



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

**Permit # VAR040029**

**Permit Year One Annual Report  
November 1, 2018-June 30, 2019**



**Permit # VAR040029**  
**Permit Year One Annual Report**  
**November 1, 2018 - June 30, 2019**

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# City of Suffolk Annual Report - Permit Year 1

## Part I D: Annual Reporting Requirements

- 2.a. Permittee, system name, and permit number: City of Suffolk General Permit No. VAR040029
  - 2.b. Reporting period for which the annual report is being submitted: Permit Year One: July 1, 2018- June 30, 2019
  - 2.c. Signed certification: See Appendix A
  - 2.d. Each annual reporting item as specified in an MCM in Part I E: See each MCM section below.
  - 2.e. An evaluation of the MS4 program implementation, including a review of each MCM, to determine the MS4 program’s effectiveness and whether or not changes to the MS4 program plan are necessary. See Evaluation section for each MCM below.
4. Status report on the implementation of the Chesapeake Bay TMDL Action Plan in accordance with Part II A, including any revisions to the plan.

### Part II.A.13 Chesapeake Bay TMDL Action Plan

1. A list of BMPs implemented during the reporting period but not reported to the DEQ BMP Warehouse in accordance with Part I E 5 g and the estimated reduction of pollutants of concern achieved by each and reported in pounds per year.  
Street sweeping practices continued for the reporting period as outlined in the action plan; 6745 cubic yards of debris were collected. This equates to 8,663.6 pounds of total nitrogen, 3,697.4 pounds of total phosphorus, and 967,322.6 pounds of total suspended solids.
2. If the permittee acquired credits during the reporting period to meet all or a portion of the required reductions in Part II A 3, A 4, or A 5, a statement that credits were acquired.  
No credits were necessary and therefore no credits were acquired during the reporting period.
3. The progress, using the final design efficiency of the BMPs, toward meeting the required cumulative reductions for total nitrogen, total phosphorus, and total suspended solids.

<b>Chesapeake Bay TMDL Balance Sheet</b>					
	Type	Nitrogen removed	Phosphorus removed	TSS removed	Estimated Costs
<b>2010 Census Urbanized Area 40% Required Reductions (lbs)</b>		<b>2385.47</b>	<b>563.61</b>	<b>251795.97</b>	
Reductions in place	Stream Restoration	289	98.26	447950	\$ 1,500,000.00
	Land Use Changes	328.49	37.84	5077.55	\$ 71,022.76
	Oversized BMPs	195.52	42.31	46955.47	\$ -
	Shoreline Management	52.39	20.42	93928.52	\$ -
	Septic Conversions	3445.2	-	-	\$ 14,693,544.00
	Street Sweeping	7334.5	3165.8	807833.88	\$ 488,026.51
	Nutrient Trading		as needed		\$ -
<b>Totals</b>		<b>11356.10</b>	<b>3266.37</b>	<b>953795.42</b>	<b>\$ 15,252,593.27</b>
Credits remaining after 40% is accounted for		8970.63	2702.76	701999.45	

note: for practices in unregulated area, baseline was accounted for in the calculations.

4. A list of BMPs that are planned to be implemented during the next reporting period.

-Street sweeping

The City continues to exceed the reduction requirements outlined in the permit. The second phase of the action plan is being developed at this time.

5. Status report on the implementation of the local TMDL Action Plan in accordance with Part II B, including any revisions to the plan.

Part II.B.9 Local TMDL Action Plan

1. A summary of actions conducted to implement the local TMDL Action Plan.

In accordance with the goals of the City's local bacteria TMDL Action Plan, Public Works staff conducted a total of 104 dry weather outfall screenings and distributed seven pet waste stations throughout the City. Also, annual training was conducted for appropriate City staff (see the Training Summary found in Appendix F for details). Staff educated the public about pet waste at numerous outreach events where 194 dog waste bag dispensers, 107 dog waste educational rack cards, and 90 educational dog waste bumper stickers were distributed. In addition to local efforts, the City partners with askHRGreen.org and other localities in the region on campaigns which include radio, TV, and web advertising. More information about the regional efforts, including statistics for our reach with those campaigns, is included in the askHRGreen.org Annual Report in Appendix B of this report. No revisions to the local TMDL Action Plan were made during the reporting period.

