes, or sampling waiver conditions. <i>DEP Note: If permittee participates in a collaborative monitoring plan, permittee may refer to a joint response as defined by the interlocal agreement.</i></p> <p>Name and date of the approved plan: Current approval of the Group Monitoring Plan is September 8, 2016 (with issuance of the Cycle 4 permit)</p> <p>Status: The monitoring program is carried out jointly by the PBC permittees. See the PBC Joint Annual Report. The information relevant to the permittee's outfalls is addressed within the Annual Assessment Report documents provided herewith.</p>
B.	<p>Provide a brief discussion of the monitoring and loading results to date which includes a summary of the water quality monitoring data and / or stormwater pollutant loading changes from the reporting year. <i>DEP Note: Results must be specific to the permittee's SWMP.</i></p> <p>See attached Annual Assessment Report</p>
C.	<p>Attach a monitoring data summary as required by the permit. An analysis of the data discussing changes in water quality and/or stormwater pollutant loading from previous reporting years. <i>DEP Note: Analysis must be specific to the permittee's SWMP.</i></p> <p>See attached Annual Assessment Report.</p>

SECTION IV. FISCAL ANALYSIS

A.	Total expenditures for the NPDES stormwater management program for the current reporting year: \$23,765
B.	Total budget for the NPDES stormwater management program for the subsequent reporting year: \$30,450
C.	<p>Did the current reporting year resources decrease from the previous year? Y <input type="checkbox"/> / N <input checked="" type="checkbox"/></p> <p>If program resources decreased, provide a discussion of the impacts on the implementation of the SWMP.</p>

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

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

Attached	N/A	Required Attachments	Permit Citation	Attachment Number/Title
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Any additional information required to be submitted in this current annual reporting year in accordance with Part III.A of your permit that is not otherwise included in Section VII below.	Part III.A	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	An explanation of why the minimum inspection frequency in Table II.A.1.a. was not met, if applicable.	Part II.A.1	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	A list of the flood control projects that did not include stormwater treatment and an explanation for each of why it did not (if applicable).	Part III.A.4	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	A monitoring data summary as directed in Section III.C above and in accordance with Rule 62-624.600(2)(c), F.A.C.	Part V.B.3	See Joint Annual Report and attached Assessment Report
<input type="checkbox"/>	<input checked="" type="checkbox"/>	YEAR 1 ONLY: An inventory of all known major outfalls and a map depicting the location of the major outfalls (hard copy or CD-ROM) in accordance with Rule 62-624.600(2)(a), F.A.C.	Part III.A.1	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	YEAR 2: A summary review of codes and regulations to reduce the stormwater impact from development.	Part III.A.2	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Year 3 ONLY: The estimates of pollutant loadings and event mean concentrations for each major outfall or each major watershed in accordance with Rule 62-624.600(2)(b), F.A.C.	Part V.A	See Joint Annual report and attached Assessment Report
<input type="checkbox"/>	<input checked="" type="checkbox"/>	YEAR 3: Summary of TMDL Monitoring Results (if applicable).	Part VIII.B.2	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	YEAR 3: Bacteria Pollution Control Plan (if applicable).	Part VIII.B.3	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	YEAR 4: A follow-up report on plan implementation of changes to codes and regulations to reduce the stormwater impact from development.	Part III.A.2	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	YEAR 4: A report on any amendments to the applicable legal authority (if applicable).	Part III.A.7.a	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	YEAR 4: Permit re-application information in accordance with Rule 62-624.420(2), F.A.C. <ul style="list-style-type: none"> The monitoring plan (with revisions, if applicable). If the total annual pollutant loadings have not decreased over the past two permit cycles, revisions to the SWMP, as appropriate. 	Part V.B.3 Part V.A.3	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	YEAR 4: TMDL Supplemental SWMP (if applicable).	Part VIII.B.3	

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

SECTION VI. CERTIFICATION STATEMENT AND SIGNATURE

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

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name of Responsible Authority (type or print): Linda Stumpf

Title: Town Manager

Signature:  Date: 12/18/19

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									
	<p>Report the current known inventory.</p> <p>Report the number of inspection and maintenance activities conducted for each applicable type of structure included in Table II.A.1.a, and the percentage of the total inventory of each type of structure inspected and maintained.</p> <p><i>Note: Delete structures that are not in your MS4's inventory. The permittee may choose its own unit of measurement for each structural control to be consistent with the unit of measurement in the documentation. Unit options include: miles, linear feet, acres, etc.</i></p>									
	Type of Structure	Number of Structures	Number of Inspections	Percent Inspected	Number of Maintenance Activities	Percent Maintained				
	Inlets / catch basins / grates	12	48	100	48	100	NPDES Stormwater System Maintenance Inspection Checklist	Building Department Staff	Quarterly Inspections. Maintenance performed when needed	
	Ditches / conveyance swales (miles)	15840	4	100	4	100	Roadways Maintenance Schedule	Building Department Staff	Maintenance performed when needed	
	<input type="checkbox"/>									
	<p>If the minimum inspection frequencies set forth in Table II.A.1.a. were not met, provide as an attachment an explanation of why they were not and a description of the actions that will be taken to ensure that they will be met.</p>									

