



**VSMP General Permit for
Municipal Separate Storm Sewer Systems**

Permit # VAR040029

Permit Year Five Annual Report

July 1, 2017-June 30, 2018



Permit # VAR040029
Permit Year Five Annual Report
July 1, 2017 - June 30, 2018

TABLE OF CONTENTS

Introduction and Summary

APPENDICES

- Appendix A: Signed Certification Statement**
- Appendix B: MS4 Program Plan with Permit Year 5 Status**
- Appendix C: Supporting Documentation for Minimum Control Measure 1: Public Education and Outreach**
- Appendix D: Supporting Documentation for Minimum Control Measure 2: Public Involvement/ Participation**
- Appendix E: Supporting Documentation for Minimum Control Measure 3: Illicit Discharge Detection and Elimination**
- Appendix F: Supporting Documentation for Minimum Control Measure 4: Construction Site Stormwater Runoff Control**
- Appendix G: Supporting Documentation for Minimum Control Measure 5: Post-Construction Stormwater Management**

**Appendix H: Supporting Documentation for Minimum Control Measure 6:
Pollution Prevention/Good Housekeeping for Municipal
Operations**

Appendix I: Surface Water Monitoring Program July 1, 2017-June 30, 2018

Introduction and Summary

The City of Suffolk submits the following information in accordance with 9VAC25-890-40 Section II.E.3 items (a) through (e). To aid in the organization of this report, this section serves as a summary and is supported by supplemental information in the form of attached appendices where appropriate.

Permit requirements for annual reporting

Annual reports. The operator must submit an annual report for the reporting period of July 1 through June 30 to the department by the following October 1 of that year. The reports shall include:

a. Background Information.

- (1) The name and state permit number of the program submitting the annual report;
- (2) The annual report permit year;
- (3) Modifications to any operator's department's roles and responsibilities;
- (4) Number of new MS4 outfalls and associated acreage by HUC added during the permit year; and
- (5) Signed certification;

b. The status of compliance with state permit conditions, an assessment of the appropriateness of the identified best management practices and progress towards achieving the identified measurable goals for each of the minimum control measures;

c. Results of information collected and analyzed, including monitoring data, if any, during the reporting period;

d. A summary of the stormwater activities the operator plans to undertake during the next reporting cycle;

e. A change in any identified best management practices or measurable goals for any of the minimum control measures including steps to be taken to address any deficiencies;

f. Notice that the operator is relying on another government entity to satisfy some of the state permit obligations (if applicable);

g. The approval status of any programs pursuant to Section II C (if appropriate), or the progress towards achieving full approval of these programs; and

h. Information required for any applicable TMDL special condition contained in Section I.

Summary of City actions to meet reporting requirements

a. Background

- (1) City of Suffolk General Permit No.: VAR040029
- (2) Permit Year Five; July 1, 2017 – June 30, 2018
- (3) There have been no changes to the operator's departmental roles and responsibilities pertaining to this permit.
- (4) The 2010 Census increased the Urbanized Area in Suffolk from 13.7 square miles to 47.3 square miles. A total of 1,356 MS4 outfalls have been identified. A list of new outfalls added in permit year 5 is attached in Appendix E. Detailed outfall maps and the outfall information table can be viewed on the City of Suffolk website at this address: <http://www.suffolkva.us/270/Illicit-Discharge-IDDE>

(5) The signed certification statement is in Appendix A of this report.

- b. The City maintains a Program Plan Matrix to assess compliance with permit conditions, assess the appropriateness of best management practices, and to track progress towards measurable goals for minimum control measures. The Program Plan Matrix with progress updates is attached in Appendix B.
- c. Monthly sampling of the Nansemond River and its tributaries continued with a partnership between the City, The Virginia Department of Health Division of Shellfish Sanitation (VDH DSS), Hampton Roads Sanitation District (HRSD), and the Nansemond River Preservation Alliance (NRPA). In addition to coordination of sampling efforts on the Nansemond, the participating groups are collaborating with the City to actively search for human sources of bacteria in the stormwater conveyance system. The sampling results for the Nansemond River, and details about the other sampling program are attached in Appendix I.
- d. The City plans to continue those practices identified in the Program Plan attached in Appendix B until it is updated in accordance with the new MS4 permit. Also, the City intends to maintain its partnership with Hampton Roads localities through the Hampton Roads Planning District Commission to improve and coordinate education and outreach efforts. The City plans to continue the surface water monitoring program on the Nansemond River. The City will continue to work with Suffolk Public Schools in accordance with the Memorandum of Understanding between the City of Suffolk and Suffolk Public Schools approved July 2010. This memorandum has been provided in previous reports and has not changed since being adopted.
- e. The Program Plan Matrix for PY1 of the new MS4 permit will be updated within six months of the permit start date (as required in the permit). Changes to Best Management Practices or measurable goals are identified within the PY5 Program Plan Matrix located in Appendix B. The City intends to continue its partnership with the Hampton Roads Planning District Commission to seek enhancements or modifications to existing Best Management Practices throughout the next permit cycle.
- f. The City continues a close relationship with the Hampton Roads Planning District Commission and its affiliate localities for the purpose of meeting certain permit requirements. The Hampton Roads Regional Stormwater Management Program Memorandum of Agreement executed June 2018 outlines the cooperation between the City and the Hampton Roads Planning District Commission. Most of the functions of this partnership exist through the askHRgreen.org Stormwater Education Subcommittee, the Stormwater Workgroup, and the Regional Environmental Committee.
- g. The City of Suffolk does not operate or follow any programs that are intended to replace any of the minimum control measures required under Section II B.
- h. TMDL requirements

(1) In PY3 a TMDL Action Plan was submitted for the following bacteria TMDLs: Upper Nansemond River and Shingle Creek; Hoffler Creek; Elizabeth River; Chuckatuck Creek and Brewers Creek; Bleakhorn Creek, Bennett Creek, and Knotts Creek.

i) Pet Waste Stations: 5 pet waste stations were granted to neighborhoods in TMDL watersheds (6 total pet waste stations granted).

Neighborhood	Watershed	Number of Stations
Steeplechase	Bennetts Creek	1
Belleharbour Woods	Knotts Creek	2
Linkside Cove	Nansemond River	1
Belmont Park	Bennetts Creek	2

ii) IDDE: Four illicit discharges related to sewage or septage were investigated inside the TMDL watersheds. Details are included in the illicit discharge summary in Appendix E.

iii) Employee Training: All Pollution Prevention and Good Housekeeping Trainings conducted for City employees include a segment on recognizing and reporting illicit discharges. Examples discussed include septic and sewage overflows and pet waste. A training summary is included in Appendix H.

iv) Public Education and Outreach: Efforts in this area are discussed in detail in Appendix C. Pet waste is a main topic discussed at these events, especially events for students. Regional advertising campaigns run by askHRgreen.org focus on pet waste and best management practices for the home that can reduce sewer system issues. 472 dog waste bag holders and 433 pet waste rack cards were given away during permit year five.

(2) The City of Suffolk has met the required Chesapeake Bay TMDL reductions for the first permit cycle. Street sweeping practices continued in Permit Year 5 as outlined in the action plan; 8000.8 cubic yards of debris were collected. This equates to 12,111.21 pounds of total nitrogen, 4,844.48 pounds of total phosphorus, and 1,453,345.32 pounds of total suspended solids. These efforts exceed the City of Suffolk's level of commitment identified in the Action Plan. No additional structural practices were implemented during this reporting year.

Appendix A

Signed Certification Statement

Certification Statement

As required by 9VAC25-870-370 B, all reports required by state permits, and other information requested by the board shall be signed by a responsible official or by a duly authorized representative of that person. A responsible official is:

1. *For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for state permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;*

2. *For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or*

3. *For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.*

Duly Authorized Representatives

A person is a duly authorized representative only if:

1. *The authorization is made in writing by a person described above;*

2. *The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and*

3. *The written authorization is submitted to the department.*

CERTIFICATION

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 gather and evaluate the information submitted. Based on 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.


Responsible Official Signature

9/27/18
Date

VAR040029

City of Suffolk

Permit Number

MS4 Name

Appendix B

MS4 Program Plan with Permit Year 5 Status

City of Suffolk MS4 Program Plan Permit Year 5

1. Public Outreach and Education							
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents	PY5 Status
1.b	Design plan to educate citizens on techniques to reduce impacts of stormwater pollution on public waterways with an emphasis on impaired waters.						
1.b.1	Regional Media Campaign	Participate in the askHRgreen.org regional media campaign which will make impressions with a stormwater message via print, television (local municipal access, cable and local affiliate), radio, and social media	Demographic, reach and frequency	askHRgreen.org Stormwater Education Subcommittee	Annually	Copies of ads within askHRgreen.org Annual Report	Participated in the regional askHRgreen.org program. See askHRgreen.org annual report attached in Appendix C.
1.b.2	Educate homeowners on hazards and legal implications of illegal discharges and improper disposal of waste.	Promote askHRgreen.org for list of locality contacts for citizens to report illicit discharges and to learn about proper disposal methods.	Number of page visits	askHRgreen.org Stormwater Education Subcommittee	Post New info in PY1	askHRgreen.org website	askHRgreen.org website visits are detailed in the askHRgreen.org Annual Report attached in Appendix C.
1.c	Updated Public Education and Outreach Program						
1.c.1	High-priority water quality issues	Identify at least 3 high priority water quality issues that contribute to the discharge of stormwater	Number of high-priority issues	askHRgreen.org Stormwater Education Subcommittee	End of PY1 & Annually thereafter	askHRgreen.org Annual Report	Leaves & pet waste, fertilizing and soil testing, and fats oil and grease reduction were identified as high priority issues.
1.b.3 1.c.2	Target Audience	Identify and estimate the population size of target audience(s) who are likely to have significant impacts for each high priority issue	Estimated target audience population	askHRgreen.org Stormwater Education Subcommittee	End of PY1 & Annually thereafter	askHRgreen.org Annual Report	Target audience reach discussed in askHRgreen.org annual report and summary preceding report attached in Appendix C.
1.c.3	Relevant Message Development						
1.c.3a	Stormwater materials	Develop relevant message(s) and associated educational and outreach materials for distribution to target audience	Message Materials	askHRgreen.org Stormwater Education Subcommittee	End of PY1 & Annually thereafter	askHRgreen.org Annual Report	Detailed in askHRgreen.org annual report in Appendix C.
1.c.5	Relevant Message Implementation	Conduct sufficient education and outreach activities designed to reach an equivalent 20% of each high priority audience.	Percentage of target audience reached through activities.	askHRgreen.org Stormwater Education Subcommittee	End of PY1 & Annually thereafter	askHRgreen.org Annual Report	Over 20% of the target audiences for pet waste, fertilizing and soil testing, fats oil and grease reduction, and "what not to flush" was reached by various media outlets funded through askHRgreen.org . More details in askHRgreen.org annual report and summary preceding the report in Appendix C.
1.c.5a	Distribute educational materials developed through askHRgreen.org	Distribute materials developed through askHRgreen.org to target audience in locality.	Number of materials distributed	askHRgreen.org Representative	Continuously		Distributed 6,050 promotional and educational items developed through askHRgreen.org
1.c.5b	Maintain and enhance askHRgreen.org website	Increase website visits to industry standard by end of permit cycle.	Annual askHRgreen.org website visits	HRPDC & askHRgreen.org	Permit Cycle	askHRgreen.org Annual Report	Detailed in askHRgreen.org annual report in Appendix C.
1.c.5c	<i>Scoop the Poop</i> campaign	Make <i>Scoop the Poop</i> information and giveaways available where citizens receive animal licenses and at pet-related events as appropriate	Number of giveaways distributed	askHRgreen.org Representative	Annually	Rack cards, dog waste bag holders	433 Scoop the Poop rack cards, 472 dog waste bag holders, and 6 pet waste stations distributed.
1.c.5d	Promote Lawn Care campaign	Run media campaigns and make lawn care best management practice guides available.	Demographic, reach and frequency	askHRgreen.org Stormwater Education Subcommittee	Annually	askHRgreen.org Annual Report	The stormwater education subcommittee radio, online, and advanced TV campaign to reach the target audience of men aged 35+ about fertilizer and soil testing. A 27.4% target audience reach was achieved. Details are in Appendix C of annual report.
1.c.6	Provide for adjustment of target audiences and messages to address any observed weaknesses or shortcomings	Website feedback reports, regional meeting feedback	Demographic, reach, frequency, & website click-through rates	askHRgreen.org Stormwater Education Subcommittee	Annually	askHRgreen.org Annual Report	No adjustments in target audiences were necessary during PY5.
1.d	Participate in regional committees: askHRgreen.org , RSMC, and SW Phase II Subcommittee			PW Engineering & askHRgreen.org Representative		askHRgreen.org Annual Report, MOA, HRPDC Regional Cooperation in Stormwater Management	addressed in 1.d.1, 1.d.2, and 1.d.3 below.

City of Suffolk MS4 Program Plan Permit Year 5

1. Public Outreach and Education							
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents	PY5 Status
1.d.1	Regional Cooperation	Renew MOA with the HRPDC to participate in the regional processes, including the Regional Stormwater Management Committee, Stormwater Phase II Subcommittee and askHRgreen.org	Maintain valid MOA	HRPDC	Every 5 years (concurrent with MS4 permit cycle).	MOA	The Hampton Roads Regional Stormwater Management Program MOA was revised and signed by all permitted Hampton Roads localities in 2018
1.d.2	askHRgreen.org	Participate in at least 50% of askHRgreen.org Stormwater Education Subcommittee meetings	Number of meetings attended/Number of meetings held	askHRgreen.org Representative	Annually	askHRgreen.org Annual Report	12 meetings held, 12 meetings attended.
1.d.3	Stormwater Phase II Subcommittee	Participate in at least 50% of Stormwater Phase II Subcommittee Meetings.	Number of meetings attended/Number of meetings held	PW Engineering	Annually	Attendance chart	12 meetings held, 12 meetings attended.
1.e	Update Program Plan	Update Public Outreach and Education plan as necessary to maintain compliance with the permit effective on July 1, 2013		PW Engineering, askHRgreen.org , askHRgreen.org Representative & HRPDC	As scheduled in permit	Revised Program Plan	After review, the Public Outreach and Education Program Plan was found to be sufficient for meeting Permit requirements and no changes were made.
1.f	Evaluation and Assessment	Evaluate and assess progress towards meeting measurable goals.	In accordance with Section II E of General Permit VAR040029	PW Engineering	Annually	Annual Report	Compliance with this measurable goal is met with the submission of this report.

City of Suffolk MS4 Program Plan Permit Year 5

2. Public Involvement/Participation							
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents	PY5 Status
2.a	Public Involvement						
2.a.1	Provide Public Notice of Program Plan and Modifications	Promote the availability of the operator's MS4 Program Plan and any modifications for public review and comment in accordance with public law.	Public notice of modifications.	PW Engineering	As necessary	Virginia Code reference, updated plan	http://www.suffolkva.us/265/MS4-Program-Overview
2.a.2	Make Program Plan and other Stormwater Program Information Available to Public						
2.a.2a	Updated Program Plan	Post copies of updated program plan to City website within 30 days of submittal of annual report.	Presence of materials on website	PW Engineering	Annually	Locality website	http://www.suffolkva.us/265/MS4-Program-Overview
2.a.2b	Annual Report	Post copies of annual report to City website within 30 days of submittal to DEQ.	Presence of materials on website	PW Engineering	Annually	Locality website	http://www.suffolkva.us/265/MS4-Program-Overview
2.a.2c	Reapplication Public Involvement	Prior to reapplying for coverage, notify public and provide for receipt of comments on the proposed MS4 Program Plan.	Presence of materials on website	PW Engineering	6 mo. prior to end of permit cycle	Locality website	not applicable for this permit year.
2.b	Public Participation in a minimum of four local activities annually	Clean the Bay Day, Stormwater Medalion Placement events, Recycling and Electronic Drives, Tire Amnesty days, Clean-Up events	# events, # of items distributed, # of participants, # of pounds collected, or # of volunteer hours	PW Engineering	Annually		City staff held, participated in, or helped coordinate 119 public participation events with 4129 volunteer hours. These events collected 2127 pounds of recyclable batteries, 3261 scrap tires, and picked up 1563 bags of trash. Event details attached in Appendix D. Staff gave away 6,050 promotional items. Promotional giveaway details attached in Appendix C.
2.c	Update Program Plan	Update Public Involvement/ Participation plan as necessary to maintain compliance with the permit effective on July 1, 2013		PW Engineering	As scheduled in permit		After review, the Public Involvement/ Participation Program Plan was found to be sufficient for meeting the current permit requirements and no changes were made. The Program Plan will be updated no later than May 1, 2019 to comply with requirements of the new permit.
2.d	Evaluation and Assessment	Evaluate and assess progress towards meeting measurable goals.	In accordance with Section II E of General Permit VAR040029	PW Engineering	Annually	Annual report	Compliance with this measurable goal is met with the submission of this report.

City of Suffolk MS4 Program Plan Permit Year 5

3. Illicit Discharge Detection and Elimination							
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents	PY5 Status
3.a	Storm Sewer System Map						
3.a.1	MS4 outfall map	Maintain and update mapping including location and name of waters receiving discharges	Updated Map	PW Engineering	Annually	Outfall map	http://www.suffolkva.us/270/Illicit-Discharge-IDDE
3.a.2	MS4 outfall information table	Table listing outfall ID, acreage served, receiving water, applicable TMDL(s).	Updated Table	PW Engineering	Annually	Information Table	1356 MS4 Outfalls. A list of new MS4 outfalls is attached in Appendix E.
3.a.3	MS4 boundaries map and information table	Map and information table identifying MS4 watershed within 2010 urbanized area.	Boundary Map	PW Engineering	End of PY4	MS4 Catchments Map	Attached in Appendix E
3.a.4	Public information	Make MS4 map and information table available to the public	Presence of materials on website or refer to availability location	PW Engineering	Annually	Locality website	http://www.suffolkva.us/270/Illicit-Discharge-IDDE
3.a.5	New outfalls	Identify new points of discharge	List of new outfalls	PW Engineering	Annually	New outfall list	1356 total MS4 Outfalls have been identified with 7 new outfalls identified in PY5. A list of new MS4 outfalls is attached in Appendix E.
3.a.5a	Cooperation with adjacent MS4s	Identify and notify, in writing, any downstream regulated MS4 to which the small regulated MS4 is physically interconnected.	Develop map, Regional Phase II Stormwater Subcommittee Meetings, letters	PW Engineering	Annually	Letters; meeting attendance	Stormwater Education Subcommittee meeting and Stormwater Regional Workgroup meeting attendance included in Appendix C.
3.b	Illicit Discharge Detection & Elimination Ordinance	Continue implementing and enforcing the illicit discharge/stormwater ordinance.	Current Ordinance	PW Engineering/ Fire Dept	As necessary	Ordinance	Sec.35-52 and Sec.35-53 of the Suffolk Municipal Code
3.c	Dry Weather Screening						
3.c.1	Dry Weather Screening Procedures	Develop written dry weather field screening methodologies for IDDE.	SOP	PW Engineering	End of PY1	DWS Protocol	Most recent procedures were submitted with the Permit Year 2 annual report.
3.c.2	Field Screening	Perform dry weather screening of a minimum of 50 outfalls.	Documentation of screening performed and results	PW Engineering/ SW Inspector	Annually	Map and ORI Field sheets	114 dry weather outfall screenings conducted. Screening details attached in Appendix E.
3.d	Promote, Publicize, and facilitate public reporting of illicit discharges into or from MS4s						
3.d.1	Public IDDE Reporting	Promote & Publicize IDDE reporting	Presence of phone number & information on website	PW Engineering	Continuously	Locality website	http://www.suffolkva.us/9/How-Do-I
3.d.2	Prevent or minimize the discharge of hazardous substances and oil in the MS4 stormwater discharge.	Yard inspections; Develop/enhance reporting relationship with FD/Haz Mat Team; targeted education	Number of responses/ number of inspections	PW Engineering/ Fire Dept	Continuously	Inspection forms	Conducted 11 city-wide municipal facility inspections, summary included in Appendix H.
3.e	Illicit Discharge Detection & Elimination Procedures						
3.e.1	IDDE program implementation	Continue implementing an illicit discharge detection and elimination program for the municipally-owned MS4 within the Urbanized Area.	Develop written protocol for responding and investigating IDDE	PW Engineering/ Fire Dept	End of PY1	IDDE Protocol	Included in PY1 Annual Report
3.e.2	IDDE activity tracking	Track illicit discharge detection and elimination activities.	Number of investigations and actions taken	PW Engineering/ Fire Dept	Ongoing	List of Activities	24 illicit discharge investigations by Public Works Engineering. 34 HAZMAT incidents investigated by Suffolk Fire Dept. Reports attached in Appendix E
3.e.3	Report spills that reach state waters to DEQ						
3.e.3a	Report non sewer spills and releases from small MS4 operated properties that reach State waters to DEQ.	Report spills to the DEQ's Pollution Response Program (PREP).	Number of internal reports. If applicable, obtain PREP number.	PW Engineering / Fire Dept	Fire Dept. Report in accordance to Section III. G.	Internal Summary Report	Fire Department HAZMAT Report Summary included in Appendix E.

City of Suffolk MS4 Program Plan Permit Year 5

3. Illicit Discharge Detection and Elimination							
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents	PY5 Status
3.e.3b	Report Sanitary Sewer Overflows through SSORS database.	Continue to utilize SSORS to report Sanitary Sewer Overflows	Number of overflows	Public Utilities	Continuously	List from SSORS	22 sanitary sewer overflows reported. Map and summary of SSORS reports included in Appendix E.
3.f	Update Program Plan	Update Illicit Discharge Detection and Elimination plan as necessary to maintain compliance with the permit effective on July 1, 2013		PW Engineering/ Fire Dept	As scheduled in permit		After review, the Illicit Discharge Detection and Elimination Plan was found to be sufficient for meeting Permit requirements and no changes were made.
3.g	Evaluation and Assessment	Evaluate and assess progress towards meeting measurable goals.	In accordance with Section II E of General Permit VAR040029	PW Engineering	Annually	Annual report	Compliance with this measurable goal is met with the submission of this report.

City of Suffolk MS4 Program Plan Permit Year 5

4. Construction Site Storm Water Runoff Control							
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents	PYS Status
4.a	Legal Authorities						
4.a.1	LD Activities > 10,000 SF	Continue to implement the Stormwater Management Ordinance & the Erosion and Sedimentation Control Ordinance	Stormwater Management Ordinance & Erosion and Sedimentation Control Ordinance	PW Engineering	Continuously	SWM & E&SC Ordinances	Stormwater- Ch. 35 Stormwater Management ESC-Ch. 34 Environment Article II. Erosion and Sedimentation Control
4.a.2	CBPA LD Activities >2,500 SF	Continue to implement the Chesapeake Bay Preservation Ordinance and Stormwater Management Ordinance	Chesapeake Bay Preservation Ordinance & Stormwater Management Ordinance	PW Engineering	Continuously	CBPA & SWM Ordinance	Stormwater- Ch. 35 Stormwater Management CBPA- UDO Article 4. Zoning-Sec 31-415 Chesapeake Bay Preservation Overlay District
4.a.4	Individual Lot or CPOD LD Activities > 10,000 SF	Continue to implement the SWM, E&SC, & CBPA ordinances	SWM, E&SC, & CBPA Ordinances	PW Engineering	Continuously	Ordinances	Stormwater- Ch. 35 Stormwater Management ESC-Ch. 34 Environment Article II. Erosion and Sedimentation Control. CBPA-UDO Article 4. Zoning Sec 31-415 Chesapeake Bay Preservation Overlay District
4.b	Local Programs						
4.b.1	E&SC Plan Reviews	Continue to implement the site plan review, LID implementation where deemed appropriate, provisions of the local SWM, E&SC, and CBPA Ordinances.	# plan reviews	Planning/ PW Engineering	Annually	Summary from Locality tracking system	126 plan submittals reviewed. 33 plans recommended for approval.
4.c	Compliance and Enforcement						
4.c.1	E&SC Inspections	Continue to inspect land-disturbing activities for compliance with an approved erosion and sediment control plan.	# of inspections	PW Engineering	Annually	Summary from Locality tracking system	7,903 ESC Inspections and 711 Enforcement Actions. Details attached in Appendix F.
4.c.2	E&SC Inspection Schedule	Continue to implement inspection schedule per Erosion and Sediment Control Law	# of inspections; # enforcement actions	PW Engineering	Annually	Summary from Locality tracking system	Updated inspection procedures were reported with the PY3 Annual Report. 7,903 ESC Inspections and 711 Enforcement Actions in PY4.
4.c.3	Certifications						
4.c.3a	E&SC Certifications	Ensure that plan reviewers, inspectors, and program administrators obtain the appropriate certifications as required under the Erosion and Sediment Control Law	Certifications obtained	PW Engineering	Ongoing	Certifications	There is a continuous effort to maintain certifications and to certify new personnel. Certified personnel listed in Appendix F.
4.c.3b	SWM Certifications	Ensure that plan reviewers, inspectors, and program administrators obtain the appropriate certifications as required under the Stormwater Management Act	Certifications obtained	PW Engineering	Beginning in PY2	Certifications	There is a continuous effort to maintain certifications and to certify new personnel. Certified personnel listed in Appendix F.
4.c.4	Public Inquiry	Continue to receive and respond to information from citizens relating to the local erosion and sediment control program through personal visits, email, telephone, and the City web page.	# of calls/requests, #site visits	PW Engineering	Annually	Summary from Locality tracking system	11 inquiries were received in permit year five, details are included in Appendix F
4.c.5	E&SC Enforcement	Continue to implement enforcement provisions of the local Erosion and Sediment Control and Stormwater Management Ordinance.	# enforcement actions	PW Engineering	Annually	Summary from Locality tracking system	711 enforcement actions for ESC violations. Details in Appenndix F.
4.c.6	E&SC Modifications due to inadequacy	Continue to implement provisions of the local Erosion and Sediment Control Ordinance and Stormwater Mangement Ordinance requiring changes to the plan due to inadequacy.	# of Field Changes	PW Engineering	Annually	Summary from Locality tracking system	5 approved ESC field changes
4.c.7	VSMP Inspections	Implement inspection provisions of the local Stormwater Management Ordinance for VSMP authority permits including Pollution Prevention Plans contained within the SWPPP	# of inspections; # enforcement actions	PW Engineering	Beginning in PY2	Summary from Locality tracking system	157 SWPPP inspections. SWPPP enforcement actions are included in the reported E&S enforcement actions.
4.d	VSMP Authority Permits						

City of Suffolk MS4 Program Plan Permit Year 5

4. Construction Site Storm Water Runoff Control							
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents	PY5 Status
4.d.2	Local VSMP program (after July 1, 2014)	Implement the site plan review, construction site BMP, and inspection provisions of the local Stormwater Management Ordinance.	#of permit applications and permits issued.	PW Engineering	Beginning in PY2	VSMP permit numbers	20 Construction General Permits issued.
4.e	Update Program Plan	Update Construction Site Stormwater Runoff Control plan as necessary to maintain compliance with the permit effective on July 1, 2013		PW Engineering & HRPDC	As scheduled in permit	Project Inspection (Land Disturbance) SOP	The Construction Site Stormwater Runoff Control Program Plan was found to be sufficient for meeting Permit requirements and no changes were made.
4.f	Tracking and Reporting	Continue to track and report the total number of permitted land disturbing activities as well as the total disturbed acreage.	Number of permits & acres disturbed	PW Engineering	Annually	Annual Report	103 permitted activities disturbing 138.48 acres of land. Monthly reports have been submitted to DEQ.
4.g	Evaluation and Assessment	Evaluate and assess progress towards meeting measurable goals.	In accordance with Section II E of General Permit VAR040029	PW Engineering	Annually	Annual Report	Compliance with this measurable goal is met with the submission of this report.

City of Suffolk MS4 Program Plan Permit Year 5

5. Post Construction Storm Water Management in New Development and Redevelopment							
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents	PY5 Status
5.a 5.d.2	Applicable oversight requirements	Address post-construction stormwater runoff from new development and redevelopment from large or small construction activities and CBPA Land disturbing activities < 1 Ac but >2,500 SF.	Stormwater Management Ordinance	PW Engineering	Continuously	SWM Ordinance Plan Review Procedures	No change to previously reported ordinance or procedures (Ch. 35 Stormwater Ordinance)
5.b	Stormwater Management Ordinance	Implement the stormwater criteria of the Stormwater Management Ordinance for new development and redevelopment, and update ordinance to comply with Section II.B.5 of the General Permit.	Stormwater Management Ordinance	PW Engineering	Update in PY1	SWM Ordinance	No change to previously reported ordinance (Ch. 35 Stormwater Ordinance).
5.c	BMP Inspection and O&M Verification						
5.c.1	Non-operator (Private) BMPs						
5.c.1a	BMP Maintenance Agreements	Require BMP maintenance agreements as directed by the Stormwater Management Ordinance.	# of Agreements & Inspection Schedules	PW Engineering	Ongoing	List of Maintenance Agreements	5 new maintenance agreements executed in PY5, summary attached in Appendix G
5.c.1b 5.d.3 5.e.9	Inspection activities	Conduct BMP site inspections in accordance with written policies and procedures	Inspection Schedule	PW Engineering	Annually	Inspection Report Summary; Inspection Procedures	No change to previously reported inspection procedures.
5.c.1c 5.d.4 5.e.9	Enforcement activities	Enforce BMP maintenance responsibilities in accordance with written policies and procedures	# of Reinspections & NOVs	PW Engineering	Annually	Inspection Report Summary; Enforcement Procedures	316 annual inspections, 18 Re-inspections, 9 Major Deficiency letters sent, 0 NOVs. (city-wide)
5.c.2 5.d.5	Inspection & Maintenance Schedules for City-Owned BMPs	Continue to adhere to procedures for regular inspection and maintenance of locally owned stormwater control structures in accordance with SWM regulations.	Inspection Schedule	PW Engineering/ PW Operations	Annually	Inspection Report Summary; Inspection Procedures	City and School owned BMPs are inspected annually (72 total BMPs inspected).
5.e	Tracking and Reporting						
5.e.1-9	BMP Tracking	Track all known permanent stormwater management facilities that discharge to the regulated small MS4 and submit the information per General Permit No. VAR040029.	Data as required by Permit (print & spreadsheet/database)	PW Engineering	Annually	BMP Report	BMPs that discharge to the MS4 or are accessible through a Deed of Easement or Maintenance Agreement are inspected.
5.e.9	New BMP tracking	BMPs brought online within the past year	Database or spreadsheet with new BMP information	PW Engineering	Annually	BMP Report	21 BMPs were brought online in PY5, details in Appendix G. Data will be submitted into the BMP Warehouse managed by DEQ
5.f	Update Program Plan	Update the Post Construction Storm Water Management in New Development and Redevelopment plan as necessary to maintain compliance with the permit effective on July 1, 2013		PW Engineering & HRPDC	As scheduled in permit		After review, the Post Construction Program Plan was found to be sufficient for meeting Permit requirements and no changes were made.
5.g	Evaluation and Assessment	Evaluate and assess progress towards meeting measurable goals.	In accordance with Section II E of General Permit VAR040029	PW Engineering	Annually	Annual report	Compliance with this measurable goal is met with the submission of this report.

City of Suffolk MS4 Program Plan Permit Year 5

6. Pollution Prevention/Good Housekeeping for Municipal Operations							
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents	PY5 Status
6.a	Operations and Maintenance Activities						
6.a.1	Plans and Procedures	Continue to implement and update plans describing spill prevention and control and pollution prevention procedures for municipal facilities specifically to prevent illicit discharges	SOP(s)/SWPPP	Public Works	Continuously	"Operations and Maintenance: Pollution Prevention Guide" http://www.suffolkva.us/files/5714/4976/3991/P2_and_Good_Housekeeping_Guide.pdf	Operations and Maintenance Pollution Prevention Guide completed and submitted with PY2 Annual Report.
6.a.2	Waste Disposal	Continue to implement and update procedures for proper waste disposal, including yard waste	SOP(s)/ SWPPP	Public Works	Continuously	"Operations and Maintenance: Pollution Prevention Guide "	Operations and Maintenance Pollution Prevention Guide completed and submitted with PY2 Annual Report.
6.a.3	Manage Municipal Vehicle Wash Water	Develop and implement procedures to prevent the discharge of municipal vehicle wash water into the MS4 without a separate VPDES permit	Procedures	Operations Personnel	Continuously	"Operations and Maintenance: Pollution Prevention Guide "	Operations and Maintenance Pollution Prevention Guide completed and submitted with PY2 Annual Report.
6.a.4	Manage Wastewater	Prevent the discharge of wastewater to MS4 without a separate VPDES permit	Procedures	Public Works	Continuously	"Operations and Maintenance: Pollution Prevention Guide "	Operations and Maintenance Pollution Prevention Guide completed and submitted with PY2 Annual Report.
6.a.5	Utility Construction and Maintenance	Require BMPs when discharging water pumped from utility construction and maintenance activities	Procedures	Public Utilities	Continuously	"Operations and Maintenance: Pollution Prevention Guide "	Operations and Maintenance Pollution Prevention Guide completed and submitted with PY2 Annual Report.
6.a.6	Bulk Storage BMPs	Require BMPs for bulk storage areas (salt storage, top soil stockpiles)	BMPs Used	PW Operations	Continuously	"Operations and Maintenance: Pollution Prevention Guide "	Operations and Maintenance Pollution Prevention Guide completed and submitted with PY2 Annual Report.
6.a.7	Manage Leaking Municipally-owned Vehicles	Prevent the discharge of pollutants to the MS4	BMPs Used	PW Fleet Maintenance/ PW Operations	Continuously	"Operations and Maintenance: Pollution Prevention Guide "	Operations and Maintenance Pollution Prevention Guide completed and submitted with PY2 Annual Report.
6.a.8	Manage Fertilizers and Pesticides	Implement procedures to ensure materials are applied in accordance with manufacturer's recommendations	Procedures	PW Operations/ Mosquito Control/ Parks and Recreation	Continuously	"Operations and Maintenance: Pollution Prevention Guide "	Operations and Maintenance Pollution Prevention Guide completed and submitted with PY2 Annual Report. Certified pesticide applicators are detailed in Appendix H.
6.b	Storm Water Pollution Prevention Plans (SWPPP)						
6.b.1	High-priority facilities	Identify municipal high-priority facilities of types listed in General Permit No. VAR040029	# & type of high-priority facility	PW Engineering	End of PY1	List of high-priority facilities	Refuse, Fleet Maintenance, and the Bus Parking Facility have been identified as high priority sites

City of Suffolk MS4 Program Plan Permit Year 5

6. Pollution Prevention/Good Housekeeping for Municipal Operations							
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents	PY5 Status
6.b.2	SWPPP Locations	Identify municipal high-priority facilities that have a high potential of discharging pollutants	# & type of high-priority facility	PW Engineering	End of PY1	List of SWPPP Sites	Refuse, Fleet Maintenance, and the Bus Parking Facility have been identified for SWPPP development.
6.b.3	SWPPP development & Implementation	Develop and Implement SWPPPs for identified high-priority facilities	SWPPP	PW Engineering/ PW Refuse/ PW Fleet Maintenance	PY4	SWPPP	SWPPPs have been developed and implemented for the following identified high priority facilities: Fleet Management, Bus Parking Facility, and Waste Management Facility (Refuse).
6.c	Nutrient Management Plans						
6.c.1	NMP Implementation						
6.c.1a	NMP Locations	Identify locations of municipally owned properties where nutrient management plans can be performed	Number of sites & area	PW Engineering	End of PY1	List of managed turf sites > 1 Ac.	4 sites totaling 322.52 acres. Details in Appendix H.
6.c.1b	NMP development & implementation	Develop and Implement NMPs for identified turf and landscape (15% by PY2, 40% by PY3; 75% by PY4; & 100% by PY5)	% of identified area under NMP	PW Engineering	PY2 - PY5	List of NMP Covered Sites	100% of Nutrient Management Plans have been developed and implemented, totaling 322.52 acres (including 148.21 acres added in PY5). Permit cycle NMP requirements are attached in Appendix H.
6.c.2	NMP Tracking	Track the total acreage of lands where turf and landscape NMPs are required and implemented	Acreage required & Acreage implemented	PW Engineering	Annually	List of managed turf sites > 1 Ac.	322.52 acres requiring NMP's. 322.52 acres covered by NMP's in PY5.
6.c.3	Deicing agents	Operator shall not apply deicing agents containing urea or other forms of nitrogen or phosphorus to parking lots, roadways, and sidewalks, or other paved surfaces	Statement of non-use of nutrient containing deicing agents	PW Operations	Annually	Statement	The City's deicing agents do not contain urea or other forms of nitrogen or phosphorus.
6.d	Employee Education & Training						
6.d.1	IDDE Training for field personnel	Provide training to field personnel in the recognition of Illicit discharges	# of training sessions / # Employees trained	PW Engineering/HRPDC	Biennial	Attendance list, Summary of Training	IDDE training was done in conjunction with Pollution Prevention and Good housekeeping training. Training Summary attached in Appendix H
6.d.2	Streets & parking lot maintenance training	Provide training to Streets & Landscape Divisions for road, street & parking lot maintenance	# of training sessions / # Employees trained	PW Engineering/HRPDC	Biennial	Attendance list, Summary of Training	Training conducted, see Training Summary in Appendix H
6.d.3	Public Works Facilities training	Provide training to PW personnel on good housekeeping and pollution prevention practices	# of training sessions / # Employees trained	PW Engineering/HRPDC	Biennial	Attendance list, Summary of Training	Training conducted, see Training Summary in Appendix H
6.d.4	Pesticides & herbicide certifications	Maintain certifications and training for pesticide and herbicide applicators in accordance with Virginia Pesticide Control Act	Certifications obtained	PW Operations	Continuously	Certifications	List of certified personnel attached in Appendix H
6.d.5 & 6.d.6	E&SC & SWM Training	Ensure that plan reviewers, inspectors, and program administrators obtain the appropriate certifications as required under the Erosion and Sediment Control Law	Certifications obtained	PW Engineering	Continuously	Certifications	All employees conducting plan review are required to be certified by departmental policy. Certifications list included in Appendix F

City of Suffolk MS4 Program Plan Permit Year 5

6. Pollution Prevention/Good Housekeeping for Municipal Operations							
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents	PY5 Status
6.d.7	Parks and Recreation employee training	Provide training to P&R personnel on good housekeeping and pollution prevention practices	# of training sessions / # Employees trained	PW Engineering/HRPDC	Biennial	Attendance list, Summary of Training	Training conducted, see Training Summary in Appendix H
6.d.8	Emergency Response employee training	Provide training and certification in spill response to emergency response employees	Certifications obtained	Fire Department	PY1	Certifications	All firefighters receive Hazardous Materials Operations Level Training in Fire Academy as well as in service training
6.d.9	Tracking						
6.d.9a	Training Needs Assessment	Determine any educational needs for employees and develop appropriate training and/or materials.	Training assessment	HRPDC & Phase II Stormwater Committee	1X per permit cycle	Training Schedule	In PY5, training of City and contract custodial staff was initiated (new training handout was created).
6.d.9b	Training Schedule	Identify and prioritize pollution prevention education and training needs for municipal employees based on relative risk for stormwater pollution from municipal operations through the HRPDC Stormwater Phase II Subcommittee.	Training Schedule	HRPDC, Phase II SW Committee & PW Engineering	Annually	Training schedule	A training summary (including schedule) is attached in Appendix H.
6.d.9c	Training Materials	Distribute pollution prevention educational materials developed through the HRPDC/ askHRgreen.org to municipal employees engaging in operations with a high risk of discharging pollutants into the MS4.	# of items distributed	HRPDC & PW Engineering	Annually	E-newsletter, training materials	No specific materials were distributed. Information was conveyed during site inspections and trainings.
6.e	Contractor Training	Participate in the development of at least one regional contractor training session during the life of the permit.	Training session	HRPDC & Phase II Stormwater Committee	Once per permit cycle	Training sessions and evaluation forms	7 regional trainings were held or hosted at HRPDC. City staff attended over 50% of these trainings. Details are attached in Appendix C.
6.f	Update Program Plan	Update Pollution Prevention/Good Housekeeping for Municipal Operations plan as necessary to maintain compliance with the permit effective on July 1, 2013		PW Engineering & HRPDC	As scheduled in permit		After review, the Pollution Prevention/Good Housekeeping Program Plan was found to be sufficient for meeting Permit requirements and no changes were made.
6.g	Evaluation and Assessment	Evaluate and assess progress towards meeting measurable goals.	In accordance with Section II E of General Permit VAR040029	PW Engineering	Annually	Annual report	Compliance with this measurable goal is met with the submission of this report.

