



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: Palm Beach County | | |
| B. | Permit Name: Palm Beach County MS4 | | |
| C. | Permit Number: FLS000018-004 | | |
| D. | Annual Report Year: <input type="checkbox"/> Year 1 <input type="checkbox"/> Year 2 <input type="checkbox"/> Year 3 <input checked="" type="checkbox"/> Year 4 <input type="checkbox"/> Year 5 <input type="checkbox"/> Other, specify Year: | | |
| E. | Reporting Time Period (month/year): October/ 2019 through September / 2020 | | |
| F. | Name of the Responsible Authority: Deborah Drum | | |
| | Title: Department Director | | |
| | Department: Environmental Resources Management | | |
| | Mailing Address: 2300 North Jog Road, 4 th Floor | | |
| | City: West Palm Beach | Zip Code: 33411 | County: Palm Beach County |
| Telephone Number: (561) 233-2454 | | Fax Number: (561) 233-2414 | |
| E-mail Address: DDrum@pbcgov.org | | | |
| G. | Name of the Designated Stormwater Management Program Contact (if different from Section I.F above): Bonnie Finneran | | |
| | Title: Environmental Director | | |
| | Department: Environmental Resources Management | | |
| | Mailing Address: 2300 North Jog Road, 4 th Floor | | |
| | City: West Palm Beach | Zip Code: 33411-2743 | County: Palm Beach County |
| | Telephone Number: (561) 233-2525 | | Fax Number: (561) 233-2414 |
| E-mail Address: bfinnera@pbcgov.org | | | |

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: PBC Group NPDES MS4 Permittees Water Quality Monitoring Plan, 1998. Status: See Joint Annual Report for PBC Group NPDES MS4 Permittees available at the NPDES Group Permittee's website at www.pbco-npdes.org.</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.</p> <p>See the attached NPDES Assessment for the Cycle 4, Year 4 reporting period.</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.</p> <p>See Joint Annual Report for PBC Group NPDES MS4 Permittees available at the NPDES Group Permittee's website at www.pbco-npdes.org.</p> |

SECTION IV. FISCAL ANALYSIS

| | |
|-----------|---|
| A. | Total expenditures for the NPDES stormwater management program for the current reporting year: \$8,887,576 |
| B. | Total budget for the NPDES stormwater management program for the subsequent reporting year: \$9,949,175 |
| C. | <p>Did subsequent program resources decrease from the current reporting period? Y <input checked="" type="checkbox"/> / N <input type="checkbox"/></p> <p>If program resources decreased, provide a discussion of the impacts on the implementation of the SWMP.</p> <p>Reduced expenditures due to Fire Rescue training and Cooperative Extension having Covid restrictions on group meetings and not from decreased resources. No anticipated impacts on the implementation of the SWMP expected.</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 checked="" type="checkbox"/> | <input 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 | 1. NPDES Annual Assessment. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | If program resources have decreased from the previous year, a discussion of the impacts on the implementation of the SWMP. | Part II.F | See comment in Section IV.C. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | An explanation of why the minimum inspection frequency in Table II.A.1.a. was not met, if applicable. | Part II.A.1 | |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | A list of the flood control projects that did not include stormwater treatment and an explanation for each of why it did not (if applicable). | Part III.A.4 | |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | A monitoring data summary as directed in Section III.C above and in accordance with Rule 62-624.600(2)(c), F.A.C. | Part VI.B.2. | |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | YEAR 1 ONLY: An inventory of all known major outfalls and a map depicting the location of the major outfalls (hard copy or CD-ROM) in accordance with Rule 62-624.600(2)(a), F.A.C. | Part III.A.1 | |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | YEAR 2: A summary review of codes and regulations to reduce the stormwater impact from development. | Part III.A.2 | |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Year 3 ONLY: The estimates of pollutant loadings and event mean concentrations for each major outfall or each major watershed in accordance with Rule 62-624.600(2)(b), F.A.C. | Part V.A | |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | YEAR 3: Summary of TMDL Monitoring Results (if applicable). | Part VIII.B.2 | |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | YEAR 3: Bacteria Pollution Control Plan (if applicable). | Part VIII.B.3 | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | YEAR 4: A follow-up report on plan implementation of changes to codes and regulations to reduce the stormwater impact from development. | Part III.A.2 | 2. 11.3.20 PBC Land Development Division Memo. No Changes Needed. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | YEAR 4: A report on any amendments to the applicable legal authority (if applicable). | Part III.A.7.a | No Changes Needed. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | YEAR 4: Permit re-application information in accordance with Rule 62-624.420(2), F.A.C. <ul style="list-style-type: none"> The monitoring plan (with revisions, if applicable). If the total annual pollutant loadings have not decreased over the past two permit cycles, revisions to the SWMP, as appropriate. | Part V.B.3 Part V.A.3 | See Joint Annual Report for PBC Group NPDES MS4 Permittees. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | YEAR 4: TMDL Supplemental SWMP (if applicable). | Part VIII.B.3 | No SWMP Needed. |