## **Part I E: Minimum Control Measures**

### **MCM 1: Public Education and Outreach**

#### **Part I.E.1.g. Annual report information:**

- (1) A list of the high priority stormwater issues the permittee addressed in the public education and outreach program: The City of Suffolk 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. See Appendix B: AskHRGreen Annual Report and High Priority Issues- Education and Outreach Plan.
- (2) A list of strategies used to communicate each high priority stormwater issue. See Appendix B: High Priority Issues- Education and Outreach Plan.

**Evaluation of MCM 1:** During the permit year, the City exceeded education and outreach requirements. City staff continued to regularly attend HRPDC meetings of the above-mentioned committees and actively participated in promoting the high priority issues, as well as provided input on media campaigns for Lawn Care and FOG best management practices. During the permit year, stormwater staff distributed 194 dog waste bag dispensers at outreach events to support the Scoop the Poop campaign.

The City reached out to over 200 Suffolk landscaping companies via mail to encourage them to join the new Bay Star Business program and educate them on RPA requirements. The City posts and regularly updates volunteer opportunities (clean-up events, recycling drives, etc.) on the City website as well as on the askhrgreen.org events calendar. A total of 2786 giveaways were distributed at outreach events from July 1, 2018 to June 30, 2019 (See Appendix B: List of Giveaways).

## **MCM 2: Public Involvement and Participation**

### **Part I.E.2.f. Annual report information:**

- (1) A summary of any public input on the MS4 program received (including stormwater complaints) and how the permittee responded: The City of Suffolk did not receive any public input on the MS4 program during the reporting period and no complaints on the program were received.
- (2) A webpage address to the permittee's MS4 program and stormwater website:  
MS4 Program webpage: <http://www.suffolkva.us/265/MS4-Program-Overview>  
Stormwater webpage: <http://www.suffolkva.us/261/Stormwater-Management>
- (3) A description of the public involvement activities implemented by the permittee: See Appendix C: Outreach and Involvement Events List. The City implemented many public involvement activities during the permit year. The City chose 4 of these activities for metric reporting and evaluation as required in Part I.E.2.c of the permit. The 4 activities from Table 2 that are included in the City's Program Plan are highlighted in this list.
- (4) A report of the metric as defined for each activity and an evaluation as to whether or not the activity is beneficial to improving water quality: See Appendix C: Outreach and Involvement Events List (4 highlighted activities).
- (5) The name of other MS4 permittees with whom the permittee collaborated in the public involvement opportunities. For the majority of public involvement events, the City did not collaborate with other MS4 permittees. For the events where the City did collaborate with other HRPDC localities, there is a note in the Event Description column of the Outreach and Involvement Events List.

**Evaluation of MCM 2:** During the permit year, the City continued to exceed public involvement and participation requirements by participating in a total of 31 outreach events, which is well above the required four activities. The City determined that all events were beneficial to water quality, whether through public education, through the physical cleaning up of land and waterways, or by preventing improper disposal by holding recycling drives. The Public Works Stormwater division is very active in Suffolk Public schools and utilizes an Enviroscape watershed model to teach kids about the impact stormwater pollution has on our waterways. Although the City did not receive any input on the MS4 program plan, the City has provided the public with several methods to make comments, including a link on the MS4 Program webpage and via phone.

## **MCM 3: Illicit Discharge Detection and Elimination**

### **Part I.E.3.e. Annual report information:**

- (1) A confirmation statement that the MS4 map and information table have been updated to reflect any changes to the MS4 occurring on or before June 30 of the reporting year: The City of Suffolk

has updated any changes to the MS4 that occurred on or before June 30, 2019. The most recent update occurred on September 25, 2019.