City of Suffolk MS4 Program Plan Permit Year 5

TMDL Special Conditions							
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents	PY5 Status
SC-1	TMDL						
SC-1a	Develop Chesapeake Bay TMDL Action Plan	Develop a TMDL Action Plan consistent with the Virginia Ph I and II WIPs to meet the Level 2 (L2) reductions of pollutants of concern (POC)	TMDL Action Plan	SW Program Administrator	End of PY2	TMDL Action Plan	Submitted with PY2 Annual Report, resubmitted with PY3 Annual Report.
SC-1b	Implement Chesapeake Bay TMDL Action Plan	Implement the TMDL Action Plan to meet 5% of the Level 2 (L2) reductions of pollutants of concern (POC) by the end of the permit cycle.	Per TMDL Action Plan	SW Program Administrator	End of PY5	TMDL Action Plan	Update included in the Introduction and Summary.
SC-2	Upper Nansemond/Shingle Creek	Develop and Implement a TMDL Action Plan for the POC.	TMDL Action Plan	SW Program Administrator	End of PY3	TMDL Action Plan	Submitted with PY3 Annual Report. Update included in the Introduction and Summary.
SC-3	Bleakhorn Creek, BennettsCreek & Knotts Creek	Develop and Implement a TMDL Action Plan for the POC.	TMDL Action Plan	SW Program Administrator	End of PY3	TMDL Action Plan	
SC-4	Chuckatuck Creek and Brewers Creek	Develop and Implement a TMDL Action Plan for the POC.	TMDL Action Plan	SW Program Administrator	End of PY3	TMDL Action Plan	
SC-5	Hoffler Creek	Develop and Implement a TMDL Action Plan for the POC.	TMDL Action Plan	SW Program Administrator	End of PY3	TMDL Action Plan	
SC-6	Elizabeth River	Develop and Implement a TMDL Action Plan for the POC.	TMDL Action Plan	SW Program Administrator	End of PY3	TMDL Action Plan	
SC-7	Evaluation and Assessment	Evaluate and assess progress towards meeting measurable goals.	In accordance with Section II E of General Permit VAR040029	SW Program Administrator	Annually	Annual report	Compliance with this measurable goal is met with the submission of this report.

Appendix C

Supporting Documentation for Minimum Control Measure 1: Public Education and Outreach

CHESAPEAKE

JAMES E. BAKER
STEPHEN BEST
DEBBIE RITTER
ELLA P. WARD
ROBERT GEIS

FRANKLIN

BARRY CHEATHAM
R. RANDY MARTIN

GLOUCESTER COUNTY

PHILLIP BAZZANI
BRENT FEDORS

HAMPTON

MARY BUNTING
JAMES GRAY
DONNIE TUCK

ISLE OF WIGHT COUNTY

WILLIAM M. MCCARTY
RANDY KEATON

JAMES CITY COUNTY

BILL PORTER
MICHAEL J. HIPPLE

NEWPORT NEWS

MCKINLEY L. PRICE
SHARON P. SCOTT
CYNTHIA ROHLF

NORFOLK

KENNETH C. ALEXANDER
MAMIE B. JOHNSON
ANDRIA P. MCCLELLAN
THOMAS R. SMIGIEL
DOUGLAS SMITH

POQUOSON

DAVID A. HUX
J. RANDALL WHEELER

PORTSMOUTH

LYDIA PETTIS PATTON
JOHN ROWE

SMITHFIELD

T. CARTER WILLIAMS

SOUTHAMPTON COUNTY

MICHAEL W. JOHNSON
BARRY PORTER

SUFFOLK

LEROY BENNETT
PATRICK ROBERTS

SURRY COUNTY

TYRONE W. FRANKLIN
JOHN M. SEWARD

VIRGINIA BEACH

LOUIS R. JONES
BENJAMIN DAVENPORT
ROBERT M. DYER
DAVID L. HANSEN
BARBARA M. HENLEY
JOHN E. UHRIN
ROSEMARY WILSON
JAMES WOOD

WILLIAMSBURG

ANDREW TRIVETTE
PAUL FREILING

YORK COUNTY

NEIL MORGAN
THOMAS G. SHEPPERD JR.

Report Documentation

TITLE:

askHRgreen.org Annual Report for Fiscal Year 2017-2018

REPORT DATE

September 2018

GRANT/SPONSORING AGENCY

Local Funds

**ORGANIZATION NAME,
ADDRESS AND TELEPHONE**

*Hampton Roads Planning
District Commission
723 Woodlake Drive
Chesapeake, Virginia 23320
(757) 420-8300
www.hrpdcva.gov*

AUTHORS:

*Katie Cullipher
Rebekah Eastep
Elizabeth Vandell*

ABSTRACT

The Hampton Roads Planning District Commission (HRPDC) is one of 21 Planning District Commissions in the Commonwealth of Virginia and is a regional organization representing the 17 local governments of the Hampton Roads area. This report provides an overview of the askHRgreen.org regional public outreach program and campaign results for fiscal year 2017-2018. It also provides an overview of the individual initiatives and results from each of the four askHRgreen.org environmental education subcommittees: Recycling and Beautification, Stormwater Education, Water Awareness, and Fats, Oils & Grease Education.

ACKNOWLEDGEMENTS

This report was prepared by the Hampton Roads Planning District Commission (HRPDC) staff in cooperation with the member localities. Preparation of this report was included in the HRPDC Unified Planning Work Program for Fiscal Year 2018, approved by the Commission in May 2017.

Launched in 2011, askHRgreen.org is more than just a robust website; it is an award-winning comprehensive public outreach initiative. The program combines traditional and social media with grassroots outreach efforts to not only educate, but inspire residents of Hampton Roads to make changes that have a positive impact on the environment. askHRgreen.org is a regional solution that helps our localities meet the requirements of MS4 permits, groundwater withdrawal permits, and state consent orders to reduce sanitary sewer overflows. By combining local expertise and taking advantage of economies of scale, askHRgreen.org has become a pathway to compliance and a "one-stop shop" for citizens to find answers, resources, and inspiration for a cleaner, greener Hampton Roads. From earth-friendly landscaping ideas and pointers for keeping local waterways clean to recycling tips and simple steps to make local living easy on the environment, all you have to do is askHRgreen.org.

Financial support for askHRgreen.org is made possible by the following member localities and agencies: the cities of Chesapeake, Franklin, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach and Williamsburg; the counties of Gloucester, Isle of Wight, James City, Southampton, Surry and York; the town of Smithfield and the Hampton Roads Sanitation District. Members of local staff and HRSD comprise four askHRgreen.org subcommittees who meet monthly to develop and implement the regional program.

Recycling and Beautification Subcommittee - A coalition of local government staff members from across Hampton Roads who are working together to share ideas and pool resources for various education programs tailored towards community beautification, litter prevention, and recycling education. This group has been working cooperatively since 1981.

Fats, Oils, and Grease (FOG) Education Subcommittee - A coalition of local government staff members working together with HRSD to protect wastewater infrastructure, reduce sanitary sewer overflows, and improve local water quality. The Subcommittee shares both technical resources and educational strategies to prevent improper disposal of fats, oils, and grease. This cooperative effort has been underway since 2007 when 13 of the region's localities and HRSD entered into the Regional Special Order by Consent with

the Virginia Department of Environmental Quality.

Water Awareness Subcommittee - Regional public utilities staff members who work together to educate citizens about aging infrastructure, the value of tap water, and the importance of water conservation. This cooperative effort to promote the vital role water plays in the quality of life of Hampton Roads and the need to conserve it assists localities in meeting requirements of various locality goals as well as water supply and ground water permit education requirements.

Stormwater Education Subcommittee - A cooperative partnership of the region's seventeen member cities and counties which has served as a formal adjunct to the required public information component of the Virginia Pollution Discharge Elimination System Permits (VPDES) for Phase I and Phase II Municipal Separate Storm Sewer Systems (MS4) since 1997. Local government staff members work together to share ideas and pool resources for various education programs tailored to stormwater pollution prevention.



Continued to follow the 2015-2020 askHRgreen.org marketing plan

Launched & continued to build a new, responsive website

Conducted 10 themed media campaigns for individual committees

Continued an active media relations program

Launched a new "Imagine A Day Without Water" campaign

Launched a new litter prevention "Team Up 2 Clean Up" campaign

Launched the Bay Star Business Program

Continued building and adding to the online media toolkit

Orchestrated an enhanced Search Engine Marketing campaign

Continued to administer regional grant programs

Enhanced our bi-monthly e-newsletters

Planned second Write As Rain multi-committee campaign; this one targets students

—2017-2018 By The Numbers—

8,623 students impacted by environmental education grants 

55,735 visitors to askHRgreen.org
93,589 page views on askHRgreen.org 

 **2,708 households enrolled** in the regional Bay Star Homes program


1,975
 Facebook


1,684
 Twitter


7,284
 eNewsletter
 Subscribers

35 pet waste stations installed 
 impacting neighborhoods across the region

\$19,071 in grant funding received

askHRgreen.org representation at **33 community events** 

2017-2018 ACTIVITY CALENDAR

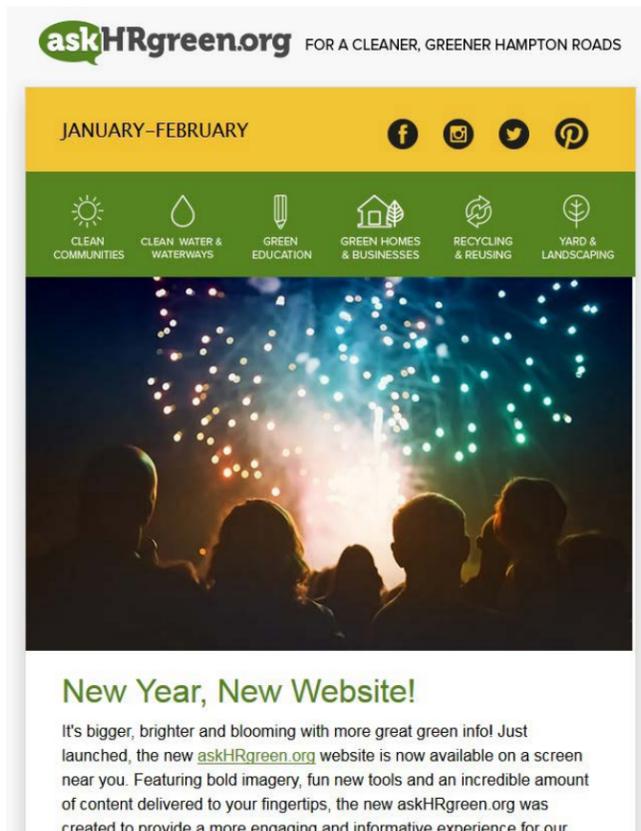
COMMITTEE	CAMPAIGN	MEDIA	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE
WATER AWARENESS	Imagine A Day	AT, R, O, S												
STORMWATER	Leaves / Pet Waste	R, O, S												
R&B	Recycle More, Trash Less	AT, R, O, S												
FOG	FOG Down the Drain	R, O, S												
FOG	What Not to Flush	AT, R, O, S												
WATER AWARENESS	Fix-A-Leak Week	AT, R, O, S												
R&B	Team Up 2 Clean Up	R, O, S												
STORMWATER	Lawncare / Work Smarter	AT, R, O, S												
WATER AWARENESS	Value of Water	AT, R, O, S												
FOG	What Do You Know	AT, O, S												
ALL	askHRgreen.org Newsletters	E												
ALL	Public Relations													
ALL	Search Engine Marketing													
ALL	askHRgreen.org Blog Articles													

 **13.4 million opportunities** to see or hear askHRgreen.org in the media

A New askHRgreen.org

In December 2017, we launched a brand new, responsive website featuring bold imagery, helpful new tools, and an incredible amount of content delivered seamlessly on any device. The new askHRgreen.org was created to provide a more engaging and informative experience for our Hampton Roads communities. The way the site filters and delivers information truly allows users to “ask” HRgreen like never before. For instance, when users click on a topic like “clean water and waterways,” they will receive related information in a variety of forms – water-related blog posts, resources, toolkit materials, and even tips to share with friends on social media. Other enhancements include bookmarking, so users can return to visit pages of interest; a robust event calendar integrated with Google maps; and locality pages where residents can check for news, events, and resources available in their hometowns.

In FY18, the askHRgreen.org website had a higher percentage of new visitor traffic than in any other year and an increase in page views and time spent on the site over the previous fiscal year, proving that people are viewing more content and spending more time on the newly enhanced website. This is a trend that we hope continues in the coming year.



WEBSITE VISITATION

	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12	TOTAL
Visits	55,735	58,113	52,530	58,279	55,505	32,697	27,424	340,283
Unique Visitors	45,661	46,282	42,539	46,994	43,547	25,092	19,920	270,035
Pageviews	93,589	92,681	93,177	103,228	116,818	72,270	67,047	638,810
Pages per Visit	1.68	1.59	1.77	1.77	2.10	2.21	2.42	
Average Visit Duration	1:27	1:12	1:32	1:26	1:48	2:10	2:19	
Bounce Rate	77.31%	79.07%	74.92%	74.80%	64.37%	61.27%	61.24%	
% New Visits	81.48%	79.62%	80.44%	79.87%	77.74%	75.50%	70.78%	
Mobile Devices	30,205	30,626	20,783	22,655	18,694	5,100	2,916	130,979
Desktop Devices	25,530	27,487	31,747	35,624	36,811	27,597	24,508	209,304

Search Engine Marketing

The askHRgreen.org Search Engine Marketing (SEM) program employs Google pay-per-click advertising to increase traffic to the askHRgreen.org website. By bidding on select keywords and phrases, our ads direct search traffic to relevant content on the askHRgreen.org website. In FY18, we changed our SEM vendor from The Virginian-Pilot to WTKR and to date, we have seen a 70 percent increase in clicks compared to FY17. The website redesign also contributed to this performance increase. To view the SEM report from WTKR (Dec-June 2018), please see appendix A.

[askHRgreen.org - Dispose Medication Safely](#)
askHRgreen.org
Learn The Proper Way To Dispose Of Medication & Keep It Out Of Our Water.

[askHRgreen.org - Fat, Oil & Grease Disposal](#)
askHRgreen.org
Avoid Drain Clogs & Learn How To Dispose Of Fats, Oils, & Greases Properly.

[askHRgreen.org - Recycling Old Electronics](#)
askHRgreen.org
Think Before You Toss. Recycle Your Old Electronics. Find Out Where!

[askHRgreen.org - Fertilizing Tips For Your Lawn](#)
askHRgreen.org
Be Sure To Test Your Soil First. Follow These Easy Steps Today!

[askHRgreen.org - Tap Water Facts](#)
askHRgreen.org
Drink Tap Water in Hampton Roads With A High Level Of Confidence!

SEARCH ENGINE MARKETING

VENDOR Pilot Online (Jul. - Dec. 2017), WTKR (Dec. 2017 - Jun. 2018)

CONTENT Ads and keywords for all committees + askHRgreen.org

DURATION 12 months / July 2017 - June 2018

IMPRESSIONS FY 17-18 169,140 FY 16-17 107,920 +57%

CLICKS FY 17-18 7,330 FY 16-17 4,226 +73%

Community Outreach

Events

Each year, askHRgreen.org receives numerous invitations to participate in community events. This is a vital touchpoint with residents in Hampton Roads. While some events are environmentally focused, many are attended by the general public and provide an important opportunity to share information with those outside the “green community.” Whether at an employee eco fair or a multi-day countywide fair, locality representatives have an opportunity to distribute outreach materials and promotional items provided by each askHRgreen.org subcommittee. In FY18, more than 170,000 event attendees may have seen askHRgreen.org at an event or received information and materials from local volunteers. In addition, over 360 people signed up to receive our news and information during these outreach events in FY18.

2017-2018 Regional Events			Estimated Attendance
8/19	Green Run Community Day	Virginia Beach	50
9/7	EcoFest at Greer Environmental Center	Virginia Beach	200
9/10	Newport News Go Green Expo	Newport News	1,500
9/14 - 9/17	Isle of Wight County Fair	IOW	28,000
9/17	RIVERFest 2017	Virginia Beach	1,400
9/30	James RiverFest	James City County	200
10/16	Bay Star Homes Fall Workshop	Newport News	15
10/17	Bay Star Homes Fall Workshop	Chesapeake	7
10/5 - 10/8	Peanut Festival	Suffolk	100,000
10/7	Norfolk Arbor Day Festival	Norfolk	Unavailable
10/7	Lynnhaven River NOW Fall Festival	Virginia Beach	Unavailable
10/19	CNU Farmers Market	Newport News	100
10/21 - 10/22	Bark in the Park	Chesapeake	5,100
10/24 -	Newport News Shipbuilding	Newport News	1,850
1/15 - 1/18	Home Gardener Day & MAHSC	Virginia Beach	1,500
1/26 - 1/28	Virginia Flower & Garden Expo	Virginia Beach	7,400
3/1-3/2	Virginia Green Travel Conference	Virginia Beach	170
3/3 - 3/4	Hampton Roads Home Show	Hampton	5,600
3/24	Community Association Day	Virginia Beach	Unavailable
3/24 - 3/25	Daffodil Festival	Gloucester	1,500
3/25	Hoffler Creek Spring Festival	Portsmouth	300
4/5	CNU Farmers Market	Newport News	50
4/14 - 4/15	Mid-Atlantic Home & Outdoor Living Show	Virginia Beach	Unavailable
4/21	Virginia Living Museum Earth Day Festival	Newport News	1,395
4/23	NASA Earth Day Fair	Hampton	100
4/28	Community Empowerment Fair	Newport News	150
5/9	Public Service Week & Drinking Water	Virginia Beach	500
5/24	Sensible Seafood FEST	Virginia Beach	525
5/31	Virginia Beach Public Works Annual Picnic	Virginia Beach	442
6/2	Celebrate the Park	Newport News	324
6/5	Anheuser Busch Eco Event	Williamsburg	300
6/5	CMA CGM Environmental Fair	Norfolk	unavailable
6/30	Olden Days	Smithfield	12,000

Bay Star Homes

The Bay Star Homes program recognizes residents who pledge to avoid behaviors that are harmful to local waterways and encourages private property owners to implement voluntary stormwater management practices such as rain barrels, rain gardens, and downspout disconnects. Residents are also encouraged to incorporate more environmentally-friendly choices into their daily routines. In FY18, there were 287 new Bay Star Homes added across the region, bringing the program total to just over 2,700 households.

Bay Star Homes Registrants (as of June 30, 2018)	
City/County	Number
Chesapeake	107
Franklin	11
Gloucester	17
Hampton	66
Isle of Wight	9
James City	6
Newport News	157
Norfolk	1942
Poquoson	12
Portsmouth	28
Smithfield	8
Southampton	1
Suffolk	110
Surry	2
Virginia Beach	175
Williamsburg	5
York	52
Total	2,708

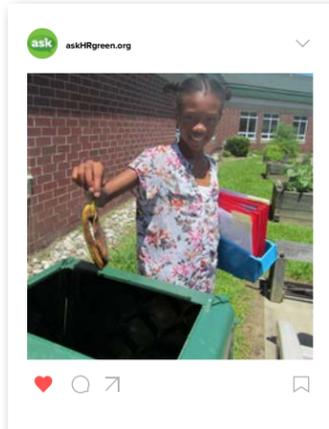
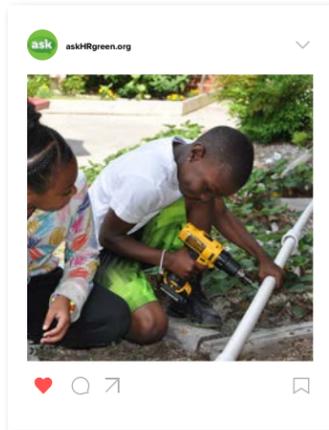
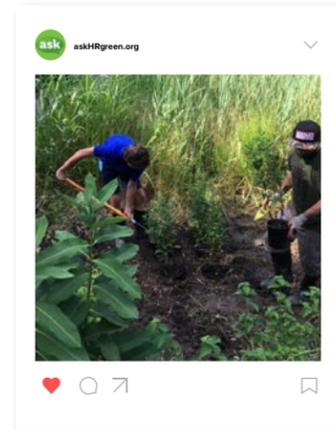


Sudent Outreach

Environmental Education Mini Grant Program

At askHRgreen.org, we've learned that even a small amount of grant money can help spark an idea that encourages people to make an impact in our region. askHRgreen.org offers environmental education mini grants of up to \$500 to provide funding for environmentally-themed projects for students. All Hampton Roads teachers (K-12), youth leaders, or organizations working with youth are eligible to apply.

In FY18, \$7,758 in grant funding was awarded to support 19 school projects in and out of the classroom. These projects reached over 8,600 students across Hampton Roads and included learning gardens, school recycling programs, composting, rain barrels, and more.



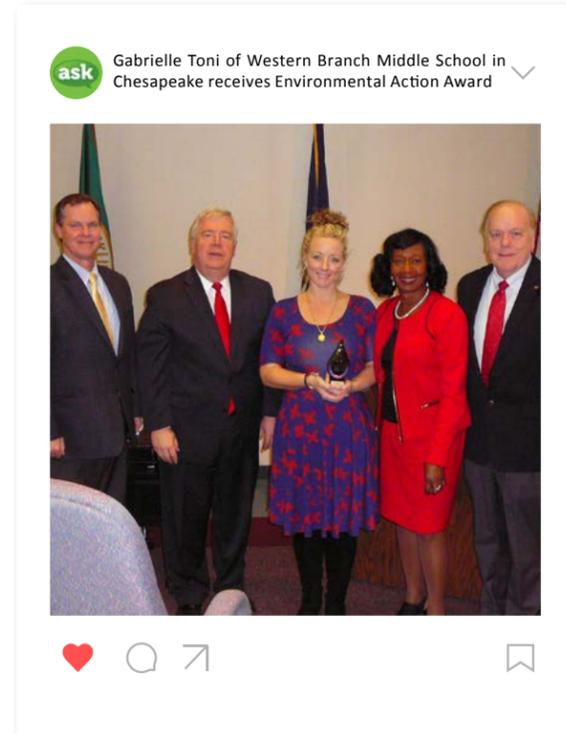
Project	# Students	Project Description	School/Organization	City/County	Grant
Calcott Eagles Recycle	550	This project funded large and small recycling bins to place throughout Mary Calcott Elementary School.	Mary Calcott Elementary School	Norfolk	\$500.00
Clean Water, Healthy Refreshment	575	Students compared bottled water with tap water in a health and physical education class hydration unit, following a water cycle unit in core classrooms. Reusable water bottles were ordered with the project for the students to keep and use in the future.	Newtown Elementary School	Virginia Beach	\$500.00
Composting Captains	79	A self-contained composting system was purchased to help students witness the process of recycling in the form of composting and how plants change through the life cycle.	Oakland Elementary School	Suffolk	\$500.00
Drip Drip Drop	50	Students installed rain barrels to collect rain water from the school's roof to use in seven raised garden beds.	Covenant Christian School	Williamsburg	\$170.00
Effects of Erosion and Seasonal Changes on Nature	40	Students used kits to create a watershed/river system and demonstrated how water flows in their stream.	Newtown Elementary School	Virginia Beach	\$400.00
Effects of Erosion on Water Quality	300	Students used kits to create a watershed/river system and demonstrated how water flows in their stream.	Greenbrier Middle School	Chesapeake	\$500.00
Enviroscape Program	1,000	Grant funds were used to purchase an Enviroscape for presentations to Virginia Beach and Chesapeake students on environmental education.	Virginia Dare Soil and Water Conservation District	Virginia Beach	\$500.00
Hydration Station Leads to Healthy Minds and a Healthy Environment	750	A water station retrofit was installed on the middle school side of Spratley Gifted Center.	Spratley Gifted Center	Hampton	\$500.00
Hydration Station Reduces Waste	700	Four water station retrofits were installed on the elementary side at Spratley Gifted Center.	Spratley Gifted Center	Hampton	\$500.00
The Importance of Native Plants to Pollinators	18	This project added to and expanded the variety of native/pollinator plants at the VBMS pollinator garden. Plants such as turtlehead and milkweed also served as caterpillar food plants.	Virginia Beach Middle School	Virginia Beach	\$350.00
KMES Kinder Garden	60	This project began a children's garden with native plants, flowers, vegetables, and pollinators to encourage learning through discovery.	Kempsville Meadows Elementary School	Virginia Beach	\$500.00
Mission Green Planet	1	As part of a larger project, a high school student used grant funds to plant 200 saplings at two Virginia Beach elementary schools.	Kellam High School	Virginia Beach	\$360.00
Rain Water Tower	75	Students built a wooden water tower in the school courtyard to conserve water and establish a self-watering garden and green nursery.	Crittenden Middle School	Newport News	\$500.00
Recycle Mania	1,200	Recycle Mania gave each class room at JYMS a standard blue recycling bin to promote recycling throughout the school year.	John Yeates Middle School	Suffolk	\$500.00
Rising Phoenix	30	Grant funds were used to purchase bins for recycling and materials to collect recyclables from the bins.	Maury High School	Norfolk	\$500.00
School-Wide Recycling	920	Grant funds enabled the continuation of a recycling program while the school developed a way to sustain the program into future years.	Northern Shores Elementary School	Suffolk	\$250.00
Waste Not, Want Not	700	A compost bin was purchased to increase composting of waste from school gardens and the office coffeemaker.	Greenbrier Intermediate School	Chesapeake	\$175.00
We ALL Need Water	660	Students will create an ocean-friendly garden within their existing Learning Garden.	Strawbridge Elementary School	Virginia Beach	\$500.00
Whole School Recycling Program	915	Grant funds will go towards the purchase of recycling bins for classrooms at the school.	Grafton Middle School	Yorktown	\$355.00
8,623					\$7,758.55

Environmental Action Awards

In March 2018, askHRgreen.org recognized two local schools and educators for their commitment to environmental stewardship and leadership. Michelle Effatt, former science teacher at Cradock Middle School in Portsmouth, and Gabrielle Toni, art teacher at Western Branch Middle School in Chesapeake, each received the Environmental Action Award.

The askHRgreen.org Environmental Action Award was developed to recognize individuals who inspire youth (K-12) to have a positive impact on the environment by taking action in their schools or communities. The winning projects had previously received funding through the askHRgreen.org mini grant program and were selected as outstanding by a panel of local askHRgreen.org representatives from the HRPDC's 17 member jurisdictions and HRSD. The Cradock Middle School and Western Branch Middle School projects were among 13 projects under consideration for the award, all of which were funded by askHRgreen.org in FY17.

Cradock Middle School was recognized for Ms. Effatt's leadership of a community clean-up project. At Western Branch Middle School, Ms. Toni brought her art students together with a handful of technology students for an upcycling project to bring new life to some tired, old park benches. In addition to the award, each school received a check for \$100.00 to be spent to further their project or to launch a new environmental initiative.



Green Learning Guide

With a grant from the Chesapeake Bay Restoration Fund, and support from local cities and counties, askHRgreen.org developed a Green Learning Guide for third grade students in FY18. A sixth-grade Green Learning Guide was first published by askHRgreen.org in 2012, but this third-grade version will be brand new for the 2018-19 school year.

Designed to meet Virginia SOL standards, the Green Learning Guides make it easy for teachers to bring the environment into the classroom in a way that directly relates to critical science, math, and English skills. The free guides showcase educational content in a fun, interactive format with colorful maps, bold graphics, and creative activities to connect students to our Hampton Roads environment.

The sixth-grade Green Learning Guide was warmly embraced by area educators, many of whom incorporated the guide into their lesson plans. One teacher in Chesapeake relayed how helpful the publication was to her students because "the real life examples put the ideas in a different perspective." Another simply said she was thankful to have the valuable information for her students.

Both editions of the Green Learning Guide and accompanying teacher's guides are available for download on the askHRgreen.org website. We hope to provide printed copies of the third-grade edition to students across the region during the 2018-19 school year.



Business Outreach

Bay Star Business Program

In June 2018, the Stormwater Education Subcommittee launched the Bay Star Business Program, an extension of the successful Bay Star Homes initiative. This free, pledge-based program is designed to recognize Hampton Roads companies that are committed to protecting water quality in the region. Business owners can easily sign up online at askHRgreen.org/BayStarBusiness and select a minimum of five out of 15 suggested practices such as conserving water, keeping outdoor areas litter-free, maintaining (repairing/washing) company vehicles under cover, or organizing a community cleanup event. Most action items are no- or low-cost solutions to help business run more efficiently. In return for their pledges, a business receives a welcome packet in the mail that includes tips and information from askHRgreen.org and the city or county in which they operate and Bay Star Business window clings to display in their office or on company vehicles. They also receive recognition on the askHRgreen.org website for their participation in the program. Anheuser Busch was the first company to sign up as a Bay Star Business in FY18, and we are looking forward to growing the program with local businesses in the year ahead.



WORKING TOGETHER FOR CLEAN, HEALTHY WATERWAYS
BAY STAR Business Partner
askHRgreen.org/BayStarBusiness

Improve your business. Improve your community. Improve our waterways.
Be a Bay Star Business!

Small changes make BIG waves. The Bay Star Business Program encourages local businesses to implement easy changes that can have a major impact on our waterways.

Joining is easy. Go to askHRgreen.org/BayStarBusiness to register and simply pledge to put five environmentally-friendly practices into action. Select actions that fit your business model. Examples include...

- Conserve water
- Conserve energy
- Keep outdoor areas litter-free
- Host a clean-up event
- Start recycling
- Implement green landscaping practices
- ...and more!

As a Bay Star Business partner, you'll be listed on the askHRgreen.org website and will receive a free window decal to proudly display your commitment to clean waterways.

BAY STAR Business Partner
 Working together for clean, healthy waterways
askHRgreen.org/BayStarBusiness

beautification
 recycling
 conservation
 litter-free
 protect
 get involved

Team Up 2 Clean Up

The cost that litter imposes on communities and businesses is substantial. That is why the Recycling & Beautification Subcommittee launched the Team Up 2 Clean Up campaign in early spring 2018 to make it easier for residents and businesses alike to get involved with litter prevention and cleanup initiatives. This new initiative offers an online toolkit where everyone from schools and civic leagues to businesses and neighbors on the block can download free posters, brochures, presentations, and other resources to educate their peers/employees about litter. There are resources available to empower businesses to organize their own cleanups and also a comprehensive listing of existing regional cleanups and community beautification projects to help connect people with their local cleanup coordinators. Some of the information included in the Team Up 2 Clean Up toolkit is specifically tailored for businesses and outlines best practices like:

- Engaging and training employees by asking for their input and incorporating litter prevention strategies into regular tasks.
- Providing convenient trash, ash, and recycling receptacles at transition points to give customers a proper disposal option.
- Keeping waste containers covered at all times to prevent spills.

The Team Up 2 Clean Up campaign offers a new way that we can all work together to combat litter in Hampton Roads.



Fats, Oils, and Grease (FOG) Commercial Training and Certification Program

The FOG training and certification program is designed to educate local food service workers and grease haulers on how to prevent sanitary sewer backups caused by improper handling and disposal of fats, oils, and grease. FOG certification requirements vary by locality, and the free certification program is available to anyone through the HRFOG.com website.

Various updates and enhancements were made to HRFOG.com during FY18. The changes improved the user experience but also made it easier for administrators to clean up and manage data. Users can now access the certification tests directly from their profile page.



Administrators can provide certificates for users at any time and better manage records for local food service establishments. Another important upgrade was the creation of email notifications that prompt users to recertify in advance of their certification expiration date.

Events

Each year, askHRgreen.org participates in a variety of corporate and industry events across the region. In FY18, those outreach events included those hosted by organizations such as Newport News Shipbuilding, Anheuser Busch, CMA CGM, and NASA. We also attended and sponsored the Mid-Atlantic Horticulture Association Short Course in January. That multi-day course is produced by the Virginia Horticultural Foundation and is a nationally-recognized annual training for horticulture professionals.



FY2017-2018 Campaign Initiatives

Residential Recycling Practices

The Recycling & Beautification Subcommittee’s focus on residential recycling was two-fold in FY18. Residents were encouraged to 1) use curbside and drop-off recycling services and 2) increase the quality of recycling collected at curbside by reducing contamination.

Paid Media. A two-week media campaign ran from November 6 to November 19. The campaign was scheduled to coincide with America Recycles Day on November 15. The campaign utilized the “Recycle More, Trash Less” creative developed several years ago but had the added benefit of accompanying video produced in FY17. The campaign included radio, digital display ads and retargeting, native content ads, social media, and advanced TV. Throughout the year, specific recycling messages were included in our Google SEM campaign, driving traffic to the askHRgreen.org website from relevant keyword searches. Recycling is consistently the best performing topic for SEM.



Outreach Materials. In order to keep outreach materials as relevant as possible, the Committee updated the askHRgreen.org residential recycling rack card and poster to incorporate the addition of cartons which are now accepted through some local recycling programs.



Public Relations. Public relations support succeeded in promoting the residential recycling message through a variety of media channels including print (Coastal Virginia Magazine, The Virginian-Pilot), news releases (topics included Christmas tree recycling and America Recycles Day), interviews with local radio and TV shows, and multiple articles in the askHRgreen.org newsletter and blog.

Social Media. We engaged with the community via Facebook, Twitter, and Instagram. Outreach included sharing recycling news and trending stories, answering recycling questions, and promoting local recycling collection events.

Virginia Litter Prevention & Recycling Competitive Grant. We received a \$5,971 grant from the Virginia Department of Environmental Quality to enhance our recycling education program in FY18. We used the grant funds to target both the general public and schools with new outreach materials. Many localities reported needing an engaging way to share recycling information with students. To tackle this, we created an interactive “Where Does It Go” magnet game and designed recycling tattoos as a fun giveaway prize. For the general public, we printed rack cards and refrigerator magnets highlighting the most common items that should go in recycling bins. We also purchased poster stands, giving localities the ability to bring recycling messages to citizens in unexpected places and increase general awareness about the do’s and don’ts of recycling.

Litter Prevention

In FY18, we launched an exciting new litter prevention campaign branded “Team Up 2 Clean Up.” The campaign uses a patriotic theme and poses the question “America the Beautiful?” Residents and businesses are encouraged to recognize litter as a problem and then take action by organizing litter cleanups or practicing litter prevention strategies. The campaign includes a toolkit of resources available for use by locality members, businesses, and the general public. The Recycling & Beautification Subcommittee also promoted litter prevention and the Team Up 2 Cleanup campaign in the following ways:



Paid Media. A two-week media campaign ran from March 19 to April 1, strategically scheduled to align with the start of Keep America Beautiful’s Great American Cleanup. The campaign included radio, digital display ads

and retargeting, native content ads, and social media. Throughout the year, specific litter prevention messages were included in our Google SEM campaign, driving traffic to the askHRgreen.org website from relevant keyword searches.

Outreach Materials. The Team Up 2 Clean Up campaign included the creation of a publicly available toolkit of outreach materials. Toolkit materials include logos, residential rack cards and posters, business rack cards and posters, and a presentation. The rack cards were printed for distribution by Subcommittee members and at regional events.



Public Relations. Public relations was an important part of the Team Up 2 Clean Up campaign launch. The added exposure came from features in various media channels including print (Coastal Virginia Magazine, The Virginian-Pilot, Inside Business, Coastal Virginia BIZ magazine), a news release, interviews with local radio and TV shows, and articles in the askHRgreen.org newsletter and blog.