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): Deborah Drum

Title: Department Director

Signature:  Date: 3/12/2021

SECTION VII. STORMWATER MANAGEMENT PROGRAM (SWMP) SUMMARY TABLE

| A. | B. | C. | D. | E. | F. | | | | | |
|----------------------------------|---|--------------------------------------|------------------------------|--------------------------------------|---|---------------------------|------------------|---------------|--|--|
| Permit Citation/ SWMP Element | Permit Requirement/Quantifiable SWMP Activity | Number of Activities Performed | 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 | | | | |
| | Exfiltration trench / French drains (lf) | 190,427 | 12 | 10% | 0 | 0% | Job Perf. Report | Road & Bridge | | |
| | Grass treatment swales (miles) | 12.1 | 34 | 10% | 0 | 0% | Job Perf. Report | Road & Bridge | | |
| | Grass conveyance swales (miles) | 1212.4 | 341 | 10% | 279 | 5% | Job Perf. Report | Road & Bridge | | |
| | Dry detention systems | 28 | 170 | 100% | 168 | 100% | Dredge Job Cost | Road & Bridge | | |
| | Wet detention systems | 47 | 306 | 100% | 282 | 100% | Dredge Job Cost | Road & Bridge | | |
| | Pump stations | 1 | 25 | 100% | 102 | 100% | Bridge Job Cost | Road & Bridge | The one pump station operated by PBC Road & Bridge. | |
| | Major outfalls | | | | | | | | Due to historical operation records DEP granted a request from PBC to inspect all major outfall during the permit cycle. | |
| | Weirs or other control structures | 101 | 249 | 100% | 5 | 5% | Dredge Job Cost | Road & Bridge | | |
| | MS4 pipes / culverts (miles) | 20.30 | 792 | 70% | 545 | 55% | Job Perf. Report | Road & | | |

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 |
| | Inlets / catch basins / grates | 47,317 | 1,612 | 30% | 327 | 10% | Job Perf. Report | Bridge Road & Bridge | |
| | Ditches (miles) | 21.38 | 452 | 100% | 446 | 100% | Job Perf. Report | Road & Bridge | |
| | 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. | | | | <input type="checkbox"/> | | | | |

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.3 of the permit. Strengths: Experienced staff. 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 68 Number of significant development projects approved 68 | Project Files Project Files | Engineering Engineering | PBC Land Dev PBC Land Dev |
| Part III.A.2 Summary | Provide in the Year 2 Annual Report the summary report of the review activity. Provide in the Year 4 Annual Report the follow-up report on plan implementation. Year 2 ONLY: Attach the summary report of the review activity <input type="checkbox"/> Year 4 ONLY: Attach the follow-up report on plan implementation <input checked="" type="checkbox"/> | <input type="checkbox"/> <input checked="" type="checkbox"/> | Memorandum from Land Dev. Director | PBC Land Development | No Changes Needed. |
| Part III.A.3 | Roadways Provide an evaluation of the Stormwater Management Program according to Part VI.B.3 of the permit. Strengths: Experienced Engineering staff. Limitations: None observed. SWMP revisions implemented to address limitations: None at this time. | | | | |
| Part III.A.3 | 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> | | | | |
| | CONTRACTOR Litter Control: Frequency of litter collection | 16 | Vendor Reports and Dept. records | Streetscape Section's Service Vendor | |
| | CONTRACTOR Litter Control: Estimated amount of area maintained (if) | 681,542 | Vendor Reports and Dept. records | Streetscape Section's Service Vendor | |
| | CONTRACTOR Litter Control: Estimated amount of litter collected (tons) | 15.61 | Vendor Reports and Dept. records | Streetscape Section's Service Vendor | Reduced #'s due to Covid. |
| | 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". | | | | |

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 |
| | <p>Trash Pick-up Events: Total miles cleaned</p> | 22 | Vendor & Department Records | Keep Palm Beach County (KPBC) Beautiful | 15 Events. Reduced #s due to Covid. |
| | <p>Trash Pick-up Events: Estimated amount of litter collected (tons)</p> | 3.1 | Event site reports | KPBC Beautiful | Reduced #s due to Covid. |
| | <p>Adopt-A-Road: Total miles cleaned</p> | 58 | Adopt a Road files | PBC ENG | |
| | <p>Adopt-A-Road: Estimated amount of litter collected (bags, 30 gallon)</p> | 2.5 tons | Adopt a Road files | PBC ENG | Reduced #s due to Covid. Estimated 30 lbs/bag. |
| | <p>Report on the street sweeping program, including the frequency of the sweeping, total miles swept, an estimate of the quantity of sweepings collected, and the total nitrogen and total phosphorus loadings that were removed by the collection of sweepings. If no street sweeping program is implemented, provide the explanation of why not in column F.</p> | | | | |
| | <p>Frequency of street sweeping</p> | 2 times per year | Job Perf. Report | Road & Bridge | |
| | <p>Total miles swept</p> | 1,606 | Job Perf. Report | Road & Bridge | |
| | <p>Estimated quantity of sweeping material collected (cubic yards)</p> | 1,777 | Road Material cost Employee Report | Road & Bridge | |
| | <p>Total phosphorous loadings removed (pounds)</p> | 1,353 | FDEP/FSA Nutrient Load Reduction Assessment tool spreadsheet | PBC ERM | |
| | <p>Total nitrogen loadings removed (pounds)</p> | 2,485 | FDEP/FSA Nutrient Load Reduction Assessment tool spreadsheet | PBC ERM | |
| | <p>Report the equipment yards and maintenances shops that support road maintenance activities, and the number of inspections conducted for each facility.</p> | | | | |
| | <p>Name of Facility</p> | <p>Number of Inspections</p> | <p>Inspection Report</p> | <p>PBC Facilities Compliance Section</p> | |
| | <p>PBC Vista Fleet Maintenance</p> | <p>1</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.3 Summary | Provide an evaluation of the Stormwater Management Program according to Part VI.B.3 of the permit. Strengths: Well organized maintenance program. Limitations: Occasional equipment maintenance issues. 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. | 0 | Capital Improvements Plan (CIP). | Planning, Zoning and Building Dept. Engineering & Public Works | No Flood Control Projects currently under construction. |
| | Flood control projects completed during the reporting period | 0 | Capital Improvements Plan (CIP). | Planning, Zoning and Building Dept. Engineering & Public Works | No Flood Control Projects currently under construction. |
| | Flood control projects completed that did <u>not</u> include stormwater treatment | 0 | Capital Improvements Plan (CIP). | Planning, Zoning and Building Dept. Engineering & Public Works | No Stormwater Projects currently under construction. |
| | Stormwater retrofit projects planned/under construction | 0 | Capital Improvements Plan (CIP). | Planning, Zoning and Building Dept. Engineering & Public Works | No Stormwater Projects currently under construction. |
| | Stormwater retrofit projects completed | 0 | Capital Improvements Plan (CIP). | Planning, Zoning and Building Dept. Engineering & Public Works | No Stormwater Projects currently under construction. |
| | if there were projects that did not include stormwater treatment, provide as an attachment a list of the projects and an explanation for each of why it did not. | <input type="checkbox"/> | | | |
| Part III.A.4 Summary | Provide an evaluation of the Stormwater Management Program according to Part VI.B.3 of the permit. Strengths: Experienced Engineering staff and contracting methods. Limitations: PBC MSTU funding exhausted which provided 50% of projects costs. SWMP revisions implemented to address limitations: None at this time. MSTU projects may still proceed if property owners agree to the assessments. | | | | |