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 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.				
	Strengths: Simple catch basin and swale system with no major flooding.				
	Limitations: None.				
	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	0	None	None	No significant redevelopment projects have been reviewed nor approved
	Number of significant development projects approved	0	None	None	
	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	0	N/A	N/A	N/A
	Year 4 ONLY: Attach the follow-up report on plan implementation	0	N/A	N/A	N/A
Part III.A.2 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.				
	Strengths: There has been no significant redevelopment in the Town.				
	Limitations: None				
	SWMP revisions implemented to address limitations: None.				
Part III.A.3	Roadways				
	Report on the litter control program, including the frequency of litter collection, an estimate of the total number of road miles cleaned or amount of area covered by the activities, and an estimate of the quantity of litter collected. <i>Note: If the permittee does not contract activities, delete CONTRACTOR activities.</i>				
	PERMITTEE Litter Control: Frequency of litter collection	Daily	Roadway Maintenance Schedule	Building Department and Town Residents	Town Staff collects the litter as needed. Residents maintain their own areas.
	PERMITTEE Litter Control: Estimated amount of area maintained (lf) PERMITTEE Litter Control: Estimated amount of litter collected (cy)	5.34	ROW Maps	Building Dept.	None
		Less than 1 bag per month	Roadway Maintenance Schedule and Litter Control Program	Building Department	The litter is collected when seen, but is not measured.

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	
	CONTRACTOR Litter Control: Frequency of litter collection	0	None	None	None	
	CONTRACTOR Litter Control: Estimated amount of area maintained (lf)	0	None	None	None	
	CONTRACTOR Litter Control: Estimated amount of litter collected (cy)	0	None	None	None	
	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".					
	Trash Pick-up Events: Total miles cleaned	0	None	None	No event this year	
	Trash Pick-up Events: Estimated amount of litter collected (cy)	0	None	None	No event this year	
	Adopt-A-Road: Total miles cleaned	0	None	None	None	
	Adopt-A-Road: Estimated amount of litter collected (cy)	0	None	None	None	
	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	0	None	None	DOT maintains South Ocean Blvd. (main road). The Town's inside Roads do not have curb and gutter	
	Total miles swept	0	None	None	None	
	Estimated quantity of sweeping material collected (cy / tons)	0	None	None	None	
	Total phosphorous loadings removed (pounds)	0	None	None	None	
	Total nitrogen loadings removed (pounds)	0	None	None	None	
	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				
	The Town of Manalapan does not have any of these facilities		0	None	None	None

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.3 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.				
	Strengths: Re-paved in 2013				
	Limitations: None.				
	SWMP revisions implemented to address limitations: None.				
Part III.A.4	Flood Control Projects				
	Report the total number of flood control projects that were constructed by the permittee during the reporting period and the number of those projects that did NOT include stormwater treatment. The permittee shall provide a list of the projects where stormwater treatment was not included with an explanation for each of why it was not.				
	Report on any stormwater retrofit planning activities and the associated implementation of retrofitting projects to reduce stormwater pollutant loads from existing drainage systems that do not have treatment BMPs.				
	Flood control projects completed during the reporting period	0	Five Year Capital Improvement Plan	Building Department	None for the reporting year
	Flood control projects completed that did <u>not</u> include stormwater treatment	0	Five Year Capital Improvement Plan	Building Department	None for the reporting year
	Stormwater retrofit projects planned/under construction	0	None	None	None
	Stormwater retrofit projects completed	0	None	None	None
	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 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.				
	Strengths: No flooding on property of Town of Manalapan.				
	Limitations: None.				
	SWMP revisions implemented to address limitations: None.				