Social Media. We engaged with the community via Facebook, Twitter, and Instagram. Outreach topics included the negative impacts of litter and promoting local cleanup events like Great American Cleanup and Clean the Bay Day.

Cigarette Litter Prevention Grant. Keep Virginia Beautiful awarded a “30 in Thirty” grant of \$2,000 to the Recycling & Beautification Subcommittee to implement a cigarette litter prevention project in seven participating localities: Hampton, Newport News, Norfolk, Portsmouth, Suffolk, York County, and Virginia Beach. Through the grant, 26 new cigarette ash receptacles were installed in Hampton Roads. The grant also funded banners and lawn signs to help with outreach.



Fats, Oils & Grease (FOG) Disposal & What Not To Flush

Paid Media. The FOG Subcommittee had three comprehensive media campaigns that ran for a total of four weeks in FY18. In addition, throughout the year, specific FOG and “what not to flush” messages were included in our Google SEM campaign, driving traffic to the askHRgreen.org website from relevant keyword searches.

- The first campaign ran during the Thanksgiving holiday (November 20 to November 26) on radio, digital display ads and retargeting, native content ads, and social media and carried a message of keeping FOG and food scraps out of the sink.
- The second campaign ran during the week leading up to the Super Bowl (January 29 to February 4) and included radio, digital display ads and retargeting, native content ads, social media, and advanced TV. The campaign was a pickup of the classic horror movie themed ad used in past years.
- The final campaign featured the newly created “What Do You Know About Flushing?” video in a paid media campaign combining digital display ads and retargeting, native content ads, social media, and advanced TV. The two-week campaign ran from May 28 to June 10. The video component of the campaign features residents answering questions about whether different personal care products like wipes and cotton swabs are safe to flush down the toilet.



Outreach Materials. The FOG residential rack card was refreshed with a new look to match the new website branding. In addition, a variety of promotional items were purchased including sink strainers, grease can lids, sponges, washcloths, and more.

Public Relations. Public relations supported public education and outreach through a variety of media channels including news releases, interviews with local radio and TV shows, and multiple articles in the askHRgreen.org newsletter and blog.

Social Media. We engaged with the community via Facebook, Twitter, and Instagram. Outreach topics included the negative impacts of improper grease disposal, fatbergs, proper medication disposal, and the importance of infrastructure.

Technical Standards for the Sizing of Grease Control Devices

In FY18, the FOG Education Subcommittee convened a technical panel to review and propose updates to the Regional Technical Standards for the Sizing of Grease Control Devices. After a thorough review and comment process, proposed revisions included updating drainage fixture unit (DFU) values per the 2012 Virginia Plumbing Code, modifying DFU values for floor drains, and changing from NAICS designations to low/medium/high grease production categories. The revised technical sizing standards were approved by the regional Directors of Utilities Committee at their September 2017 meeting.

Communicating the Value of Water

Paid Media. A two-week media campaign ran from October 9 to 15 to coincide with the national “Imagine a Day Without Water” initiative. The campaign included radio, digital display ads, native content ads, social media, and advanced TV. In addition, throughout the year, specific messages about the value of water were included in our Google SEM campaign, driving traffic to the askHRgreen.org website from relevant keyword searches.

Outreach Materials. The Water Awareness Subcommittee updated the Value of Water rack card to better align with the updated branding of askHRgreen.org. With the redesign came the opportunity to update content as

well and the Subcommittee worked together to update the cost of household services including the daily cost of household water usage.

Public Relations. Public relations was an important part of communicating the value of water in FY18. As part of the Imagine a Day Without Water campaign, we composed an op-ed which was published in both the Daily Press and The Virginian-Pilot. It was also published in the Chesapeake Clipper. Additional exposure came from features on various media channels, including interviews with local radio and TV shows and articles in the askHRgreen.org newsletter and blog.

Social Media. We engaged with the community via Facebook, Twitter, and Instagram. Sharing video content was an important part of Facebook content for the value of water message, especially the “What Do You Know” three-part series featuring interviews with citizens answering questions about how much water they use in a day, the average cost of a gallon of tap water, and the vital role water plays in our daily lives. Other topics in our social media outreach included the safety of tap water, choosing tap over bottled water, and water scarcity in developing countries. As part of the national Imagine a Day Without Water campaign, we also conducted an organic Facebook and Instagram campaign with daily posts starting on October 8 and culminating on October 12.



GOOD TO KNOW

IF SOMEONE OFFERS YOU A GLASS OF WATER...

TAKE IT

JUST DON'T TAKE IT FOR GRANTED.

EASY ACCESS
TO SAFE, CLEAN TAP WATER:

- Protects our health
- Allows our economy to thrive
- Provides the quality of life we all enjoy

AND FOR SOMETHING SO ESSENTIAL, IT'S AMAZINGLY INEXPENSIVE.

Most households pay less than \$3.00 a day for all the tap water they use. Compared to cell phone service or cable TV, that could be the world's greatest bargain.

Economy Cable TV & Internet Package	about \$152/month
Family Cell Phone Plan w/Data Package	about \$210/month
Daily Small Vanilla Skim Latte	about \$97/month

So just remember what a great thing it is to have **SAFE, CLEAN—AND AFFORDABLE—TAP WATER** available 24/7/365.

Water Conservation

Paid Media. In promotion of Fix-a-Leak Week, a nationwide campaign from EPA, a one-week media campaign ran from March 12 to 18. The campaign included radio, digital display ads, native content ads, social media, and advanced TV. Throughout the year, specific water conservation messages were included in our Google SEM campaign, driving traffic to the askHRgreen.org website from relevant keyword searches.

Outreach Materials. The Water Awareness Subcommittee distributed numerous promotional items aimed at helping residents conserve water. Items included rain gauges, shower timers, dye tabs, black-eyed Susan seed packets, hose nozzles, and seed bookmarks. In addition to these promotional materials, the Subcommittee began production on a new video in 2018 that tests citizens' knowledge about wasteful toilet leaks and how to fix them. The final video will debut in FY19 highlighting how many gallons of water a leaky toilet will waste and the simple DIY ways to find and fix leaks around the house.



Public Relations. Conservation messages were featured in various media channels including print, interviews with local radio and TV shows, and articles in the askHRgreen.org newsletter and blog.

Social Media. We engaged with the community via Facebook, Twitter, and Instagram. Outreach topics included promoting rain barrels, drought tolerant and native plants, fixing leaks, and winterizing the home to prevent burst pipes.

Water Infrastructure

Paid Media. Throughout the year, specific infrastructure messages were included in our Google SEM campaign, driving traffic to the askHRgreen.org website from relevant keyword searches. In addition, a week-long media campaign ran from May 7 to 13. This campaign complimented the national Drinking Water Week campaign from the American Water Works Association. The campaign included radio, digital display ads, native content ads, social media, and advanced TV.

Public Relations. The importance of water infrastructure was included in various public relations activities including print (Daily Press, The Virginian-Pilot), interviews with local radio and TV shows, and articles in the askHRgreen.org newsletter and blog.

Social Media. We engaged with the community via Facebook, Twitter, and Instagram. Sharing video content was an important part of the Facebook strategy for the infrastructure message, especially the “What Do You Know” three-part series.

Leaves and Yard Debris

Paid Media. Throughout the year, specific yard waste/leaf disposal ad copy was included in our Google SEM campaign, driving traffic to the askHRgreen.org website from relevant keyword searches. In the fall, a week-long media campaign ran from October 23 to November 5. The campaign included radio, digital display and retargeting ads, native content ads on WTKR.com, and social media.

Outreach Materials. The Stormwater Education Subcommittee maintains a comprehensive library of brochures and rack cards with stormwater pollution prevention information. Proper leaf and yard debris disposal tips are included in several printed pieces that are handed out to residents and businesses alike. The “Only Rain Down the Drain” slogan was even included on the 5,000 message pens printed for distribution at local events. In addition to these promotional materials, the Subcommittee began production on a new video in 2018 that features local residents weighing in on what can (and can’t) safely go down the storm drain. The final video will launch in FY19 highlighting “good to know” information (“only rain down the drain”) and “good to do” behaviors like keeping leaves and grass clippings out of storm drains, testing before fertilizing, picking up after pets, and car washing tips.

Public Relations. The leaf and yard debris disposal message was promoted via news release, print articles (i.e. The Virginian-Pilot and Chesapeake Clipper), interviews with local radio and TV shows, and features in the askHRgreen.org newsletter and blog.



Social Media. We engaged with the community via Facebook, Twitter, and Instagram. Outreach included sharing local news and relevant stories, answering questions, and promoting proper leaf and yard waste disposal options.

Pet Waste

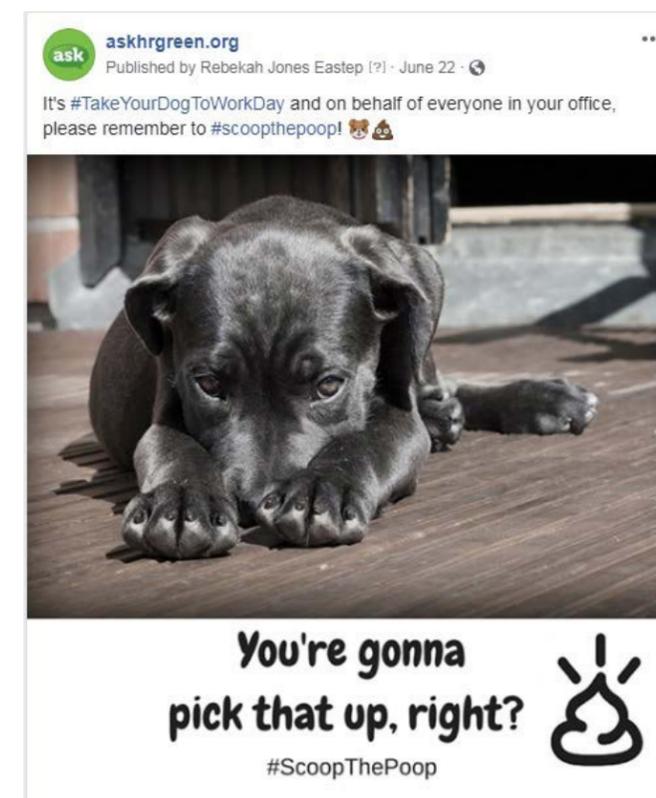
Paid Media. Throughout the year, pet waste disposal ad copy was included in our Google Search Engine Marketing campaign, driving traffic to the askHRgreen.org website from relevant keyword searches. The “scoop the poop” message was also included in the “fall leaves” media campaign that ran from October 23 to November 5.

Outreach Materials. In FY18 we printed 10,000 “scoop the poop” rack cards and 5,000 bumper stickers to hand out to the public at various events to encourage this desired behavior. In addition to the printed collateral, we purchased 5,000 dog waste bag holders for distribution.



Public Relations. The “scoop the poop” message was promoted via news release, print articles (i.e. The Virginian-Pilot and Chesapeake Clipper), interviews with local radio and TV shows, and features in the askHRgreen.org newsletter and blog.

Social Media. Social media is an important tool for sharing the “scoop the poop” message, and we utilized Facebook, Twitter, and Instagram in our outreach efforts.



Grant Programs. The askHRgreen Pet Waste Station Grant Program, which began in 2013, continued to thrive in FY18. Geared toward neighborhood associations, community groups, and property management companies, the regional program gives citizens an opportunity to apply for a free pet waste station to install and maintain in their neighborhoods. The approved applicants are responsible for installing the station, emptying the trash regularly, and replacing the bags as needed. The neighborhood is also tasked with promoting to residents the impact pet waste has on local water quality. Since the launch of the

program, 290 pet waste stations have been awarded and installed across the region. Of those, 35 were awarded and installed during FY18.

New Pet Waste Stations in FY18	
Chesapeake	2
Hampton	4
Isle of Wight	4
James City County	4
Newport News	4
Norfolk	3
Poquoson	1
Suffolk	6
Virginia Beach	5
Williamsburg	2
	35



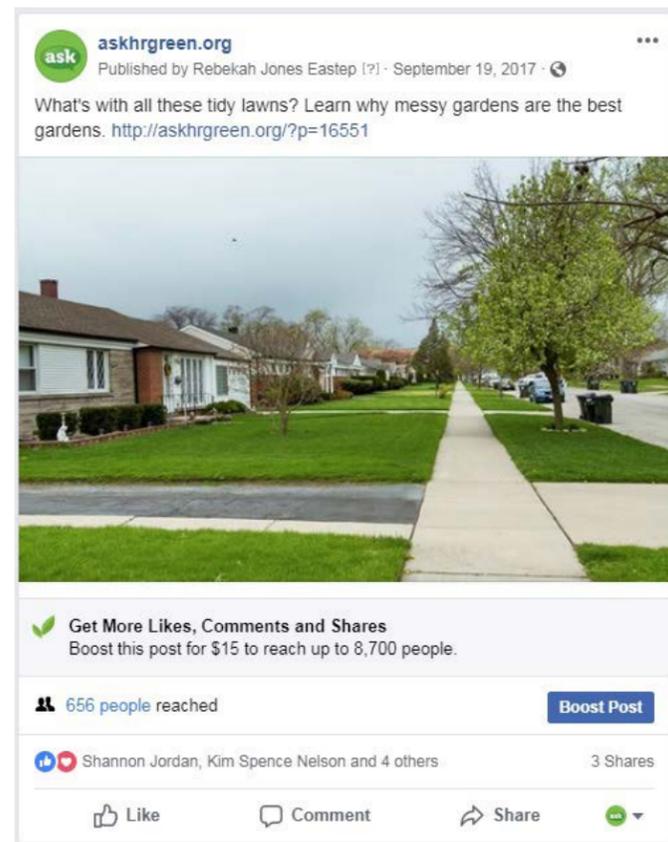
Lawn Care and Fertilizer

Paid Media. Throughout the year, lawn care, native plants, fertilizing, and soil testing ad copy was included in our Google SEM campaign, driving traffic to the askHRgreen.org website from relevant keyword searches. In the spring, a “work smarter, not harder” lawn care media campaign ran for two weeks from April 16 through April 30. The campaign included radio, digital display and retargeting ads, native content ads on WTKR.com, advanced TV (streaming) video ads, and social media.

Outreach Materials. In FY18, a brochure, discussing fertilizing best practices and proper soil testing was handed out along with soil test kits provided in partnership with local cooperative extension agencies at events across the region. We also purchased 4,000 black-eyed Susan seed packets for distribution at regional events. The seed packets contained a message about the important benefits of native plants.

Public Relations. Fertilizer and lawn care best management practices were common themes promoted throughout the year via print articles (The Chesapeake Clipper), an interview with a local radio station, and features in the askHRgreen.org newsletter and blog.

Social Media. Social media is an important tool for sharing all of our eco-friendly messages, including fertilizing and lawn care tips, and we utilized Facebook, Twitter, and Instagram in our outreach efforts.



Chesapeake Bay Restoration Fund Grant

In FY18, we received \$11,100 in grant funding for a comprehensive bay education and outreach program. The funds were split between four initiatives with the goal of improving water quality through engaging residents in the Chesapeake Bay watershed. The first initiative supported by the grant was the expansion of Bay Star Homes to include residential workshops on native plants and fall landscaping/tree planting tips. We hosted one workshop in Newport News and one in Chesapeake with the support of local master gardeners and master naturalists as well as local staff. Secondly, grant funds

were used to help create the Bay Star Business program for commercial and industrial entities. Another initiative supported by grant funds was the continuation of the regional pet waste station grant program. A portion of the grant funds also went towards the development of the Green Learning Guide created for third grade students to learn about the importance of clean waterways and pollution prevention while meeting Virginia Standards of Learning (SOL) requirements. Finally, the remaining grant funds were allocated towards stormwater-related projects through the askHrGreen.org environmental education mini grant program



PUBLIC RELATIONS

Media Outreach

34 Editorial Placements

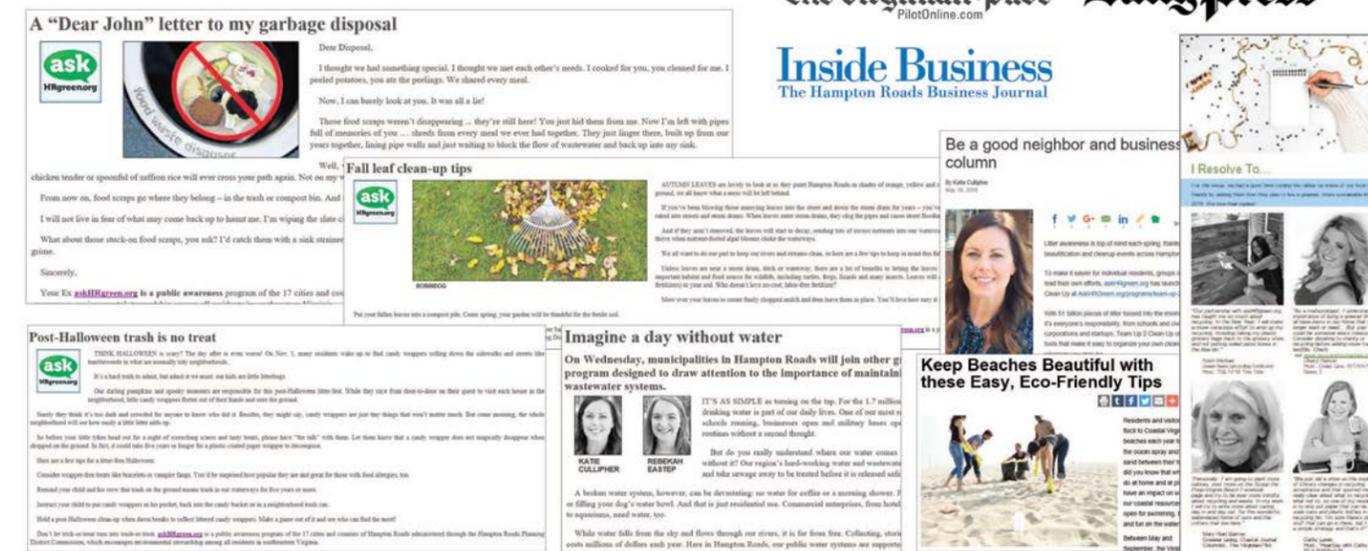
8 News Releases distributed

6 eNewsletters issued

7,284 Subscribers



Media Coverage



2017-2018 askHRgreen.org Public Relations Value

Date	Media Outlet	Topic	Length	Circ./ Imp	PR Value
Aug-Sept 2017	Coastal Virginia BIZ Magazine	Grants for Green, Chesapeake Bay Foundation/KVB	1/8 page	15,000	\$1,050.00
Saturday, Aug. 19, 2017	The Virginian-Pilot - Home - Mary Reid Barrow	Storm drain dos and donts	871 words/20 col inches	131,175	\$8,280.00
Sept-Oct. 2017	Coastal Virginia Magazine	Kids Puzzler	1 page	35,000	\$13,290.00
Sunday, Sept. 3, 2017	The Clipper	"Save money and go green this school year"	295 words/10 col inches	31,967	\$1,050.00
Sunday, Sept. 17, 2017	The Clipper	"Know the right plays for an eco-friendly game day"	284 words/9.5 col inches	31,967	\$997.50
Sunday, Sept. 24, 2017	The Clipper	"Time for fall planting!"	315 words/10.5 col inches	31,967	\$1,102.50
Sunday, Oct. 1, 2017	The Clipper	"A "Dear John" letter to my garbage disposal"	300 words/10 col inches	31,967	\$1,050.00
Saturday, Oct. 7, 2017	Daily Press	Imagine a day without water	645 words/21.5 col inches	80,970	\$1,920.00
Sunday, Oct. 6, 2017	The Clipper	"Imagine a day without water"	346 words/11.5 col inches	31,967	\$1,207.50
Sunday, Oct. 8, 2017	The Virginian-Pilot	"Imagine a day without water"	612 words/20.5 col inches	131,175	\$11,254.50
Sunday, Oct. 15, 2017	The Clipper	"Fall leaf clean-up tips"	330 words/3.5 col inches	31,967	\$367.50
Sunday, Oct. 22, 2017	The Clipper	"Mark Your Calendars for National Prescription Drug Take-Back Day"	305 words/10 col inches	31,967	\$1,050.00
Sunday, Oct. 29, 2017	The Clipper	"Post-Halloween trash is no treat"	330 words/3.5 col inches	31,967	\$367.50
Nov-Dec 2017	Coastal Virginia Magazine	Mini-grants program	1/8 page	35,000	\$2,340.00
Nov-Dec 2017	Coastal Virginia Magazine	Where does it all go? Recycling infographic	1 page	35,000	\$13,290.00
Sunday, Nov. 5, 2017	The Clipper	"America Recycles Day is Nov. 15, but Beach efforts are year-round"	182 words/6 col inches	31,967	\$630.00
Sunday, Nov. 12, 2017	The Clipper	"Make this a clog-free holiday season"	350 words/11.5 inches	31,967	\$1,207.50
Friday, Nov. 17, 2017	The Virginian-Pilot - Blog - Mary Reid Barrow	Tips for trash and recycling	735 words/24.5 col. inches	131,175	\$10,143.00
Sunday, Nov. 19, 2017	The Clipper	"Water" you thankful for?"	320 words/10.5 col inches	31,967	\$1,102.50
Saturday, Nov. 25, 2017	Suffolk News-Herald	Become a Bay Star homes	290 words/9.5 col Inches	10,431	\$848.25
Sunday, Nov. 26, 2017	The Clipper	"Helpful hints to reduce holiday waste"	390 words/13 col inches	31,967	\$1,365.00
Sunday, Dec. 3, 2017	The Clipper	"Dreamin' of a green Christmas"	375 words/12.5 col inches	31,967	\$1,312.50
March-April 2018	Coastal Virginia Magazine	Team Up 2 Clean Up boosts community effort to pick up litter	1/3 page	35,000	\$6,630
Thursday, March 22, 2018	Chesapeake Public Schools Website	Art Teacher Wins Environmental Action Award	N/A	5,000	\$375.00
Friday, March 23, 2018	Portsmouth Next Door Neighbor App	Portsmouth Educator Recognized with Environmental Action Award	NA	5,000	\$375.00
April-May 2018	Coastal Virginia BIZ Magazine	Team Up 2 Clean Up	1/4 page	15,000	\$2,640.00
Sunday, April 01, 2018	The Clipper	"Fertilizing the cheap and easy way"	268 words/9 inches	31,967	\$945.00
Monday, April 16, 2018	WTKR-TV Coast Live	Team Up 2 Clean Up	4:40 seconds	28,000	\$2,250.00
Wednesday, May 2, 2018	WNIS-AM Tony Macrini Show	Lawn care tips	3:00 minutes	39,600	\$2,250.00
May-June 2018	Coastal Virginia Magazine	Keep it Beachy Clean	1/2 page	35,000	\$4,017.00
Week of May 16, 2018	Inside Business Experts Column, by Katie Cullipher	Be a Good Neighbor and Business, Team Up 2 Clean Up	1/2 page	9,000	\$5,940.00
Sunday, June 03, 2018	WCTV-TV Chesapeake	Bay Star Business	1:20 minues	1,500	\$600.00
Saturday, June 20, 2018	WVEC-TV Coastal Connections	Team Up 2 Clean Up + Bay Star Business	5:00 minutes	15,000	\$1,125.00
				1,240,564	\$102,372.75

PUBLIC RELATIONS RESULTS

Total circulation or audience **1,240,564**

Total articles and interviews **34**

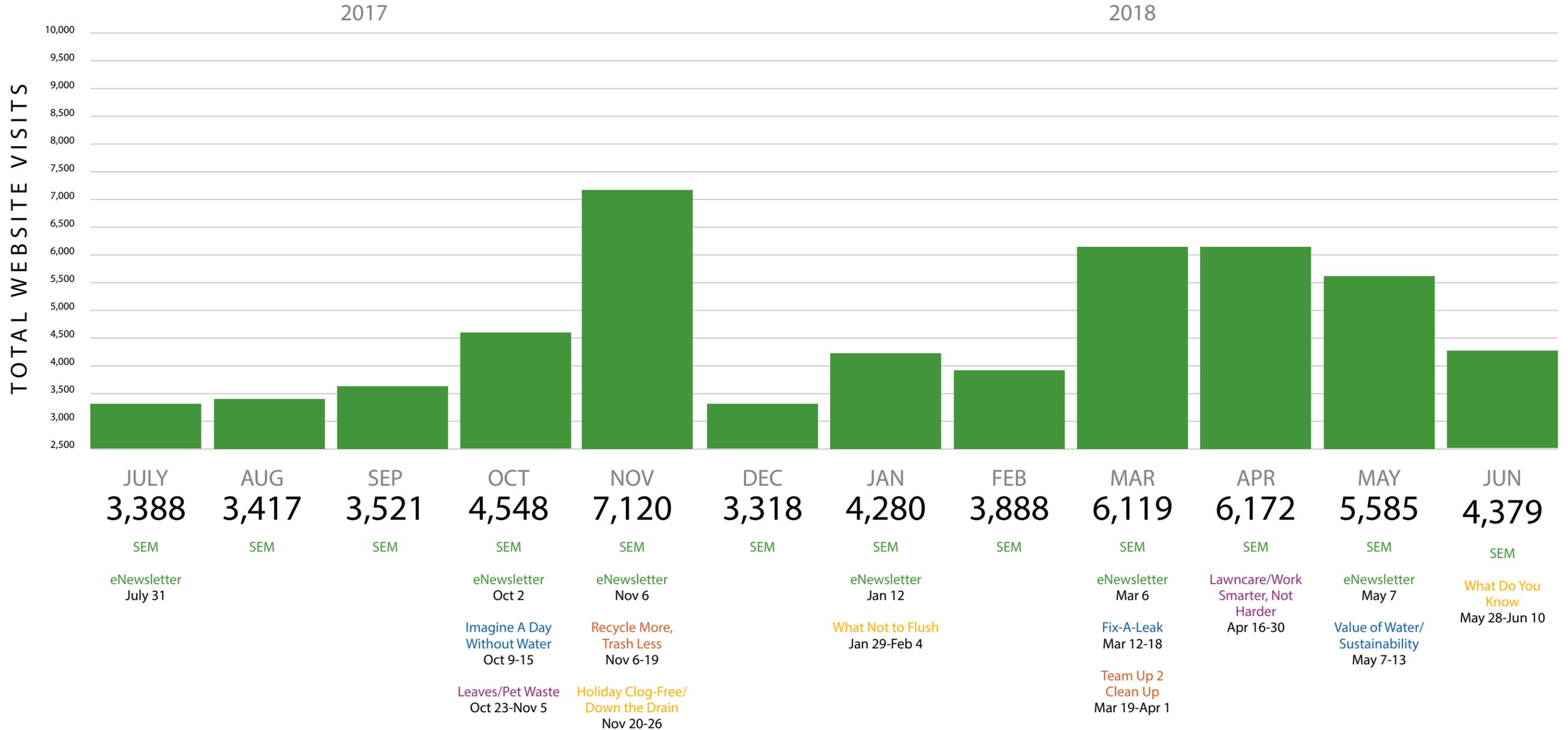
Total budget **\$12,043**

Total publicity value **\$102,373**

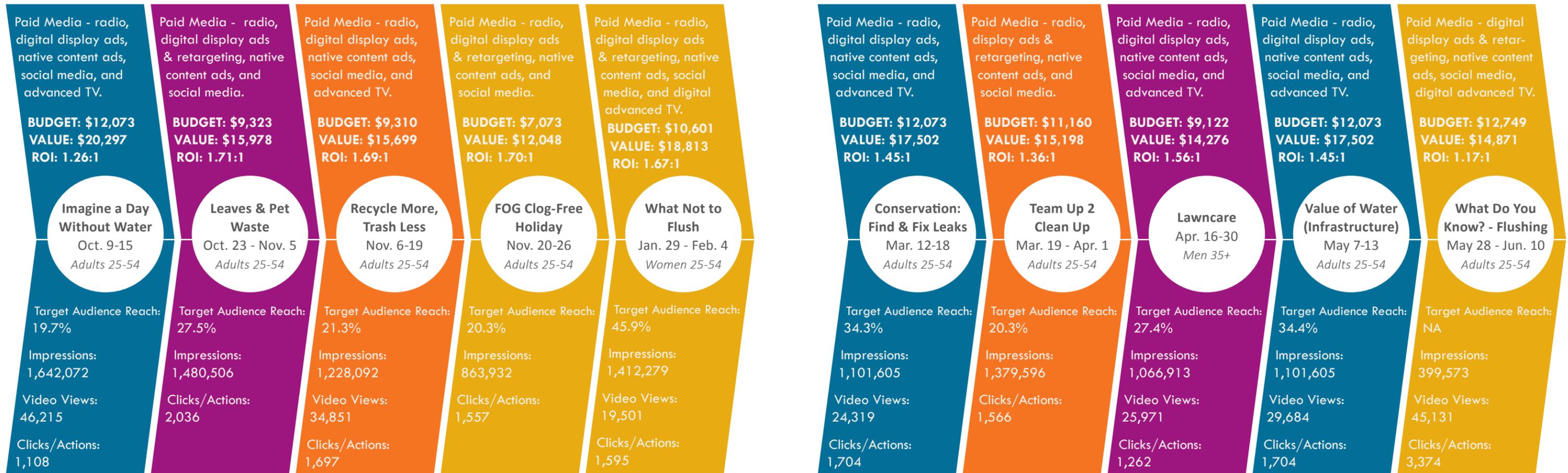
Return on Investment (ROI) **8.5:1**

—2017-2018 Promotions—

PROMOTIONS + WEBSITE VISITATION



2017-2018 Promotional Campaign Results



■ Water Awareness Subcommittee
■ Stormwater Education Subcommittee
■ Recycling and Beautification Subcommittee
■ Fats, Oils and Grease Education Subcommittee

COMBINED MEDIA RESULTS

PAID ADVERTISING WEEKS	52 consecutive
TOTAL ADVERTISING IMPRESSIONS	13,400,234
TOTAL VIDEO VIEWS	225,672
TOTAL CLICKS	24,501
TOTAL CAMPAIGN BUDGET	\$158,000
TOTAL MEDIA EXPOSURE VALUE	\$306,000
COST PER THOUSAND IMPRESSIONS	\$11.81
RETURN ON INVESTMENT (ROI)	1.93:1

askhrgreen.org
Published by Katie Rider Cullipher [?] · November 17, 2017

Thanks to Mary Reid Barrow for sharing some of our most important tips for being green in Hampton Roads this fall! 🍂🌿

PILOTONLINE.COM
Can you put yogurt cups in the recycling bin? Tips for trash and recycling

askhrgreen.org
Published by Rebekah Jones Eastep [?] · March 29

Clean the Bay Day is June 2nd. Find the cleanup location near you and get involved to prevent litter from entering our waterways! #TeamUp2CleanUp #CleanTheBayDay

CBF.ORG
Clean the Bay Day Locations
The Chesapeake Bay Foundation is saving the Bay through education, advocacy, litigation, and restoration.

Get More Likes, Comments and Shares
Boost this post for \$15 to reach up to 6,100 people.

1,117 people reached

Keep Norfolk Beautiful, Angela Wagerman and Dave Lauthers 13 Shares

askhrgreen.org
Published by Rebekah Jones Eastep [?] · August 21, 2017

Happy Eclipse Day! While you're outside looking up, be sure to look down too and pick up any trash you find lying around. #SolarEclipse2017 #LitterFree

Get More Likes, Comments and Shares
Boost this post for \$15 to reach up to 6,100 people.

2,172 people reached

David N Carol Chubb, Christene Pyne Mitchell and 12 others 4 Shares

askhrgreen.org
Published by Rebekah Jones Eastep [?] · February 20

Sick of junk mail? Of course you are! Here are 10 ways to lighten the load.

RICHMOND.COM
How to stop junk mail and save trees — and your sanity
Here are several steps you can take to drastically cut down on it.

askhrgreen.org
Published by Rebekah Jones Eastep [?] · March 22

"How long plastic may remain in the ocean is a big unknown, but unless we begin to remove it, some would say it may remain there forever." YOU can make a difference and help keep our oceans trash free. Find a spring cleanup near you at askHRgreen.org #TeamUp2CleanUp #GreatAmericanCleanup

USATODAY.COM
World's largest collection of ocean garbage is now twice the size of Texas

askhrgreen.org
Published by Rebekah Jones Eastep [?] · October 8, 2017

This week we're promoting the "Imagine a Day Without Water" campaign to raise awareness about the underground water and wastewater infrastructure we depend on everyday for public water services. Comment below and tell us what you'd miss most on a day without water and you could win an askHRgreen water conservation goodie bag! <http://askhrgreen.org/daywithoutwater2017/>

Imagine a Day Without Water
October 12, 2017

#ValueWater

Get More Likes, Comments and Shares
Boost this post for \$15 to reach up to 6,100 people.

2,480 people reached

Ecocycling, Terry Legg and 15 others 13 Comments 13 Shares

askhrgreen.org
Published by Rebekah Jones Eastep [?] · September 19, 2017

What's with all these tidy lawns? Learn why messy gardens are the best gardens. <http://askhrgreen.org/?p=16551>

askhrgreen.org
Published by Rebekah Jones Eastep [?] · January 24

How different would your day be if you could only use 50 liters of water? #Valueofwater

BBC.COM
'My wife doesn't shower any more'
The BBC's Mohammed Allie is one of millions of people trying to stave off...

askhrgreen.org
Published by Rebekah Jones Eastep [?] · August 3, 2017

It's not just a ditch. <http://askhrgreen.org/?p=16505>

10/16/2012

askhrgreen.org
Published by Rebekah Jones Eastep [?] · October 20, 2017

The "fatberg" has made its way from London to Baltimore. Don't let it happen in Hampton Roads! #CanTheGrease #NoWipesInThePipes

WASHINGTONPOST.COM
This 20-foot congealed 'fatberg' that clogged a Maryland sewer has been removed

Get More Likes, Comments and Shares
Boost this post for \$15 to reach up to 6,100 people.

1,606 people reached

Heather Barlow, Helen Webb Kuhns and 3 others 7 Shares

askhrgreen.org
Published by Rebekah Jones Eastep [?] · November 10, 2017

"It's pretty gross, but we want to show people what the impact is from tossing garbage down the drain" #NoWipesInThePipes

REVIEWJOURNAL.COM
As usage of flushable wipes rises, so do sewer-cleanup costs
That's because items like Cottonelle's FreshCare flushable cleansing...

askhrgreen.org
Published by Rebekah Jones Eastep [?] · September 15, 2017

By now you've probably heard about the #fatberg, right? So gross! Make sure you know what not to flush to prevent a monster clog right here in Hampton Roads. #whatnottoflush #nowipesinthepipes

DO NOT FLUSH THESE ITEMS

- PAPER TOWELS
- DIAPERS
- HYGIENE PRODUCTS
- OTHER TRASH
- ANY WIPES (EVEN THE 'FLUSHABLE' ONES)

PLEASE FLUSH RESPONSIBLY » ONLY YOUR "PERSONAL BUSINESS"
LEARN ABOUT THE DAMAGE THESE ITEMS CAN DO TO PIPES AT askHRgreen.org/pipes

Get More Likes, Comments and Shares
Boost this post for \$15 to reach up to 6,100 people.

2,912 people reached

Glossary of Terms

added value

Earned but unpaid advertising value.

ad group

In Search Engine Marketing (SEM), an ad group contains one or more ads which target a shared set of keywords.

average position

A ranking system that determines where your search engine marketing ad will display on a web search results page (i.e. top of page v. bottom of page).

bounce rate

The percentage of visitors who enter the site and “bounce” (leave the site) rather than continue viewing other pages within the same site.

click through rate (CTR)

A way of measuring online advertising. The CTR of an advertisement is defined as the number of clicks on an ad divided by its impressions, expressed as a percentage.

cost-per-click (CPC)

The cost associated with a person clicking on a display ad in search engine marketing.

exposure value

The combination of advertising cost, added value, and public relations value.

frequency

The number of times an individual (among the target audience) is exposed to the message.

impressions

The number of times an advertisement or public relations placement can be seen or heard by an audience.

public relations value

The equivalent advertising cost of a public relations article, interview, internet placement, etc. times three. Because a public relations placement has a higher value with an audience than advertising, it is assigned a higher value.

reach

The number or percentage of people within the target audience who are exposed to an advertising message at least once over a specific period of time.

search engine marketing (SEM)

The process of attracting traffic to a website from search engine results pages on a pay-per-click basis.

search engine marketing (SEO)

The process of improving the quality of a website so that it appears higher in natural (“organic”) search results.

unique visitors (users)

The number of people who visit a website within a specific period of time. If they visit more than one time within the period, their initial visit as well as their subsequent visits are counted as sessions. A user may have one session or multiple sessions.

Appendix A

Search Engine & Online Marketing Results - WTKR

Jan. - Jun. 2018

Campaign overview: Since December of 2017, we have worked to achieve your goal of educating the market and creating awareness on a variety of environmental topics by driving people who live in Hampton Roads to your website. We have focused on a variety of different topics each month, while still trying to maintain the overall brand awareness and keeping the focus on all of your initiatives. Here is how your campaign has performed from Dec - June:

Dec 2017:

For the month of Dec (starting Dec 20, 2017), we delivered a total of **33,775 impressions** to adults in the Hampton Roads market, and those impressions drove the following activity:

- We drove a total of **399 clicks** to your website, which is **27%** of your total site traffic, only behind google organic searches in that 12 day period.
- 8 of your top 25 pages visited in that same time period were a direct result of wtkr's efforts (the number one source of traffic to pages).
- Knowing that recycling is one of your biggest initiatives, 4 of the top 5 keyword groups for that period in December were recycling related, generating **259 clicks** to the site, accounting for **65% of all site traffic** from the search campaign (339 clicks).