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.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 | | | |
| | South County Transfer Station | 14 | Inspection Report | PBC SWA | |
| | Central County Transfer Station | 14 | Inspection Report | PBC SWA | |
| | Glades Regional Transfer Station | 14 | Inspection Report | PBC SWA | |
| | West Central Transfer Station | 14 | Inspection Report | PBC SWA | |
| | North County Transfer Station | 14 | Inspection Report | PBC SWA | |
| | Southwest County Transfer Station | 14 | Inspection Report | PBC SWA | |
| | Provide an evaluation of the Stormwater Management Program according to Part VI.B.3 of the permit. | | | | |
| Part III.A.5 Summary | Strengths: Well managed facilities designed to retain 100 year storm event. | | | | |
| | Limitations: None observed. | | | | |
| | SWMP revisions implemented to address limitations: None at this time. | | | | |
| 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 | 24 | Parks & Recreation IFAS Documentation | PBC Extension Service & Parks Dept. | |
| | CONTRACTORS: FDACS commercial applicators of pesticides/herbicides | 307 | Parks & Recreation IFAS Documentation | PBC Extension Service & Parks Dept. | |
| | PERSONNEL: Green Industry BMP Program training completed | 4 | Parks & Recreation IFAS Documentation | PBC Extension Service & Parks Dept. | |
| | CONTRACTORS: FDACS certified / licensed applicators of fertilizer | 32 | Parks & Recreation IFAS Documentation | PBC Extension Service & Parks Dept. | |
| | Provide a copy of the adopted ordinance with the Year 2 Annual Report. If this provision is not applicable because the permittee is not within the watershed of a nutrient-impaired water body, indicate that in Column F. | | | | |
| | Year 2 ONLY: Attach copy of adopted Florida-friendly ordinance | <input type="checkbox"/> | | | |

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 |
| 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 | 18,780 | IFAS Monthly Reports | PBC UF/IFAS | |
| | Neighborhood presentations: Number conducted | 1 | IFAS Monthly Reports | PBC UF/IFAS | |
| | Neighborhood presentations: Number of participants | 49 | IFAS Monthly Reports | PBC UF/IFAS | |
| | Newspapers & newsletters: Number of articles/notices published | 2735 | IFAS Monthly Reports | PBC UF/IFAS | |
| | Newsletters: Number of newsletters distributed | 0 | IFAS Monthly Reports | PBC UF/IFAS | Activity Not Performed This Permit Year. |
| | Public displays (e.g., kiosks, storyboards, posters, etc.) | 10 | IFAS Monthly Reports | PBC UF/IFAS | |
| | School presentations: Number conducted | 30 | IFAS Monthly Reports | PBC UF/IFAS | |
| | School presentations: Number of participants | 660 | IFAS Monthly Reports | PBC UF/IFAS | Reduced #s due to Covid. |
| | Seminars/Workshops: Number conducted | 57 | IFAS Monthly Reports | PBC UF/IFAS | Reduced #s due to Covid. |
| | Seminars/Workshops: Number of participants | 1,959 | IFAS Monthly Reports | PBC UF/IFAS | Reduced #s due to Covid. |
| | Special events: Number conducted | 2 | IFAS Monthly Reports | PBC UF/IFAS | Reduced #s due to Covid. |
| | Special events: Number of participants | 87 | IFAS Monthly Reports | PBC UF/IFAS | Reduced #s due to Covid. |
| | Number of visitors to stormwater-related pages | 0 | IFAS Monthly Reports | PBC UF/IFAS | Activity Not Performed This Permit Year. |
| | FYN: Brochure/Flyers/Fact sheets distributed | 6,013 | IFAS Monthly Reports | FYN | Reduced #s due to Covid. |
| | FYN: Neighborhood presentations: Number conducted | 13 | IFAS Monthly Reports | FYN | Reduced #s due to Covid. |
| FYN: Neighborhood presentations: Number of participants | 477 | IFAS Monthly Reports | FYN | Reduced #s due to Covid. | |
| FYN: Public displays (e.g., kiosks, storyboards, posters, etc.) | 0 | IFAS Monthly Reports | FYN | Activity Not Performed This Permit Year. | |
| FYN: Radio or television Public Service Announcements (PSAs) | 0 | IFAS Monthly Reports | FYN | Activity Not Performed This Permit Year. | |