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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.5	Municipal Waste Treatment, Storage, and Disposal Facilities Not Covered by an NPDES Stormwater Permit				
	Report the applicable facilities and the number of the inspections conducted for each facility.				
	Name of Facility	Number of Inspections			
	The Town of Manalapan does not have any of these facilities	0	None	None	
Part III.A.5 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.				
	Strengths: None.				
	Limitations: None				
	SWMP revisions implemented to address limitations: None.				
Part III.A.6	Pesticides, Herbicides, and Fertilizer Application				
	Report the number of permittee personnel applicators and contracted commercial applicators of pesticides and herbicides who are FDACS certified / licensed.				
	Report the number of permittee personnel who have been trained through the Green Industry BMP Program and the number of contracted commercial applicators of fertilizer who are FDACS certified / licensed.				
	PERSONNEL: FDACS public applicators of pesticides/herbicides	0	None	None	Applied by contractors
	CONTRACTORS: FDACS commercial applicators of pesticides/ herbicides	2	FDAS certificate	Town of Manalapan	Shorman's Pest Control & The Lawn Doctor
	PERSONNEL: Green Industry BMP Program training completed	0	None	None	No fertilizers are applied
	CONTRACTORS: FDACS certified / licensed applicators of fertilizer	0	None	None	None
	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	0	N/A	N/A	N/A
	Report on the public education and outreach activities that are performed or sponsored by the permittee within the permittee's jurisdiction to encourage citizens to reduce their use of pesticides, herbicides and fertilizers including the type and number of activities conducted, the type and number of materials distributed, and the number of Web site visits (if applicable).				
	Public Education and Outreach Program	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.			
	Brochures/Flyers/Fact sheets distributed	1	Brochure	Town of Manalapan	Brochures are constantly available in the Town's lobby

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
Part III.A.6 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.				
	Strengths: Bi-monthly application with certified company				
	Limitations: None.				
	SWMP revisions implemented to address limitations: None.				
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	0	N/A	N/A	N/A
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	0	NPDES Stormwater System Maintenance Inspection Checklist	Building Department	None during this reporting period
	Illicit discharges found during a proactive inspection	0	NPDES Stormwater System Maintenance Inspection Checklist	Building Department	None during this reporting period
	NOV/WL/citation/fines issued for illicit discharges found during proactive inspection	0	Violation Notice	Building/Police Department	None during this reporting period
	Report on the reactive investigation program as it relates to responding to reports of suspected illicit discharges, including the number of reports received, the number of investigations conducted, the number of illicit activities found, and the number and type of enforcement actions taken.				
	Reports of suspected illicit discharges received	0	NPDES Stormwater System Maintenance Inspection Checklist	Building/Police Department	None during this reporting period
	Reactive investigations of reports of suspected illicit discharges etc.	0	NPDES Stormwater System Maintenance Inspection	Building/Police Department	None

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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
	Illicit discharges etc. found during reactive investigation	0	Checklist NPDES Stormwater System Maintenance Inspection Checklist	Building/Police Department	None during this reporting period
	NOV/WL/citation/fines issued for illicit discharges etc. found during reactive investigation	0	Violation Notice	Building/Police Department	None during this reporting period
	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	1	Sign-In Sheet	BC MS4 NPDES Permit Annual Staff Training	Training videos
	Contractors trained	0	None	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.				
	Hazardous and non-hazardous material spills responded to	0	Spill Prevention and Response Procedure	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	1	Sign-In Sheet	BC MS4 NPDES Permit Annual Staff Training	Training videos
	Contractors trained	0	None	None	None
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).				
	Public Education and Outreach Program	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.			
	Brochures/Flyers/Fact sheets distributed	1	Brochure	Town of Manalapan	Brochures are constantly available in the Town's lobby

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Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentation / Record	Entity Performing the Activity	Comments
Part III.A.7.f	Illicit Discharges and Improper Disposal — Oils, Toxics, and Household Hazardous Waste Control				
	Report on the public education and outreach activities that are performed or sponsored by the permittee within the permittee's jurisdiction to encourage the proper use and disposal of oils, toxics, and household hazardous waste, including the type and number of activities conducted, the type and number of materials distributed, the amount of waste collected / recycled / properly disposed, and the number of Web site visits (if applicable).				
	Public Education and Outreach Program	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.			
	Brochures/Flyers/Fact sheets distributed	1	Brochure	Town of Manalapan	Brochures are constantly available in the Town's lobby
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	Individual Septic Tanks			
	Activity to reduce/eliminate SSOs and I&I: (description)	0	N/A	N/A	N/A
	Activity to reduce/eliminate SSOs and I&I: (description)	0	N/A	N/A	N/A
	SSO incidents discovered	0	N/A	N/A	N/A
	SSO incidents resolved	0	N/A	N/A	N/A
	Inflow / infiltration incidents discovered	0	N/A	N/A	N/A
	Inflow / infiltration incidents resolved	0	N/A	N/A	N/A
Part III.A.7 Summary	For activities required by Part III.A.7: Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.				
	Strengths: N/A				
	Limitations: N/A				
	SWMP Revisions implemented to address limitations: N/A				
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	