Jan 2018:

For the month of January, we delivered a total of **138,035 impressions** to adults in the Hampton Roads market using PPC, Facebook, Video, Content ads and Targeted display. Our additional initiative this month was What Not To Flush. Those impressions drove the following activity:

- We drove a total of **1,292 clicks** to your website, which is **26%** of your total site traffic, only behind google organic searches.
- **625 clicks** were from the PPC campaign and **667 clicks** were from Facebook for What Not To Flush.
- The 2 most visited pages in January, only behind your home page, were related to What Not To Flush with **862 clicks**.
- The top keyword groups for January were recycling related, generating **358 clicks** to the site, accounting for **57% of all site traffic** from the search campaign (625 clicks).
- The WNTF campaign spanned into Feb for a campaign total of:
 - **144,979 impressions**
 - **1595 total clicks**
 - **Video was watched 81,013 times**

Feb 2018:

For the month of February, we delivered a total of **70,650 impressions** to adults in the Hampton Roads market, and those impressions drove the following activity:

- We drove a total of **1,120 clicks** to your website, which is **29%** of your total site traffic, only behind google organic searches.
- **826 clicks** were from the PPC campaign and **294 clicks** were from Facebook for What Not To Flush.

- Even though the WNTF campaign only ran through Feb 3rd, it was still the number 2 set of pages viewed for the month, only behind your home page. The WNTF pages were viewed **399 times**.
- The top keyword groups for February were recycling related, generating **492 clicks** to the site, accounting for **60% of all site traffic** from the search campaign (826 clicks).

March 2018:

For the month of March, we delivered a total of **404,484 impressions** to adults in the Hampton Roads market using PPC, Facebook, Video, Content ads and Targeted display. Our 2 additional initiatives this month were Fix A Leak & Team Up To Clean Up. Those impressions drove the following activity:

- We drove a total of **2,494 clicks** to your website, which is **41%** of your total site traffic and the number 1 source of traffic ahead of google organic searches.
- **1,054 clicks** were from the PPC campaign, and **1440 clicks** were from the result of the 2 campaigns we were also running.
- The top keyword groups for March were recycling related, generating **530 clicks** to the site, accounting for **50% of all site traffic** from the search campaign (1,054 clicks).
- The 3 most visited pages in March were:
 1. Fix a leak **1,064 views**
 2. Homepage **974 views**
 3. Team up to clean up **713 views**
- Fix a leak campaign stats:
 - **171,305 total impressions**
 - **1,704 total clicks**
 - **Video was watched 42,903 times**
- Team up 2 Clean up stats:
 - **212,786 total impressions**
 - **1,566 total clicks**

April 2018:

For the month of April, we delivered a total of **186,242 impressions** to adults in the Hampton Roads market using PPC, Facebook, Video, Content ads and Targeted display. Our additional initiative this month was Lawncare. Those impressions drove the following activity:

- We drove a total of **1,843 clicks** to your website, which is **30%** of your total site traffic and the number 2 source of traffic only behind google organic searches.
- **1,120 clicks** were from the PPC campaign, and **723 clicks** were from the result of the Lawncare campaign we were also running.
- The top keyword groups for April were recycling related, generating **524 clicks** to the site, accounting for **47% of all site traffic** from the search campaign (1,120 clicks).

- The number 2 page visited in April, only behind the home page, was your lawncare page
- Lawncare campaign stats:
 - 166,713 total impressions
 - 1,262 total clicks
 - Video was watched 30,728 times

May 2018:

For the month of May, we delivered a total of **258,887 impressions** to adults in the Hampton Roads market using PPC, Facebook, Video, Content ads and Targeted display. Our additional initiative this month was Water Awareness. Those impressions drove the following activity:

- We drove a total of **2,113 clicks** to your website, which is **38%** of your total site traffic and the number 1 source of traffic, even above google organic searches.
- **1,036 clicks** were from the PPC campaign, and **1,077 clicks** were from the result of the Water Awareness campaign we were also running.
- The top keyword groups were recycling related, generating **495 clicks** to the site, accounting for **48% of all site traffic** from the search campaign (1,036 clicks).
- The number 2 page visited in May, only behind the home page, was your Water awareness page.
- Water Awareness campaign stats:
 - 238,573 total impressions
 - 1,272 total clicks
 - Video was watched 35,020 times

June 2018:

For the month of June, we delivered a total of **418,805 impressions** to adults in the Hampton Roads market using PPC, Facebook, Video, Content ads and Targeted display. Our additional initiative this month was What Do You Know. Those impressions drove the following activity:

- We drove a total of **1,813 clicks** to your website, which is **41%** of your total site traffic and the number 1 source of traffic, even above google organic searches.
- **935 clicks** were from the PPC campaign, and **878 clicks** were from the result of the What Do You Know campaign we were also running.
- The top keyword groups for June were recycling related, generating **517 clicks** to the site, accounting for **56% of all site traffic** from the search campaign (935 clicks).
- The number 1 page visited in June, even above the home page, was your What Do You Know page. **17%** of your total site traffic visited pages for this WDYK campaign.
- What Do You Know campaign stats:
 - 399,573 total impressions
 - 3,374 total clicks
 - Video was watched 160,216 times

Fiscal Year 2016-2017 Results

Campaign Name	Ad Group	Impressions	Clicks	CTR	Avg. CPC	Avg. Daily Search
						Impr. Share
Ask HRGreen - Paid Search	Electronics Disposal	15756	1215	7.71%	\$1.29	39.08%
Ask HRGreen - Paid Search	Reduce Reuse Recycle	17940	754	4.20%	\$1.71	15.84%
Ask HRGreen - Paid Search	TMDL	15880	662	4.17%	\$1.50	9.67%
Ask HRGreen - Paid Search	Native Plants	14493	435	3.00%	\$1.40	13.12%
Ask HRGreen - Paid Search	Recycling At Home	12712	388	3.05%	\$1.60	12.12%
Ask HRGreen - Paid Search	Medication Diposal	3589	360	10.03%	\$1.00	42.66%
Ask HRGreen - Paid Search	askHRgreen General	2894	352	12.16%	\$0.67	12.35%
Ask HRGreen - Paid Search	Battery Disposal	19464	313	1.61%	\$1.23	44.82%
Ask HRGreen - Paid Search	Great American Cleanup	5634	253	4.49%	\$1.31	26.04%
Ask HRGreen - Paid Search	Tap Water	10374	214	2.06%	\$1.73	6.65%
Ask HRGreen - Paid Search	Fertilizer Tips	5787	168	2.90%	\$1.35	13.04%
Ask HRGreen - Paid Search	Plastic Bag Recycling	2472	167	6.76%	\$1.20	22.55%
Ask HRGreen - Paid Search	Rain Barrels	4326	115	2.66%	\$1.21	26.98%
Ask HRGreen - Paid Search	Soil Testing	2603	104	4.00%	\$1.38	28.15%
Ask HRGreen - Paid Search	Lawn Care	5809	99	1.70%	\$1.68	6.27%
Ask HRGreen - Paid Search	Water Conservation	1284	80	6.23%	\$1.29	24.52%
Ask HRGreen - Paid Search	Rain Garden	1460	49	3.36%	\$0.92	26.13%
Ask HRGreen - Paid Search	Stormwater	1066	47	4.41%	\$1.51	9.09%
Ask HRGreen - Paid Search	Fats Oil Grease Disposal	3504	44	1.26%	\$2.29	12.45%
Ask HRGreen - Paid Search	Team Up 2 Clean Up	826	43	5.21%	\$1.42	10.64%
Ask HRGreen - Paid Search	Yard Waste Disposal	1867	41	2.20%	\$1.94	9.65%
Ask HRGreen - Paid Search	Pet Waste	2235	32	1.43%	\$1.54	11.94%
Ask HRGreen - Paid Search	Find/Fix Leaks	1602	27	1.69%	\$1.79	6.06%
Ask HRGreen - Paid Search	Food Disposal	2552	24	0.94%	\$1.90	6.52%
Ask HRGreen - Paid Search	Recycling At School	390	16	4.10%	\$1.40	26.49%
Ask HRGreen - Paid Search	Environmental Education	417	14	3.36%	\$1.51	12.52%
Ask HRGreen - Paid Search	Pet Waste Station Grant Program	246	7	2.85%	\$1.41	12.40%
Ask HRGreen - Paid Search	Bay Star Homes	8	1	12.50%	\$0.42	15.49%
Ask HRGreen - Paid Search	Bay Star Business	3	1	33.33%	\$1.14	18.06%
Ask HRGreen - Paid Search	Green Learning	21	0	0.00%		8.16%
		157214	6025	3.83%	\$1.38	17.98%

**Fiscal Year 2017-2018 Stormwater Permit Requirements
Target Audience Percentages**

See pages 32-33 in the FY18 askHRgreen.org Annual Report

- **Leaves & Pet Waste.** For that focal area, we ran a 2-week radio and online media campaign designed to reach the target audience of adults 25-54. The reach of the radio campaign was 27.5% with a frequency of 4. For leaves and pet waste, we were able to reach 27.5% of the target audience a total of 4 times.
- **Fertilizer/Soil Testing.** For that focal area, we ran a 2-week radio, online, and advanced TV media campaign designed to reach the target audience of men, 35+. The reach of the radio campaign was 27.4% with a frequency of 2.8. For fertilizer/soil testing, we were able to reach 27.4% of the target audience a total of 2.8 times.
- **Holiday FOG/Reducing SSOs.** For that focal area, we ran a 1-week radio and online campaign designed to reach the target audience of adults 25-54. The reach of the radio campaign was 20.3% with a frequency of 3.1. For holiday FOG/SSO prevention messaging, we were able to reach 20.3% of the target audience a total of 3.1 times.
- **FOG/Reducing SSOs.** For that focal area, we ran a 1-week radio, online, and advanced TV media campaign designed to reach the target audience of women 25-54. The reach of the radio campaign was 45.9% with a frequency of 2.7. For the FOG message, we were able to reach 45.9% of the target audience a total of 2.7 times.
- **What Not to Flush/Reducing SSOs.** For that focal area, we ran a 2-week online, and advanced TV media campaign designed to reach the target audience of adults 25-54. The campaign had 399,573 total impressions and 45,131 completed video views. For the What Not to Flush message, 399,573 people had the opportunity to view the campaign and the video was watched, in completion, 45,131 times.

askHRgreen.org Stormwater Education Annual Reporting Locality Shares for Media Campaigns

Directions: Find your locality's population percentage from the "Population Percentage" tab. Insert that percentage into the yellow box below to find your locality's share of FY18 media campaigns

Suffolk Population Percentage:	5.33%
---------------------------------------	--------------

Stormwater Media Campaigns							
Campaign Name	Total Campaign Impressions	Suffolk Campaign Share	Target Audience	Target Audience Impressions	Target Audience Reach	Target Audience Frequency	Suffolk Target Share
Fall Leaves & Pet Waste	1,480,506	78,911	Adults 25-54	719,800	27.5%	4	38,365
Lawn care	1,066,913	56,866	Men 35+	302,300	27.4%	2.8	16,113
Search Engine Marketing	169,140	9,015	-	-	-	-	-
	2,716,559	144,793	-	1,022,100	-	-	54,478

Fats, Oils & Grease Media Campaigns							
Campaign Name	Total Campaign Impressions	Suffolk Campaign Share	Target Audience	Target Audience Impressions	Target Audience Reach	Target Audience Frequency	Suffolk Target Share
Holiday Cooking/FOG	863,932	46,048	Adults 25-54	415,810	20.3%	3.1	22,163
FOG	1,412,279	75,274	Women 25-54	409,100	45.9%	2.7	21,805
What Not to Flush*	399,573	21,297	Adults 25-54	NA	NA	NA	-
	2,675,784	142,619	-	824,910	-	-	43,968

*The What Not to Flush campaign was run online only. Target audience impressions, reach, frequency are only available for radio campaigns.

All Other Campaigns		
Campaign Name	Total Impressions	Suffolk Share
Public Relations	1,240,564	66,122
All other askHRgreen Impressions	6,729,473	358,681
Total FY18 askHRgreen Impressions	13,362,380	712,215

REGIONAL COOPERATION IN STORMWATER MANAGEMENT

FISCAL YEAR 2017-2018

A STATUS REPORT

This report was included in the HRPDC Work Program for FY 2017-2018, approved by the Commission at its Executive Committee Meeting on May 18, 2017

**Prepared by the staff of the
Hampton Roads Planning District Commission
in cooperation with the
Regional Stormwater Workgroup**

September 2018

REPORT DOCUMENTATION

TITLE:
**Regional Cooperation in Stormwater
Management Fiscal Year 2017-2018:
A Status Report**

REPORT DATE
September 2018

GRANT/SPONSORING AGENCY
LOCAL FUNDS

AUTHORS:
Katherine C. Filippino
Whitney S. Katchmark
Jillian C. Sunderland

**ORGANIZATION NAME,
ADDRESS AND TELEPHONE**
Hampton Roads Planning
District Commission
723 Woodlake Drive
Chesapeake, Virginia 23320
(757) 420-8300
<http://www.hrpdcva.gov>

ABSTRACT

This document describes cooperative activities related to stormwater management undertaken by Hampton Roads local governments during Fiscal Year 2017-2018. The activities described include the regional information exchange process, public information and education, legislative and regulatory issues, cooperative regional studies and related programs. This document is used by the region's eleven localities with stormwater permits to assist them in meeting their permit requirements.

ACKNOWLEDGMENTS

The Hampton Roads Planning District Commission, in cooperation with the Regional Stormwater Workgroup, prepared this report.

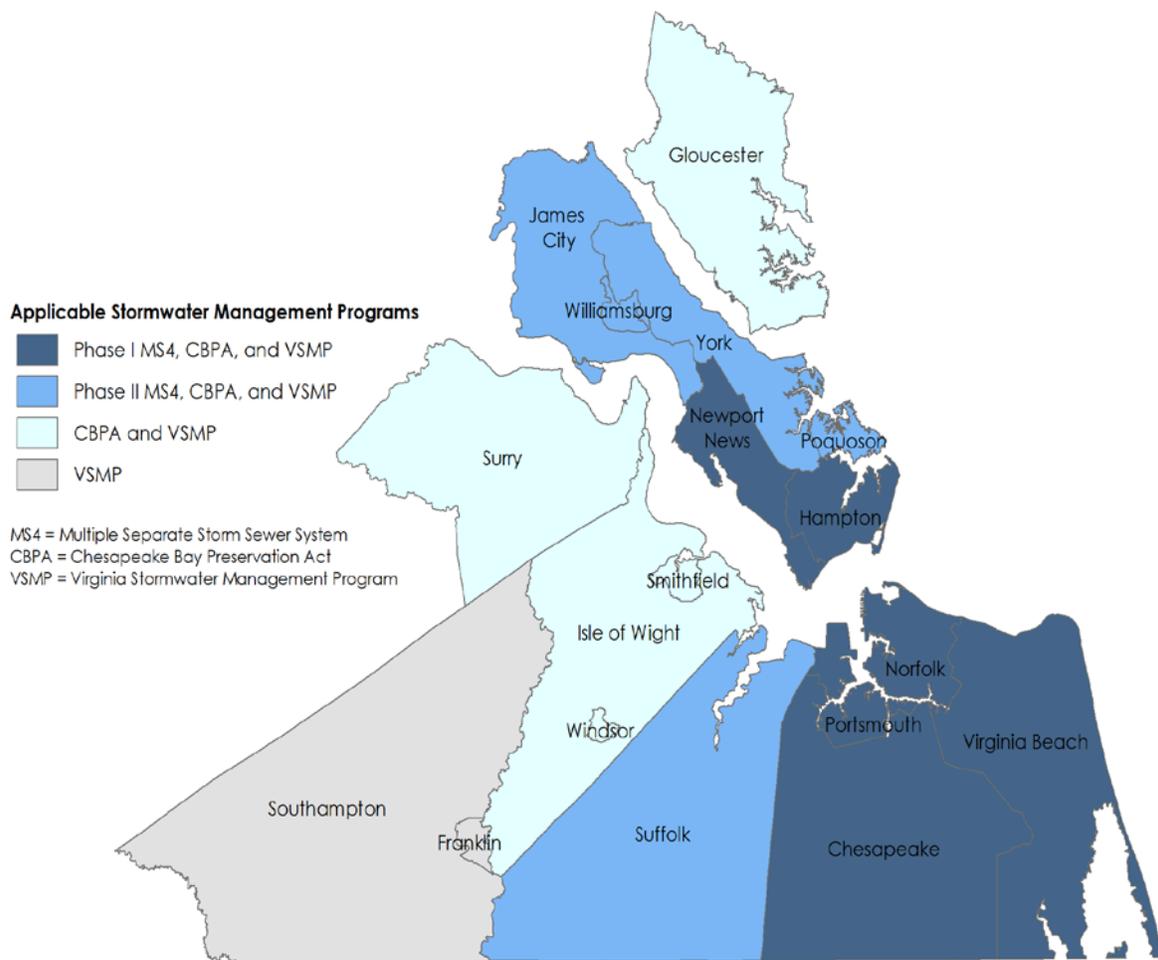
Preparation of this report was included in the HRPDC Unified Planning Work Program for FY 2017-2018, approved by the Commission at its Executive Committee Meeting of May 18, 2017.

The seventeen member local governments through the HRPDC Regional Stormwater Management Program provided funding.

INTRODUCTION

Working through the Hampton Roads Planning District Commission (HRPDC), the region's seventeen member cities and counties and town (Figure 1) cooperated on a variety of stormwater management activities during Fiscal Year 2017-2018. This cooperative effort has been underway as a formal adjunct to the Virginia Pollutant Discharge Elimination System Permits (VPDES) for Municipal Separate Storm Sewer Systems (MS4) held by the Cities of Chesapeake, Hampton, Newport News, Norfolk, Portsmouth and Virginia Beach since Fiscal Year 1995-1996. The Cities of Suffolk, Poquoson, Williamsburg, and the Counties of James City County, Isle of Wight, and York joined in 2002 to coordinate Phase II MS4 permit applications. Cooperative activities documented in this report represent a continuation of an ongoing effort, which has involved concerted activity since 1992.

As of April 19, 2016, the Phase II MS4 permit for Isle of Wight County was terminated by the Department of Environmental Quality (DEQ). It was determined that the County does not own or operate a MS4 within the Census Urbanized Area.



REGIONAL STORMWATER MANAGEMENT PROGRAM GOALS

The HRPDC and local stormwater staffs undertook a comprehensive effort in FY 1998-1999, called the Regional Loading Study. The project included developing a set of regional stormwater management goals to guide the regional program. The goals were presented to and adopted by the HRPDC at its Executive Committee Meeting in September 1999. They were reaffirmed in the January 2003 approval of the “Memorandum of Agreement (MOA) Establishing the Hampton Roads Regional Stormwater Management Program” and the renewal of the MOA in 2008, 2013, and 2018. The adopted Regional Stormwater Management Program Goals, which guide the regional program, are:

- Manage stormwater quantity and quality to the maximum extent practicable (MEP).
 - Implement best management practices (BMPs) and retrofit flood control projects to provide water quality benefits.
 - Support site planning and plan review activities.
 - Manage pesticide, herbicide and fertilizer applications.
- Implement public information activities to increase citizen awareness and support for the program.
- Meet the following needs of citizens:
 - Address flooding and drainage problems.
 - Maintain the stormwater infrastructure.
 - Protect waterways.
 - Provide the appropriate funding for the program.
- Implement cost-effective and flexible program components.
- Satisfy VPDES stormwater permit requirements.
 - Enhance erosion and sedimentation control.
 - Manage illicit discharges, spill response, and remediation.

THE REGIONAL PROGRAM

The Regional Stormwater Management Program initially focused on activities that supported the permit compliance efforts of the six communities with Phase I VPDES MS4 Permits, technical assistance to the region’s non-permitted communities and regional education and training to support all of the communities. The program has expanded to include the needs of the five communities with Phase II VPDES MS4 permits and the development of locally administered Stormwater Programs which were required starting July 1, 2014.

Phase I Localities

The current Phase I MS4 permits became effective on July 1, 2016. FY 2017-2018 represents the second year of the five-year permit cycle. This year, the permittees were focused on developing their Chesapeake Bay and local TMDL Action Plans. The Action Plans were required to be submitted to DEQ for review and approval by July 1, 2018.

Phase II Localities

The Phase II General Permit was reissued on July 1, 2013. FY 2017-2018 represents the fifth year in the permit cycle. The permittees continue to implement their first Chesapeake Bay Action Plans, which were submitted in FY 2014-2015. Their first local TMDL Action Plans were due to DEQ on July 1, 2016. The permittees have been closely monitoring the development of the new MS4 General Permit.

Both the Phase I and Phase II Localities continue to implement their local Stormwater Programs, train staff on stormwater issues, and meet education and outreach requirements. HRPDC staff developed training materials and hosted various webcasts to assist with these efforts. More detailed descriptions are available in the *Training* section of this report. The regional environmental education organization, askHRgreen.org, conducted regional media campaigns for pet waste reduction, proper lawn maintenance, and reduction of fats, oils, and grease.

INFORMATION EXCHANGE

The cornerstone of the Regional Stormwater Program continues to be the exchange of information. This is accomplished through regular monthly meetings to address topics of regional importance, as well as crosscutting issues that affect local stormwater, planning, public works and public utilities staff. In addition, various agencies and organizations utilize this regional forum to engage and inform local governments, as well as to gather feedback.

Monthly Meetings

The seventeen communities participate in the HRPDC Regional Stormwater Program and their staffs meet twice a month. The Stormwater Workgroup meetings provide an opportunity for local stormwater managers to exchange information about successful program activities, utility structures and policies, and technical challenges. The HRPDC Regional Environmental Committee meetings include local stormwater and planning staff plus cooperating agencies such as the Department of Conservation and Recreation (DCR), the DEQ, the Virginia Department of Transportation, the Hampton Roads Sanitation District (HRSD), and the US Navy.

State and Federal Agency Program Briefings

Representatives of state and federal agencies frequently brief the Committee on developing issues, regulatory guidance and technical programs. During the year, the Committee was briefed by representatives of the US Department of Agriculture on waterfowl control, the

Virginia Department of Transportation on their Chesapeake Bay TMDL Action Plan, and the US Army Corps of Engineers on their Chesapeake Bay Comprehensive Plan.

Regional Water Quality Technical Workgroup

In FY 2015, the HRPDC established the Regional Technical Environmental Workgroup in order to provide a forum for local government staff from various departments and consultants to discuss technical details of the implementation of the Chesapeake Bay TMDL as well as local TMDLs. In FY 2016, the name of the Workgroup was changed to the Regional Water Quality Technical Workgroup to more accurately reflect the topics of discussion.

The objectives of the Workgroup are to discuss technical aspects of restoration projects, discuss research and development of alternative BMPs, help set regional priorities for approval of BMPs for the Bay TMDL, and develop research priorities for filling data gaps. Meetings are open to the public. The Workgroup serves an advisory role to the Regional Environmental Committee.

In FY 2018, three meetings were held in September, March, and June. On September 7, 2017, Mr. Colin Stief, a Senior Applications Manager with the Chesapeake Conservancy, discussed the BMP Calculator Tool developed for York County, Pennsylvania, the GIS mapping tools for stormwater infrastructure in Washington D.C., and the green infrastructure connectivity maps developed for Maryland. On March 1, 2018, Ms. Nasrin Alamdari, a PhD student of Dr. David Sample at Virginia Tech, presented a talk entitled, “How Effective Stormwater Control Measures Are in the Face of Climate Change”. Ms. Alamdari was joined by City of Virginia Beach engineers, Ms. Shanda Davenport and Mr. Greg Johnson, who discussed how the City of Virginia Beach may address these concerns. On June 7, 2018, the Workgroup welcomed Mr. Bill Keeling from the Virginia Department of Environmental Quality for a presentation on BMP reporting.

PUBLIC EDUCATION

askHRgreen.org

The HR STORM committee, consisting of local stormwater education/public information staff, was established in 1997 to support development and operation of the stormwater education program. Beginning in FY 2011, the HRPDC environmental education programs were combined into a single public awareness program and central resource for environmental education in Hampton Roads known as askHRgreen.org. In January 2018, the new askHRgreen.org website launched. The website contains information on earth-friendly landscaping ideas and pointers for keeping local waterways clean, recycling tips, and simple steps to make local living easy on the environment. It also includes a blog written by a team of local experts who work in the region’s municipal utility and environmental divisions.

The stormwater education subcommittee of askHRgreen.org continues to meet on a monthly basis to discuss education priorities for stormwater. In FY 2018, the subcommittee focused on ensuring that the regional education campaign fulfills the outreach requirements of the current

Phase II General Permit and many of the outreach objectives of the individual Phase I permits. The subcommittee also continued the program to distribute pet waste stations to interested community members throughout Hampton Roads. The activities conducted through the askHRgreen.org campaign for the year are summarized in the askHRgreen.org Annual Report.

TRAINING

Since 2004, HRPDC staff has worked with the MS4 permittees to develop and conduct training programs for local government staff. The table below provides a summary of the FY 2018 programs.

Training Topic	Date
Center for Watershed Protection – Making Urban Trees Count (webcast)	June 2017
Manufactured Treatment Devices Workshop	Dec 2017
Center for Watershed Protection – Stream and BMP Monitoring (webcast)	Mar 2018
Center for Watershed Protection – National Stormwater Conference (online)	Apr 2018
Center for Watershed Protection – Bioretention Design Modifications (webcast)	May 2018
Wetlands Permitting Workshop for Local Government Staff	May 2018
Center for Watershed Protection – Retrofitting the Urban Environment: What’s New (webcast)	June 2018

Webcasts

The Stormwater Regional Workgroup purchased a series of webcasts from the Center for Watershed Protection to view throughout FY 2018. HRPDC hosted the webcasts so that one subscription could be shared.

Manufactured Treatment Devices (MTD) Workshop

HRPDC staff partnered with Contech Engineered Solutions and Hydro International to offer a half-day MTD Workshop that covered the basics of how MTDs treat runoff, the history of MTDs in the Virginia BMP Clearinghouse, appropriate utilization of the devices in the field, and maintenance considerations. The Workshop had 38 attendees, representing local governments, state agencies, consultants, and the Navy.

US Army Corps Wetlands Permitting Workshop for Local Government Staff

HRPDC and Norfolk District staff collaborated to host a half-day Wetlands Permitting Workshop. The topics covered included the background and organization of the Regulatory

Branch, best practices for completing wetland permit applications, coordination with other agencies, and the new Regional General Permit. The Workshop was geared specifically to local government staff and had nearly 70 participants.

LEGISLATIVE & REGULATORY MONITORING

This element of the program involves monitoring state and federal legislative and regulatory activities that may impact local stormwater management programs. HRPDC staff in cooperation with the Committee develops consensus positions for consideration by the Commission and local governments. The level of effort devoted to this element has increased significantly over the years. During FY 2018, the regional emphasis was on the Phase II MS4 General Permit reissuance, the Construction General Permit reissuance, House Bill 1774 Workgroup, developing guidelines for the use of proprietary BMPs for stormwater regulation compliance, and development of Virginia's Phase III Watershed Implementation Plan for the Chesapeake Bay TMDL. For each issue, HRPDC staff provided updates to the Regional Stormwater Workgroup or the Regional Environmental Committee, collected input, and submitted comments on behalf of the Region. If a stakeholder group was assembled for a particular issue, then the Region nominated a representative to serve on behalf of the localities.

Phase II MS4 General Permit Reissuance

HRPDC staff served on the Technical Advisory Committee (TAC) established to assist DEQ with revising the permit language. The TAC met nine times from October 2016 through May 2017 and reviewed all sections of the permit twice.

The federal MS4 Remand Rule ("Rule") was finalized in November 2017, and the general permit had to be updated to comply. DEQ is following the Traditional Approach outlined in the Rule which requires the general permit to contain clear, specific, and measurable requirements. For example, for minimum control measure 1, public education and outreach, permittees are to implement a certain number of strategies that they select from the list of DEQ- or CBP-approved BMPs provided in the permit.

The Phase II MS4 General Permit, which was set to expire on June 30, 2018, has been administratively continued. The formal public comment period was delayed and ran from January 8, 2018 through March 9, 2018. DEQ intends to present the revised draft to the State Water Control Board in August 2018.

A regional comment letter was submitted in March 2018. The comments were focused on consistency between the permit requirements and the registration statement and also between the language in the permit and existing federal and state law.

Construction General Permit Reissuance

The existing Construction General Permit (GP) expires on June 30, 2019. HRPDC staff serves on the TAC for the permit reissuance. The TAC met six times from January through June 2018.

The TAC was focused on addressing the projects that are still subject to the old stormwater management criteria (Part IIC) and to making the Virginia Construction GP consistent with the 2017 EPA Construction GP.

The TAC had extensive discussions on the definition of land disturbance, particularly as it relates to whether a grandfathered project or a project subject to the time limits of applicability could continue to be subject to the old stormwater criteria. The portions of those projects that had commenced land disturbance within the specified timeframe could continue; however, if land disturbance had not commenced and the portion was not covered in the stormwater management plan, the owner would have to redesign that portion in accordance with the new stormwater criteria (Part IIB).

DEQ intends to present the revised draft of the Construction GP at the September State Water Control Board meeting. A formal public comment period will follow this fall.

House Bill 1774 – Stormwater Management in Rural Tidewater Localities

The General Assembly requested that the Commonwealth Center for Recurrent Flooding Resiliency convene a workgroup to study the administration of the Commonwealth's current stormwater management program, as well as the potential treatment and use of water in roadside ditches in rural, Tidewater Virginia localities (as defined by the workgroup). HRPDC staff served on the Workgroup, which met three times from August through November 2017. The Workgroup developed a report to propose potential solutions to address rural Tidewater localities' concerns regarding administration of regulatory coverage for land disturbances of between 2,500 square feet and one (1) acre, and to assess potential innovative alternatives for treatment and use of stormwater in these rural Tidewater localities. In the 2018 session, the General Assembly approved two out of several recommendations from the Workgroup. One bill allows rural Tidewater localities to use a tiered approach to the water quantity requirements of the stormwater management program that is based upon the percent of impervious cover in a watershed. The second bill allows rural Tidewater localities to acceptance a signed and sealed plan by a licensed professional in lieu of review by the locality for land disturbing activities between 2,500 square feet and 1 acre.

Proprietary BMPs for Stormwater Compliance

The new post-construction water quality requirements require approval from DEQ for use of proprietary BMPs in Virginia. The Stormwater BMP Clearinghouse Committee was established in order to provide guidance to the DEQ on BMP listing criteria, Clearinghouse website content, and database design. Regional input centered on defining the proposed role of the Clearinghouse in approving non-proprietary BMP pollutant removal efficiencies.

At the end of FY 2014, the DEQ issued interim guidance that describes a process for approving these proprietary BMPs and assigning pollutant removal credits: "Interim Use of Stormwater Manufactured Treatment Devices (MTDs) to meet the New Virginia Stormwater Management Program (VSMP) Technical Criteria, Part IIB Water Quality Design Requirements." In FY 2015, the Clearinghouse Committee focused on the approval process for MTDs and discussed how

and when the guidance should be updated or replaced with regulations. HRPDC staff has been involved with a cooperative effort to request that DEQ add sizing criteria to the guidance. In FY 2016, DEQ began the process of revising the guidance and updating the BMP Clearinghouse to include sizing for MTDs. That process remains ongoing. In FY 2018, HRPDC staff continued to monitor the parallel efforts by the Chesapeake Bay Program (CBP) and the Water Environment Federation to develop testing protocols for MTDs.

Virginia's Phase III Watershed Implementation Plan for the Chesapeake Bay TMDL

The EPA established the Chesapeake Bay TMDL on December 29, 2010 that included a Phase I Watershed Implementation Plan (WIP) developed by Virginia that outlined the statewide strategies that would be implemented by each source sector to achieve TMDL compliance. In March 2012, Virginia submitted its final Phase II WIP to EPA that outlined the management actions that will be implemented by local governments. The HRPDC participated in both efforts on behalf of the local governments and submitted regional input for the Phase II WIP entitled, *Hampton Roads Regional Planning Framework, Scenario, and Strategies*.

Virginia is required to develop a Phase III Watershed Implementation Plan by 2019 that will describe how the state will achieve the required nutrient and sediment reductions from 2017 through 2025. In FY 2015, Virginia began the development of this plan with the establishment of the Chesapeake Bay Stakeholder Advisory Group. HRPDC staff continues to participate in the Stakeholder Advisory Group and attended the meetings in March, April, and June of 2018.

As part of the state's efforts to develop the Phase III WIP, DEQ staff led outreach meetings across the state. HRPDC hosted the outreach meeting for Hampton Roads on June 1, 2017. DEQ staff reviewed the progress Virginia has made so far in reaching the goals of the TMDL, discussed the schedule for the development of the Phase III WIP, and explained the role of localities.

In FY 2019, DEQ is contracting with the Planning Districts in the Bay watershed to develop strategies for reducing nitrogen and phosphorus loads (known as local area planning goals) in the unregulated developed, natural, and septic sectors. As part of this effort, the HRPDC staff will coordinate three stakeholder meetings from August through October 2018 to share best practices, discuss potential management strategies, and propose policy changes for obtaining nutrient reductions.

REGIONAL STUDIES

Water Quality Monitoring Study

In FY 2014, the HRPDC and the Phase I localities partnered with the USGS and the HRSD to create the Hampton Roads Regional Water Quality Monitoring Program (RWQMP). The purpose of the study is to characterize the sediment and nutrient loadings from the major urban land-uses in the Hampton Roads region. The data collected during the first three to five years will serve as a baseline for nutrient and sediment loads from the MS4s prior to implementation of BMPs to comply with the Chesapeake Bay TMDL. In addition these

measured sediment and nutrient loads will be compared to the loading rates in the Chesapeake Bay Watershed Model and used to improve the accuracy of the model in the Coastal Plain. In FY 2015, the locations of the 12 stations (2 per Phase I locality) were selected, and seven stations were installed. In FY 2016, three additional stations were installed. In FY 2017, the remaining two stations were brought online. In FY 2018, all twelve stations continued to collect storm event samples, which are analyzed for nutrients and sediments. The stations continuously monitor flow, turbidity, and conductivity. Additional information on the project objectives, site locations, and data collected can be viewed here: <http://va.water.usgs.gov/HRstormwater/index.html>.

The RWQMP was incorporated into the Phase I MS4 permits. HRPDC staff develops an Annual Report that includes the locations of monitoring stations, a summary of available data, and an interpretation of the data to include in the Phase I MS4 Annual Reports. The report is based on the annual update presented to the Regional Stormwater Workgroup by Mr. Aaron Porter (USGS).

Stormwater Program Matrix

A comprehensive stormwater program matrix, including Phase I and Phase II communities, was developed in FY 2000 to address both utility and programmatic issues. The matrix includes the rate structures, the type of bill, the frequency of billing, the number of utility customers, and program contact information. HRPDC staff coordinates with local government stormwater program staff to update the information in the matrix annually.

Local TMDL and Implementation Plan Development

The state has developed a substantial number of TMDL Studies and TMDL Implementation Plans. This work follows the classification of the waters by the state as meeting or failing to meet water quality standards. Water bodies that fail to meet water quality standards are classified as “impaired,” triggering the requirement to prepare the TMDL study. HRPDC staff has coordinated regional involvement in the “impaired waters” listing and TMDL development process. This has entailed providing opportunities through the Regional Environmental Committee for education of local government staff on the TMDL process, response to the development of TMDLs themselves, and participation in the development of implementation plans.

To assist the region’s localities in addressing this requirement and ensuring that Implementation Plans are feasible, HRPDC staff is working with the DEQ through a cooperative regional partnership to coordinate the TMDL study process with the localities and to develop the required Implementation Plans. In FY 2014, the HRPDC partnered with the DEQ, Hampton Roads localities, and the HRSD to develop a study plan to collect stormwater samples from the Elizabeth River watershed and analyze them for polychlorinated biphenyl (PCB) concentration in order to support the development of the Lower James and Elizabeth River PCB TMDL. Stations in Chesapeake, Norfolk, Portsmouth, and Virginia Beach were selected because they met the criteria for representative land uses and watersheds where PCBs could be monitored. In FY 2015, water samples were collected at these stations by the HRSD and sent to the DEQ

selected laboratory for PCB analysis. The MS4 localities in Hampton Roads funded the data collection and the DEQ paid for the analysis. The PCB TMDL for the Lower James and Elizabeth River was expected to be developed in FY 2017; however, the DEQ experienced a number of staffing changes and other delays. It is expected sometime during FY 2019.

HRSD Bacteria Source Tracking

HRSD began a pathogen program to conduct bacteria source tracking in June 2015. The program was designed as a way to partner with local governments to focus source identification efforts. HRSD is providing sampling and analyses services while the local governments are providing staff time for the investigations. Several localities have taken advantage of the program so far.

TECHNICAL ASSISTANCE

The HRPDC continues to serve as a clearinghouse for technical assistance to the localities, as well as a point of contact in arranging short-term assistance from one locality to another. The HRPDC Committee structure also provides a forum for state and federal regulatory agency staff to meet with the region's localities to discuss evolving stormwater management regulations and other emerging regulatory issues. In addition, HRPDC staff provides technical information and advice to all of the participating localities on a wide variety of issues upon request. In FY 2018, technical assistance to localities was focused on disseminating information related to implementation of and compliance with the Chesapeake Bay TMDL, providing training resources for locality stormwater staff, and evaluating the real world challenges of interpreting and implementing the local stormwater programs.

MEMORANDUM OF AGREEMENT

The Regional Stormwater Management Program was established in 1996 as a formal program of the Hampton Roads Planning District Commission with support and participation from the seventeen member local governments. An MOA was created that outlines the basic regulatory and programmatic premises for the cooperative program, incorporating the Regional Program Goals, described earlier in this report. The MOA establishes a division of program responsibilities among the HRPDC and the participating localities, addresses questions of legal liability for program implementation, and includes other general provisions. The MOA is reauthorized by the signatories every five years and was renewed in 2018.