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 |
| | FYN: School presentations: Number conducted | 0 | IFAS Monthly Reports | FYN | Permit Year. Activity Not Performed This Permit Year. |
| | FYN: School presentations: Number of participants | 0 | IFAS Monthly Reports | FYN | Activity Not Performed This Permit Year. |
| | FYN: Seminars/Workshops: Number conducted | 27 | IFAS Monthly Reports | FYN | Reduced #s due to Covid. |
| | FYN: Seminars/Workshops: Number of participants | 883 | IFAS Monthly Reports | FYN | Reduced #s due to Covid. |
| | FYN: Special events: Number conducted | 1 | IFAS Monthly Reports | FYN | Reduced #s due to Covid. |
| | FYN: Special events: Number of participants | 225 | IFAS Monthly Reports | FYN | Reduced #s due to Covid. |
| Part III.A.6 Summary | Provide an evaluation of the Stormwater Management Program according to Part VI.B.3 of the permit. | | | | |
| | Strengths: Extensive range of training, certification and educational programs. | | | | |
| | Limitations: None observed. | | | | |
| | SWMP revisions implemented to address limitations: None at this time. | | | | |
| Part III.A.7.a | Illicit Discharges and Improper Disposal — Inspections, Ordinances, and Enforcement Measures | | | | |
| | Year 4 ONLY: Attach a report on amendments to applicable legal authority | <input checked="" type="checkbox"/> | PBC Stormwater Pollution Prevention Ordinance | PBC ERM | No changes Needed. |
| 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 | 30 | Proactive Insp. database | PBC ERM | PBC ERM Staff. |
| | Illicit discharges found during a proactive inspection | 1 | Proactive Insp. database | PBC ERM | Illicit Discharge discovered by ERM. Resolved w/o NOV. |
| | NOV/WL/citation/fines issued for illicit discharges found during proactive inspection | 0 | Proactive Insp. database | PBC ERM | None Required. |
| | Year 1 ONLY: Attach the written proactive inspection program plan | <input type="checkbox"/> | | | |
| | Report on the reactive investigation program as it relates to responding to reports of suspected illicit discharges, including the number of reports received, the | | | | |