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Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity		Number of Activities Performed		Documentation / Record	Entity Performing the Activity	Comments
	Operating municipal landfills	0	0	0	Solid Waste Facility inventory Report printout from DEP website	Engenuity Group, Inc.	None
	Hazardous waste treatment, storage, disposal and recovery (HWTSDR) facilities	0	0	0	Hazardous Waste Facility inventory Report printout from DEP website	Engenuity Group, Inc.	None
	EPCRA Title III, Section 313 facilities (TRI)	0	0	0	Toxics Release Inventory (TRI) printout from EPA website	Engenuity Group, Inc.	None
	Facilities determined as high risk by the permittee	0	0	0	Superfund (CERCLIS) printout from EPA website	Engenuity Group, Inc.	None
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	The Town of Manalapan does not have any high risk facilities
Part III.A.8 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.						
	Strengths: The Town of Manalapan does not have any of these facilities						
	Limitations: None.						
	SWMP revisions implemented to address limitations: None.						
Part III.A.9.a	Construction Site Runoff — Site Planning and Non-Structural and Structural Best Management Practices						
	Report the number of permittee and private pre-construction site plans reviewed for stormwater, erosion, and sedimentation controls, and the number approved.						
	PERMITTEE SITES: Construction site plans reviewed		0		Site Plan Review Procedures	Building Department	No plans were reviewed
	PERMITTEE SITES: Construction site plans approved		0		Site Plan Review Procedures	Building Department	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
	PRIVATE SITES: Construction site plans reviewed	0	Site Plan Review Procedures	Building Department	No plans were reviewed
	PRIVATE SITES: Construction site plans approved	0	Site Plan Review Procedures	Building Department	None
	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	0	None	None	None
	Confirmed ERP coverage	0	None	None	None
	Notified of CGP stormwater permit requirements	0	None	None	None
	Confirmed CGP coverage	0	None	None	None
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	0	Construction Site Inspection	Building Department	None
	PERMITTEE SITES: Pre-, During, and Post inspections of active construction sites for E&S and waste control BMPs	0	Construction Site Inspection	Building Department	None
	PERMITTEE SITES: Percentage of active construction sites inspected	0	Construction Site Inspection	Building Department	No construction sites for this reporting period
	PRIVATE SITES: Active construction sites	0	Construction Site Inspection	Building Department	None
	PRIVATE SITES: Pre-, During, and Post inspections of active construction sites for E&S and waste control BMPs	0	Construction Site Inspection	Building Department	No construction sites for this reporting period
	PRIVATE SITES: Percentage of active construction sites inspected	0	Construction Site Inspection	Building Department	No construction sites for this reporting period
	Enforcement Action	0	Violation Notice	Building Department	None
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		

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 construction site inspectors	0	0	N/A	N/A	N/A
	Permittee construction site plan reviewers		0	N/A	N/A	N/A
	Permittee construction site operators		0	N/A	N/A	N/A
Part III.A.9 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.					
	Strengths: No issues. Weekly inspections are performed by a Building Department Official					
	Limitations: None.					
	SWMP revisions implemented to address limitations: None.					

SECTION VIII. CHANGES TO THE STORMWATER MANAGEMENT PROGRAM (SWMP) ACTIVITIES (Not Applicable in Year 4)		
A.	Permit Citation/ SWMP Element	Proposed Changes to the Stormwater Management Program Activities Established as Specific Requirements Under Part III.A of the Permit (Including the Rationale for the Change) — REQUIRES DEP APPROVAL PRIOR TO CHANGE IF PROPOSING TO REPLACE OR DELETE AN ACTIVITY.
		None
B.	Permit Citation/ SWMP Element	Changes to the Stormwater Management Program Activities NOT Established as Specific Requirements Under Part III.A of the Permit (Including the Rationale for the Change)
		None.

SECTION IX. TMDL Status Report

A.	YEAR 1 Provide a table summarizing the status of the TMDL process. Include a list of prioritized TMDLs and their monitoring and implementation schedule; and include the Identification number of the outfall prioritized for TMDL monitoring.								
	WBID Number	Segment/ Waterbody/ Basin	Pollutant of Concern	TMDL DEP / EPA	Percent Reduction (WLA)	Priority Rank	Priority Outfall	Monitoring Summary / BPCP Due Date	Supplemental SWMP Due Date
	N/A			<input type="checkbox"/> / <input type="checkbox"/>		1		(Year 3 AR)	(Year 4 AR; N/A) if BPCP)
				<input type="checkbox"/> / <input type="checkbox"/>					
B.	YEAR 3 and annually thereafter, provide a summary of the estimated load reductions that have occurred for the pollutant(s) of concern being discharged from the MS4 to the TMDL water body during the reporting period and cumulatively since the date the Supplemental SWMP was implemented. Year 3: Submit a Monitoring data summary or BPCP (if applicable). Year 4: Submit a Supplemental SWMP (if applicable).								
	WBID Number	Pollutant of Concern	Monitoring Summary / BPCP Submitted	Supplemental SWMP Submitted	Projected load reductions OR Actual load reductions to date				
	N/A		(Year 3 AR)	(Year 4 AR; N/A if BPCP)					
C.	Provide a brief statement as to the status of TMDL implementation according to Part VIII.B of the permit (e.g. status of monitoring to validate WLA): No discharge to a TMDL WBID at the time of permit issuance.								