PERMIT ADMINISTRATION AND REPORTING SYSTEM (PARS)

In an effort to streamline reporting and capture data more effectively for local governments, the permitted localities pooled resources to develop the Permit Administration and Reporting System, or PARS. The region contracted with URS Corporation to develop a web-based data tracking and reporting system. The system allows local governments to catalog development sites and their associated BMPs. The system also enables localities to capture inspection information, catalog stormwater outfalls, document illicit discharge investigations and record

public education information. The Regional Stormwater Workgroup agreed to retire PARS on June 30, 2016 for all users except Chesapeake, James City County, Norfolk, Suffolk, and Williamsburg as it no longer met reporting and tracking needs. These five localities agreed to continue to support PARS through December 2016. Norfolk and Chesapeake continue to support the database into FY 2019 while alternative systems are under development in those localities.

RELATED PROGRAMS AND PROJECTS

In various combinations, the eleven MS4 communities, as well as their non-permitted counterpart communities, participate in a wide variety of related programs. These programs are noted here because of their relationship with stormwater management.

Chesapeake Bay Program Participation

The Chesapeake Bay Program (CBP) is a regional partnership that has led and directed the restoration of the Chesapeake Bay since 1983. CBP partners include federal and state agencies, local governments, non-profit organizations and academic institutions. Partners work together through the CBP's goal teams, workgroups and committees to collaborate, share information, and set goals.

Since the development of the Chesapeake Bay TMDL in December 2010, the Hampton Roads Region has devoted considerable attention to the ongoing CBP. HRPDC and locality staff have participated in the deliberations of many CBP committees and work groups dealing with urban stormwater, land development, watershed planning, land use development, modeling and local government's role in the Bay Program. HRPDC staff has continued to follow the activities of the CBP primarily through participation in the Urban Stormwater Workgroup, the Land Use Workgroup, and the Water Quality Goal Implementation Team. HRPDC staff serves on the Climate Resiliency Workgroup, which was established to evaluate the impacts of climate change on the CBP's goals and activities. HRPDC staff participated in the Local Area Targets Task Force, which was charged to make recommendations whether the Phase III WIPs should include local area targets and if so, options for how these targets could be expressed in different jurisdictions. HRPDC staff also serves on Virginia's WIP III Stakeholder Advisory Group (SAG) and continues to participate in the development of the ongoing James River Chlorophyll-a study. On behalf of the HRPDC, Mr. Tim Hare, ARCADIS, served on the Scientific and Technical Advisory Committee (STAC) that was tasked with evaluating the impacts of climate change on BMPs.

Chesapeake Bay Preservation Act Program

Fifteen of the seventeen member localities continue to implement programs in response to the Virginia Chesapeake Bay Preservation Act (CBPA). Stormwater management is one component of those programs. Although the CBPA is not formally part of the multi-state CBP, described above, it serves as one element of local government implementation actions to comply with their MS4 Permits and to meet the goals of the CBP.

Trading with HRSD

HRSD, HRPDC staff, and the MS4 permittees collaborated to develop a regional template for the memorandums of agreement to establish the framework for trading stormwater pollutant reduction credits. Individual MOAs with each of the eleven MS4 permittees were signed in 2017.

Currently HRSD treatment plants operate well below design flows, as those were established to ensure capacity to support regional population projections in 2040 and beyond. Annual average flows in 2015 were approximately 60% of design flows. As a result of plant flows well below design flows in combination with significant investment in nutrient removal technologies, HRSD currently discharges nutrients and sediment significantly below permitted limits and is projected to do so for the foreseeable future. The difference between permitted mass load limits and current performance provides ample capacity to absorb load reductions required from stormwater dischargers in Hampton Roads through at least 2036.

HRSD is developing the Sustainable Water Initiative for Tomorrow (SWIFT) project, their multi-year initiative that will take treated wastewater, purify it to drinking water standards, and then inject it into the Potomac Aquifer. In addition to replenishing the water in the aquifer, the SWIFT project will significantly reduce the volume of treated wastewater reaching the James, York, and Elizabeth Rivers. The project will generate enough permanent nutrient and sediment credits to meet almost all of the regional urban stormwater waste load allocations in the Chesapeake Bay TMDL. Mr. Ted Henifin (General Manager for HRSD) has given several presentations on the project at the Regional Environmental Committee and Regional Stormwater Workgroup meetings and has described the advantages of using the credits generated by the project to meet MS4 pollution reduction requirements.

Trading with HRSD, first using the capacity credits and then using the permanent credits from SWIFT, allows MS4 permittees to change their focus from costly stormwater retrofit projects to addressing recurrent flooding and climate change adaptation.

Local Government Coordination with the Norfolk District of the US Army Corps of Engineers

HRPDC staff was asked to reach out to the Regulatory Branch of the Norfolk District to work towards improving communications between the Army Corps and the localities, especially in regards to wetlands permitting. The localities have shared their concerns with regulators being incommunicative, staff regularly changing, and permitting delays. HRPDC staff met with Mr. Tom Walker, Chief of the Regulatory Branch, and some of his staff to share experiences and to try to determine how the localities could better position themselves during the joint permit application process. The meeting resulted in the training Workshop that was held on May 31, 2018. HRPDC staff continues the dialogue with the Regulatory Branch to facilitate the exchange of information and improve communications.

Virginia Conservation Assistance Program (VCAP)

The VCAP is an urban cost-share program that provides financial reimbursement to property owners installing eligible small-scale BMPs in the Chesapeake Bay watershed. The program has been funded with federal dollars from the US Environmental Protection Agency (EPA) and the National Fish and Wildlife Foundation (NFWF). The program has installed about 300 BMPs over the last couple of years and applications are waiting to be funded.

VCAP is administered by the Soil and Water Conservation Districts (SWCD) and is limited to projects in localities that are included in a SWCD. This means that several localities in Hampton Roads are not eligible for the program including the Cities of Portsmouth, Norfolk, Hampton, Newport News, and Poquoson. HRPDC staff was tasked with exploring options for expanding the reach of the program. Staff spoke with the Coordinator of VCAP, the Executive Director of the SWCDs, and several District Managers. Currently, there is no capacity to expand the program into other localities due to limited staff at the SWCDs and funding constraints. In order to qualify for the program, the Cities would either have to pursue becoming part of a SWCD or would need to create a MOA and provide funding for additional staff at their nearest SWCD. HRPDC staff researched these options and presented the findings to the Stormwater Managers. It is not practical for the Cities to become part of an existing SWCD or to create their own. HRPDC staff will continue to advocate for the expansion of VCAP as part of the Phase III Watershed Implementation Plan (WIP) for the Chesapeake Bay TMDL. The program is well-suited to achieve reductions in urban areas beyond MS4 service areas.

CONCLUSION

Through the Hampton Roads Planning District Commission, the seventeen localities of Hampton Roads have established a comprehensive Regional Stormwater Management Program. This program provides technical assistance, coordination, comprehensive technical studies and policy analyses and stormwater education. The Regional Stormwater Management Program enables the region's localities to participate actively and effectively in state and federal regulatory matters. It has enhanced the ability of the eleven localities with VPDES Permits for their Municipal Separate Storm Sewer Systems to comply with permit requirements.

The Regional Stormwater Management Program provides a mechanism through which the strengths of the seventeen local stormwater programs can be mutually supportive. It allows for cost-effective compliance with permit requirements, resolution of citizen concerns with stormwater drainage and water quality matters, promotes regional consistency, and achievement of improved environmental quality throughout the Hampton Roads Region.

**Regional Stormwater Workgroup
Meeting Attendance Permit Year 5**

Meeting Dates	7/19/2017	8/16/2017	9/20/2017	10/18/2017	11/15/2017	12/13/2017	1/17/2018	2/21/2018	3/21/2018	4/18/2018	5/16/2018	6/20/2018
Suffolk	1	1	1	1	1	1	1	1	1	1	1	1

# Meetings	% Attended
12	100%

askHRgreen.org Stormwater Education Meeting Attendance Permit Year 5

	July	August	September	October	November	December	January	February	March	April	May	June	Meetings Attended	Percentage of Meetings Attended
Suffolk	Jamie Durden	Jamie Durden, Erin Rountree	Jamie Durden	Jamie Durden	Jamie Durden	Jamie Durden	Jamie Durden, Heather Baggett	Jamie Durden, Heather Baggett	Jamie Durden	Jamie Durden, Heather Baggett	Jamie Durden, Heather Baggett	Jamie Durden	12	100%

Giveaway Tracking- Permit Year 5

Item	Taste of Suffolk	TGIF 7/14/2017	TGIF 8/4/2017	TGIF 8/18/2017	TGIF 9/1/2017	Peanut Fest	Bay Star Home Workshop	Reduce your footprint: Energy	Trunk or Treat	Yappy Hour	Dominon Energy/Turkey Giveaway	Bay Star Homes (27 New Participants)	Steeplechase Pet Waste Station
Pens			15	9	10	283	15	20				27	
Pencils													
Residential Guide Brochures (Healthy Bay Starts at Home)	40	6	1	1	1	36		20	150		40	27	
Seed Packets												27	
Medallions													
Native Plants VA Coastal Plain (Blue)						20							
Native Plants VA Riparian Buffer Zones		1		1		11							
Native Plant Guide						13	6						
Native plant sheet													
Car Wash Brochure		1	2		4								
Plant More Plants Brochure/Card													
Plant More Plants Bumper Sticker													
Dog Waste Bags	14	7	12	9	10	113				50			
Dog Waste Rack Cards						113				50			
Dog Waste Stickers												27	
Green Living Brochure						40		20				27	
Crossword Puzzle													
Hrgreen Bag	150					450	6		150		40	27	
Green Learning Guides													
Tape Measure Key Ring													
Teachers Guides													
Down the Drain Brochure											40	27	
Time to Fertilize Brochure						36						27	
Garden Kneelers													
Coastal Virginia Magazine													
Hampton Roads TMDL Rack Card	40	6	3	8	4	40						27	
Bay Star Homes Flag Pole												27	
Bay Star Home Info Sheet											40		
Bay Star Home Stickers												27	
Bay Star Homes Flag													
Illicit Discharge Business Card						9		20	150		40	27	
Soil Testing Kit												27	
Hand Sanitizer												27	
Smoking Litter cup ash try													
Smoking Litter pocket ash tray													
Household recycling made easy						49					40	27	
Gold fish crackers	20	20	20	20	20								
Sewedish Fish Candy													
Water in HR													
Wrist Bands													
Choose Tap												27	
Hampton Roads Defined by Water	40												
Waterwise Book						140	6						
Coloring Work Sheets													
BSH Window Cling						89						27	
Floating key chains													
Pet Waste Stations													1
Total	304	41	53	48	49	1,442	33	80	450	100	240	459	1

Giveaway Tracking- Permit Year 5

	Belleharbor Woods Pet Waste Station	Linkside Cove Pet Waste Station	Belmont Park Pet Waste Station	Engaging Suffolk	Kings Fork Middle School Career Day	Lakeland High School Career	Star Pointe Academy	2018 Suffolk Earth and Arts	Mutt Strutt	Medallion West Point	Ruritan Golf Tournament	City of Suffolk Safety Fair	TGIF 6/8/2018
Item													
Pens											50	15	15
Pencils					80	80						15	15
Residential Guide Brochures (Healthy Bay Starts at Home)				20							50	15	4
Seed Packets							50		100	20	50	40	20
Medallions										30			
Native Plants VA Coastal Plain (Blue)													
Native Plants VA Riparian Buffer Zones													
Native Plant Guide													
Native plant sheet													
Car Wash Brochure													
Plant More Plants Brochure/Card													
Plant More Plants Bumper Sticker													
Dog Waste Bags				20				17	200			4	3
Dog Waste Rack Cards								70	200				
Dog Waste Stickers								20				20	10
Green Living Brochure													
Crossword Puzzle													
Hrgreen Bag							50				50		
Green Learning Guides													
Tape Measure Key Ring													
Teachers Guides													
Down the Drain Brochure													
Time to Fertilize Brochure				20				100					
Garden Kneelers													
Coastal Virginia Magazine												10	4
Hampton Roads TMDL Rack Card													
Bay Star Homes Flag Pole													
Bay Star Home Info Sheet				20					200		50	15	3
Bay Star Home Stickers													
Bay Star Homes Flag													
Illicit Discharge Business Card				20					200		50	15	2
Soil Testing Kit													
Hand Sanitizer													
Smoking Litter cup ash try													
Smoking Litter pocket ash tray													
Household recycling made easy											50	20	5
Gold fish crackers													
Sewedish Fish Candy												20	10
Water in HR												20	3
Wrist Bands					80	80							
Choose Tap													
Hampton Roads Defined by Water												20	3
Waterwise Book													
Coloring Work Sheets													
BSH Window Cling													
Floating key chains					80							30	10
Pet Waste Stations	2	1	2										
Total	2	1	2	100	240	160	100	207	900	50	350	259	107

Giveaway Tracking- Permit Year 5

	TGIF 6/15/2018	TGIF 6/29/2018	Citizen Medallion Event in Harbour View	Paul D. Camp Medallion Placement	Total
Item					
Pens	15	15			489
Pencils	15	15			220
Residential Guide Brochures (Healthy Bay Starts at Home)					411
Seed Packets	20	7			334
Medallions			47	15	92
Native Plants VA Coastal Plain (Blue)					20
Native Plants VA Riparian Buffer Zones					13
Native Plant Guide					19
Native plant sheet					0
Car Wash Brochure					7
Plant More Plants Brochure/Card					0
Plant More Plants Bumper Sticker					0
Dog Waste Bags	4	9			472
Dog Waste Rack Cards					433
Dog Waste Stickers	7	9			93
Green Living Brochure					87
Crossword Puzzle					0
Hrgreen Bag					923
Green Learning Guides					0
Tape Measure Key Ring					0
Teachers Guides					0
Down the Drain Brochure					67
Time to Fertilize Brochure					183
Garden Kneelers					0
Coastal Virginia Magazine	6	2			22
Hampton Roads TMDL Rack Card					128
Bay Star Homes Flag Pole					27
Bay Star Home Info Sheet	4	1			333
Bay Star Home Stickers					27
Bay Star Homes Flag					0
Illicit Discharge Business Card	4	1			538
Soil Testing Kit					27
Hand Sanitizer					27
Smoking Litter cup ash try					0
Smoking Litter pocket ash tray					0
Household recycling made easy	5	2			198
Gold fish crackers					100
Sewedish Fish Candy	20	10			60
Water in HR	4				27
Wrist Bands					160
Choose Tap					27
Hampton Roads Defined by Water	4	1			68
Waterwise Book					146
Coloring Work Sheets					0
BSH Window Cling					116
Floating key chains	20	10			150
Pet Waste Stations					6
Total	128	82	47	15	6,050

Appendix D

Supporting Documentation for Minimum Control Measure 2: Public Involvement/ Participation

Outreach and Involvement Events Permit Year 5

Event	Event Date	Event Description
Citizen Medallion Event (Volunteer)	8/25/2017	Participated in a volunteer event to install storm drain medallions. Reached 4 citizens
Taste of Suffolk	9/9/2017	This festival features some of Suffolk's local restaurants, crafters, vendors and merchants. They have live entertainment and contests. Public Works Engineering representatives worked alongside other city and local vendors while offering information on stormwater run off, lawn care practices, used oil, native plants, scooping the poop, water quality, TMDLs and recycling/litter prevention. Reached 310 Citizens
Suffolk TGIF Summer Concert Series	7/14/2017, 8/4/2017, 8/18/2017, 9/1/2017	Summer concerts held at Suffolk Parks. Free and open to the public. Public Works Engineering representatives presented information regarding stormwater runoff, lawn care practices, used oil disposal, native plants, scooping the poop, water quality, TMDLs, and recycling/litter prevention.
Paul D. Camp Medallion Placement (Volunteer)	9/14/2017	Participated in a volunteer event to install storm drain medallions. Reached 15 Students
International Coastal Cleanup	9/28/2017	River and bank cleanup. Volunteers removed several bags of trash and other debris. Reached 35 people.
Peanut Fest	10/5-8/2017	This festival honors the cities' agriculture practices and long history of peanuts, as well as bringing the community together for an exciting and fun filled weekend. Public Works Engineering representatives worked along side other city and local vendors while offering information on stormwater run off, lawn care practices, used oil, native plants, scooping the poop, water quality, TMDLs and recycling/litter prevention. Reached 100,000 people
Farm Days	10/11-12/2017	Educated 2nd grade students about pollution in stormwater runoff using the Enviroscape model. Students were also taught about recycling and litter prevention. Reached approx. 1100 second grade students.
Bay Star Home Workshop (Volunteer)	10/24/2017	Participants were educated on: stormwater BMPs, including what they could do around their house to help our waterways, Litter control and how to keep Hampton Roads Beautiful, Native plants, and how to properly plant and maintain trees. Reached 10 citizens
NRPA Marshfield Study Fall	10/17-18/2017	Educated 7th graders in Suffolk Public Schools (fall classes) about pollution in stormwater runoff using the Enviroscape model. Reached 450 Students
Reduce your footprint: Energy Efficiency and Green Living	9/23/2017 and 10/24/17	Participants learned how to reduce their impact and lower energy cost, and made natural cleaning supplies. Gave away reusable bags and stormwater informational flyers. Reached 25 Citizens
Trunk or Treat Suffolk Library	10/21/2017	Gave "Save the Fish" Gold Fish and reusable bags to Suffolk Library event organizers so they can give to kids. Also handed out rack cards and IDDE Business Cards. Reached 150 citizens
Yappy Hour	10/27/2017	Gave pet waste bag holders and informational rack cards to event organizers to be given away at the event to encourage pet owners to pick up after their pets. Reached 50 Pet owners
Forest Glen 6th grade Science Students	12/13/2017	Educated 6th grade science students about our watershed and pollution prevention with enviroscape. Illicit discharge pictures were used to demonstrate real life pollution. Reached 100 Students
Dominion Energy/Turkey Giveaway	12/16/2017	Turkey giveaway to citizens of Suffolk in poverty from local businesses, partnered with Dominion Energy to give out info on how to lower their electricity bill and be more environmentally friendly. Stormwater gave out bags, info about stormwater runoff, what not to put down the drain,lawn care practices, used oil, native plants, scooping the poop, water quality, TMDLs and recycling/litter prevention. Reached 40 citizens.
Oakland Elementary	12/18-19/2017	Educated 3rd and 4th grade students about pollution in stormwater runoff using the Enviroscape model. Reached approx. 160 Students
Elephants Fork Elementary	1/5/2018 (canceled)	Educated 4th grade students about pollution in stormwater runoff using the Enviroscape model. Reached approx 100 Students
Home Gardener's Day & Mid-Atlantic Horticulture Short Course	1/15-19/2018	Participated with other HRPDC member localities to distribute educational materials at event.
Virginia Flower and Garden Expo	1/26-28/2018	Participated with other HRPDC member localities to distribute educational materials in the AskHRgreen trailer at event.
Engaging Suffolk	1/27/2018	This event gets residents involved with local organizations and they learn about or participate in volunteer opportunities. Informational rack cards about Bay Star Homes, A Clean healthy bay starts at home, fertilizer, bag waste dog holders and adopt a spot were given to participants.
Lakeland Career Day	2/15/2018	Educated high school students about stormwater and how technicians help keep our waterways clean by upholding our MS4 permit. Reached 200 Students
Pruden Center Public Works Academy	2/21/2018	Educated 12th grade science students about our watershed and pollution prevention with enviroscape. Illicit discharge pictures were used to demonstrate real life pollution. Reached 25 students.
Kings Fork Middle School Career Day	2/22/2018	Educated 6th grade students about stormwater and how technicians help keep our waterways clean by upholding our MS4 permit. Reached 150 Students
Star Point Academy Career Day	3/20/2018	Educated 3rd-10th grade students about our watershed and pollution prevention with enviroscape. Reached 50 students
Nansemond Parkway Elementary	3/21/2018	Educated 5th grade students about pollution in stormwater runoff using the Enviroscape model. Reached approx 100 Students

Outreach and Involvement Events Permit Year 5

Mack Benn Elementary	3/22/2018	Educated 5th grade students about pollution in stormwater runoff using the Enviroscape model. Reached approx 100 Students
Booker T. Washington Elementary	3/23/2018	Educated 5th grade students about pollution in stormwater runoff using the Enviroscape model. Reached approx 50 Students
Nansemond River High School (Volunteer)	3/27/2018	Spoke with Ecology Club about Stormwater Pollution Prevention. Reached 10 students.
Suffolk Pruden Center	4/10/2018	Educated the Governors School about pollution in stormwater runoff using the Enviroscape model. Reached approx 20 Students
Nansemond Suffolk Academy	4/11/2018	Used the Enviroscape watershed model to help demonstrate the stormwater water runoff and pollution to Pre-k through 5th grade and their parents. Reached 100 people.
2018 Suffolk Earth and Arts festival	4/21/2018	A festival celebrating local makers, music, growers and artisans. Gave away dog waste bag holders, stickers, and fliers, and gave away fertilize information. Reached 100 people.
STEM partner engagement fair for Middle School Teachers	4/30/2018	Spoke with potential education partners to engage with and benefit their learning experiences, especially in the STEM area.
STEM partner engagement fair for High School Teachers	5/1/2018	Spoke with potential education partners to engage with and benefit their learning experiences, especially in the STEM area.
Mutt Strut	5/6/2018	Gave pet waste bag holders and informational rack cards to event organizers to be given away at the event to encourage pet owners to pick up after their pets. Reached 200 pet owners
Ruritan Golf Tournament	5/19/2018	Golf tournament held in the city of suffolk. Made bags up for participants with rack card holders about stormwater run off, lawn care practices, used oil, native plants, scooping the poop, water quality, TMDLs and recycling/litter prevention. Reached 50 people.
Environmental Educational Event Harbor View	5/19/2018 Canceled	Harbour view event that teaches citizens how to get involved with local organizations and they learn about or participate in volunteer opportunities. Informational rack cards about Bay Star Homes, A Clean healthy bay starts at home, fertilizer, bag waste dog holders and adopt a spot were given to participants.
NRPA Marshfield Study Spring	5/1-2/2018	Educated 7th graders in Suffolk Public Schools (fall classes) about pollution in stormwater runoff using the Enviroscape model. Reached 450 Students
West Point Medallion Placement (Volunteer)	5/3-30/2018	Participated in a volunteer event to install storm drain medallions. Reached 6 citizens
Clean the Bay Day	6/2/2018	River and land clean up. Reached 170 people.
City of Suffolk Safety Fair	6/8/2018	City wide safety fair for employees that included demonstrations and trainings. Informational rack cards about Bay Star Homes, A Clean healthy bay starts at home, fertilizer, bag waste dog holders and adopt a spot were given to participants. Reached 60 city employees.
TGIFs	6/8/2018, 6/15/2018, 6/22/2018 Canceled, 6/22/2018	Summer concerts held at Suffolk Parks. Free and open to the public. Public Works Engineering representatives presented information regarding stormwater runoff, lawn care practices, used oil disposal, native plants, scooping the poop, water quality, TMDLs, and recycling/litter prevention.
Adopt-a-Programs	Year Round	This free program engages the public to take responsibility in keeping their local community free of litter. The program currently helps keep over 100 miles of Suffolk streets, parks, and one section of the Nansemond River litter free. In the last year, volunteers donated 3717 hours and collected 1563 bags of trash.
Tree and Wildflower Plantings	Year Round	Volunteers planted native trees at Lake Kennedy and Sleepyhole Parks. Volunteers planted wildflowers at a City-owned retention pond.

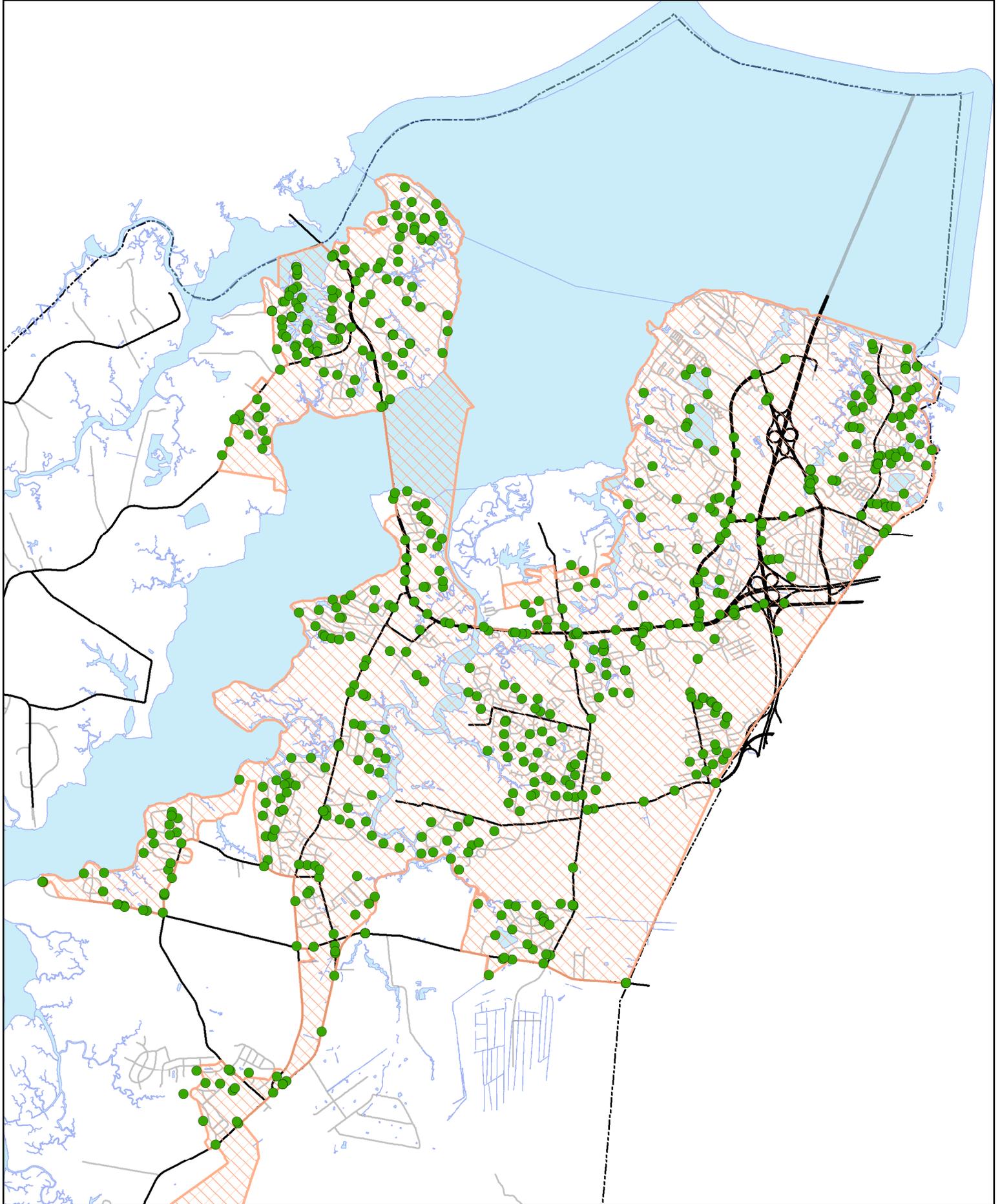
Appendix E

Supporting Documentation for Minimum Control Measure 3: Illicit Discharge Detection and Elimination



MS4 Outfalls - North Suffolk

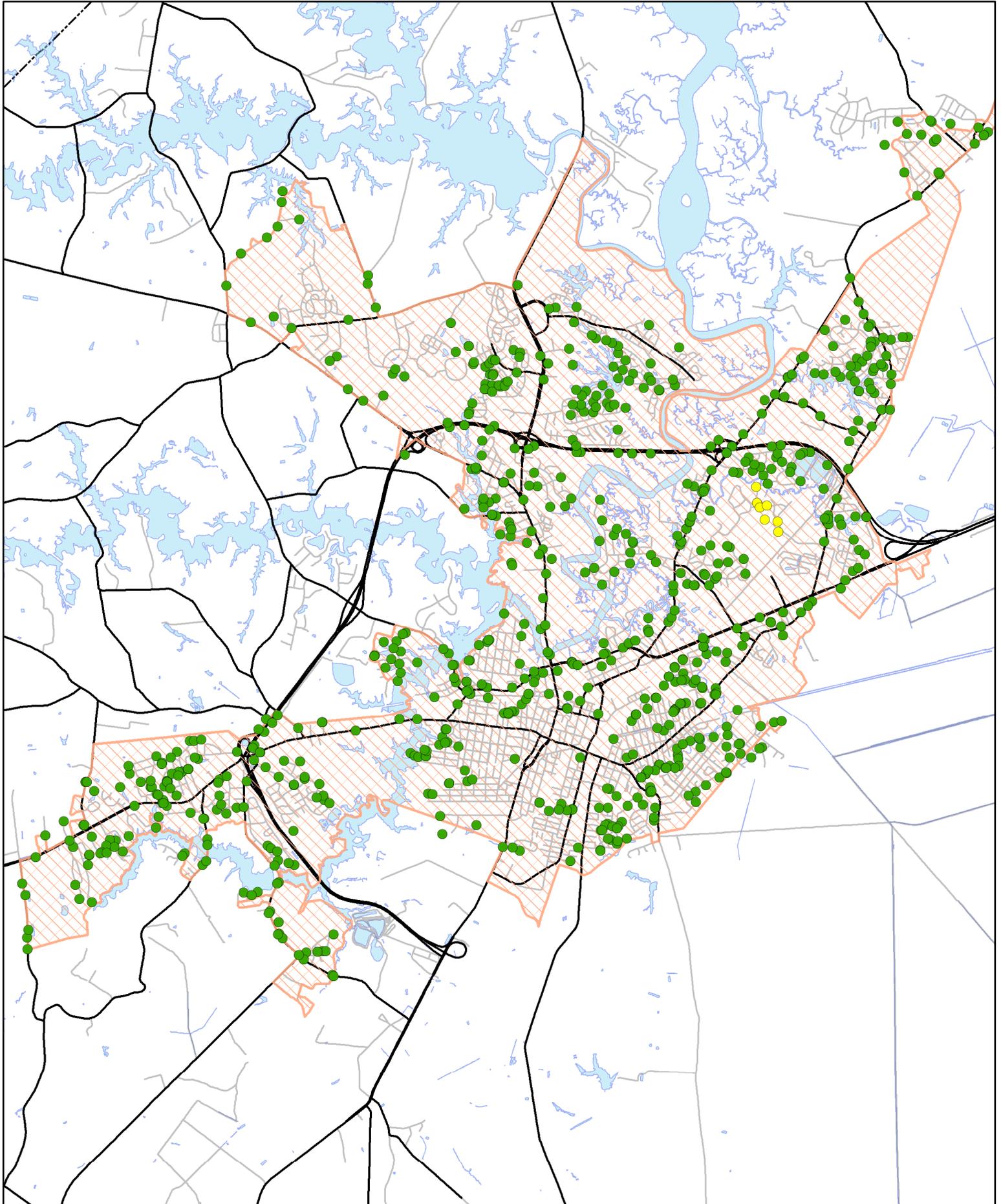
- New MS4 Outfalls 2018
- MS4 Outfalls
- ▨ 2010 Census Urbanized Area





MS4 Outfalls - Downtown Suffolk

- New MS4 Outfalls 2018
- MS4 Outfalls
- ▨ 2010 Census Urbanized Area



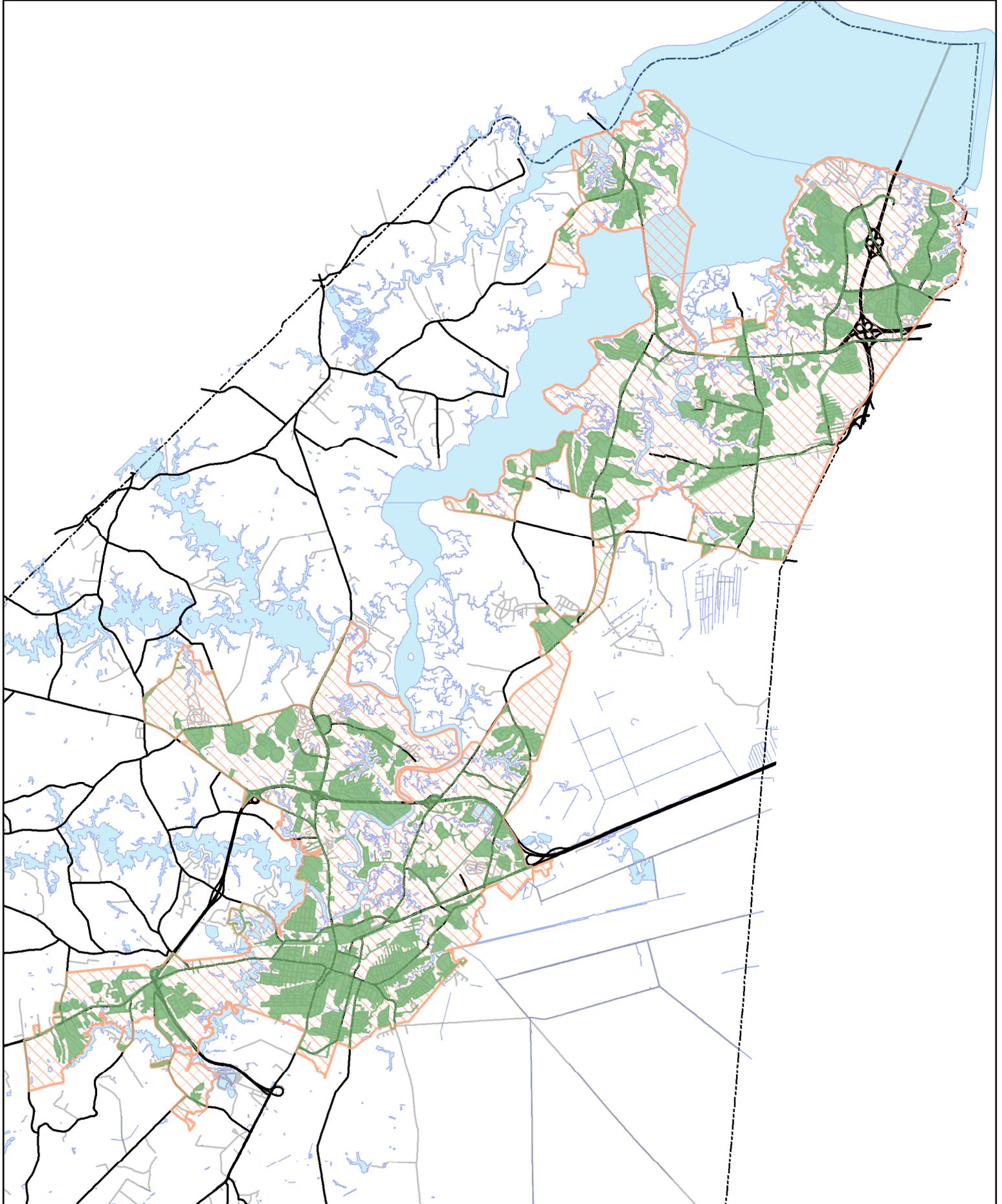
New Outfalls Permit Year 5

FACILITYID	LATITUDE	LONGITUDE	TMDL	Receiving Water	VA HUC 6	Impaired Yes/No	Est. Acreage
JR-242-OF-0060	36.760120620	-76.549199600	Nansemond River and Shingle Creek	Burnetts Mill Creek	JL48	YES	2.74
JR-242-OF-0061	36.758079640	-76.548965420	Nansemond River and Shingle Creek	Burnetts Mill Creek	JL48	YES	0.62
JR-242-OF-0062	36.755888040	-76.547945720	Nansemond River and Shingle Creek	Burnetts Mill Creek	JL48	YES	1.08
JR-242-OF-0063	36.757518600	-76.548680660	Nansemond River and Shingle Creek	Burnetts Mill Creek	JL48	YES	3.16
JR-242-OF-0065	36.757669200	-76.547545310	Nansemond River and Shingle Creek	Burnetts Mill Creek	JL48	YES	0.33
JR-242-OF-0069	36.755571590	-76.545897560	Nansemond River and Shingle Creek	Burnetts Mill Creek	JL48	YES	5.19
JR-242-OF-0070	36.754274880	-76.545827720	Nansemond River and Shingle Creek	Burnetts Mill Creek	JL48	YES	13.89