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 |
| | <p>number of investigations conducted, the number of illicit activities found, and the number and type of enforcement actions taken.</p> | | | | |
| | <p>Reports of suspected illicit discharges received</p> | 8 | RP Complaint Log | PBC ERM | SWP Program Inspections. |
| | <p>Reactive investigations of reports of suspected illicit discharges etc.</p> | 8 | RP Complaint Log | PBC ERM | SWP Program Inspections. |
| | <p>Illicit discharges etc. found during reactive investigation</p> | 8 | RP Complaint Log. | PBC ERM | SWP Program Inspections. |
| | <p>NOV/WL/citation/fines issued for illicit discharges etc. found during reactive investigation</p> | 2 | RP Complaint Log. | PBC ERM | NCLs issued. Resolved w/o NOV. |
| | <p>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.</p> | | | | |
| | <p>Personnel trained</p> | 2 | PBC NPDES Steering Committee Attendance Log. | PBC NPDES Steering Committee. | PBC Personnel Attending. |
| | <p>Contractors trained</p> | 0 | N/A | Contractors are not utilized. | Contractors are not utilized. |
| <p>Part III.A.7.d</p> | <p>Illicit Discharges and Improper Disposal — Spill Prevention and Response</p> | | | | |
| | <p>Report on the spill prevention and response activities, including the number of spills addressed.</p> | | | | |
| | <p>Hazardous and non-hazardous material spills responded to</p> | 498 | Special Operations Situation Dispatches | PBC Fire-Rescue | Contact Patrick Thume, PBC FR. |
| | <p>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.</p> | | | | |
| | <p>Personnel trained</p> | 1,302 | HazMat Competency Database | PBC Fire-Rescue | Contractors are not utilized. |
| | <p>Contractors trained</p> | 0 | N/A | PBC Fire-Rescue | Contractors are not utilized. |
| <p>Part III.A.7.e</p> | <p>Illicit Discharges and Improper Disposal — Public Reporting</p> | | | | |
| | <p>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).</p> | | | | |
| | <p>The public outreach and education plan is carried out as a joint effort by the Palm Beach County Co-permittees. Please see the Palm Beach County Joint Annual Report for the public education and outreach information available at the Group Permittee's website at www.pbcco-npdes.org.</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.7.f | Illicit Discharges and Improper Disposal — Oils, Toxics, and Household Hazardous Waste Control | | | | |
| | <p>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).</p> <p>Estimated percentage of the population reached by Palm Beach County Home Chemical Collection Program Brochures/Flyers/Fact sheets distributed</p> <p>Household Hazardous Waste (HHW) Collection Day: Events</p> <p>HHW Collection Day: Amount of waste collected/recycled/disposed (tons)</p> <p>Neighborhood presentations: Number conducted</p> <p>Neighborhood presentations: Number of participants</p> <p>Newspapers & newsletters: Number of articles/notices published</p> <p>Newsletters: Number of newsletters distributed</p> <p>Public displays (e.g., kiosks, storyboards, posters, etc.)</p> <p>Radio or television Public Service Announcements (PSAs)</p> <p>School presentations: Number conducted</p> <p>School presentations: Number of participants</p> <p>Seminars/Workshops: Number conducted</p> <p>Seminars/Workshops: Number of participants</p> <p>Special events: Number conducted</p> <p>Special events: Number of participants</p> | <p>80%</p> <p>106,550</p> <p>2,017</p> <p>2,140</p> <p>185</p> <p>2,872</p> <p>0</p> <p>7</p> <p>114</p> <p>4,000</p> <p>210</p> <p>8,626</p> <p>17</p> <p>135</p> <p>24</p> <p>27,190</p> | <p>PBC SWA</p> <p>Brochures</p> <p>Disposal Records</p> <p>Disposal Records</p> <p>Samples</p> <p>Samples</p> <p>PBC SWA</p> <p>E-Newsletter</p> <p>Samples</p> <p>Jump Drive</p> <p>Samples</p> <p>Samples</p> <p>Samples</p> <p>Samples</p> <p>Samples</p> <p>Samples</p> <p>Samples</p> | <p>Solid Waste Authority</p> <p>Recycling/HHW Services/</p> <p>HHW Services</p> <p>HHW Services</p> <p>Recycling</p> <p>Recycling</p> <p>Media Arts</p> <p>Recycling/Com. Service</p> <p>Public Affairs</p> <p>Recycling</p> <p>Recycling</p> <p>Recycling</p> <p>Recycling</p> <p>Recycling/Community Services</p> <p>Recycling/Com. Service</p> | <p>Reduced #s due to Covid.</p> <p>Reduced #s due to Covid.</p> <p>None Published.</p> |
| Part III.A.7.g | Illicit Discharges and Improper Disposal — Limitation of Sanitary Sewer Seepage | | | | |
| | <p>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.</p> <p>Activity to reduce/eliminate SSOs and I&I: Repair / lining of sanitary sewer system (ft.)</p> <p>Owner of the sanitary sewer system</p> | 31,097 | <p>I & I Monthly Activity Report</p> | <p>Palm Beach County Water Utilities</p> <p>WUD Const. Group</p> | <p>Contact Stephen Brown, PBC</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 |
| | Activity to reduce/eliminate SSOs and I&I: Lift Station Rehabilitation / Conversion | 310 | I & I Monthly Activity Report | WUD Const. Group | WUD. Ongoing improvements. |
| | SSO incidents discovered | 6 | I & I Monthly Activity Report | WUD Const. Group | Incidents reported by PBC WUD. |
| | SSO incidents resolved | 6 | I & I Monthly Activity Report | WUD Const. Group | Incidents resolved by PBC WUD. |
| | Inflow / infiltration incidents discovered | 0 | I & I Monthly Activity Report | WUD Const. Group | None reported. |
| | Inflow / infiltration incidents resolved | 0 | I & I Monthly Activity Report | WUD Const. Group | None reported. |
| 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: Well trained and motivated staff. | | | | |
| | Limitations: None Observed. | | | | |
| | 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 | 1 | 0 | 0 | PBC SWA |
| | Hazardous waste treatment, storage, disposal and recovery (HWTSDR) facilities | 0 | 0 | 0 | PBC SWA |
| | EPCRA Title III, Section 313 facilities (TRI) | 4 | 4 | 0 | Database |
| | | | | | The PBC Solid Waste Authority has one operating landfill with a NPDES Permit and does not discharge to any MS4. None in PBC. No discrepancies observed during 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 |
| | Facilities determined as high risk by the permittee | 0 | Database | PBC ERM | None identified through the proactive inspections. |
| Part III.A.8.b | Industrial and High-Risk Runoff — Monitoring for High Risk Industries Report the number of high risk facilities sampled. | 0 | N/A | | None in PBC. |
| 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: Lack of industrial activity and High-Risk facilities in PBC. Limitations: None. SWMP revisions implemented to address limitations: None at this time. | 0 | N/A | | |
| 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 | 22 | List of active PBC job sites during the Permit Year. | PBC Engineering Construction Coordination. | Contact Mark Tomlinson, PBC Construction Coordinator. |
| | PERMITTEE SITES: Construction site plans approved | 22 | List of active PBC job sites during the Permit Year. | PBC Engineering Construction Coordination. | |
| | PRIVATE SITES: Construction site plans reviewed | 29 | BMP Construction Insp database. | PBC ERM | Initial Insp Data. |
| | PRIVATE SITES: Construction site plans approved | 29 | BMP Construction Insp database. | PBC ERM | Initial Insp Data. |
| | 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 | 68 | Project Files | Engineering Land Development Div | Contact Joanne Keller, PBC Director Land Dev. |
| | Confirmed ERP coverage | 68 | Project Files | Engineering Land Development Div | |
| | Notified of CGP stormwater permit requirements | 110 | DRO & Plat Review | PBC ERM | This is a summation of |