- (2) The total number of outfalls screened during the reporting period as part of the dry weather screening program: 104 total outfalls were screened from July 1, 2018 to June 30, 2019. See Appendix D: Dry Weather Screenings List.
- (3) A list of illicit discharges to the MS4 including spills reaching the MS4 with information as follows:
  - (a) The source of illicit discharge
  - (b) The dates that the discharge was observed, reported, or both
  - (c) Whether the discharge was discovered by the permittee during dry weather screening, reported by the public, or other method (describe)
  - (d) How the investigation was resolved
  - (e) A description of any follow-up activities
  - (f) The date the investigation was closed.

See Appendix D: Illicit Discharge Response Report, HAZMAT Incident Report, and Sanitary Sewer Overflow Report

**Evaluation of MCM 3:** The City continues to exceed permit requirements for the Illicit Discharge Detection and Elimination control measure by conducting a total of 104 dry weather screenings during the reporting period. The City continues to maintain an up-to-date MS4 map that includes all new outfalls and BMPs installed during the permit period. The Public Works Stormwater division continues to enforce the City's illicit discharge ordinance and conducted 47 illicit discharge investigations during the permit period, some of which resulted in repairs to septic systems and City sewer systems.

#### **MCM 4: Construction Site Stormwater Runoff Control**

##### **Part I.E.4.d. Annual report information:**

- (2) Total number of inspections conducted: See Appendix E: ESC and SWM Enforcement Actions Summary
- (3) Total number and type of enforcement actions implemented and the type of enforcement actions: See Appendix E: ESC and SWM Enforcement Actions Summary

**Evaluation of MCM 4:** The City continues to enforce Stormwater Management and Erosion and Sediment Control regulations through the Stormwater Management ordinance, Erosion and Sediment Control ordinance, and Chesapeake Bay Preservation ordinance, including inspections and enforcement. Staff continue to maintain the required stormwater management and erosion and sediment control certifications.

#### **MCM 5: Post Construction stormwater management for new development and development on prior developed lands**

##### **Part I.E.5.i. Annual report information:**

- (1) If the permittee implements a Virginia Stormwater Management Program in accordance with Part I E 5 a (1) and (2):
  - The number of privately owned stormwater management facility inspections conducted: 291 inspections

- The number of enforcement actions initiated by the permittee to ensure long-term maintenance of privately owned stormwater management facilities including the type of enforcement action: 2 enforcement actions; Type of enforcement: 30-Day Letters
- (2) Total number of inspections conducted on stormwater management facilities owned or operated by the permittee: 72 inspections
  - (3) A description of the significant maintenance, repair, or retrofit activities performed on the stormwater management facilities owned or operated by the permittee to ensure it continues to perform as designed. This does not include routine activities such as grass mowing or trash collection. During the reporting year, there was one significant repair of a City-owned stormwater management facility. Two pipe joint failures were repaired at curb inlets connected to the wet pond (JR-217-WP-0031) at North Suffolk Library. The streets were patched and erosion caused by the failures was repaired and stabilized. The repair was verified on 5-17-19.
  - (4) A confirmation statement that the permittee submitted stormwater management facility information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which the permittee was required to obtain coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities in accordance with Part I E 5 f or a statement that the permittee did not complete any projects requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities.  
During the reporting period, the City of Suffolk submitted all stormwater management facility information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which the permittee was required to obtain coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities in accordance with Part I E 5 f.
  - (5) A confirmation statement that the permittee electronically reported BMPs using the DEQ BMP Warehouse in accordance with Part I E 5 g and the date on which the information was submitted.  
The City of Suffolk electronically reported BMPs using the DEQ BMP Warehouse in accordance with Part I E 5 g on September 25, 2019.

**Evaluation of MCM 5:** The City of Suffolk continues to exceed permit requirements for post construction stormwater management by inspecting all privately owned and City-owned stormwater management facilities annually. When major maintenance is required, a 30 Day Letter is sent to the BMP owner/manager and a response is requested within 30 days. All BMP information is continuously submitted through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which the permittee was required to obtain coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities in accordance with Part I E 5 f. The DEQ's BMP Warehouse is updated annually by October 1<sup>st</sup> with all new BMPs, and the City's GIS system is also kept up-to-date as new BMPs are added.

**MCM 6: Pollution Prevention and Good Housekeeping for facilities owned or operated by the permittee within the MS4 service area**

**Part I.E.6.q. Annual report information:**

- (1) A summary of any operational procedures developed or modified in accordance with Part I E 6 a during the reporting period.