MS4 Regulated Service Area

-  MS4 Regulated Service Area
-  2010 Census Urbanized Area



Dry Weather Screenings Permit Year 5

Date Inspected	Inspected By	Location	Observations	Facility ID
07/27/2017 09:25	DURDEN, JAMIE L	Godwin Commerce Park	Can not locate	JR-241-OF-0065
07/11/2017 10:11	DURDEN, JAMIE L	Burbage Lake Village		JR-196-OF-0005
07/11/2017 10:33	DURDEN, JAMIE L	Burbage Lake Village	Inaccessible, fence. Dry at stormdrain.	JR-196-OF-0050
07/11/2017 10:34	WESLEY, SAMUEL	1007 OBICI INDUSTRIAL BLVD		JR-267-IN-0038
07/11/2017 10:39	DURDEN, JAMIE L	Burbage Lake Village		JR-196-OF-0042
07/11/2017 10:41	WESLEY, SAMUEL	1001 OBICI INDUSTRIAL BLVD	Unable to locate covered by cut branches and vegetation, spoke with John Wagner Amadas Coach to properly dispose.	JR-267-IN-0092
07/11/2017 10:47	DURDEN, JAMIE L	Burbage Lake Village	Outfall lifter up at end from roots. Cracking.	JR-196-OF-0041
07/11/2017 10:58	DURDEN, JAMIE L	Burbage Lake Village	Outfall Submerged in water, Dry at stormdrain.	JR-196-OF-0040
07/11/2017 10:52	WESLEY, SAMUEL	1001 Obici Industrial Blvd	Outfall is a dual structure.	JR-267-IN-0042
07/11/2017 11:16	DURDEN, JAMIE L	Burbage Lake Village	Outfall has earth inside. Needs to be cleaned out.	JR-196-OF-0038
07/11/2017 11:28	DURDEN, JAMIE L	Burbage Lake Village		JR-196-OF-0037
07/11/2017 11:32	DURDEN, JAMIE L	Castlewood Village	Inaccessible, Fence	JR-196-OF-0034
07/11/2017 11:35	DURDEN, JAMIE L	Castlewood Village	Could not locate outfall.	JR-196-OF-0032
07/11/2017 11:27	WESLEY, SAMUEL	644 CAROLINA RD	Unable to locate heavy vegetation	JR-267-OF-0001
07/11/2017 12:05	DURDEN, JAMIE L	Scottsfield Village		JR-196-OF-0013
07/11/2017 12:06	DURDEN, JAMIE L	Burbage Lake Village		JR-196-OF-0008
07/11/2017 12:07	DURDEN, JAMIE L	Burbage Lake Village		JR-196-OF-0064
07/11/2017 12:08	DURDEN, JAMIE L	Burbage Lake Village		JR-196-OF-0065
07/11/2017 01:24	DURDEN, JAMIE L	Burbage Lake Village		JR-196-OF-0049
07/11/2017 09:52	DURDEN, JAMIE L	Burbage Lake Village	Inaccessible, Fence. Dry at stormdrain.	JR-196-OF-0048
07/11/2017 10:05	DURDEN, JAMIE L	Burbage Lake Village		JR-196-OF-0043
07/11/2017 11:10	DURDEN, JAMIE L	Burbage Lake Village		JR-196-OF-0039
07/11/2017 11:43	DURDEN, JAMIE L	Castlewood Village		JR-196-OF-0033
07/13/2017 09:55	DURDEN, JAMIE L	Wynnewood	Outfall under water. City has done construction to area, holds water. Stormdrain on left of Vernon Street facing outfall is full with water. Stormdrain on right of Vernon Street facing outfall is full of sediment. Needs Pumpout immediately.	JR-218-OF-0008
07/13/2017 10:07	DURDEN, JAMIE L	Wynnewood	In Stream. Odd man hole with sewer top. Flow was backing up to manholes going across road.	JR-218-OF-0007
07/13/2017 10:57	DURDEN, JAMIE L	Huntersville	Outfall wet, but no flow at the time.	JR-218-OF-0006
07/13/2017 11:01	DURDEN, JAMIE L	Huntersville	Pipe was, but no flow at this time.	JR-218-OF-0005
07/13/2017 11:52	DURDEN, JAMIE L	Orchard Cove	Could not Locate	JR-196-OF-0043
07/13/2017 12:07	DURDEN, JAMIE L	Hampton Roads Crossing		JR-218-OF-0002
07/13/2017 12:16	DURDEN, JAMIE L	Hampton Roads Crossing	Cannot locate	JR-218-OF-0001
07/13/2017 12:18	DURDEN, JAMIE L	Hampton Roads Crossing	Cannot Locate	JR-218-OF-0003
07/13/2017 11:43	DURDEN, JAMIE L	Armistead Forest		JR-196-OF-0074
08/4/2017 11:10	WESLEY, SAMUEL	126 greenfield cres	Unable to locate area overgrown with vegetation.	JR-267-OF-0003
07/13/2017 11:42	DURDEN, JAMIE L	Armistead Forest	Could not access, Fence.	JR-218-OF-0009
10/2/2017 12:00	KEELING, DAVID	Eastover	Flowing, sample collected and sent to HRSD for bacteria analysis	JR-267-OF-0020
12/4/2017 11:21	DURDEN, JAMIE L	nansmond river hs		JR-242-OF-0029
12/4/2017 11:45	DURDEN, JAMIE L	driver pointe		JR-217-OF-0044
12/4/2017 12:19	DURDEN, JAMIE L	driver village green	outfall directs water to concrete flume	JR-216-OF-0052
12/4/2017 12:49	DURDEN, JAMIE L	warrington estates	cannot access, fence.stormdrain dry.	JR-216-OF-0058
12/4/2017 12:42	DURDEN, JAMIE L	warrington estates	debris in outfall. 3/4 full	JR-216-OF-0056
12/4/2017 10:54	DURDEN, JAMIE L	Nansmond Parkway		JR-242-OF-0033
12/4/2017 11:25	DURDEN, JAMIE L	nansmond river hs		JR-242-OF-0031
12/4/2017 12:08	DURDEN, JAMIE L	driver pointe		JR-217-OF-0043
12/4/2017 12:26	DURDEN, JAMIE L	bennetts pasture		JR-216-OF-0051
12/4/2017 12:34	DURDEN, JAMIE L	warrington estates		JR-216-OF-0001
01/22/2018 12:04	DURDEN, JAMIE L	Burnetts Mill		JR-241-OF-0076
01/22/2018 10:22	DURDEN, JAMIE L	Burnetts Mill	Ground water filtering in. No flow in storm drains.	JR-241-OF-0016
01/22/2018 10:51	DURDEN, JAMIE L	Burnetts Mill	Iron Flocc	JR-241-OF-0016
01/22/2018 11:11	DURDEN, JAMIE L	Burnetts Mill		JR-241-OF-0015
01/22/2018 11:15	BAGGETT, HEATHER W	Burnetts Mill		JR-241-OF-0015
01/22/2018 11:35	DURDEN, JAMIE L	Burnetts Mill	Found that the oil was coming from a nearby stormdrain. Someone has a leaking car. Dispersed IDDE door hangers. Small flow was ground water leaking into system. Stormdrain dry once tracked up to JR-241-DI-0812	JR-241-OF-0017
01/22/2018 11:42	DURDEN, JAMIE L	Burnetts Mill	Could not find outfall; Checked junction box (man hole), holding clear water, no flow. (JR-241-MH-0110)	JR-241-OF-0019
01/22/2018 11:54	DURDEN, JAMIE L	Burnetts Mill	Very small trickle, not enough to get a sample.	JR-241-OF-0022
01/22/2018 12:01	DURDEN, JAMIE L	Burnetts Mill	Fence, inaccessible. Stormdrain dry.	JR-241-OF-0023
01/22/2018 12:15	DURDEN, JAMIE L	Burnetts Mill		JR-241-OF-0075
04/12/2018 02:06	DURDEN, JAMIE L	Riverview		JR-267-OF-0022
04/12/2018 02:06	DURDEN, JAMIE L	Riverview		JR-267-OF-0106

04/12/2018 02:25	DURDEN, JAMIE L	Riverview		JR-267-OF-0024
04/19/2018 11:01	DURDEN, JAMIE L	Burnetts Mill	No flow, outfall submerged. Checked stormdrain, full, no flow. Submerged due to high creek levels.	JR-241-OF-0020
04/19/2018 11:31	DURDEN, JAMIE L	Burnetts Mill	Flow, not at stormdrain. Tested flow at outfall.	JR-241-OF-0073
04/19/2018 11:57	DURDEN, JAMIE L	Burnetts Mill	Submerged due to high creek. Checked stormdrain, flow, tested.	JR-241-OF-0050
04/19/2018 12:26	DURDEN, JAMIE L	Burnetts Mill	Submerged, stormdrain dry.	JR-241-OF-0051
04/19/2018 12:35	DURDEN, JAMIE L	Burnetts Mill	Fence blocking outfall. Stormdrain (JR-241-DI-0806) flowing and sampled there.	JR-241-OF-0074
04/19/2018 12:40	DURDEN, JAMIE L	Burnetts Mill	Outfall submerged. Stormdrain wet, not enough to say flow.	JR-241-OF-0052
04/19/2018 12:53	DURDEN, JAMIE L	Burnetts Mill	Submerged at outfall due to high creek. Dry at stormdrain.	JR-241-OF-0053
04/19/2018 01:15	DURDEN, JAMIE L	Burnetts Mill		JR-241-OF-0018
04/19/2018 02:15	DURDEN, JAMIE L	Northgate		JR-241-OF-0114
04/19/2018 02:40	DURDEN, JAMIE L	Northgate	Ditch to driveway pipe, then open to a plastic or wooden brown flume.	JR-241-OF-0118
04/19/2018 03:40	DURDEN, JAMIE L	Murphys Mill Rd	Found a large pipe farther into the woods. Believe this is a pipe that drains the pond into Lake Meade. Pipe was partially submerged, but no flow.	JR-241-OF-0170
04/19/2018 11:11	DURDEN, JAMIE L	Burnetts Mill	Oil in front of stormdrain closest to outfall. (JR-241-DI-0159) Hanger left, followed up on as an illicit discharge. Checked stormdrain (JR-241-DI-0159) full of water, no flow, had oil sheen. Other stormdrain dry. Creek level high.	JR-241-OF-0021
06/6/2018 11:20	DURDEN, JAMIE L	Lloyd Place	Could not locate outfall. Stormdrains and yard drains up the structure had clear water holding in them but no flow.	JR-267-OF-0064
06/6/2018 11:45	DURDEN, JAMIE L	Bob White Landing		JR-217-OF-0001
06/6/2018 01:00	DURDEN, JAMIE L	Washington St @ lipton	This information is for the stormdrains leading up the outfall. Could not locate outfall, believed to be under the bridge. Stormdrains closest to the outfall had water and trash sitting in it. Further up the system, stormdrains were dry. We believe the outfall is submerged.	JR-267-OF-0051
06/6/2018 02:00	DURDEN, JAMIE L	Kingsboro Heights	Stormdrain JR-267-DI-0569 Leads to a junction box. Within that box i could see the outfall from our system. No flow. This box leads to a formal outfall that was not able to be located due to heavy vegetation and steep slopes.	JR-267-OF-0032
06/6/2018 02:50	DURDEN, JAMIE L	Oakdale	JR-268-DI-0463 needs to be cleaned out. Outfall needs to be cleaned of blocks and debris. COuld not see pipe of outfall. No flow was coming from debris or flow line.	JR-268-OF-0039
06/6/2018 03:00	DURDEN, JAMIE L	Wilroy Acres	End of ditch	JR-268-OF-0029
06/7/2018 08:40	DURDEN, JAMIE L	Jefferson Street Neighborhood	Outfall partially in water. checked yard drain, clear, little water, no flow. Checked stormdrain, clear, no flow, wet.	JR-267-OF-0061
06/7/2018 09:10	DURDEN, JAMIE L	Jefferson Street Neighborhood	Outfall partially submerged. Checked Jr-267-DI-0550, holding water. Could not find DI-0551 through DI-0553. Found stormdrain 267-DI-0554, had some water in it. No flow. JR-267-OF-0555 was wet, no flow. Also found another pipe leading into this stormdrain. Found a yarddrain being tied into that structure. DI's to the left and right, 0556 and 0558 were dry.	JR-267-OF-0062
06/7/2018 09:30	DURDEN, JAMIE L	Nansemond Gardens	Not an MS4 outfall. Private	JR-267-OF-0078
06/7/2018 09:35	DURDEN, JAMIE L	Nansemond Gardens	This info is for the stormdrain up system, JR-267-DI-1962, due to a fence blocking the actual outfall. No flow.	JR-267-OF-0079
06/7/2018 10:50	DURDEN, JAMIE L	South Suffolk	This info is for the 3 stormdrains leading into this outfall. Outfall could not be found due to culvert and stream within system. Jr-267-JB-0042, Jr-267-DI-0808, and Jr-267-DI-0807 were all dry.	JR-267-OF-0157
06/7/2018 11:02	DURDEN, JAMIE L	South Suffolk	Checked JR-267-DI-0803, flowing. Checked corner drain, JR-267-DI-0804, coming into 0803 from peanut facility, that drain was stagnate. Checked JR-267-DI-0810 and water was flowing from straight down the road, and from the DI directly across the street. Checked the DI directly across the street, JR-267-DI-0802, where flow was coming from, and the DI was dry. There is a sewer man hole close in the middle of the road close to the structures and the service line is also running down the middle of the road. Checked the next 2 DI's up the street, JR-267-DI-0800 and 0801, the were both holding a very small amount of water with no flow.	JR-267-OF-0156
06/7/2018 11:06	DURDEN, JAMIE L	South Suffolk	Tracked this up the street to JR-267-JB-0040, that man hole was also flowing. The next manhole on private property was full of water. Could not tell if it had flow or not. That particular man hole leads to an inlet we found near JR-267-DI-0655. The inlet was dry. Found some old plans but they do not match the new construction. Currently investigating.	JR-267-OF-0065
06/11/2018 11:15	DURDEN, JAMIE L	Kingsboro Heights		JR-267-OF-0135
06/26/2018 08:20	DURDEN, JAMIE L	Walnut Hill Estates	Small standing water at outfall because water has no where to go. Standing water at Jr-267-DI-0751.	JR-267-OF-0197
06/26/2018 08:37	DURDEN, JAMIE L	Pleasant Hill		JR-267-OF-0181
06/26/2018 08:55	DURDEN, JAMIE L	Wilroy Acres	Extremely small trickle, hardly noticeable. Ditch dry. Did not wait 72 hours of dry weather due to very wet year.	JR-268-OF-0023
06/26/2018 09:05	DURDEN, JAMIE L	Wilroy Acres	Outfall sitting in water because it had no where to drain. Dry up system in ditch.	JR-268-OF-0028
06/26/2018 02:08	DURDEN, JAMIE L	Nansemond Shores		JR-217-OF-0141
06/26/2018 02:10	DURDEN, JAMIE L	Nansemond Shores		JR-216-OF-0025

06/26/2018 02:14	DURDEN, JAMIE L	Nansemond Shores		JR-216-OF-0031
06/26/2018 02:14	DURDEN, JAMIE L	Nansemond Shores		JR-216-OF-0023
06/26/2018 02:35	DURDEN, JAMIE L	Nansemond Shores	Note for easier find: This pipe goes under driveway and discharges in grassy swale in yard.	JR-216-OF-0022
06/26/2018 02:56	DURDEN, JAMIE L	Nansemond Shores		JR-216-OF-0021
06/26/2018 02:59	DURDEN, JAMIE L	Nansemond Shores		JR-216-OF-0030
06/26/2018 03:03	DURDEN, JAMIE L	Nansemond Shores		JR-216-OF-0017
06/26/2018 03:12	DURDEN, JAMIE L	Nansemond Shores		JR-216-OF-0020
06/26/2018 03:20	DURDEN, JAMIE L	Nansemond Shores		JR-216-OF-0026
06/26/2018 03:22	DURDEN, JAMIE L	Nansemond Shores	This info is for the stormdrain/junction box. Could not find the outfall, junction box dry.	JR-217-OF-0160
06/26/2018 03:25	DURDEN, JAMIE L	Holiday Point Estates		JR-217-OF-0149
06/26/2018 03:32	DURDEN, JAMIE L	Holiday Point Estates		JR-217-OF-0150
06/26/2018 03:38	DURDEN, JAMIE L	Holiday Point Estates	Inspected DI's around the outfall. None were flowing. DI JR-217-DI-1470 and 1471 had standing water due to high pond, no flow. JR-217-DI-1469 was dry. Could not access JR-217-PE-0016.	JR-217-OF-0151
06/28/2018 09:00	DURDEN, JAMIE L	Lakeside		JR-267-OF-0050
06/28/2018 09:10	DURDEN, JAMIE L	Lakeside		JR-267-OF-0049
06/28/2018 09:15	DURDEN, JAMIE L	Lakeside		JR-267-OF-0048
06/28/2018 09:18	DURDEN, JAMIE L	Lakeside		JR-267-OF-0014
06/28/2018 09:33	DURDEN, JAMIE L	Lakeside		JR-267-OF-0046
06/28/2018 09:40	DURDEN, JAMIE L	Lakeside	Could not access outfall; covered with fallen trees. Could not lift stormdrain cover, too heavy.	JR-267-OF-0045
06/28/2018 09:50	DURDEN, JAMIE L	Lakeside	Outfall in a small amount of standing water. less than an inch. Checked surrounding DI's until found dry. No flow anywhere	JR-267-OF-0044
06/28/2018 10:10	DURDEN, JAMIE L	Lakeside		JR-267-OF-0042
06/28/2018 10:14	DURDEN, JAMIE L	Lakeside	Could not find outfall. Inspected JR-267-DI-0222	JR-267-OF-0043
06/28/2018 10:20	DURDEN, JAMIE L	Lakeside		JR-267-OF-0041
06/28/2018 10:25	DURDEN, JAMIE L	Lakeside		JR-267-OF-0040
06/28/2018 10:30	DURDEN, JAMIE L	Lakeside		JR-267-OF-0039

Total Dry Weather Screenings	114
-------------------------------------	------------

Illicit Discharge Response Permit Year 5

Actual Start	Actual Finish	Address	Location	Comments	ENFORCEMENT ACTION	RESOLUTION
04/11/2018 12:30	04/12/2018 02:35	101 Industrial Dr.	101 Industrial Dr.	Noticed overflowing private well at 101 Industrial Dr., spoke with Exeter Property Manager Tom Allman, to rectify. He stated building has city sewage, will investigate.	No Action	verified VDH well permit for property
04/18/2018 12:00	04/19/2018 12:00	1104 White Marsh Rd.	1104 White Marsh Rd.	Investigated 1104 White Marsh Rd., water flowing near water meter; no odor, reported to Public Utilities.	Referred to other Department or Agency	contacted Public Utilities
05/23/2018 12:00	05/23/2018 03:00	119 PITCHKETTLE POINT CIR	storm drain at corner of property	Dispatch reports resident at 116 Pitchkettle Point Circle putting pine needles in storm drain at above address. Requests educational information to be given to resident.	Education	drain unclogged by crew
03/6/2018 10:00	03/23/2018 10:50	1200 N MAIN ST	1200 Main St	Contacted management, Retention Ponds Service also contacted Katherine Elks 910-313-6830 ex 103, will dispatch a clean-up crew today to abated spill. Approximately 40 gallons at inlet structure SW end.	Verbal Warning	Retention Pond Services removed spills
04/2/2018 12:00	06/5/2018 12:00	1201 FDR CT	Pipe running in front of property to road.	Anonymous caller said that sewage is leaving someones property through a trench and running down the road to the nearest stormdrain.	Referred to other Department or Agency	Referred to VDH. VDH Gave them a NOV. Also referred to Community Development and they gave them a NOV. Home owner had A-1 Plumbing repair broken sewer line.
03/28/2018 08:45	04/12/2018 02:00	1217 N MAIN ST	1217 Main St (Moe's)	Food spill (rice and beans), grease spill and garbage near dumpster area and behind restaurant.	Verbal Warning	Referred to VDH-Suffolk
07/21/2016 01:57	08/9/2017 07:43	1258 PORTSMOUTH BLVD	Studios 4 Less Motel	7/21/2016 2:25:18 PM Call received from Frankies Auto that motel was pumping sewage into the creek. David Keeling met VDH staff on-site. VDH is writing formal letter requiring septic tank repair.	Referred to other Department or Agency	Referred to VDH who required pumping of holding tanks, and servicing of pumps and alarms
07/11/2017 10:00	07/14/2017 11:36	132 WINTERVIEW DR	132 WINTERVIEW DR	7/11/2017 7:04:25 AM Citizen states front yard floods, has a ditch or ponds near backyard.	Education	Portsmouth will repair BMP behind home
09/18/2017 09:50	09/20/2017 12:00	1625 Moore's Point Rd.	1625 Moore's Point Rd	Resident has mowed grass clippings into street, no answer at door left business card. Operations e-mailed will dispatch a street sweeper.	Verbal Warning	Educated resident; street swept.
09/13/2017 02:00	10/6/2017 12:00	1926 WILROY RD	1926 Wilroy Rd	Discovered sanitary sewer overflow at private pumping station, contacted property owner, repairs required on electrical panel. Pump regenerated sewage pumped to bottom of well, lime distributed over spill area. Contractor (CS Hines) inspected panels	Verbal Warning	electrical panel repaired; received receipts
06/30/2017 01:00	07/14/2017 01:40	2117 KING ST	BMP (JR-242-DB-0003) Woodshire Landing	Citizen complains BMP ditch not cut, vegetation overgrown.	Letter	BMP vegetation cut

Illicit Discharge Response Permit Year 5

Actual Start	Actual Finish	Address	Location	Comments	ENFORCEMENT ACTION	RESOLUTION
06/30/2017 11:00	07/17/2017 03:00	2199 King Street (Woodshire Landing)	Neighbor's complaint vegetation in channel (JR-242-DB-0003) in Woodshire Landing needs to be cut back.	Spoke with Rosemary Dorow property manager, will have ditch cut back and repair all discrepancies.	Verbal Warning	Corrected; vegetation cut back in BMP
08/15/2017 12:00	08/16/2017 02:00	3006 KEMPTON PARK RD	3006 KEMPTON PARK RD	Tracked stormwater drain system from Kempton Park Rd. to Sedgfield St., results inconclusive.	No Action	inconclusive; no evidence of oil sheen
10/11/2017 11:30	10/11/2017 12:25	308 N & W AVE	Chilton's Auto Service, 308 N&W Ave	Mechanic was seen by David Keeling flushing a radiator, and the fluid allowed to spill onto the ground. No fluid had entered into the stormdrain.	Verbal Warning	The shop manager was notified of the discharge and that allowing fluids to enter the stormdrain system is illegal. the spill was mopped up immediately.
02/3/2017 09:39	07/25/2017 12:00	3400 HOLLAND RD	3400 Holland Road Septic System	2/3/2017 1:39:25 PM Neighbor reported to DEQ, a resident pumping sewage into woods behind home (3400 Holland Rd.) By WESLEY, SAMUEL: 2/3/2017 1:46:49 PM Verified sewage being pumped by resident from distribution box to woods	Referred to other Department or Agency	referral to VDH (home unoccupied at time of closing incident)
03/12/2018 12:00	03/26/2018 12:00	400 Greenway Road	400 Greenway Road	Complainant is notifying the city of an abandoned property that has numerous vehicles on the property and other sources of potential ground water contamination	Referred to other Department or Agency	Referred to Community Development
02/1/2018 10:00	02/1/2018 02:00	416 KINGSALE RD	Utility line in front left of property.	Relief valve at end of drinking water line is discharging.	Referred to other Department or Agency	Not an illicit discharge. Relief valve from drinking water line is on a timer and releases pressure every day for approximately 4 hours.
02/1/2018 12:00	02/1/2018 12:00	449 WELLONS ST	Between 449 and 465 Wellons st	Water holding in gutterpan for a period of time. Observed bubbles at water main in walkway at private lot between 449 and 465 Wellons. Contacted Utilities reported leak.	Referred to other Department or Agency	Notified Public Utilities that a water line was broken at the water main.
06/26/2017 08:49	10/20/2017 12:00	4873 NANSEMOND PKWY	4873 NANSEMOND PKWY	Neighbor states ditch to right of house needs to be cleaned.	Verbal Warning	Dry pond and wet pond cut (water level lowered)
03/6/2018 08:30	03/23/2018 12:15	5002 S LINKS CIR	5002 S. Links Cir	Oil spill in front of 5002 S. Links Circle	Verbal Warning	Absorbent added and disposed of
02/1/2018 12:00	02/1/2018 12:00	539 WILSON ST	Corner of Wilson and Wellons St	Noticed gutter pan full of running water. Looks to be coming from a patch in the road near a water utility line.	Referred to other Department or Agency	Water line broken under pavement. Referred to Public Utilites.
09/13/2017 03:00	09/14/2017 03:00	560 KINGS FORK RD	560 Kings Fork Road	Septic tank being pumped to neighbor's field.	Referred to other Department or Agency	Community Development to issue NOV
10/27/2017 10:55	10/27/2017 11:45	8320 Crittenden Road	8320 Crittenden Road	Investigated complaint, no evidence of vegetation kill, photos attached.	Education	After investigation, no evidence present to support complaint
04/17/2018 12:00	04/20/2018 12:00	9232 ECLIPSE DR	9232 Eclipse Dr.	Leaves in asphalt flume in front of 9232 Eclipse Dr.	Education	Home owner picked up all of leaves in paved flume.

Chemical Spill or Leak 17-18

Tuesday, September 25, 2018
8:49 AM

Incident Date	Incident Number	Incident Type	Incident Address	Closed	Description
6/14/2018	1800006702	Chemical spill or leak	5800 HARBOUR VIEW Boulevard	6/14/18	Nothing Found
7/19/2017	1707830	Chemical spill or leak	100 FINNEY Avenue	7/19/17	Wrecker Cleanup
7/8/2017	1707366	Chemical spill or leak	3471 SLEEPY HOLE Road	7/8/17	Owner Cleanup

Gasoline or Other Flammable Liquid 17-18

Monday, September 24, 2018
1:26 PM

Incident Date	Incident Number	Incident Type	Incident Address	Closed	Description
6/25/2018	1800007141	Gasoline or other flammable liquid spill	6253 COLLEGE Drive	6/25/2018	Tow Company
6/20/2018	1800006937	Gasoline or other flammable liquid spill	3004 CARLISLE Court	6/20/2018	Nothing Found
6/5/2018	1800006382	Gasoline or other flammable liquid spill	219 BANK Street	6/5/2018	Nothing Found
5/22/2018	1800005863	Gasoline or other flammable liquid spill	128 HOLLOWAY Drive	5/22/2018	Owner Cleanup
5/6/2018	1800005221	Gasoline or other flammable liquid spill	1300 CAROLINA Road	5/6/2018	Nothing Found
5/1/2018	1800004994	Gasoline or other flammable liquid spill	186 MAJESTIC Drive	5/1/2018	Nothing Found
4/10/2018	1800004101	Gasoline or other flammable liquid spill	2399 HOLLAND Road	4/10/2018	Tow Company
3/29/2018	1800003618	Gasoline or other flammable liquid spill	1928 HOLLAND Road	3/29/2018	Owner Cleanup
3/12/2018	1800002921	Gasoline or other flammable liquid spill	819 West WASHINGTON Street	3/12/2018	Owner Cleanup
2/24/2018	1800002202	Gasoline or other flammable liquid spill	1017 UNIVERSITY Boulevard	2/24/2018	Owner Cleanup
2/21/2018	1800002087	Gasoline or other flammable liquid spill	1508 GRIGGS Street	2/21/2018	Nothing Found
12/19/2017	1700013879	Gasoline or other flammable liquid spill	1849 BRIDGE Road and crittenden rd	12/19/2017	Nothing Found
12/12/2017	1700013622	Gasoline or other flammable liquid spill	4999 CAROLINA Road and 4500 Deer Forest Road	12/12/2017	Hepaco Cleanup
11/15/2017	1700012584	Gasoline or other flammable liquid spill	5631 HOLLAND Road and Buckhorn	11/15/2017	Owner Cleanup
11/14/2017	1700012553	Gasoline or other flammable liquid spill	1050 BELLE ORCHARD Lane	11/14/2017	Owner Cleanup
11/9/2017	1700012332	Gasoline or other flammable liquid spill	6600 WHALEYVILLE Boulevard	11/9/2017	Petro Chem Cleanup
11/7/2017	1700012254	Gasoline or other flammable liquid spill	1216 PORTSMOUTH Boulevard	11/7/2017	W.L. Black Cleanup
10/6/2017	1700010938	Gasoline or other flammable liquid spill	1152 PORTSMOUTH Boulevard	10/6/2017	Nothing Found
9/13/2017	1700010090	Gasoline or other flammable liquid spill	4739 BRIDGE Road	9/13/2017	Nothing Found
8/27/2017	1700009434	Gasoline or other flammable liquid spill	2402 GODWIN Boulevard	8/27/2017	Nothing Found
8/18/2017	1700009074	Gasoline or other flammable liquid spill	1200 North MAIN Street	8/18/2017	Tow Company
7/17/2017	1700007770	Gasoline or other flammable liquid spill	200 WOODROW Avenue	7/17/2017	Owner Cleanup
7/14/2017	1700007616	Gasoline or other flammable liquid spill	4440 BRIDGE Road	7/14/2017	Nothing Found

Suffolk Fire & Rescue Oil or Other Combustible Incidents 17-18

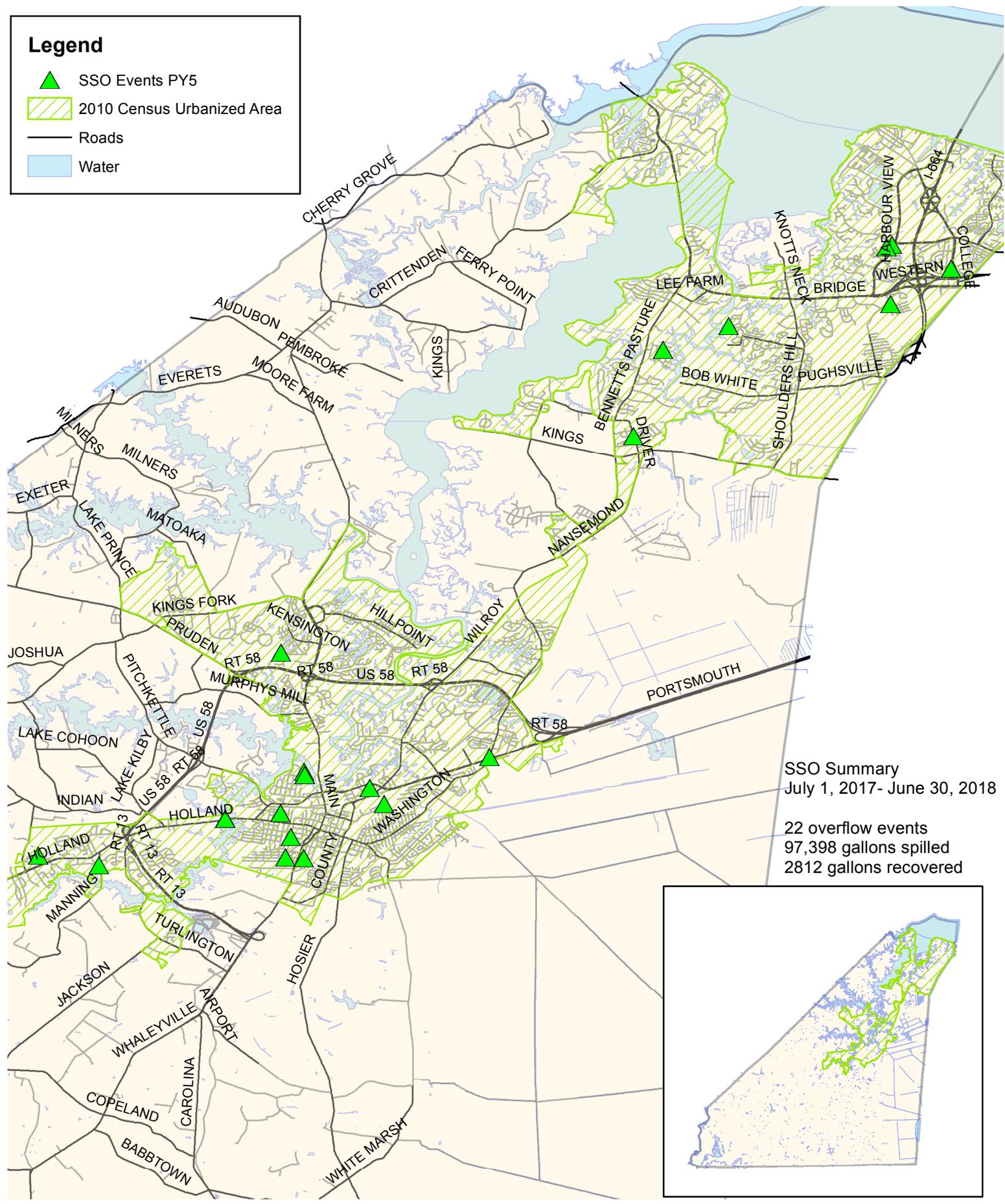
Monday, September 24, 2018
1:05 PM

Incident Date	Incident Number	Incident Type	Incident Address	Closed	Description
6/10/2018	1800006553	Oil or other combustible liquid spill	5699 SHOULDERS HILL Road and BRIDGE ROAD	6/10/2018	Nothing Found
4/16/2018	1800004345	Oil or other combustible liquid spill	2400 LONGSTREET Lane	4/16/2018	Nothing Found
11/25/2017	1700012962	Oil or other combustible liquid spill	3370 HOLLAND Road	11/25/2017	Nothing Found
10/22/2017	1700011636	Oil or other combustible liquid spill	116 GREENFIELD Crescent	10/22/2017	Owner Cleanup
10/5/2017	1700010899	Oil or other combustible liquid spill	1099 RT 58 Road	10/5/2017	Nothing Found
9/16/2017	1700010206	Oil or other combustible liquid spill	2400 PITCHKETTLE Road	9/16/2017	Nothing Found
8/21/2017	1700009188	Oil or other combustible liquid spill	1504 HOLLAND Road	8/21/2017	Owner Cleanup
7/3/2017	1700007191	Oil or other combustible liquid spill	8205 CRITTENDEN Road	7/3/17	Owner Cleanup

Sanitary Sewer Overflows Permit Year 5

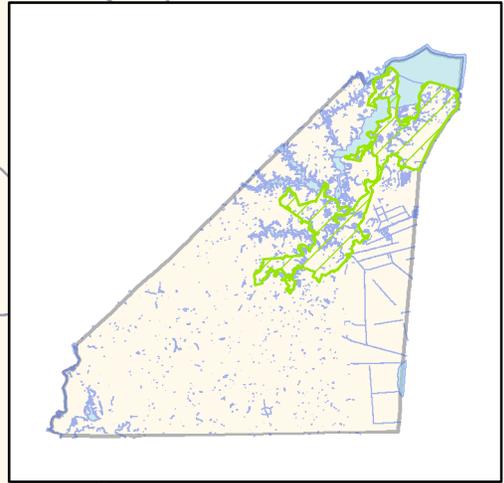
Legend

-  SSO Events PY5
-  2010 Census Urbanized Area
-  Roads
-  Water



SSO Summary
July 1, 2017- June 30, 2018

22 overflow events
97,398 gallons spilled
2812 gallons recovered



Sanitary Sewer Overflows Permit Year 5

DEQ_IR	SSORS_ID	Date of Incident	Date Under Control	Date Reported	Possible Receptor	Site Name	Site Address	Latitude	Longitude	Category	Description	Spill Duration	Corrective Action	Quantity Spilled (gal)	Amount Reached Waterway (gal)
SSORS#20 18-T- 105087	105087	11/4/2017	11/6/2017	11/8/2017	Speights Run	PS 023	133 Manning Road	36.719271	-76.638901	Third Party Action	PS 023 is an existing pump station that is being replaced by a new PS 023 that is currently under construction. During the construction, the contractor was responsible to maintain the operation of the existing PS 023 while the new PS 023 was being constr	56 hour(s) 0 minute(s)	Upon notification of the contractor of the overflow, the contractor repaired the electrical equipment at existing PS 023 and the floats on the back-up pumping system. -----November 8, 2017 09:32 AM-----	90000	90000
SSORS#20 18-T- 105109	105109	12/29/2017	12/29/2017	1/3/2018	Nansemond River	MH 119-069	3321 Forsythia Court	36.855371	-76.479981	Maintenance-Debris	Sewer overflow at sanitary manhole.	0 hour(s) 45 minute(s)	Cleaned sewer main to clear blockage. (Currently in the process of extracting brick from sewer main). -----January 3, 2018 10:03 AM-----	1500	1500
SSORS#20 18-T- 105119	105119	1/20/2018	1/20/2018	1/22/2018	Nansemond River	MH 116-055	5871 Harbour View Blvd	36.875785	-76.438751	Maintenance-Grease	Sewer overflow at manhole	3 hour(s) 45 minute(s)	Cleaned sewer main line segment and cleared grease and debris. -----January 22, 2018 11:30 AM-----	1000	800
SSORS#20 18-T- 105071	105071	9/25/2017	9/25/2017	9/25/2017	Lake Meade	Bershire Meadows	100 Berkshire Meadows	36.772992	-76.592951	Maintenance-Other	Staff was disconnecting the hose from the emergency pump. Staff did not ensure that the discharge valve was shut completely before removing the hose.	0 hour(s) 5 minute(s)	The emergency pump hose has been reconnected to the discharge line. Staff has been briefed on the proper procedure of removing an emergency pump hose. -----September 25, 2017 03:23 PM-----	500	500
SSORS#20 18-T- 105154	105154	3/12/2018	3/13/2018	3/13/2018	Nansemond River	Riverview #2	806A Riverview Drive	36.741989	-76.58694	Power Outages (Storm Event)	PS 003 lost electrical power at the station. This failure occurred during a snow storm. Staff experienced difficulties mobilizing and staging emergency equipment for the station due to the weather. PS 003 overflowed a result of these events.	8 hour(s) 30 minute(s)	Staff setup an emergency pump. They also utilized a pump and haul truck company to help maintain the station. PS 003 is now back in normal operation. -----March 13, 2018 12:19 PM-----March 15, 2018 08:14 AM-----	500	500
SSORS#20 18-T- 105034	105034	7/26/2017	7/26/2017	7/26/2017	Shingle Creek	FM 030-02V	2805 East Washington Street	36.746514	-76.54042	Maintenance-Other	Sewer force main damaged by piercing tool used by Public Utilities maintenance crew.	2 hour(s) 10 minute(s)	Repaired sewer force main and removed liquids and debris from jobsite. -----July 26, 2017 03:53 PM-----	1000	200
SSORS#20 18-T- 105150	105150	3/3/2018	3/3/2018	3/5/2018	Nansemond River	FM 114-01N	4245 Driver Lane	36.827492	-76.504085	Maintenance-Other	Leak on sewer service at force main.	6 hour(s) 30 minute(s)	Repaired sewer service and cleaned up liquid and debris with vac-truck. -----March 5, 2018 02:29 PM-----	2000	200
SSORS#20 18-T- 105028	105028	7/15/2017	7/15/2017	7/15/2017	Shingle Creek	North Jericho:	1321 Bethlehem Street	36.734684	-76.566963	Capacity-Weather Related	PS 076 pumps failed to maintain the station levels. This was due to capacity issues during a rain event.	2 hour(s) 5 minute(s)	Staff used an emergency pump to maintain the station. PS 076 is now back in normal operation. -----July 15, 2017 08:39 AM-----	125	125