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 |
| | Confirmed CGP coverage | 41 | BMP Construction Insp database. | PBC ERM | Development Review Office comments and Plat review comments. Initial & Revisit Insp Data. |
| 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 | 22 | Active PBC project sites & inspection reports for Permit Year. | PBC Engineering Construction Coordination | Contact Mark Tomlinson, PBC Construction Coordinator. |
| | PERMITTEE SITES: Pre-, During, and Post inspections of active construction sites for E&S and waste control BMPs | 379 | Active PBC project sites & inspection reports for Permit Year. | PBC Engineering Construction Coordination | |
| | PERMITTEE SITES: Percentage of active construction sites inspected | 100% | Active PBC project sites & inspection reports for Permit Year. | PBC Engineering Construction Coordination | |
| | PRIVATE SITES: Active construction sites | 29 | BMP Construction Insp database. | PBC ERM | Initial Insp Data. |
| | PRIVATE SITES: Pre-, During, and Post inspections of active construction sites for E&S and waste control BMPs | 41 | BMP Construction Insp database. | PBC ERM | Initial & Revisit Insp Data. |
| | PRIVATE SITES: Percentage of active construction sites inspected | 100% | BMP Construction Insp database. | PBC ERM | Initial Insp Data. |
| | Enforcement Action | 2 | BMP Construction Insp database. | PBC ERM | Notice of Non- compliance issued. Resolved w/o NOV. |
| | Year 1 ONLY: Attach the written construction site inspection program plan | <input type="checkbox"/> | | | |

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.9.c | <p>Construction Site Runoff — Site Operator Training</p> <p>Report the type of training activities, the number of inspectors, site plan reviewers and site operators trained (both in-house and outside training).</p> | | | | |
| | | | | | |
| | <p>DEP Certification</p> | <p>Annual Training</p> | | | |
| | <p>Permittee construction site inspectors</p> | <p>24</p> | <p>DEP certification training Attendance log and Engineering Coordination pre-construction meetings and annual refresher for ERM staff member.</p> | <p>Florida Stormwater Erosion and Sediment Control Inspector Training/ EXCAL Visual</p> | <p>No FDEP Annual Training in 2020 due to Covid.</p> |
| | <p>Permittee construction site plan reviewers</p> | <p>22</p> | <p>PBC Engineering Coordination Preconstruction plan review meetings with selected GC/construction contractors.</p> | <p>PBC Engineering Coordination and ERM</p> | <p>All PBC inspectors have received DEP Certification.</p> |
| | <p>Permittee construction site operators</p> | <p>22</p> | <p>PBC Engineering Coordination Preconstruction plan review meetings with selected GC/construction contractors.</p> | <p>PBC Engineering Coordination and ERM</p> | <p>All PBC inspectors have received DEP Certification.</p> |
| Part III.A.9 Summary | <p>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.</p> | | | | |
| | <p>Strengths: Well trained and experienced inspection staff.</p> | | | | |
| | <p>Limitations: None.</p> | | | | |
| | <p>SWMP revisions implemented to address limitations: None.</p> | | | | |

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. |
|----|----------------------------------|--|
| | | No changes proposed. |
| | | |
| 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) |
| | | No changes proposed. |
| | | |
| | | |

SECTION IX. TMDL Status Report

YEAR 1 Provide a table summarizing the status of the TMDL process. Include a list of prioritized TMDLs and their monitoring and implementation schedule; and include the 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 |
|-------------|---------------------------------|-------------------------|--|-------------------------------|---------------|---------------------|---|----------------------------------|
| 3264A | E-1 Canal | Fecal Coliform | <input checked="" type="checkbox"/> / <input type="checkbox"/> | 97% | 1 | See BPCP | Completed. Year 3 AR. | Year 4 AR; N/A if BPCP |
| 3262A | Lake Ida | TN & TP | <input type="checkbox"/> / <input checked="" type="checkbox"/> | TN 20% TP 45% | 2 | TBD | | |

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 |
|-------------|----------------------------|--|-----------------------------------|---|
| 3264A | Fecal Coliform/ E. Coli | Year 3 AR | (Year 4 AR; N/A if BPCP) | The calculated load reduction, based on the monitoring program results, is 36%. |

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):

Monitoring Plan for E-1 Canal Fecal Coliform TMDL is complete and monitoring commenced 1/17/2019 and completed 12/4/2019.

Attachment 1

Permit Year 2019-20 Annual MS4 Assessment

Permit Year 2019-2020 Annual MS4 Assessment

Annual MS4 Assessment Plan

- Annual geometric mean values are calculated for individual pollutant parameters for each water quality monitoring station.
- Water quality monitoring stations are assessed by contrasting the 10-12 year geometric mean nutrient values to the Permit year geometric mean nutrient values. (The 10-12 year water quality aggregate mean serves as baseline values). The annual geometric mean values of individual pollutant parameter will prove invaluable for annual trend assessments.
- Any significant decreases in water quality (significant increase in pollutant parameter values) attributed to the MS4 shall trigger an individual assessment of the nearest PBC MS4 outfalls, including drainage areas, land use, and established pollutant loading Event Mean Concentrations (EMCs) with regard to potential individual parameter values increases.
- The assessment conclusion may include recommendations for increased street sweeping and increased inspections of stormwater treatment components such as control structure operational effectiveness.

(Please see the accompanying map with data.)

C-18 Basin

The C-18 Basin contains no Palm Beach County (PBC) major outfalls and has several County roadways (MS4s). There are two NPDES water quality monitoring stations in this basin. Station 15 had a decrease in total nitrogen from 0.81 mg/L to 0.72 mg/L, a decrease in total phosphorus from 16 ppb to 11 ppb and chlorophyll a concentrations decreased from 2.6 µg/L to 1.6 µg/L. Station 16 had a decrease in total nitrogen from 1.11 mg/L to 1.01 mg/L, total phosphorus was essentially the same and chlorophyll a was also essentially the same. Station C18S46 had a decrease in total nitrogen from 0.87 mg/L to 0.80 mg/L, total phosphorus was essentially the same and chlorophyll a is not a parameter monitored by SFWMD at this site, thus no comparison is possible. The C-18 Basin has the best water quality in Palm Beach County due to the large percentage of natural areas within the basin.