The following Standard Operating Procedures were updated or modified prior to May 1, 2019 to comply with the requirements of the new permit:

- SOP SPW-ENG-30-003 Dry Weather Screening
- SOP SPW-ENG-30-001 Illicit Discharge Detection and Elimination
- SOP SPW-ENG-30-010 Land Disturbance Inspections
- SOP SPW-ENG-30-006 BMP Inspections
- SOP SPW-ENG-10-011 Inspections of City-owned BMPs

The following Standard Operating Procedures were developed in April 2019 to comply with the requirements of the new permit:

- SOP SPW-ENG-30-015 Receiving, Responding to, and Documenting Public Reports, Complaints, and Input
- SOP SPW-ENG-30-016 Maintenance of City-owned Stormwater Management Facilities

- (2) A summary of any new SWPPPs developed in accordance with Part I E 6 c during the reporting period:

During the reporting period, no new SWPPPs were developed, as no new facilities in the MS4 were found to be classified as "high priority."

- (3) A summary of any SWPPPs modified in accordance with Part I E 6 f or the rationale of any high priority facilities delisted in accordance with Part I E 6 h during the reporting period:

During the reporting period, no SWPPPs were modified in accordance with Part I E 6 h, and no high priority facilities were delisted in accordance with Part I E 6 h.

- (4) A summary of any new turf and landscape nutrient management plans developed that includes:
- (a) Location and the total acreage of each land area
  - (b) The date of the approved nutrient management plan

During the reporting period, no new turf and landscape nutrient management plans were developed. Currently, a new nutrient management plan is being developed for Constant's Wharf Park. Information for this NMP will be provided in the PY2 Annual Report.

- (5) A list of the training events conducted in accordance with Part I E 6 m, including the following information:

- (a) The date of the training event
- (b) The number of employees who attended the training event
- (c) The objective of the training event

See Appendix F: Training Summary

**Evaluation of MCM 6:** The City exceeds permit requirements for Pollution Prevention and Good Housekeeping for City facilities by conducting annual trainings for all appropriate City employees that is based on the Operations and Maintenance Pollution Prevention Guide. A great emphasis is placed on illicit discharge detection to encourage City employees to report illicit discharges to the stormwater department. All City facilities are inspected annually to evaluate pollution prevention practices, and all facilities are evaluated to determine if they should be added to the high-priority facilities list or if they should have a SWPPP. Nutrient Management Plans are in place for all City lands where nutrients are

applied to a contiguous area over 1 acre, and new plans are developed when areas are discovered or begin receiving nutrient application. The City does not apply deicing agents containing urea or other forms of nitrogen or phosphorus to any paved surfaces. Through either training or contract language, the City requires all contractors employed by the City to use appropriate control measures to minimize the discharge of pollutants to the MS4.

**Part I.C.4. Summary of Revisions to the MS4 Program Plan:**

The MS4 Program Plan was revised in April 2019 in order to comply with requirements of the new MS4 permit and was posted to the City's website at that time. Since April 2019, there have been no revisions made to the Program Plan, and none are necessary at this time. Should changes be made to the Program Plan, the City will post the most up-to-date version to the City's MS4 Program Overview webpage at <http://www.suffolkva.us/265/MS4-Program-Overview> within 30 days of the revision.

# **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

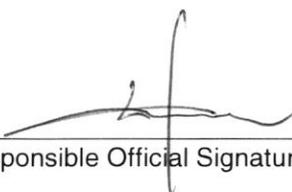
A person is a duly authorized representative only if:

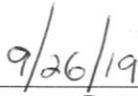
- 1. The authorization is made in writing by a person described above;*
- 2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, 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.*

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## 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

  
Date

VAR040029                      City of Suffolk

Permit Number                      MS4 Name



# CITY OF SUFFOLK

P.O. BOX 1858, SUFFOLK, VIRGINIA 23439-1858 PHONE: (757) 514-4012

CITY MANAGER

August 8, 2019

Virginia Department of Environmental Quality  
Tidewater Regional Office  
Attn: Matt Fanghella  
5636 Southern Blvd  
Virginia Beach, VA 23462

Mr Fanghella:

This letter is in reference to the City of Suffolk's General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems, No. VAR040029. Per Part III K.2 of the permit, authorization may be made in writing to specify a "duly authorized representative" who is "an individual or a position having responsibility for the overall operation of the regulated facility or activity..." This individual is authorized to sign "all reports required by state permits, including annual reports, and other information requested by the board or department." I would like to authorize the City of Suffolk's Director of Public Works to act as a duly authorized representative to sign all reports required by this permit.