Sanitary Sewer Overflows Permit Year 5

DEQ_IR	SSORS_ID	Date of Incident	Date Under Control	Date Reported	Possible Receptor	Site Name	Site Address	Latitude	Longitude	Category	Description	Spill Duration	Corrective Action	Quantity Spilled (gal)	Amount Reached Waterway (gal)
SSORS#20 18-T- 105027	105027	7/12/2017	7/12/2017	7/12/2017	Speights Run	Reid Crossing:	1902 Kyle Court	36.721622	-76.654123	Maintenance- Other	Staff was assisting Ch2mhill with the curve testing of PS 126. Staff was attempting to fill the wet well up from the station emergency force main connection. Staff connected to the force main connection with a hose and ran it into the wet well. When staf	0 hour(s) 4 minute(s)	Staff closed the force main valve. They then filled the wet well with water from a fire hydrant. -----July 12, 2017 03:24 PM-----	100	100
SSORS#20 18-T- 105112	105112	12/31/2017	12/31/2017	1/10/2018	Nansemond River	CC 004-195-009	213 N Broad Street	36.732408	-76.59302	Maintenance- Debris	Sewer overflow at customer cleanout.	1 hour(s) 30 minute(s)	Flushed sewer cleanout and removed debris. -----January 10, 2018 08:52 AM-----	100	100
SSORS#20 18-T- 105115	105115	1/15/2018	1/15/2018	1/16/2018	Nansemond River	MH 020-084	6000 College Drive #168	36.869912	-76.423824	Maintenance- Debris	Sewer Overflow at Manhole.	1 hour(s) 30 minute(s)	Cleaned sewer main and cleared blockage. -----January 16, 2018 02:38 PM-----	100	100
SSORS#20 18-T- 105122	105122	1/22/2018	1/22/2018	1/23/2018	Nansemond River	Bennetts Harbour	5124 Warrington Drive	36.849329	-76.496592	Maintenance- Other	Staff was assisting Ch2mhill with performing a curve test at PS 080. They were filling the wet well from the emergency force main connection with a hose. There was a strong surge on the force main which caused the hose to come out of the wet well. This i	0 hour(s) 3 minute(s)	Staff shut down the emergency force main. PS 080 is now back in normal operation. -----January 23, 2018 09:06 AM-----	100	100
SSORS#20 18-T- 105135	105135	2/3/2018	2/3/2018	2/5/2018	Nansemond River	MH 116-077	5871 Harbour View Blvd	36.875239	-76.440131	Maintenance- Grease	Sewer Overflow at manhole.	3 hour(s) 30 minute(s)	Cleaned sewer main line and cleared blockage. -----February 5, 2018 02:55 PM-----	100	100
SSORS#20 18-T- 105118	105118	1/19/2018	1/19/2018	1/22/2018	Lake Kilby	MH 048-422	213 Wellons Street	36.726424	-76.590491	Maintenance- Debris	Sewer overflow at manhole.	2 hour(s) 0 minute(s)	Cleaned sewer main and cleared blockage. -----January 22, 2018 11:20 AM-----	50	50
SSORS#20 18-T- 105125	105125	1/22/2018	1/22/2018	1/23/2018	Nansemond River	MH 003-038	811 East Riverview Drive	36.742719	-76.587152	Maintenance- Debris	Sewer overflow at manhole.	0 hour(s) 30 minute(s)	Cleaned sewer main line and cleared blockage. -----January 23, 2018 03:18 PM-----	50	50
SSORS#20 18-T- 105177	105177	5/2/2018	5/2/2018	5/2/2018	Lake Meade	Holland Heights	1090 Holland Rd.	36.730985	-76.606956	Maintenance- Other	PS 136 emergency pump connection valve is not shutting off to the complete shut off point. The cap that fits over the emergency pump connection fitting was leaking.	0 hour(s) 20 minute(s)	The emergency pump connection valve is scheduled to be repaired by a contractor. The contractor replaced the cap that fits over the connection fitting. This repair resolved the leaking issue. -----May 2, 2018 02:19 PM-----	20	20
SSORS#20 18-T- 105203	105203	6/10/2018	6/10/2018	6/11/2018	Lake Meade	Holland Heights	1090 Holland Road	36.730985	-76.606956	Maintenance- Other	PS 136 was being maintained by an emergency pump. The air release valve on the emergency pump was not closed completely. This failure resulted in a spill at PS 136.	0 hour(s) 12 minute(s)	Staff completely shut the air release valve on the emergency pump. -----June 11, 2018 10:19 AM-----	20	20

Sanitary Sewer Overflows Permit Year 5

DEQ_IR	SSORS_ID	Date of Incident	Date Under Control	Date Reported	Possible Receptor	Site Name	Site Address	Latitude	Longitude	Category	Description	Spill Duration	Corrective Action	Quantity Spilled (gal)	Amount Reached Waterway (gal)
SSORS#20 18-T- 105085	105085	11/1/2017	11/1/2017	11/3/2017	Lake Kilby	CC 004-03N-002	479 Wellons Street	36.721192	-76.591752	Maintenance-Debris	Sewer overflow at customer cleanout.	0 hour(s) 20 minute(s)	Flushed sewer cleanout and recovered debris. -----November 3, 2017 09:39 AM-----	20	10
SSORS#20 18-T- 105039	105039	8/2/2017	8/2/2017	8/2/2017	Nansemond River	CC 004-055-003	416 1/2 York Street	36.720939	-76.587207	Maintenance-Debris	Sewer overflow at customer cleanout.	0 hour(s) 15 minute(s)	Flushed sewer cleanout and recovered debris. -----August 2, 2017 03:51 PM-----	10	8
SSORS#20 18-T- 105070	105070	9/25/2017	9/25/2017	9/25/2017	Knotts Creek	Belleville Meadows	4359 Crowdy Blvd.	36.860965	-76.439136	Maintenance-Other	Staff had an emergency pump in operation at PS 016 due to a fault at the station. The cam lock connection on the discharge hose had a leak on it. This fault resulted in a spill at this station.	0 hour(s) 10 minute(s)	PS 016 fault has been corrected and the emergency pump has been removed. PS 016 is now back in normal operation. -----September 25, 2017 01:07 PM--- --	3	3
SSORS#20 18-T- 105045	105045	8/12/2017	8/12/2017	8/14/2017	Nansemond River	PS 003	806A East Riverview Drive	36.741989	-76.58694	Maintenance-Other	PS 003 pumps tripped out in the pump control panel. This failure caused an overflow at the Pumping Station.	0 hour(s) 7 minute(s)	The Maintenance crew reset the pumps and the station is back in normal operation. -----August 14, 2017 09:32 AM-----	100	0
SSORS#20 18-T- 105205	105205	6/11/2018	6/11/2018	6/12/2018	Nansemond River	MH 005-018	429 Nansemond Ave	36.738694	-76.570575	Maintenance-Debris	Sanitary sewer overflow at manhole.	6 hour(s) 0 minute(s)	Cleaned sewer main line and cleared blockage. -----June 12, 2018 12:58 PM-----	-1	-1

Appendix F

Supporting Documentation for Minimum Control Measure 4: Construction Site Stormwater Runoff Control

ESC and SWM Enforcement Actions Summary Permit Year 5

Yearly Inspection Tracking

Month/Year: July 1, 2017 to June 30, 2018

SINGLE FAMILY

HUC	Total Yearly Inspections	Yearly Completed	Total Enforcements	Stop Work Orders
AS02	159	11	1	
AS03				
AS04	11			
AS05	28	1		
AS06				
CL01	74	7		
CL02	40	3		
CL03	13	3		
CL05	6	1		
CU66				
CU69	31	2		
CU70	17	2		
JL42				
JL43				
JL44	623	37	33	2
JL45	510	24	2	
JL46	33			
JL47				
JL48	2096	124	106	8
JL49	2905	81	311	3
JL50	30	1		
JL55	58	16	3	1
JL59				
Total	6634	313	456	14

PROJECTS - SP, EP, ESC

HUC	Total Yearly Inspections	MS Violations	Notice to Comply	Stop Work Orders	SWPPP Inspections
AS02	2				1
AS03					
AS04					
AS05					
AS06					
CL01	23				
CL02					
CL03					
CL05					
CU66					
CU69					
CU70					
JL42	12	2			
JL43					
JL44	101	57	1	1	16
JL45	51	10			8
JL46	2				
JL47					
JL48	177	55	6	3	34
JL49	605	56		2	59
JL50	296	47		1	39
JL55					
JL59					
Total	1269	227	7	7	157

Total Inspections	7903	Total Enforcement Actions	711
-------------------	------	---------------------------	-----

ESC Complaint Tracking Log - Permit Year 5 (2017/18)

#	Date of Complaint	Inspector	Location	Date Complete	Complaint Origination	Brief Discription of Complaint and Resolution
1	8/8/2017	LM	3708 Knotts Creek Ln	8/10/2017	Phone	Resident altered ditch and installed un-approved pipe. An NOV was mailed to resident.
2	8/11/2017	LM	4401 Miles Ave	8/12/2017	Email	Builder failed to install 1st step measures and blocked ditch with sand. A stop work order was issued.
3	8/29/2017	CRB	213 Woodrow Dr	9/1/2017	Phone	Complaint called in for flooding in yard. Engineering is reviewing site drainage. Determined to be Contractor grading issue.
4	9/18/2017	LM	Governors Point	9/18/2017	email	Resident emailed our department about surface runoff crossing their front yard from the neighbors property. It was determined that the contractors for both properties did not follow the issued grading plans for the SF homes, thus creating the drainage problem. Informed the homeowners that the issue was private issue to be taken up with the site contractor.
5	9/29/2017	LM	6913 Respass Beach Road	9/25/2017	phone	Mrs. Wright called about a neighbor cutting trees and depositing them on her property. The area was then grubbed above the 2500sqft threshold. We issued an inspection report to Art Brandriff to immediately vegetate the denuded property. He complied. We also indicated that he speak to Mrs Wright about the timber deposited on her property, as this is considered a private issue.
6	11/2/2017	LM	Charlotte Ave.	11/3/2017	Phone	Neighbor to a demo home called and was worried about drainage. We monitored the situation, but no problems as of yet.
7	11/3/2017	LM	3391 Village Sq Place	11/6/2017	Phone	Mr. Holden called with concerns about his neighbors lot draining to his. Discussed with him that the grading is the responsibility of the home builder, and is considered a private issue between homeowners and their builders
8	2/26/2018	CB	Old Sommerton Road	3/8/2018	Office	Utility work without LDP or ROW permit
9	2/26/2018	LM	Oyster Bay Lane	2/27/2018	Phone	SF construction without perimeter silt fence
10	3/16/2018	DL	Sentara Belleharbour	3/20/2018	email	Anonymous complaint about possible undersized BMP or no runoff controls in place. Reviewed site and responded back to DEQ that this is not our finding and controls in use are adequate for stormwater runoff treatment.
11	6/11/2018	CB	149 Patriots Walke Dr	6/11/2018	phone	Standing water in back yard. Working with builder to remedy.

ESC and SWM Certified Personnel Permit Year 5

Employee Name	Certification Type	Cert. No	Expires
Adams, Dean	Erosion and Sediment Control Inspector	#3963	5/31/2020
Adkins, John M	Erosion and Sediment Control Inspector, Stormwater Management Inspector	#ESIN0497, #SWIN1219	11/3/2019, 1/31/2021
Allison, Earl	Dual Inspector	#DIN0471	8/25/2019
Baggett, Heather	Stormwater Management Inspector	#SWIN0441	12/8/2018
Bradshaw, Charles	Dual Inspector	#DIN0176	12/20/2021
Cereske, Damion	Erosion and Sediment Control Inspector	#ESIN0984	7/23/2021
Cereske, Farris	Dual Inspector	#DIN0656	12/21/2018
Durden, Jamie	Stormwater Management Inspector	#SWIN0949	2/18/2020
Earley, Sherry P.E.	Dual Program Administrator	#DPA0120	6/18/2021
Evans, Carlton	Erosion and Sediment Control Inspector	#3647	5/31/2019
Gambito, Edwin P.E.	Stormwater Management Plan Reviewer	#SWPR0137	7/8/2021
Gill, Beth	Erosion and Sediment Control Plan Reviewer	#8044	11/30/2019
Heide, Edward	Dual Plan Reviewer	#DPR0106	8/20/2021
Hunt, Ryan	Dual Plan Reviewer	#DPR0103	3/26/2021
Jarriel, David	Dual Inspector	#DIN0124	11/30/2021
Jenkins, Bakari	Dual Inspector	#DIN0967	7/11/2021
Jordan, Antonio	Erosion and Sediment Control Combined Administrator	#6191	5/31/2019
Keeling, David	Dual Inspector	#DIN0241	10/16/2018
Liverman, Dyan	Dual Inspector	#DIN0186	8/12/2021
Madray, Louis	Dual Inspector	#DIN0184	7/27/2021
Maxwell, Christian	Dual Inspector	#DIN0944	3/28/2019
Mushett, George Alan	Dual Plan Reviewer	#DPR0120	4/5/2019
Orvis, Michael	Erosion and Sediment Control Inspector	#5822	11/30/2021
Oxton, Chad	Erosion and Sediment Control Inspector	#5825	11/30/2018
Ross, Beth	Dual Plan Reviewer	#DPR0113	7/9/2021
Rountree, Adam	Dual Plan Reviewer	#DPR0107	9/10/2021
Rountree, Erin	Dual Plan Reviewer	#DPR0108	7/8/2021
Rountree, Joseph	Dual Inspector	#DIN0489	9/17/2019
Skinner, Stanley I	Erosion and Sediment Control Combined Administrator	#437	11/30/2019
Strickland, Rose	Dual Inspector	#DIN0563	11/28/2019

ESC and SWM Certified Personnel Permit Year 5

Employee Name	Certification Type	Cert. No	Expires
Thywenston, Swain	Erosion and Sediment Control Inspector	#ESIN0451	8/16/2019
Trimyer, Jason	Dual Inspector	#DIN0179	7/9/2021
Weaver, James	Erosion and Sediment Control Inspector	#5875	11/30/2018
Weil, Charles P.E.	Erosion and Sediment Control Plan Reviewer, Stormwater Management Plan Reviewer	#ESPR0121, #SWPR0244	6/03/2019, 09/16/2019
Wells, Dale	Erosion and Sediment Control Inspector	#5876	11/30/2021
Wesley, Samuel	Dual Inspector	#DIN0234	11/21/2018
Wiggins, Michael	Dual Inspector	#DIN0751	2/18/2020
Williams, Victor	Erosion and Sediment Control Inspector	#6046	5/31/2022
Velasquez, Mark P.E.	Stormwater Management Plan Reviewer (provisional)		

Appendix G

Supporting Documentation for Minimum Control Measure 5: Post-Construction Stormwater Management

Maintenance Agreements Recorded in Permit Year 5

Planning File #	Tax Map/Parcel	Parcel ID No (PIN)	Project Name	Project Location	Reviewing Engineer	Agreement Date
SP-2015-03	20*22	303742000	Blue Bell Creameries LP	5045 Nansemond Pkwy	Adam Rountree	5/10/2018
SPL-2017-010	6*3A*2C*2	306001050	Harbour View Business Park	5840 Harbour View Blvd.	Ryan Hunt	6/14/2018
SPL-2017-003	12*56	302667000	Hilltop Terrace Apartments	5616 Shoulders Hill Rd.	Ryan Hunt	9/14/2017
SP-2017-00011	12*12	302864000	Retreat at Bennett's Creek	5700 Lee Farm Lane	Ryan Hunt	1/24/2018
FS-2017-00003	25*29M	253269600	Millennium Service Company, LLC	3075 Godwin Blvd.	Adam Rountree	2/7/2018

Includes facilities inside and outside of MS4 Service Area

BMP Inspections Permit Year 5

Date Inspected	Inspected By	Feature UID
07/5/2017 08:39	WESLEY, SAMUEL	JR-267-DB-0005
07/5/2017 08:22	WESLEY, SAMUEL	JR-267-DB-0004
07/5/2017 08:40	WESLEY, SAMUEL	JR-267-BR-0001
07/5/2017 09:23	WESLEY, SAMUEL	JR-241-DB-0013
07/5/2017 10:06	WESLEY, SAMUEL	JR-241-WP-0027
07/5/2017 11:19	WESLEY, SAMUEL	JR-217-WP-0031
07/6/2017 10:01	WESLEY, SAMUEL	JR-215-RB-0001
07/6/2017 11:02	WESLEY, SAMUEL	JR-218-WP-0002
07/6/2017 01:06	WESLEY, SAMUEL	JR-267-WP-0033
07/7/2017 09:24	WESLEY, SAMUEL	JR-241-MB-0002
07/7/2017 09:01	WESLEY, SAMUEL	JR-241-MB-0001
07/7/2017 11:00	WESLEY, SAMUEL	JR-241-MB-0003
07/7/2017 10:12	WESLEY, SAMUEL	JR-194-DB-0001
07/7/2017 11:00	WESLEY, SAMUEL	JR-241-RB-0004
07/7/2017 11:15	WESLEY, SAMUEL	JR-267-MB-0001
07/10/2017 01:31	WESLEY, SAMUEL	JR-217-WP-0078
07/10/2017 10:12	WESLEY, SAMUEL	JR-217-RB-0009
07/10/2017 01:42	WESLEY, SAMUEL	JR-217-WP-0080
07/11/2017 09:07	WESLEY, SAMUEL	JR-266-WP-0023
07/11/2017 09:34	WESLEY, SAMUEL	JR-266-WP-0022
07/12/2017 08:19	WESLEY, SAMUEL	JR-267-MB-0058
07/12/2017 08:46	WESLEY, SAMUEL	JR-267-MB-0059
07/13/2017 09:28	WESLEY, SAMUEL	JR-267-MB-0006
07/13/2017 09:48	WESLEY, SAMUEL	JR-267-MB-0005
07/13/2017 10:04	WESLEY, SAMUEL	JR-267-MB-0003
07/13/2017 10:25	WESLEY, SAMUEL	JR-267-MB-0002
07/13/2017 10:49	WESLEY, SAMUEL	JR-267-MB-0008
07/17/2017 08:20	WESLEY, SAMUEL	JR-241-WP-0023
07/17/2017 09:05	WESLEY, SAMUEL	JR-241-WP-0025
07/17/2017 10:30	WESLEY, SAMUEL	JR-241-NT-0001
07/17/2017 10:55	WESLEY, SAMUEL	JR-241-WP-0026
07/17/2017 01:00	WESLEY, SAMUEL	JR-241-DB-0003
07/24/2017 10:45	WESLEY, SAMUEL	JR-266-WP-0012
07/24/2017 11:15	WESLEY, SAMUEL	JR-266-WP-0013
07/5/2017 12:35	WESLEY, SAMUEL	JR-267-WP-0027
07/24/2017 11:15	WESLEY, SAMUEL	JR-267-WP-0026
07/24/2017 09:40	WESLEY, SAMUEL	JR-266-WP-0011
07/24/2017 12:00	WESLEY, SAMUEL	JR-267-WP-0030
07/26/2017 10:00	WESLEY, SAMUEL	JR-267-WP-0029
07/26/2017 10:52	WESLEY, SAMUEL	JR-267-WP-0028
08/1/2017 01:35	WESLEY, SAMUEL	JR-217-RB-0006
08/2/2017 10:35	WESLEY, SAMUEL	JR-266-WP-0014
08/2/2017 10:35	WESLEY, SAMUEL	JR-266-IP-0001

BMP Inspections Permit Year 5

Date Inspected	Inspected By	Feature UID
08/3/2017 09:10	WESLEY, SAMUEL	JR-267-MB-0030
08/3/2017 09:35	WESLEY, SAMUEL	JR-267-MB-0031
08/3/2017 10:40	WESLEY, SAMUEL	JR-267-WP-0015
08/3/2017 11:00	WESLEY, SAMUEL	JR-267-MB-0051
08/4/2017 09:25	WESLEY, SAMUEL	CH-317-DB-0001
08/4/2017 09:50	WESLEY, SAMUEL	CH-317-MB-0001
08/4/2017 10:05	WESLEY, SAMUEL	CH-317-MB-0002
08/7/2017 11:30	WESLEY, SAMUEL	JR-267-MB-0064
08/7/2017 11:35	WESLEY, SAMUEL	JR-267-MB-0063
08/9/2017 11:00	WESLEY, SAMUEL	JR-267-GW-0004
08/9/2017 11:40	WESLEY, SAMUEL	JR-267-WP-0031
08/21/2017 09:30	WESLEY, SAMUEL	JR-267-WP-0025
08/21/2017 12:43	WESLEY, SAMUEL	JR-242-RB-0006
08/22/2017 10:25	WESLEY, SAMUEL	JR-242-WP-0017
08/22/2017 12:35	WESLEY, SAMUEL	JR-215-DB-0001
08/22/2017 01:00	WESLEY, SAMUEL	JR-215-IP-0001
08/24/2017 09:45	WESLEY, SAMUEL	JR-242-WP-0034
08/24/2017 10:50	WESLEY, SAMUEL	JR-217-WP-0052
08/24/2017 12:35	WESLEY, SAMUEL	JR-242-BR-0003
08/28/2017 08:40	WESLEY, SAMUEL	CH-265-DB-0001
08/28/2017 09:51	WESLEY, SAMUEL	JR-241-RB-0007
08/28/2017 11:00	WESLEY, SAMUEL	JR-241-RB-0006
09/5/2017 09:25	KEELING, DAVID	JR-241-WP-0022
09/5/2017 10:10	WESLEY, SAMUEL	JR-217-WP-0045
09/6/2017 08:30	WESLEY, SAMUEL	JR-242-WP-0003
09/6/2017 09:20	WESLEY, SAMUEL	JR-242-WP-0004
09/6/2017 10:05	WESLEY, SAMUEL	JR-242-WP-0025
09/6/2017 11:15	WESLEY, SAMUEL	JR-242-WP-0029
09/7/2017 09:00	WESLEY, SAMUEL	JR-240-WP-0001
09/7/2017 10:10	WESLEY, SAMUEL	JR-266-RB-0002
09/8/2017 09:00	WESLEY, SAMUEL	JR-242-BR-0002
09/8/2017 10:10	WESLEY, SAMUEL	JR-266-GC-0001
09/8/2017 12:05	WESLEY, SAMUEL	JR-266-MB-0013
09/11/2017 09:00	WESLEY, SAMUEL	JR-267-BR-0007
09/11/2017 10:15	KEELING, DAVID	JR-241-MB-0019
09/11/2017 11:05	WESLEY, SAMUEL	JR-241-DB-0010
09/12/2017 10:15	WESLEY, SAMUEL	JR-268-BR-0001
09/13/2017 09:00	WESLEY, SAMUEL	JR-268-PP-0001
09/13/2017 11:15	WESLEY, SAMUEL	JR-266-WP-0005
09/13/2017 10:30	WESLEY, SAMUEL	JR-266-WP-0002
09/14/2017 09:35	WESLEY, SAMUEL	JR-241-WP-0014
09/15/2017 09:00	WESLEY, SAMUEL	JR-241-WP-0006
09/15/2017 10:00	WESLEY, SAMUEL	JR-241-WP-0005

BMP Inspections Permit Year 5

Date Inspected	Inspected By	Feature UID
09/15/2017 10:45	WESLEY, SAMUEL	JR-195-NT-0001
09/19/2017 12:55	WESLEY, SAMUEL	JR-196-WP-0017
09/19/2017 01:30	WESLEY, SAMUEL	JR-196-WP-0020
09/19/2017 01:20	WESLEY, SAMUEL	JR-196-WP-0019
09/11/2017 11:00	WESLEY, SAMUEL	JR-241-MB-0018
10/2/2017 08:35	WESLEY, SAMUEL	JR-241-WP-0001
10/2/2017 09:05	WESLEY, SAMUEL	JR-241-WP-0002
10/2/2017 10:05	WESLEY, SAMUEL	JR-242-DB-0003
10/3/2017 08:40	WESLEY, SAMUEL	JR-242-WP-0016
10/3/2017 09:40	WESLEY, SAMUEL	JR-242-WP-0009
10/3/2017 10:20	WESLEY, SAMUEL	JR-242-WP-0010
10/4/2017 08:40	WESLEY, SAMUEL	JR-241-WP-0028
10/5/2017 08:50	WESLEY, SAMUEL	JR-242-WP-0005
10/12/2017 12:00	WESLEY, SAMUEL	JR-267-WP-0010
10/13/2017 09:15	WESLEY, SAMUEL	JR-242-RB-0003
10/13/2017 10:25	WESLEY, SAMUEL	JR-242-RB-0001
10/24/2017 11:50	WESLEY, SAMUEL	JR-242-WP-0019
10/24/2017 08:45	WESLEY, SAMUEL	JR-242-WP-0011
10/24/2017 09:30	WESLEY, SAMUEL	JR-242-WP-0012
10/24/2017 10:20	WESLEY, SAMUEL	JR-242-WP-0013
10/24/2017 11:15	WESLEY, SAMUEL	JR-242-WP-0014
10/25/2017 08:45	WESLEY, SAMUEL	JR-241-SF-0001
10/25/2017 09:30	WESLEY, SAMUEL	JR-241-WP-0003
10/25/2017 10:35	WESLEY, SAMUEL	JR-241-WP-0004
10/11/2017 11:35	WESLEY, SAMUEL	JR-241-WP-0012
11/1/2017 12:10	WESLEY, SAMUEL	JR-217-MB-0008
11/2/2017 08:50	WESLEY, SAMUEL	JR-242-RB-0004
11/2/2017 09:15	WESLEY, SAMUEL	JR-242-RB-0007
11/2/2017 09:45	WESLEY, SAMUEL	JR-242-WP-0026
11/2/2017 03:00	WESLEY, SAMUEL	JR-242-WP-0028
11/2/2017 11:15	WESLEY, SAMUEL	JR-268-RB-0004
11/3/2017 08:50	WESLEY, SAMUEL	JR-242-BR-0004
11/3/2017 10:05	WESLEY, SAMUEL	JR-217-WP-0073
11/7/2017 10:00	WESLEY, SAMUEL	JR-267-MB-0056
11/7/2017 09:35	WESLEY, SAMUEL	JR-267-DB-0010
11/7/2017 09:35	WESLEY, SAMUEL	JR-267-MB-0057
11/8/2017 08:40	WESLEY, SAMUEL	JR-267-MB-0032
11/8/2017 09:15	WESLEY, SAMUEL	JR-267-MB-0033
11/8/2017 09:45	WESLEY, SAMUEL	JR-267-MB-0034
11/9/2017 10:00	WESLEY, SAMUEL	JR-241-WP-0019
11/14/2017 09:05	WESLEY, SAMUEL	JR-268-WP-0001
11/14/2017 09:35	WESLEY, SAMUEL	JR-268-WP-0002
11/14/2017 10:45	WESLEY, SAMUEL	JR-242-RB-0005

BMP Inspections Permit Year 5

Date Inspected	Inspected By	Feature UID
11/14/2017 11:15	WESLEY, SAMUEL	JR-242-WP-0015
11/14/2017 12:15	WESLEY, SAMUEL	JR-242-WP-0020
11/15/2017 10:25	WESLEY, SAMUEL	JR-217-WP-0063
12/1/2017 09:10	WESLEY, SAMUEL	JR-217-WP-0061
12/1/2017 10:10	WESLEY, SAMUEL	JR-217-DB-0003
12/4/2017 09:10	WESLEY, SAMUEL	JR-266-DB-0002
12/4/2017 09:30	WESLEY, SAMUEL	JR-266-MB-0011
12/4/2017 10:05	WESLEY, SAMUEL	JR-267-MB-0052
12/5/2017 10:10	WESLEY, SAMUEL	JR-218-RB-0001
12/7/2017 09:05	WESLEY, SAMUEL	JR-217-WP-0022
12/7/2017 02:00	WESLEY, SAMUEL	JR-217-WP-0023
12/8/2017 09:25	WESLEY, SAMUEL	JR-217-RB-0008
12/11/2017 09:40	WESLEY, SAMUEL	JR-241-RB-0005
12/11/2017 09:15	WESLEY, SAMUEL	JR-241-DB-0001
12/28/2017 11:00	WESLEY, SAMUEL	JR-267-MB-0011
12/28/2017 11:35	WESLEY, SAMUEL	JR-267-MB-0010
12/28/2017 10:15	WESLEY, SAMUEL	JR-267-MB-0009
12/28/2017 11:25	WESLEY, SAMUEL	JR-267-MB-0012
01/3/2018 09:35	WESLEY, SAMUEL	JR-195-MB-0008
01/3/2018 09:45	WESLEY, SAMUEL	JR-195-MB-0009
01/3/2018 09:55	WESLEY, SAMUEL	JR-195-MB-0007
01/3/2018 10:10	WESLEY, SAMUEL	JR-195-MB-0006
01/3/2018 10:20	WESLEY, SAMUEL	JR-195-MB-0005
01/3/2018 10:35	WESLEY, SAMUEL	JR-195-MB-0004
01/3/2018 09:00	WESLEY, SAMUEL	JR-195-MB-0012
01/3/2018 10:55	WESLEY, SAMUEL	JR-195-MB-0013
01/3/2018 11:10	WESLEY, SAMUEL	JR-195-MB-0011
01/8/2018 10:45	WESLEY, SAMUEL	JR-195-IP-0001
01/8/2018 11:00	WESLEY, SAMUEL	JR-195-IP-0002
01/8/2018 11:15	WESLEY, SAMUEL	JR-195-RB-0001
01/8/2018 11:45	WESLEY, SAMUEL	JR-195-MB-0001
01/8/2018 12:00	WESLEY, SAMUEL	JR-195-MB-0017
01/8/2018 12:20	WESLEY, SAMUEL	JR-195-MB-0016
01/8/2018 12:49	WESLEY, SAMUEL	JR-195-MB-0014
01/8/2018 07:00	WESLEY, SAMUEL	JR-195-MB-0015
01/9/2018 09:00	WESLEY, SAMUEL	JR-216-WP-0001
01/9/2018 10:10	WESLEY, SAMUEL	JR-216-WP-0002
01/9/2018 10:30	WESLEY, SAMUEL	JR-216-WP-0006
01/9/2018 10:55	WESLEY, SAMUEL	JR-216-WP-0007
01/10/2018 11:00	WESLEY, SAMUEL	JR-196-WP-0018
01/12/2018 08:50	WESLEY, SAMUEL	JR-216-WP-0003
01/17/2018 08:35	WESLEY, SAMUEL	JR-267-WP-0002
01/17/2018 08:55	WESLEY, SAMUEL	JR-267-WP-0003

BMP Inspections Permit Year 5

Date Inspected	Inspected By	Feature UID
01/17/2018 09:30	WESLEY, SAMUEL	JR-267-WP-0004
01/17/2018 10:00	WESLEY, SAMUEL	JR-267-WP-0005
01/17/2018 10:35	WESLEY, SAMUEL	JR-267-WP-0006
01/19/2018 10:05	WESLEY, SAMUEL	JR-217-IP-0001
01/24/2018 11:25	WESLEY, SAMUEL	JR-218-BR-0003
01/24/2018 11:00	WESLEY, SAMUEL	JR-218-BR-0004
01/24/2018 11:40	WESLEY, SAMUEL	JR-218-BR-0002
01/24/2018 12:20	WESLEY, SAMUEL	JR-218-BR-0001
01/25/2018 10:35	WESLEY, SAMUEL	JR-216-DB-0001
01/26/2018 09:15	WESLEY, SAMUEL	JR-241-WP-0010
02/1/2018 11:00	WESLEY, SAMUEL	JR-217-WP-0035
02/1/2018 01:40	WESLEY, SAMUEL	JR-216-WP-0004
02/2/2018 10:50	WESLEY, SAMUEL	JR-217-WP-0033
02/2/2018 09:35	WESLEY, SAMUEL	JR-217-DB-0002
02/5/2018 09:00	WESLEY, SAMUEL	JR-266-DB-0001
02/5/2018 09:35	WESLEY, SAMUEL	JR-266-MB-0006
02/5/2018 09:55	WESLEY, SAMUEL	JR-266-MB-0007
02/5/2018 10:25	WESLEY, SAMUEL	JR-266-MB-0008
02/7/2018 10:00	WESLEY, SAMUEL	JR-195-WP-0002
02/7/2018 11:05	WESLEY, SAMUEL	JR-217-RB-0002
02/7/2018 11:35	WESLEY, SAMUEL	JR-217-WP-0042
02/8/2018 10:00	WESLEY, SAMUEL	JR-241-DB-0007
02/8/2018 11:05	WESLEY, SAMUEL	JR-217-WP-0029
02/8/2018 11:35	WESLEY, SAMUEL	JR-217-WP-0030
02/9/2018 09:10	WESLEY, SAMUEL	JR-217-RB-0003
02/9/2018 10:05	WESLEY, SAMUEL	JR-217-RB-0004
02/9/2018 11:05	WESLEY, SAMUEL	JR-217-RB-0005
02/13/2018 04:25	WESLEY, SAMUEL	JR-241-MB-0013
02/13/2018 09:05	WESLEY, SAMUEL	JR-241-MB-0012
02/13/2018 09:55	WESLEY, SAMUEL	JR-241-MB-0014
02/13/2018 10:25	WESLEY, SAMUEL	JR-241-MB-0015
02/13/2018 10:55	WESLEY, SAMUEL	JR-241-MB-0016
02/13/2018 11:20	WESLEY, SAMUEL	JR-241-MB-0017
02/13/2018 11:45	WESLEY, SAMUEL	JR-241-DB-0008
02/13/2018 11:50	WESLEY, SAMUEL	JR-241-DB-0002
02/20/2018 01:20	WESLEY, SAMUEL	JR-241-RB-0018
02/21/2018 09:25	WESLEY, SAMUEL	JR-217-WP-0077
02/22/2018 10:20	WESLEY, SAMUEL	JR-196-CW-0001
03/6/2018 09:45	WESLEY, SAMUEL	JR-267-DB-0002
03/6/2018 11:00	WESLEY, SAMUEL	JR-266-EB-0001
03/6/2018 11:15	WESLEY, SAMUEL	JR-266-MB-0009
03/6/2018 11:30	WESLEY, SAMUEL	JR-266-MB-0010
03/6/2018 11:45	WESLEY, SAMUEL	JR-266-MB-0001

BMP Inspections Permit Year 5

Date Inspected	Inspected By	Feature UID
03/6/2018 11:55	WESLEY, SAMUEL	JR-266-MB-0002
03/7/2018 10:10	WESLEY, SAMUEL	JR-217-WP-0021
03/7/2018 10:35	WESLEY, SAMUEL	JR-217-WP-0011
03/7/2018 11:10	WESLEY, SAMUEL	JR-217-WP-0010
03/8/2018 08:45	WESLEY, SAMUEL	JR-217-WP-0027
03/8/2018 10:00	WESLEY, SAMUEL	JR-217-MB-0007
03/8/2018 10:30	WESLEY, SAMUEL	JR-217-RB-0007
03/12/2018 09:25	WESLEY, SAMUEL	JR-218-DB-0001
03/12/2018 10:25	WESLEY, SAMUEL	JR-196-RB-0001
03/14/2018 11:10	WESLEY, SAMUEL	JR-217-WP-0014
03/14/2018 08:50	WESLEY, SAMUEL	JR-217-WP-0004
03/14/2018 09:35	WESLEY, SAMUEL	JR-217-WP-0012
03/14/2018 10:20	WESLEY, SAMUEL	JR-217-WP-0013
03/15/2018 09:15	WESLEY, SAMUEL	JR-217-MB-0003
03/15/2018 09:45	WESLEY, SAMUEL	JR-217-MB-0004
03/15/2018 10:15	WESLEY, SAMUEL	JR-217-MB-0005
03/15/2018 10:40	WESLEY, SAMUEL	JR-217-MB-0006
03/16/2018 09:50	WESLEY, SAMUEL	JR-217-WP-0019
03/16/2018 10:25	WESLEY, SAMUEL	JR-217-WP-0020
03/16/2018 11:05	WESLEY, SAMUEL	JR-217-WP-0046
03/19/2018 09:45	WESLEY, SAMUEL	JR-217-WP-0015
03/19/2018 10:47	WESLEY, SAMUEL	JR-217-WP-0016
03/19/2018 11:20	WESLEY, SAMUEL	JR-217-WP-0017
03/19/2018 11:50	WESLEY, SAMUEL	JR-217-WP-0018
03/19/2018 12:25	WESLEY, SAMUEL	JR-217-WP-0040
03/19/2018 12:55	WESLEY, SAMUEL	JR-217-WP-0041
02/21/2018 09:37	WESLEY, SAMUEL	JR-217-WP-0071
03/29/2018 11:40	WESLEY, SAMUEL	JR-266-RB-0005
03/29/2018 12:25	WESLEY, SAMUEL	JR-266-RB-0006
03/29/2018 01:05	WESLEY, SAMUEL	JR-266-RB-0007
04/2/2018 11:00	WESLEY, SAMUEL	JR-267-WP-0011
04/2/2018 12:35	WESLEY, SAMUEL	JR-267-WP-0018
04/3/2018 09:20	WESLEY, SAMUEL	JR-217-WP-0057
04/4/2018 09:55	WESLEY, SAMUEL	JR-241-RB-0008
04/4/2018 07:00	WESLEY, SAMUEL	JR-241-WP-0011
04/4/2018 12:20	WESLEY, SAMUEL	JR-217-WP-0004
04/4/2018 08:00	WESLEY, SAMUEL	JR-217-WP-0006
04/4/2018 01:00	WESLEY, SAMUEL	JR-217-WP-0008
04/5/2018 10:00	WESLEY, SAMUEL	JR-217-WP-0005
04/5/2018 10:50	WESLEY, SAMUEL	JR-217-WP-0007
04/5/2018 11:25	WESLEY, SAMUEL	JR-217-WP-0009
04/9/2018 09:10	WESLEY, SAMUEL	JR-241-BR-0004
04/9/2018 09:10	WESLEY, SAMUEL	JR-241-RB-0009