Town of Manalapan

Water Quality Monitoring Assessment Report

Objective

The purpose of this Report is to provide information for the Town of Manalapan to determine the overall effectiveness of its Stormwater Management Program (SWMP) in reducing stormwater pollutant loadings from its Municipal Separate Storm Sewer System (MS4) to receiving water bodies.

Assessment Report Components

As required by the MS4 Permit, the following parts make up this Assessment Report:

- A. A Water Quality Monitoring Plan – The water quality monitoring plan is intended to identify local sources where urban stormwater is adversely affecting surface water resources
- B. A Pollutant Loading Estimate/Results – The pollutant loadings and results are reported and discussed.
- C. Conclusion – The response plan is the plan of action to be taken based on the results from A. and B. and will be used to identify portions of the MS4 to be targeted for loading reduction/corrective action

Part A –Water Quality Monitoring Program

Currently, the joint NPDES program in Palm Beach County collects ambient water quality data at several monitoring sites based on the location of major outfalls and TMDL's within the County. For the Water Quality Monitoring Plan, the Town of Manalapan is proposing to use the ambient water quality data provided by the joint program from site LWL-13.

Monitoring Locations

Since the Town of Manalapan does not own any major outfalls within the MS4, the one (1) monitoring station closest to the Town's MS4 that collects data for the joint program has been selected. The following figure and table identifies this monitoring station, along with relevant information about the location.



Figure 1 – LWL-13 Monitoring Station



Table 1 - MS4 Monitoring Station

Monitoring Station Number	Location Description	Latitude/Longitude	Receiving Water Body
LWL-13	This former DEP station (28010783) is located at the Ocean Ave Causeway in the Town of Lantana, on south side of the bridge, West of the ICW and East of the Marina and public boat ramp.	26.35025/-80.00246	Lake Worth Lagoon (Southern Segment)

Monitoring Results

The primary concern that FDEP has regarding the stormwater permitting program is related to nutrients and what impacts are created by nutrients into the stormwater system. The Town of Manalapan has evaluated nutrient monitoring results at the location in Table 1. The 10-year trend referenced in the Palm Beach County MS4 Cycle 4, Year 2, Joint Annual Report is used for evaluating the nutrient levels. Specifically, Total Nitrogen (TN), Total Phosphorus (TP) and Chlorophyll-A (a surrogate for nutrient enrichment) are analyzed and evaluated below. Data for monitoring stations in the LWL-S watershed are examined.

Total Nitrogen (TN) and Total Phosphorous (TP) has a criteria of less than or equal to 0.59 mg/l and less than or equal to 0.05 mg/l, respectively. Chlorophyll-A has criteria of less than or equal to 5.70 ug/l. Based on information provided in the PBC Cycle 4 Year 2 Joint Annual Report, water quality monitoring results for the last 10 years (2009-2018) is provided in Tables 2, 3, 4, respectively for TN, TP and Chlorophyll-A.

Table 2 - LWL-13 Annual Geometric Mean Total Nitrogen Concentration for the LWL-S Watershed

Year	Concentration (mg/l)
2009	No Record
2010	0.37
2011	0.22
2012	0.35
2013	0.41
2014	0.14
2015	0.30



2016	0.32
2017	0.99
2018	0.44

Source: Extracted from Table 5-8, pg. 112 of the Cycle 4, Year 2 PBC Joint Annual Report

Table 3 - LWL-13 Annual Geometric Mean Total Phosphorous Concentration for the LWL-S Watershed

Year	Concentration (mg/l)
2009	No Record
2010	0.03
2011	0.03
2012	0.03
2013	0.04
2014	0.03
2015	0.02
2016	0.03
2017	0.07
2018	0.03

Source: Extracted from Table 5-9, pg. 116 of the Cycle 4, Year 2 PBC Joint Annual Report

Table 4 - LWL-13 Annual Geometric Mean Total Chlorophyll-A Concentration for the LWL-S Watershed

Year	Concentration (ug/l)
2009	No Record
2010	4.80
2011	3.00
2012	4.30
2013	No Record
2014	No Record
2015	4.08
2016	No Record
2017	5.40
2018	11.11

Source: Extracted from Table 5-10, pg. 120 of the Cycle 4, Year 2 PBC Joint Annual Report



Nutrient Trends

To evaluate nutrient trends, the water quality data for the last 10 years are extracted from graphs provided on the Palm Beach County NPDES web site; specifically, for Total Nitrogen (TN), Total Phosphorus (TP) and Chlorophyll-A. These nutrients are analyzed for LWL-13. Review of the annual geometric mean trend graphs (Figures 2-4) indicate a general increasing trend for all three water quality monitoring parameters.