Sincerely,

Patrick G. Roberts  
City Manager

pc: Scott Mills, AICP, Deputy City Manager  
L.J. Hansen, Acting Director of Public Works

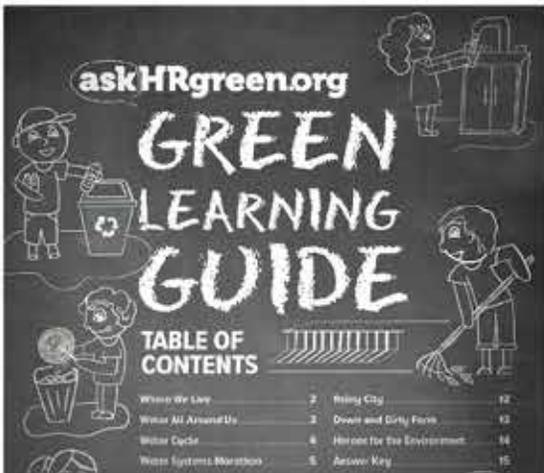
## **Appendix B**

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



ANNUAL

REPORT



2018-2019

PEP19-02

**askHRgreen.org**

WORKING TOGETHER FOR A CLEANER, GREENER HAMPTON ROADS

## HAMPTON ROADS PLANNING DISTRICT COMMISSION

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Robert Geis  
Steven Best  
Debbie Ritter  
Ella Ward

### **FRANKLIN**

Barry Cheatham  
Amanda Jarratt

### **GLOUCESTER COUNTY**

Brent Fedors  
Phillip Bazzani

### **HAMPTON**

Donnie Tuck  
James Gray  
Mary Bunting

### **ISLE OF WIGHT COUNTY**

Randy Keaton, Treasurer  
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Cynthia Rohlf  
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Douglas Smith  
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Rosemary Wilson  
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Vacant

### **WILLIAMSBURG**

Paul Freiling  
Andrew Trivette

### **YORK COUNTY**

Neil Morgan  
Sheila Noll

Robert A. Crum, Jr.  
Executive Director / Secretary

## Report Documentation

**TITLE:**

askHRgreen.org Annual Report for Fiscal Year 2018-2019

**REPORT DATE**

September 2019

**GRANT/SPONSORING AGENCY**

Local Funds

**AUTHORS:**

Katie Cullipher  
Rebekah Eastep  
Elizabeth Vandell

**ORGANIZATION NAME,****ADDRESS AND TELEPHONE**

Hampton Roads Planning District Commission  
723 Woodlake Drive  
Chesapeake, Virginia 23320  
(757) 420-8300  
[www.hrpdcva.gov](http://www.hrpdcva.gov)

**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 2018-2019. 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 HRPDC staff in cooperation with the member localities. Preparation of this report was included in the HRPDC Work Program for Fiscal Year 2019, approved by the Commission in May 2018.

## About askHRgreen.org

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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. By combining local expertise and taking advantage of economies of scale, the askHRgreen.org program is able to help local jurisdictions fulfill requirements of MS4 permits, groundwater withdrawal permits, and state consent orders to reduce sanitary sewer overflows. For citizens, it has become a “one-stop shop” 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 HRSD. 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.



..... *2018-19 Highlights* .....