C-17 Basin

The C-17 Basin contains one NPDES water quality station and one SFWMD Station. The C-17 Basin is divided between West Palm Beach and Riviera Beach. This basin has a modest amount of County roadways and 14 PBC major outfalls discharging into the C-17 Canal. NPDES Station 12A had a decrease in total nitrogen from 1.29 mg/L to 1.08 mg/L, essentially the same total phosphorus concentration and also essentially the same chlorophyll a concentration. SFWMD Station C17S44 had a decrease in total nitrogen from 0.97 mg/L to 0.78 mg/L, total phosphorus had a very large decrease from 69 ppb to 45 ppb (Atypically low for a geometric mean of monthly sampling by the SFWMD.) SFWMD does not sample chlorophyll a at this site. Water quality is reasonably good for an urbanized basin.

C-51 Basin

The C-51 Basin (East and West) contains two NPDES water quality stations and one SFWMD Station. NPDES Station 38B had a decrease in total nitrogen from 1.75 mg/L to 1.57 mg/L, a decrease in total phosphorus from 110 ppb to 86 ppb and an almost three-fold increase in chlorophyll a from 6.5 µg/L to 18.6 µg/L. This illustrates how chlorophyll a may not respond to nutrients as expected. Water quality station 38B has historically had elevated turbidity and color (tannins). If light penetration is reduced chlorophyll a concentrations are suppressed, since chlorophyll a requires sunlight for photosynthesis. NPDES Station 37B had a significant decrease in total nitrogen from 1.36 mg/L to 0.95 mg/L, a 50% decrease in total phosphorus from 85 ppb to 41 ppb and chlorophyll a increased from 4.5 µg/L to 8.3 µg/L. SFWMD station C51S155 had a decrease in total nitrogen from 1.15 mg/L to 0.94 mg/L and total phosphorus decreased from 68 ppb to 52 ppb. Chlorophyll a was added to the list of monitoring parameters by SFWMD at C51S155, however, there is no previous data to compare the 10.7 µg/L annual geometric mean. There are 3 PBC major outfalls into the C-51 Canal downstream of monitoring station 37B and 18 major outfalls into tributary canals of the C-51. The decreases in nutrient parameters at the western monitoring locations are outside the influence of MS4 outfalls. The eastern C-51 basin is within the influence of the MS4s and private stormwater management system contributions. The C-51 Canal discharges to the central segment (WBID) of the Lake Worth Lagoon, which is listed as impaired for nutrients.

C-16 Basin

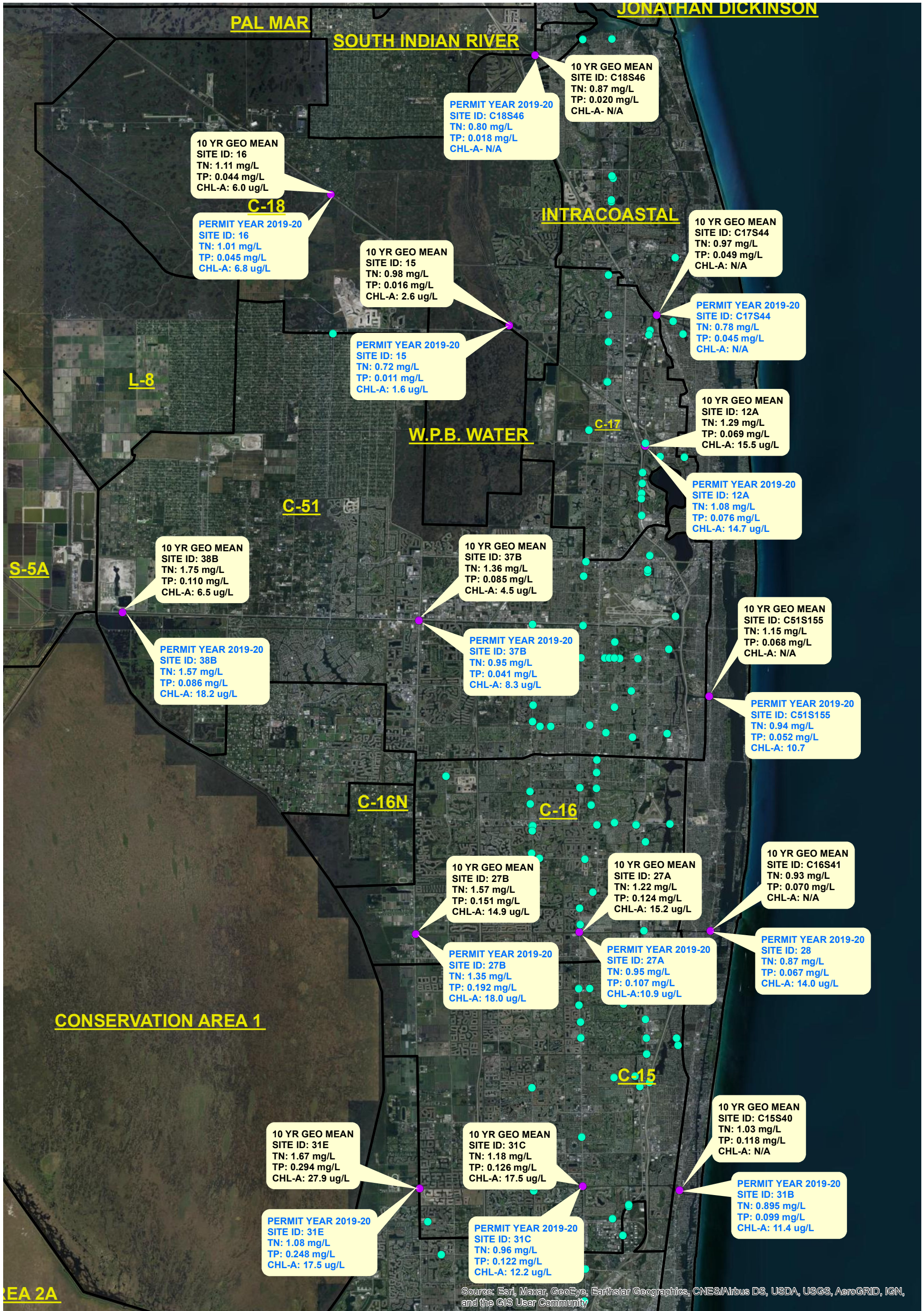
The C-16 Basin contains three NPDES water quality stations and one former SFWMD Station. There are 21 PBC major outfalls in the basin. NPDES Station 27B had a modest decrease in total nitrogen from 1.57 mg/L to 1.35 mg/L, an increase in total phosphorus from 151 ppb to 192 ppb and slight decrease in chlorophyll a from 14.9 µg/L to 13.4 µg/L. This monitoring site is outside the influence of PBC MS4 outfalls. Land use is primarily agriculture and recent residential encroachment with private drainage systems. NPDES Station 27A had a decrease in total nitrogen from 1.22 mg/L to 0.95 mg/L, a decrease in total phosphorus from 124 ppb to 107 ppb and a decrease in chlorophyll a from 15.2 µg/L to 10.9 µg/L. NPDES Station 28 had a decrease in total nitrogen from 0.93 mg/L to 0.87 mg/L and total phosphorus was essentially the same. As a former SFWMD site, a 10-year geometric mean for chlorophyll a does not exist for this site, thus no discussion of chlorophyll a change. Overall, the basin water quality during the permit year is greatly improved from the 10-year geometric mean.