Even though TN and TP shows an increasing trend for the last ten years, the long term 20 year trend shows a declining trend (reference to PBC Cycle 4 Year 2 Joint Annual Report Figures 5-2, 5-3, and 5-4 Total Nitrogen, Total Phosphorous, and Chlorophyll-A for the Lake Worth Lagoon-S, respectively). Total Chlorophyll-A is showing an increasing trend over the past 20 years. Table 5 shows the statistical trend interpretation (extracted from Table 5-11 of the Cycle 4, Year 3 PBC Joint Annual Report).

Table 5 – Statistical Water Quality Trend Interpretation of LWL-13 Monitoring Site

	Date Range	Tau	Slope¹	Selected P-Value²	Statistical Trend Interpretation³
Total Nitrogen	2004-2019	-0.233130	-0.000045	0.000225	Significant Decreasing Total
Total Phosphorous	2004-2019	-0.222143	-0.000003	0.000352	Significant Decreasing Total
Total Chlorophyll-A	2004-2019	-0.078114	-0.000156	0.218619	Decreasing Trend

¹ Even if the p-value is determined to be statistically significant, the result may not be ecologically significant. For example, if a trend is statistically significantly declining (negative trend) but the slope is near 0, then it may not be realistic to assume that an improvement in water quality reductions in TN or TP may positively impact the ecological system in a measurable way. A negative slope is an indication of a decreasing trend, while a positive slope is an indication of an increasing trend.

² Series with serial correlation (as per autocorrelation analysis results) used the p-value adjusted for serial correlation.

³ If the p-value is less than 0.05, then a decreasing trend may suggest an improvement in water quality, and an increasing trend may suggest a decline in water quality.



Part B – Pollutant Loading Estimates/Results

The municipal separate storm sewer system (MS4) National Pollutant Discharge Elimination System (NPDES) Cycle 4 permit, issued September 8, 2016, requires in PART V. – Monitoring Requirements that average annual pollutant loading, and event mean concentration (EMC) estimates be provided for six (6) parameters. The six (6) parameters identified are: 1) five-day biochemical oxygen demand (BOD₅); 2) total copper (Cu); 3) Total nitrogen (TN); 4) total phosphorus (TP); 5) total suspended solids (TSS); and, 6) total zinc (Zn), all in the unit of mg/l. It is assumed by the FDEP that pollutant loading generated within a watershed flows through MS4 outfalls and directly affects the receiving bodies. An option is provided in the permit to provide the average annual pollutant loading estimates based on major outfalls watersheds since the pollutant loading estimates for permit Cycles 1 through 3 were provided on a watershed basis, it was agreed with the FDEP that the Cycle 4 loading estimates would also be provided on a watershed basis. In addition to meeting the requirements of the permit, modeling the average annual pollutant loading generated by a watershed or a MS4's watershed can assist in planning for future improvements in stormwater quality treatment, regulations or stormwater management.

The Town of Manalapan lies in the Lake Worth Lagoon (LWL-13) watershed. The pollutant loading data related to the Lake Worth Lagoon will be used to represent the Town of Manalapan. All six (6) parameters are analyzed and graphed in the Cycle 4, Year 3 'Summary of Average Annual Pollutant Loading Model Activities' report (2019) for all of the watersheds including the Lake Worth Lagoon Watershed (See Figures 3-8, pgs. 20-23) prepared by Mock-Roos for the co-permittees reference. All parameters indicate decreases between the Cycle 3, Year 3 and Cycle 4, Year 3 reporting period within the Lake Worth Lagoon watershed.

Pollutant loadings for the Manalapan MS4 are also reported in the 'Summary of Average Annual Pollutant Loading Model Activities' report cited above. Pollutant loadings for all six (6) parameters are reported for year 2013 (Table 26, p. 39 of the report) and 2018 (Table 27, p. 40 of the report) and, specifically, for the Town of Manalapan MS4 below in Table 3.

The Town of Manalapan has in place stormwater management programs that reduces the nutrient loading into the Lake Worth Lagoon (LWL-13). These programs include maintenance of conveyance swales, catch basins, public education (brochures and flyers for public distribution, MS4 group activities and an adopted Fertilizer Ordinance). The public education component alone allows a further 6% reduction in pollutant loadings reported in Table 6 below.