**eleven million opportunities**   
to see or hear about askHRgreen.org

 **58,893** visitors to askHRgreen.org

**42** community events with over **350,000** people in attendance 

## **B★STAR PROGRAM**

 **3,072** homes

 **39** businesses

 **7,497** students impacted by **\$9,668**  
in environmental education mini grants

**64** pet waste stations installed   
impacting neighborhoods across the region

 **22,000** Green Learning Guides  
printed and distributed to third grade students



@askHRgreen  
**2,576**



@HRgreen  
**1,701**

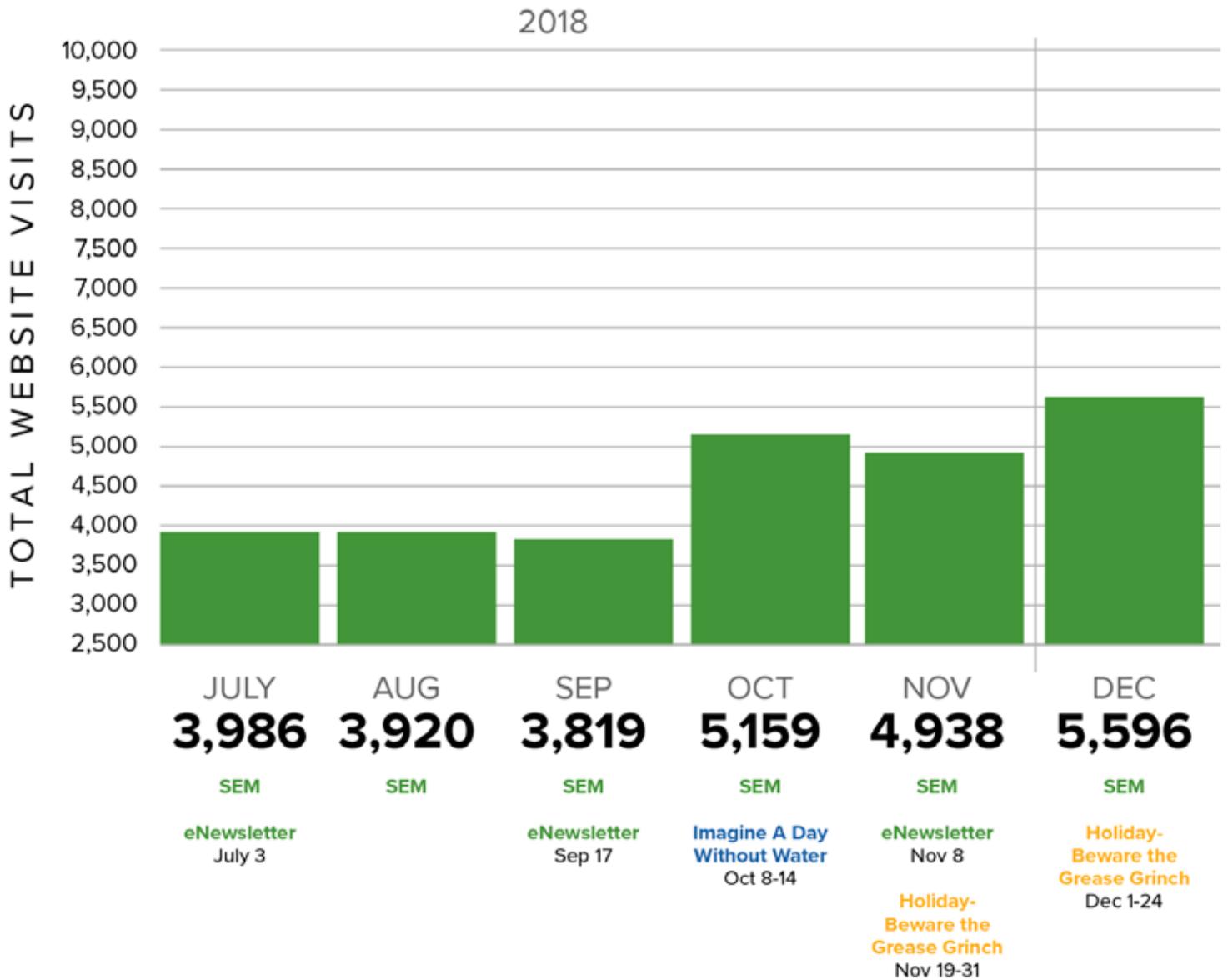


@askHRgreen  
**249**

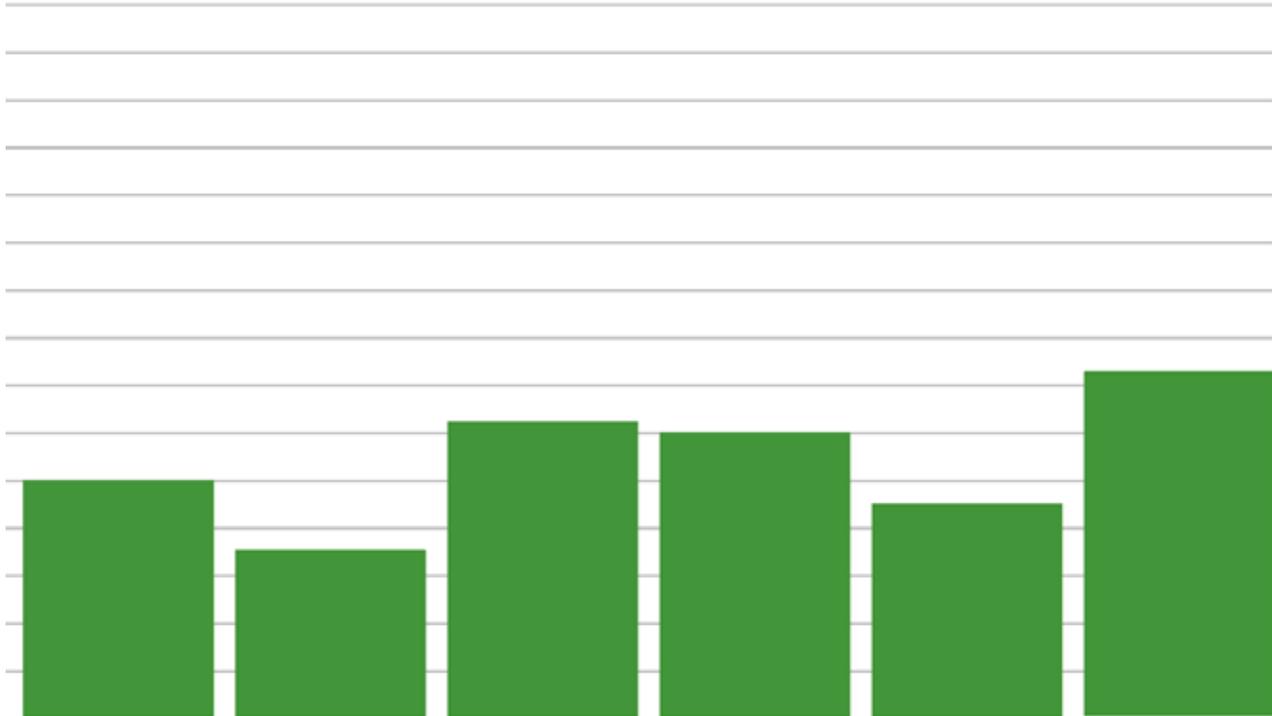


eNews Followers  
**7,878**

# PROMOTIONS + WEBSITE VISITATION



2019



JAN  
**5,068**

SEM

eNewsletter  
Jan 2

Choose to  
Refuse  
Jan 28-Feb 10

FEB  
**4,336**

SEM

MAR  
**5,621**

SEM

eNewsletter  
Mar 7

What Not to  
Flush  
Mar 4-10

Fix-A-Leak  
Mar 18-24

APR  
**5,542**

SEM

Team Up 2  
Clean Up  
Apr 1-7

MAY  
**4,781**

SEM

eNewsletter  
May 21

Value of Water/  
Drinking Water  
Week  
May 5-11

JUN  
**6,127**

SEM

Pet Waste  
Jun 3-16

What Do You  
Know/Storm  
Drains  
Jun 17-23

## Website Analytics

In December of 2017 we launched a brand new, responsive website for askHRgreen.org, ensuring that all of our content would be delivered seamlessly to any user on any type of device. In FY19, the askHRgreen.org website saw a 5.6% increase in traffic over FY18 and a 9% increase in unique visitors (the number of people accessing the site). We also continue to see an increase in traffic from phones and tablets as opposed to desktop devices, as mobile users climbed to 57% in FY19.