C-15 Basin

The C-16 Basin contains three NPDES water quality stations and one former SFWMD Station. There are 26 PBC major outfalls in the basin. NPDES Station 31E had a significant decrease nitrogen from 1.67 mg/L to 1.08 mg/L, a decrease in total phosphorus from 294 ppb to 248 ppb and a decrease in chlorophyll a from 27.9 µg/L to 17.5 µg/L. The total phosphorus permit year geometric mean, from a sample population of six, is extremely high and believed to be "legacy phosphorus" in this former and still partial agricultural area. PBC MS4s are not located this western area of eastern PBC. NPDES Station 31C had a decrease in total nitrogen from 1.18 mg/L to 0.96 mg/L, total phosphorus was essentially the same and chlorophyll a decreased from 17.5 µg/L to 12.24 µg/L. NPDES Station 31B had a decrease in total nitrogen from 1.03 mg/L to 0.90 mg/L and total phosphorus was essentially the same. As a former SFWMD site a 10-year geometric mean does not exist for this site, thus no discussion of chlorophyll a change. Water quality within the primary canal, the L-38/C-15 Canal, is fair to poor due remnant agriculture without structural BMPs in the western portion of the basin.

Hillsboro Basin

The majority of the Hillsboro basin is within Broward County. Water quality data from the two Broward County monitoring stations was not available from the DEP Florida WIN website, thus no assessment of change was possible.



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Attachment 2

Permit Year 2019-20 PBC Land Development Division Memo



**Department of Engineering
and Public Works**

P.O. Box 21229
West Palm Beach, FL 33416-1229
(561) 684-4000
FAX: (561) 684-4050
www.pbcgov.com

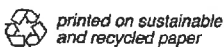
**Palm Beach County
Board of County
Commissioners**

Dave Kerner, Mayor
Robert S. Weinroth, Vice Mayor
Hal R. Valeche
Gregg K. Weiss
Mary Lou Berger
Melissa McKinlay
Mack Bernard

County Administrator

Verdenia C. Baker

*"An Equal Opportunity
Affirmative Action Employer"*



INTEROFFICE MEMORANDUM

DATE: November 3, 2020
TO: Deb Drum, Department Director
Environmental Resources Management
FROM: Joanne M. Keller, PE, Director *JK*
Land Development Division
RE: NPDES Permit Requirements – Year 4 Update

Palm Beach County (County) land development regulations were previously reviewed to consider whether any changes were necessary with respect to potential impediments to low impact design. In 2018, staff found that no changes were necessary. The regulations in place today have also been reviewed and again we find that no changes to the current regulations are necessary or desirable at this time.

Stormwater discharge limits and water quality treatment requirements consistent with State standards are already applied to all new projects by South Florida Water Management District and the County. Incorporation of low impact design practices by a developer is possible and not precluded by current County standards.

In summary, there are no changes to the existing codes and regulations needed to further reduce stormwater impacts of new development or redevelopment.

cc via email: David L. Ricks, PE, County Engineer
Tanya N. McConnell, PE, Deputy County Engineer
David Young, PE, Roadway Production
Brian Gentry, ERM
Patrick Wille, ERM