BMP Inspections Permit Year 5

Date Inspected	Inspected By	Feature UID
04/10/2018 09:05	WESLEY, SAMUEL	JR-242-WP-0006
04/10/2018 09:35	WESLEY, SAMUEL	JR-242-WP-0007
04/10/2018 09:55	WESLEY, SAMUEL	JR-242-WP-0008
04/10/2018 10:35	WESLEY, SAMUEL	JR-217-WP-0034
04/11/2018 09:50	WESLEY, SAMUEL	JR-241-WP-0007
04/13/2018 09:36	WESLEY, SAMUEL	JR-241-RB-0003
04/26/2018 08:40	WESLEY, SAMUEL	JR-266-RB-0004
05/1/2018 09:05	WESLEY, SAMUEL	JR-217-WP-0003
05/1/2018 10:15	WESLEY, SAMUEL	JR-196-WP-0015
05/1/2018 11:15	WESLEY, SAMUEL	JR-195-MB-0002
05/1/2018 11:37	WESLEY, SAMUEL	JR-195-MB-0003
05/2/2018 09:36	WESLEY, SAMUEL	JR-217-WP-0001
05/2/2018 09:40	WESLEY, SAMUEL	JR-217-WP-0002
05/2/2018 10:35	WESLEY, SAMUEL	JR-217-FB-0001
05/7/2018 10:37	WESLEY, SAMUEL	JR-267-EB-0001
05/7/2018 11:15	WESLEY, SAMUEL	JR-268-WP-0004
05/8/2018 08:36	MAGGETT, HEATHER V	JR-196-WP-0009
05/8/2018 10:37	WESLEY, SAMUEL	JR-195-WP-0008
05/8/2018 11:15	WESLEY, SAMUEL	JR-195-WP-0009
05/8/2018 12:40	WESLEY, SAMUEL	JR-195-WP-0010
05/9/2018 10:00	WESLEY, SAMUEL	JR-195-WP-0011
05/9/2018 10:37	WESLEY, SAMUEL	JR-195-WP-0012
05/9/2018 11:35	WESLEY, SAMUEL	JR-195-WP-0001
05/14/2018 08:50	WESLEY, SAMUEL	JR-195-WP-0005
05/15/2018 09:35	WESLEY, SAMUEL	JR-195-SF-0001
05/15/2018 10:05	WESLEY, SAMUEL	JR-195-SF-0002
05/15/2018 10:45	WESLEY, SAMUEL	JR-195-WP-0004
05/16/2018 12:00	WESLEY, SAMUEL	JR-196-WP-0005
05/16/2018 01:00	WESLEY, SAMUEL	JR-196-WP-0008
05/16/2018 08:55	WESLEY, SAMUEL	JR-196-MB-0004
05/16/2018 09:35	WESLEY, SAMUEL	JR-196-WP-0002
05/17/2018 11:06	WESLEY, SAMUEL	JR-196-WP-0003
05/16/2018 11:36	WESLEY, SAMUEL	JR-196-WP-0004
05/16/2018 12:30	WESLEY, SAMUEL	JR-196-WP-0007
05/17/2018 10:00	WESLEY, SAMUEL	JR-196-WP-0006
05/21/2018 09:25	WESLEY, SAMUEL	JR-195-WP-0006
06/1/2018 08:35	WESLEY, SAMUEL	JR-196-MB-0001
06/1/2018 09:05	WESLEY, SAMUEL	JR-196-MB-0002
06/1/2018 05:00	WESLEY, SAMUEL	JR-196-MB-0003
06/1/2018 09:45	WESLEY, SAMUEL	JR-196-WP-0021
06/1/2018 10:00	WESLEY, SAMUEL	JR-196-WP-0001
06/4/2018 09:35	WESLEY, SAMUEL	JR-217-DB-0004
06/4/2018 10:50	WESLEY, SAMUEL	JR-195-IP-0003

BMP Inspections Permit Year 5

Date Inspected	Inspected By	Feature UID
06/5/2018 08:40	WESLEY, SAMUEL	JR-266-WP-0001
06/5/2018 09:55	WESLEY, SAMUEL	JR-241-WP-0017
06/5/2018 11:30	WESLEY, SAMUEL	JR-196-WP-0016
06/6/2018 10:20	WESLEY, SAMUEL	JR-267-IP-0001
06/6/2018 10:55	WESLEY, SAMUEL	JR-267-MB-0062
06/8/2018 09:15	WESLEY, SAMUEL	JR-217-WP-0043
06/8/2018 10:20	WESLEY, SAMUEL	JR-217-WP-0044
06/11/2018 09:10	WESLEY, SAMUEL	JR-217-WP-0051
06/11/2018 10:25	WESLEY, SAMUEL	JR-217-WP-0024
06/11/2018 11:20	WESLEY, SAMUEL	JR-217-WP-0025
06/12/2018 09:55	WESLEY, SAMUEL	JR-242-DB-0002
06/13/2018 09:10	WESLEY, SAMUEL	JR-267-WP-0016
06/14/2018 11:00	WESLEY, SAMUEL	JR-195-WP-0013
06/14/2018 09:15	WESLEY, SAMUEL	JR-266-WP-0004
06/15/2018 09:45	WESLEY, SAMUEL	JR-195-WP-0014

Stormwater Facilities Accepted During Permit Year 5

BMP ID	Date Installed	BMP Name	Measurement Name	Measurement Unit	BMP Extent	Impervious Acres Treated	Locality	VAHU6	Latitude	Longitude	Ownership Type	Maintenance Agreement	Action Plan
JR-195-MB-0018	1/10/2018	Filtering Practices	Area Treated	Acre	0.23	0.18	Suffolk	JL49	36.87575	-76.44	Private	Yes	Chesapeake Bay Action Plan
JR-195-MB-0019	1/10/2018	Filtering Practices	Area Treated	Acre	0.53	0.38	Suffolk	JL49	36.87553	-76.44076	Private	Yes	Chesapeake Bay Action Plan
JR-195-MB-0020	1/10/2018	Filtering Practices	Area Treated	Acre	0.24	0.18	Suffolk	JL49	36.87554	-76.4407	Private	Yes	Chesapeake Bay Action Plan
JR-195-MB-0021	1/10/2018	Filtering Practices	Area Treated	Acre	0.15	0.11	Suffolk	JL49	36.87557	-76.44073	Private	Yes	Chesapeake Bay Action Plan
JR-195-MB-0022	1/10/2018	Filtering Practices	Area Treated	Acre	0.13	0.13	Suffolk	JL49	36.87578	-76.44101	Private	Yes	Chesapeake Bay Action Plan
JR-195-MB-0023	1/10/2018	Filtering Practices	Area Treated	Acre	0.13	0.13	Suffolk	JL49	36.8757	-76.44056	Private	Yes	Chesapeake Bay Action Plan
JR-195-MB-0024	1/10/2018	Filtering Practices	Area Treated	Acre	0.22	0.16	Suffolk	JL49	36.8751	-76.44059	Private	Yes	Chesapeake Bay Action Plan
JR-195-MB-0025	1/10/2018	Filtering Practices	Area Treated	Acre	0.2	0.2	Suffolk	JL49	36.87524	-76.44079	Private	Yes	Chesapeake Bay Action Plan
JR-195-MB-0026	1/10/2018	Filtering Practices	Area Treated	Acre	0.31	0.31	Suffolk	JL49	36.87565	-76.44152	Private	Yes	Chesapeake Bay Action Plan
JR-195-MB-0027	1/10/2018	Filtering Practices	Area Treated	Acre	0.21	0.21	Suffolk	JL49	36.87601	-76.44124	Private	Yes	Chesapeake Bay Action Plan
JR-195-MB-0028	1/10/2018	Filtering Practices	Area Treated	Acre	0.18	0.09	Suffolk	JL49	36.87621	-76.44127	Private	Yes	Chesapeake Bay Action Plan
JR-195-MB-0029	1/10/2018	Filtering Practices	Area Treated	Acre	0.24	0.21	Suffolk	JL49	36.87619	-76.44086	Private	Yes	Chesapeake Bay Action Plan
JR-195-MB-0030	1/10/2018	Filtering Practices	Area Treated	Acre	0.24	0.24	Suffolk	JL49	36.87601	-76.44067	Private	Yes	Chesapeake Bay Action Plan
JR-196-MB-0007	5/30/2018	Wet Pond	Area Treated	Acre	29.02	20.3	Suffolk	JL50	36.89138	-76.43236	Private	Yes	Chesapeake Bay Action Plan
JR-241-PP-0001	5/31/2018	Pervious Pavers	Permeable Pavement w/ Sand, Veg. - A/B soils, underdrain	Acre	0.48	0.48	Suffolk	JL45	36.77472	-76.58363	Private	Yes	Chesapeake Bay Action Plan
JR-241-BR-0006	5/31/2018	Bioretention	Area Treated, underdrain, A/B soils	Acre	0.77	0.48	Suffolk	JL45	36.77479	-76.58354	Private	Yes	Chesapeake Bay Action Plan
JR-241-DB-0016	5/31/2018	Detention Pond	Area Treated	Acre	0.77	0.48	Suffolk	JL45	36.77489	-76.58379	Private	Yes	Chesapeake Bay Action Plan
JR-241-GW-0002	5/31/2018	Dry Swale	Contributing Area	Acre	0.15	0.06	Suffolk	JL45	36.77457	-76.58442	Private	Yes	Chesapeake Bay Action Plan
JR-241-GW-0003	5/31/2018	Dry Swale	Contributing Area	Acre	0.49	0.31	Suffolk	JL45	36.77503	-76.58384	Private	Yes	Chesapeake Bay Action Plan
JR-241-GW-0004	5/31/2018	Dry Swale	Contributing Area	Acre	0.15	0.08	Suffolk	JL45	36.77497	-76.58358	Private	Yes	Chesapeake Bay Action Plan
JR-241-DB-0014	9/25/2017	Detention Pond	Area Treated	Acre	3.16	3	Suffolk	JL45	36.77346	-76.5844	Private	Yes	Chesapeake Bay Action Plan

All facilities are located in the Chesapeake Bay Watershed

Appendix H

Supporting Documentation for Minimum Control Measure 6: Pollution Prevention/Good Housekeeping for Municipal Operations

Nutrient Management Plans

City Facilities	Acres	Latitude	Longitude
Sleepy Hole Golf Course*	125.31	36.839	-76.516
total	125.31		Complete PY3

School Facilities			
Lakeland High School	68.05		Complete PY5
Football Field	2	36.723	-76.663
Field Hockey Field	2	36.722	-76.661
Baseball Field	2	36.72	-76.663
Softball Field	1.5	36.72	-76.662
Practice Field	1.5	36.72	-76.663
Nansemond River High School	49		Complete PY2
Football Field	2	36.804	-76.518
Field Hockey Field	2	36.802	-76.515
Baseball Field	2.5	36.802	-76.52
Softball Field	1.5	36.803	-76.519
Practice Field	2.5	36.803	76.516
Kings Fork High School	80.16		Complete PY5
Football Field	2	36.783	-76.594
Field Hockey Field	1.5	36.781	-76.595
Baseball Field	3	36.783	-76.595
Softball Field	1.5	36.782	-76.596
Practice Field	1.5	36.782	-76.592

		PY 2 (15%)	PY 3 (40%)	PY 4 (75%)	PY5 (100%)
Total acreage where NMPs are required	322.52	48.378	129.008	241.89	322.52
Total acreage where NMPs have been implemented		49	174.31	174.31	322.52

Pollution Prevention and Good Housekeeping Training Permit Year 5
Trainers: Heather Baggett, Jamie Durden

	Public Works Refuse	Public Works Operations	Public Utilities Maintenance	Fleet Management/ School Bus Facility	Public School Custodians	Parks and Recreation Grounds Maintenance	City Facility Custodians (and contract)
Date of Training	5/30/2018	6/4/2018	6/5/2018, 6/6/2018	6/12/2018	7/12/2018	5/30/2018	6/25/2018
Number of Attendees	34	59	41	22	19	32	43
Training Objectives							
MS4 Definition	X	X	X	X	X	X	X
MS4 Permit Overview	X	X	X	X	X	X	X
Illicit Discharge Detection and Elimination	X	X	X	X	X	X	X
Construction Site Erosion and Sediment Control		X	X				
Soil Erosion Defined		X	X		X	X	X
How to protect erodible materials		X	X		X	X	X
Disposing of waste properly	X	X	X	X	X	X	X
Applying fertilizer and pesticide properly		X			X	X	X
Vehicle Maintenance	X	X	X	X			
Vehicle Washing	X	X	X	X	X	X	X
Leaking Equipment	X	X	X	X	X	X	X
Drum Storage and Fuel Islands	X	X	X	X	X	X	X
Proper Salt Storage		X					
SWPPP	X			X			

Municipal Facility Inspection Summary Permit Year 5

Facility	Address	Date of Inspection	In 2010 Urbanized Area?
Fleet Maintenance	120 Forest Glen Dr	4/12/2018	Yes
Suffolk Public Schools Bus Lot	119 Forest Glen Dr	4/13/2018	Yes
Refuse Collection Equipment Storage Yard	248 Chestnut St	4/17/2018	Yes
Road Maintenance Yard Zone A	5881 Whaleyville Blvd	4/26/2018	No
Road Maintenance Yard Zone B	6750 Brentwood Rd	4/6/2018	No
Road Maintenance Yard Zone C	401 Kings Highway	4/27/2018	No
Road Maintenance Yard Zone C	3901 Sleepy Hole Rd	4/27/2018	No
Road Maintenance Yard Zone D	866 Carolina Rd	4/11/2018	No
Road Maintenance Yard Zone D	800 Carolina Rd	4/11/2018	No
Public Utilities Operations Center	272 Benton Rd	4/17/2018	No
School Maintenance Yard	1507 Freney Ave	3/29/2018	Yes

Certified Pesticide Applicator Personnel Permit Year 5

Name	Certification Type	Expiration Date
Abadam, Charles	Category 8 Public Health Pest Control	6/30/2020
Akaratovic, Karen	Category 8 Public Health Pest Control	6/30/2020
Allison, Earl	Category 60 Registered Technician	6/30/2019
Arrowood, Shane	Category 60 Registered Technician	6/30/2019
Ashburn, Gregory	Category 60 Registered Technician	6/30/2019
Bond, Kerry	Category 60 Registered Technician	6/30/2019
Bullock, TaShawn	Category 60 Registered Technician	6/30/2019
Cogswell, Scott	Category 60 Registered Technician	6/30/2019
Deans, Frank	Category 60 Registered Technician	6/30/2019
Dunning, Amanda	Category 8 Public Health Pest Control	6/30/2020
Durden, Jamie	Category 8 Public Health Pest Control	6/30/2020
Ellis, Daniel	Category 60 Registered Technician	6/30/2019
Everitt, Mark	Category 60 Registered Technician	6/30/2019
Harrel, Clarence Jr.	Category 60 Registered Technician	6/30/2020
Herring, Mary Ann	Category 8 Public Health Pest Control	6/30/2019
Jackson, Morris	Category 60 Registered Technician	6/30/2019
James, Terry	Category 60 Registered Technician	6/30/2019
Johnson, Kenyetta	Category 60 Registered Technician	6/30/2019
Jones, DiVanta	Category 60 Registered Technician	6/30/2019
Jornov, David	Category 60 Registered Technician	6/30/2019
Kirk, Daniel	Category 60 Registered Technician	6/30/2019
Kiser, Jay	Category 8 Public Health Pest Control	6/30/2020
Lawrence, Darryl	Category 60 Registered Technician	6/30/2019
Lee, Kevin	Category 60 Registered Technician	6/30/2019
Mays, Armar	Category 60 Registered Technician	6/30/2019
Norman, LaMarr	Category 8 Public Health Pest Control	6/30/2020

Certified Pesticide Applicator Personnel Permit Year 5

Porter, Ronald	Category 60 Registered Technician	6/30/2019
Raiford, Brian	Category 60 Registered Technician	6/30/2019
Reid, Broderick	Category 60 Registered Technician	6/30/2019
Riley, Sean	Category 60 Registered Technician	6/30/2019
Rountree, Derek	Category 60 Registered Technician	6/30/2019
Saunders, Curtis	Category 60 Registered Technician	6/30/2019
Stith, Dennis	Category 8 Public Health Pest Control	6/30/2020
Tanner, Rashad	Category 60 Registered Technician	6/30/2019
Taylor, Brian	Category 60 Registered Technician	6/30/2019
Ward, Carlos Jr.	Category 60 Registered Technician	6/30/2019
Weeks, Blake	Category 60 Registered Technician	6/30/2019
White, Richard	Category 60 Registered Technician	6/30/2019
Wymer, Dustin N.	Category 60 Registered Technician	6/30/2019

Appendix I

**Surface Water Monitoring Program July 1, 2017- June
30, 2018**

City of Suffolk Surface Water Monitoring Program

In response to the numerous waterway impairments and TMDL studies being conducted within the municipality and decreased funding for analytical testing by the Virginia Department of Environmental Quality, the City of Suffolk initiated a Surface Water Monitoring Program in 2011. The program is primarily focused on the Nansemond River, but incorporates other water bodies as the need arises. The program is designed to augment the sampling being performed by the Virginia Department of Environmental Quality and Virginia Department of Health Division of Shellfish Sanitation.

Samples were routinely collected by Public Works staff at predetermined sampling locations on the Nansemond River. In 2017 a partnership was started between the City, Hampton Roads Sanitation District (HRSD), The Virginia Department of Health Division of Shellfish Sanitation (VDH DSS) and the Nansemond River Preservation Alliance (NRPA) with the goal of identifying and fixing human fecal bacteria sources in the upper Nansemond River watershed.

The City's surface water monitoring program is certified by DEQ as a Level III program, allowing data that is collected to be used to list or delist waters on the 303(d) list. Sample analyses are performed by the Hampton Roads Sanitation District. The City is in the initial phases of setting up an account with the Chesapeake Monitoring Cooperative where sampling data can be uploaded to a database that is available for use by the state and public.

The ultimate objectives of the surface water sampling program are to assist with source identification, illicit discharge detection, and to identify areas of water bodies that may not need to be listed as impaired.

Nansemond River Sampling

Public Works staff continued monthly sampling along the Nansemond River and its tributaries during PY5. 16 sites are sampled in total, with 12 sites along the main stem of the Nansemond River from the mouth at the confluence with the James River, to the base of the Lake Meade Dam. Sampling is also conducted at one sampling site in each of the Nansemond River tributaries of Knotts Creek, Bennetts Creek, Western Branch, and Shingle Creek.

In addition to field conditions, parameters measured include E. coli, enterococcus, total phosphorus, ammonia, nitrate + nitrite nitrogen, and total suspended solids.

Bacteria Source Tracking Project Expansion

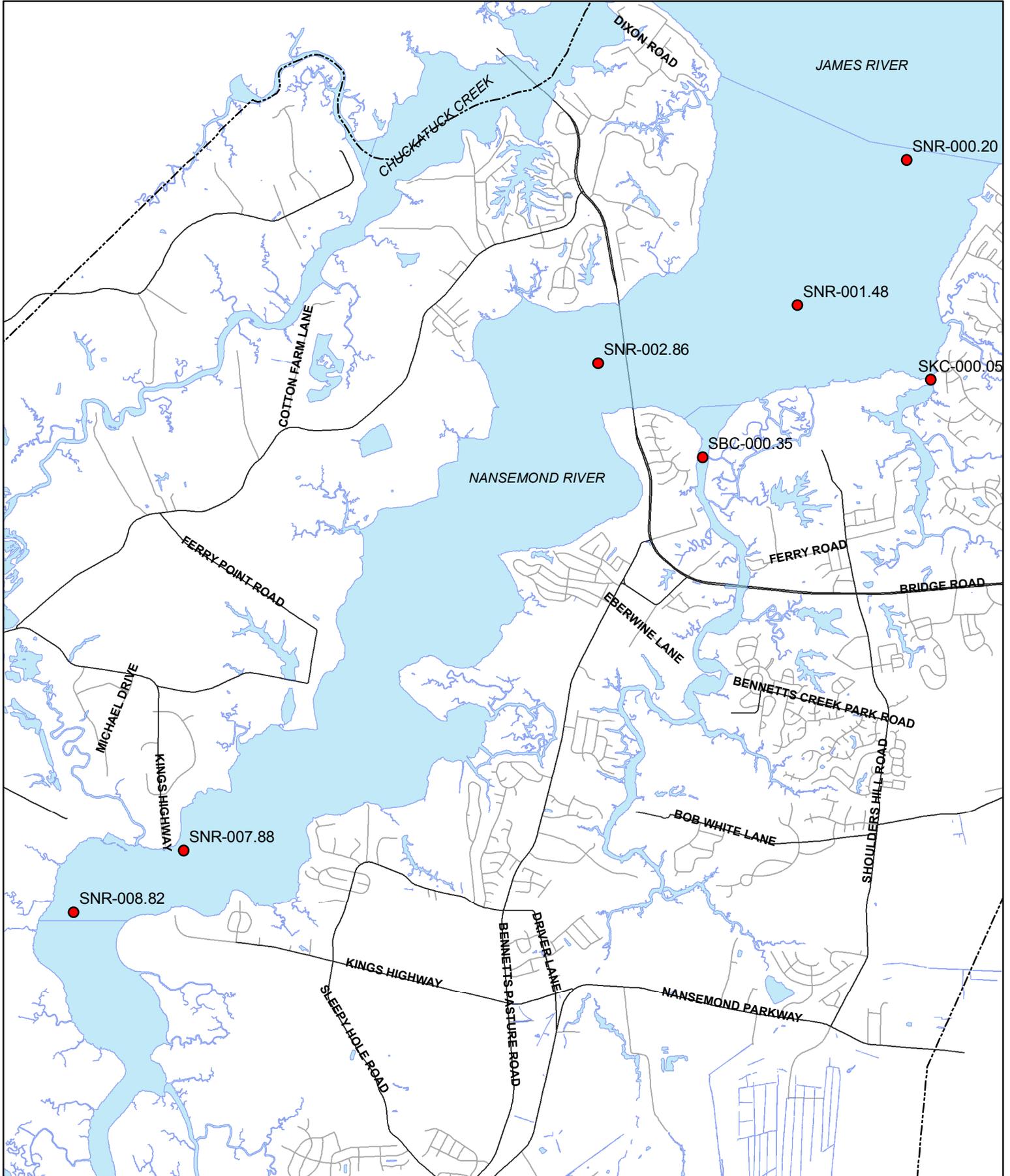
The bacteria source tracking study that was done in Shingle Creek during permit year three was used as a model and extended to the upper Nansemond River watershed which includes Shingle Creek. The project was conducted in partnership with Hampton Roads Sanitation District (HRSD) and the Virginia Department of Health Division of Shellfish Sanitation (VDH DSS) using up-to-date molecular methods and a more targeted approach.

Approximately 315 outfalls were selected for investigation and three dry weather screenings were conducted at each outfall. Flowing outfalls were sampled and analyzed for enterococcus bacteria and the human specific HF-183 genetic marker. Sites with positive results for HF-183 were identified for further investigation and necessary repairs have been made or are ongoing.



Lower Nansemond River

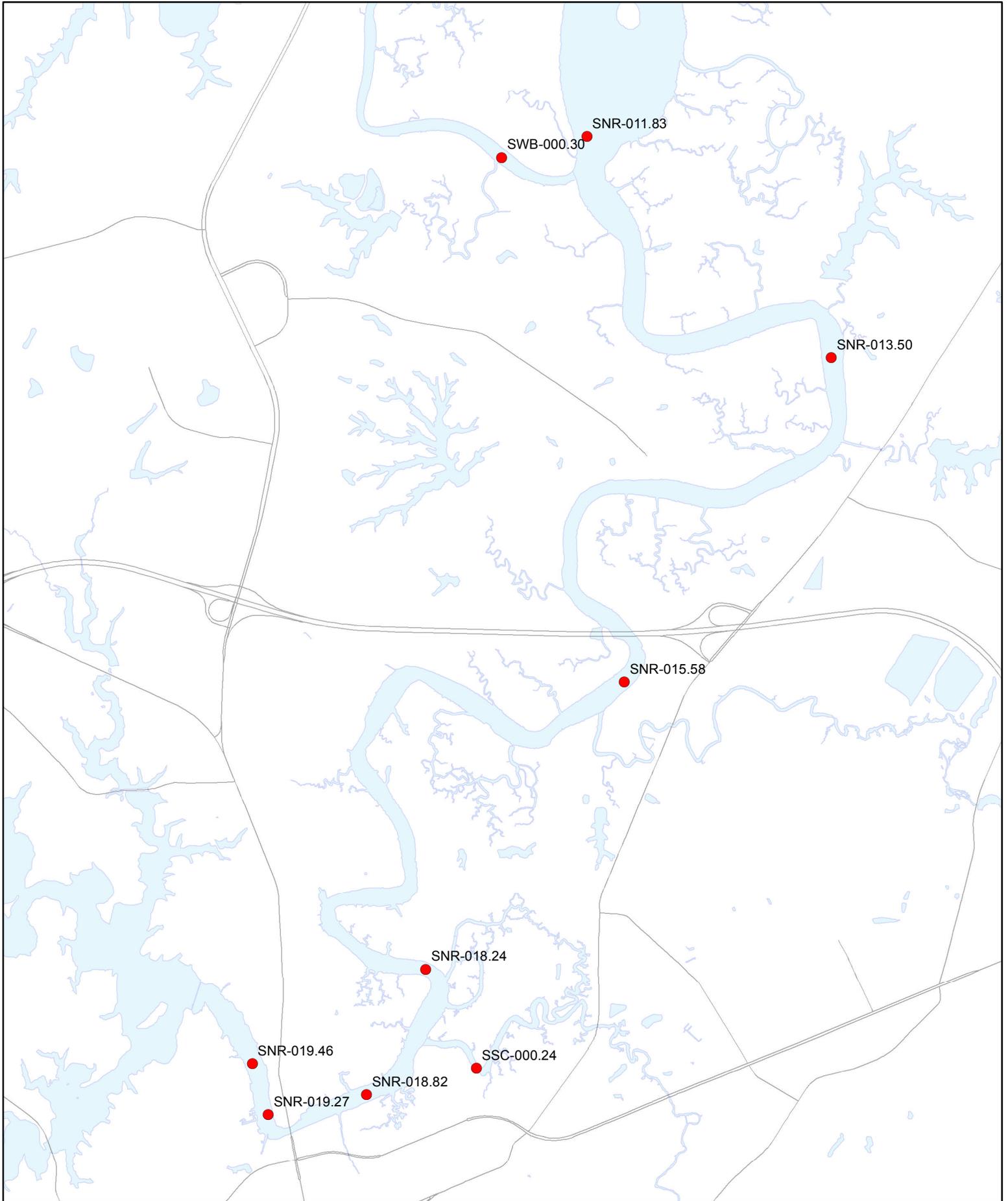
● Sampling Sites





Upper Nansemond River

● Sampling Sites



Nansemond River Water Monitoring Summary Permit Year 5

Fecal Coliform (CFU/100mL) Analyzed with FDA-MTEC method																
Sample under detection limit of 10 is referenced as 9.9																
Sampling Station ID	SBC-000.35	SNR-000.20	SKC-000.05	SNR-001.48	SNR-002.86	SNR-007.88	SNR-008.82	SNR-011.83	SWB-000.30	SNR-013.50	SNR-015.58	SNR-018.24	SSC-000.24	SNR-018.82	SNR-019.27	SNR-019.46
7/19/2017	60	9.9		9.9	10	110	60	150	380	290	240	210	620	160	80	90
8/31/2017	60	9.9		9.9	10	50	120	410	150	890	800	500	700	120		
9/14/2017	120	9.9		9.9	10	40	80	100	210	150	340	2200	810	1100	4200	3800
10/30/2017	280	50		10	20	210	210	300	350	460	2600	1700	3700	3100	3100	1400
11/14/2017	9.9	10		9.9	9.9	10	20	100	120	80	180	190	320	320		
12/12/2017	9.9	9.9		9.9	9.9	10	10	50	70	90	250	740	770	140	90	80
1/10/2018																
2/26/2018	50	9.9		30	20	50	100	210	340	150	390	310	200	570	190	1300
3/27/2018	9.9	10		9.9	9.9	9.9	30	20	20	40	60	70	90	50	30	30
4/25/2018	50	9.9		9.9	9.9	20	20	140	270	130	120	330	550	310	3800	400
5/9/2018	40	10		10	10	100	60	60	310	110	80	160	280	160	140	250
6/21/2018	30	10		9.9	9.9	30	20	100	210	80	80	520	540	750	820	750

Enterococcus (MPN/100mL) Analyzed with Enterolert method																
Sample under detection limit of 10 is referenced as 9.9																
Sampling Station ID	SBC-000.35	SNR-000.20	SKC-000.05	SNR-001.48	SNR-002.86	SNR-007.88	SNR-008.82	SNR-011.83	SWB-000.30	SNR-013.50	SNR-015.58	SNR-018.24	SSC-000.24	SNR-018.82	SNR-019.27	SNR-019.46
7/19/2017	63	20		9.9	9.9	20	20	203	131	148	134	183	364	97	41	63
8/31/2017	96	9.9		10	10	86	132	187	41	173	228	298	473	74		
9/14/2017	98	9.9		9.9	10	41	86	185	295	108	145	884	697	565	1440	905
10/30/2017	441	96		74	10	213	428	379	546	332	2610	1530	24200	1590	1940	1550
11/14/2017	20	9.9		9.9	9.9	10	30	52	85	30	75	253	313	336		
12/12/2017	134	9.9		9.9	10	10	30	171	135	496	441	820	488	323	31	30
1/10/2018																
2/26/2018	10	9.9		9.9	9.9	20	63	109	187	187	122	243	171	199	31	576
3/27/2018	9.9	9.9		10	9.9	10	10	30	63	41	31	41	74	20	41	10
4/25/2018	75	9.9		9.9	9.9	20	41	52	228	211	187	295	336	145	1790	228
5/9/2018	10	9.9		9.9	10	10	31	108	86	86	98	97	223	30	10	97
6/21/2018	41	10		9.9	9.9	41	52	31	183	75	122	292	480	301	246	169

Ammonia (mg/L)																
Sampling Station ID	SBC-000.35	SNR-000.20	SKC-000.05	SNR-001.48	SNR-002.86	SNR-007.88	SNR-008.82	SNR-011.83	SWB-000.30	SNR-013.50	SNR-015.58	SNR-018.24	SSC-000.24	SNR-018.82	SNR-019.27	SNR-019.46
7/19/2017	0.04	0.01		0.02	0.01	0.04	0.05	0.08	0.03	0.07	0.05	0.02	0.07	0.02	0.02	0.01
8/31/2017	0.06	0.02		0.02	0.03	0.04	0.05	0.07	0.04	0.05	0.03	0.02	0.05	0.03		
9/14/2017	0.02	0.02		0.03	0.04	0.05	0.05	0.06	0.02	0.05	0.02	0.02	0.04	0.02	0.02	0.01
10/30/2017	0.05	0.03		0.05	0.03	0.03	0.02	0.03	0.03	0.03	0.03	0.02	0.04	0.02	0.01	0.02
11/14/2017	0.02	0.04		0.02	0.02	0.02	0.02	0.03	0.03	0.04	0.04	0.06	0.06	0.07		
12/12/2017	0.02	0.02		0.02	0.01	0.01	0.02	0.04	0.04	0.06	0.07	0.09	0.09	0.1	0.07	0.07
1/10/2018																
2/26/2018	0.01	0.01		0.01	0.02	0.01	0.01	0.02	0.01	0.06	0.14	0.07	0.07	0.05	0.01	0.01
3/27/2018	0.01	0.01		0.01	0.01	0.02	0.01	0.04	0.02	0.04	0.02	0.01	0.02	0.01	0.01	0.01
4/25/2018	0.01	0.01		0.01	0.01	0.01	0.03	0.02	0.01	0.05	0.06	0.05	0.11	0.03	0.01	0.01
5/9/2018	0.05	0.09		0.09	0.12	0.07	0.07	0.13	0.1	0.13	0.11	0.07	0.08	0.07	0.05	0.05
6/21/2018	0.02	0.02		0.03	0.03	0.02	0.02	0.04	0.02	0.04	0.02	0.02	0.03	0.08	0.01	0.01

Nansemond River Water Monitoring Summary Permit Year 5

Nitrate/Nitrite-N (mg/L)																
Sampling Station ID	SBC-000.35	SNR-000.20	SKC-000.05	SNR-001.48	SNR-002.86	SNR-007.88	SNR-008.82	SNR-011.83	SWB-000.30	SNR-013.50	SNR-015.58	SNR-018.24	SSC-000.24	SNR-018.82	SNR-019.27	SNR-019.46
7/19/2017	0.02	0.01		0.03	0.01	0.03	0.05	0.07	0.01	0.12	0.06	0.02	0.05	0.01	0.01	0.01
8/31/2017	0.03	0.02		0.02	0.02	0.03	0.03	0.05	0.02	0.06	0.08	0.06	0.15	0.01		
9/14/2017	0.01	0.02		0.01	0.02	0.02	0.02	0.03	0.01	0.04	0.02	0.01	0.04	0.01	0.01	0.01
10/30/2017	0.01	0.03		0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.04	0.04	0.27	0.02	0.01	0.01
11/14/2017	0.08	0.14		0.12	0.1	0.03	0.03	0.03	0.03	0.04	0.04	0.07	0.08	0.07		
12/12/2017	0.07	0.01		0.01	0.01	0.02	0.03	0.05	0.04	0.09	0.17	0.2	0.36	0.1	0.02	0.01
1/10/2018																
2/26/2018	0.01	0.02		0.02	0.01	0.01	0.01	0.01	0.01	0.06	0.11	0.14	0.15	0.15	0.16	0.16
3/27/2018	0.01	0.01		0.01	0.01	0.01	0.01	0.07	0.03	0.12	0.14	0.14	0.14	0.18	0.18	0.18
4/25/2018	0.01	0.01		0.01	0.01	0.01	0.01	0.01	0.01	0.05	0.07	0.07	0.11	0.07	0.06	0.06
5/9/2018	0.01	0.01		0.01	0.01	0.03	0.03	0.08	0.05	0.1	0.09	0.06	0.11	0.04	0.03	0.03
6/21/2018	0.01	0.01		0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.01	0.01	0.03	0.02	0.01	0.01

Total Phosphorus (mg/L)																
Sampling Station ID	SBC-000.35	SNR-000.20	SKC-000.05	SNR-001.48	SNR-002.86	SNR-007.88	SNR-008.82	SNR-011.83	SWB-000.30	SNR-013.50	SNR-015.58	SNR-018.24	SSC-000.24	SNR-018.82	SNR-019.27	SNR-019.46
7/19/2017	0.13	0.1		0.11	0.13	0.15	0.15	0.14	0.14	0.13	0.13	0.12	0.12	0.08	0.05	0.05
8/31/2017	0.12	0.08		0.09	0.1	0.11	0.1	0.09	0.1	0.08	0.08	0.09	0.1	0.05		
9/14/2017	0.1	0.09		0.08	0.1	0.11	0.1	0.1	0.13	0.1	0.08	0.1	0.12	0.07	0.09	0.06
10/30/2017	0.1	0.07		0.06	0.09	0.11	0.12	0.09	0.12	0.08	0.09	0.08	0.15	0.04	0.06	0.06
11/14/2017	0.07	0.06		0.06	0.06	0.08	0.08	0.08	0.07	0.06	0.05	0.05	0.06	0.05		
12/12/2017	0.06	0.05		0.04	0.06	0.07	0.07	0.06	0.07	0.06	0.06	0.07	0.09	0.06	0.06	0.05
1/10/2018																
2/26/2018	0.04	0.05		0.03	0.04	0.07	0.08	0.13	0.1	0.08	0.09	0.08	0.14	0.07	0.04	0.04
3/27/2018	0.04	0.05		0.06	0.05	0.11	0.11	0.09	0.09	0.09	0.07	0.06	0.06	0.05	0.04	0.03
4/25/2018	0.08	0.06		0.05	0.1	0.17	0.22	0.17	0.13	0.12	0.1	0.09	0.11	0.05	0.06	0.06
5/9/2018	0.17	0.06		0.07	0.12	0.09	0.09	0.09	0.11	0.09	0.09	0.08	0.16	0.05	0.04	0.04
6/21/2018	0.13	0.1		0.11	0.12	0.15	0.14	0.13	0.15	0.12	0.12	0.13	0.14	0.13	0.12	0.1

Total Suspended Solids (mg/L)																
Sampling Station ID	SBC-000.35	SNR-000.20	SKC-000.05	SNR-001.48	SNR-002.86	SNR-007.88	SNR-008.82	SNR-011.83	SWB-000.30	SNR-013.50	SNR-015.58	SNR-018.24	SSC-000.24	SNR-018.82	SNR-019.27	SNR-019.46
7/19/2017	25.6	21.3		13.3	26.4	24.9	21.2	24.3	35.2	17	13.8	13	9.3	10	7.2	5.2
8/31/2017	24.2	14.4		15	25	13.5	19.8	10.7	13.1	8.4	13.8	12.8	8.9	5		
9/14/2017	26.3	29.4		14.2	30.6	20.3	16.6	14.8	21.7	13.4	12	13.5	12	11.5	9.4	9
10/30/2017	15.3	10.9		12.2	16.3	14.7	18.6	11.8	28.4	8	16.4	10.1	15.2	5.7	7.8	6.9
11/14/2017	10.7	6.9		8.7	6	17.8	17.2	14	9.6	7.6	5.6	4.7	6.6	3.6		
12/12/2017	3.5	7.3		4	5.7	6.9	23.6	3.6	6.1	5.7	6.1	8.1	5.8	7.2	5.2	3.5
1/10/2018																
2/26/2018	9	24.2		11.8	11.1	23	21.4	21.5	18.7	17.3	14.8	15	13.6	10.8	6.2	4.9
3/27/2018	22.4	23.4		24.4	20	51	38.3	27.2	21	21.8	15.6	10.2	6.8	9.6	4.5	3.8
4/25/2018	35.4	27.2		32	56	95.6	133	82.5	48	38.8	24.7	12.2	12	9	8.8	7
5/9/2018	17.2	20		23.4	26.4	32.4	15.6	16	23.3	11.5	7.4	8.9	7.4	8.8	6.3	5.6
6/21/2018	38.9	36.8		37.5	26.7	33.2	36.5	24	27	15.5	12.2	11.4	11.5	8	7.9	6.8