Table 6
Pollutant Loadings (lbs/year)
-Town of Manalapan-
Lake Worth Lagoon

Parameter	<u>BOD₅</u>	<u>TSS</u>	<u>TP</u>	<u>CU</u>	<u>ZN</u>	<u>TN</u>
2013 Loads	1,570	6,052	227	5	11	6,713
2018 Loads	1,531	5,719	225	5	11	6,704
Other Reduction (Less 6%, rounded, per public education)	(107)	(504)	(11)	(.3)	(1.2)	(299)
Total Amount	1,439	5,376	211	4.7	10.3	6,302
Percent (%) Reduction	5.2%	5.3%	5.7%	6.0%	6.0%	5.9%

Sources: Tables 26 (p.39) and 27 (p.40) of the "Summary of Average Annual Pollutant Loading Model activities" Report (2019) by Mock-Roos.

Reductions in pollutant loadings for the six (6) parameters in the Town of Manalapan MS4 indicate significant reductions between 2013 and 2018.

Part C – Conclusion

The Town of Manalapan's stormwater management programs are effective in reducing nutrient loadings. This is supported by the water quality monitoring program (both FDEP and the MS4 group information) and pollutant loading information. At this time there is no need to develop further stormwater management programs.

Figure 2
Total Nitrogen
LWL-13 Monitoring Station

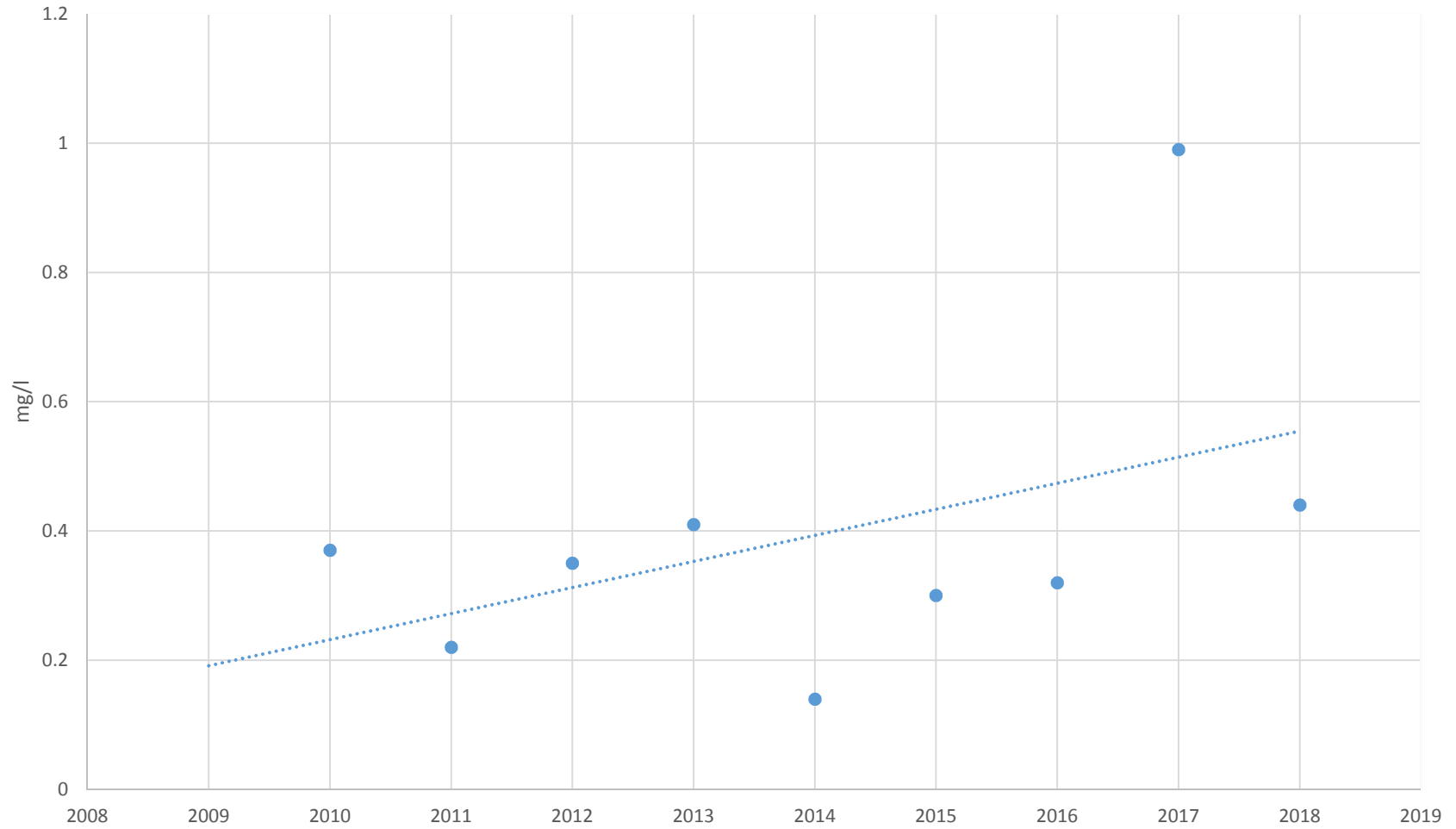


Figure 3
Total Phosphorous
LWL-13 Monitoring Station

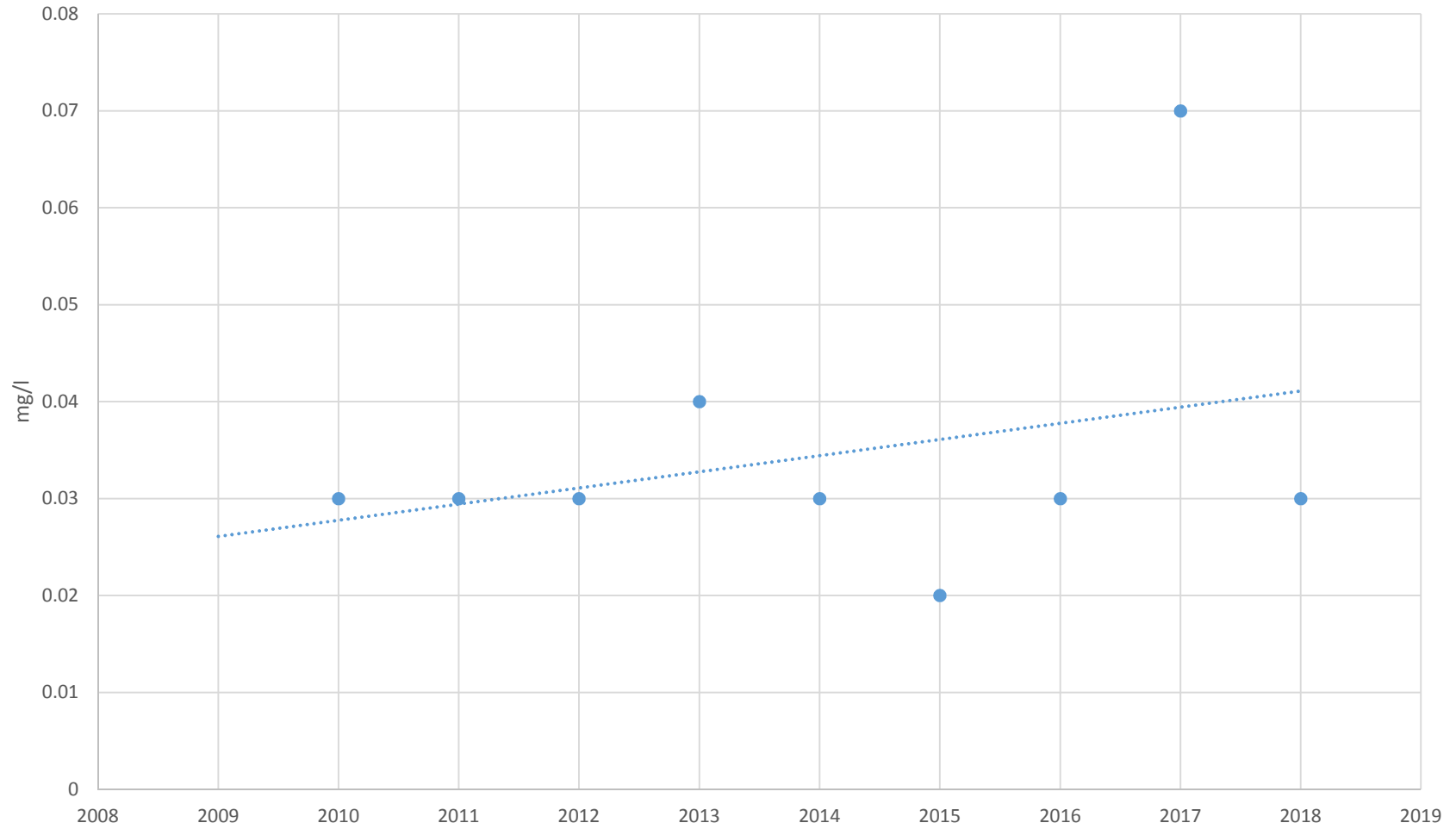


Figure 4
Total Chlorophyll-A
LWL-13 Monitoring Station