Top Traffic Sources	Sessions
google organic	21,872
wtkr (digital ads & paid search)	16,631
direct	13,278
facebook	2,823
hrfrog.com referral	742
other referral	728
bing organic	439
yahoo organic	234

Most Visited Pages	Pageviews
Homepage	9,473
/disposable-diaper-liners-flush-flush/	3,374
/gtk-gtd/recycling-at-home/	3,341
/events-happenings/	3,288
/gtk-gtd/electronics-recycling-donating/	2,423
/campaign/beware-the-grease-grinch/	2,226
/gtk-gtd/plastic-bag-recycling/	1,785
/gtk-gtd/battery-disposal/	1,516
/gtk-gtd/fat-free-drains/	1,423
/programs/great-american-cleanup/	1,392
/campaign/pet-waste/	1,326
/programs/bay-star-homes/	1,249
/dont-trash-the-grass	1,212
/gtk-gtd/restoring-chesapeake-bay/	1,135
/campaign/choose-to-refuse-single-use-plastic/	1,101
/gtk-gtd/plant-native-plants/	1,096
/gtk-gtd/lawn-garden-best-practices/	1,071
/blog/	1,009

	2018-19	2017-18	2016-17	2015-16	2014-15
Visits	<b>58,893</b>	55,735	58,113	52,530	58,279
Unique Visitors	<b>49,816</b>	45,661	46,282	42,539	46,994
Pageviews	<b>86,538</b>	93,589	92,681	93,177	103,228
Pages per Visit	<b>1.47</b>	1.68	1.59	1.77	1.77
Average Visit Duration	<b>1:03</b>	1:27	1:12	1:32	1:26
Bounce Rate	<b>81%</b>	77%	79%	75%	75%
% New Visits	<b>84%</b>	81%	80%	80%	80%
Mobile Devices	<b>57%</b>	54%	53%	40%	39%
Desktop Devices	<b>43%</b>	46%	47%	60%	61%

## 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 FY19, we had more than 210,000 Google search impressions from our ad campaigns which drove over 11,000 clicks (a 51% increase from FY18) to relevant content on the askHRgreen.org website for a click thru rate of 5.26%.

That translates into one click to the website for every 20 askHRgreen.org ads that appear in Google search results. See appendix A for the full SEM report for FY19.

	2018-19	2017-18	2016-17
Impressions	<b>210,695</b>	169,140	107,920
Clicks	<b>11,087</b>	7,330	4,226
CTR (click-thru rate)	<b>5.26%</b>	4.33%	3.92%

Ad Group	Impressions	Clicks	Cost	CTR	Avg. CPC
Electronics Disposal	28,527	2,296	\$2,887.43	8.05%	\$1.26
Reduce Reuse Recycle	27,630	1,584	\$2,318.04	5.73%	\$1.46
TMDL	21,119	1,218	\$1,756.77	5.77%	\$1.44
Recycling At Home	21,741	843	\$1,170.26	3.88%	\$1.39
Native Plants	19,615	769	\$963.02	3.92%	\$1.25
Battery Disposal	9,017	673	\$765.62	7.46%	\$1.14
Great American Cleanup	12,199	547	\$756.10	4.48%	\$1.38
askHRgreen General	3,467	484	\$285.25	13.96%	\$0.59
Medication Disposal	6,347	425	\$503.88	6.70%	\$1.19
Tap Water	8,549	337	\$490.08	3.94%	\$1.45
Plastic Bag Recycling	4,866	303	\$351.29	6.23%	\$1.16
Fertilizer Tips	7,471	216	\$325.28	2.89%	\$1.51
America Recycles Day	2,087	211	\$309.18	10.11%	\$1.47
Rain Barrels	5,626	183	\$230.09	3.25%	\$1.26
Lawn Care	9,029	166	\$256.77	1.84%	\$1.55
Team Up 2 Clean Up	3,252	128	\$192.36	3.94%	\$1.50
Soil Testing	4,401	127	\$176.08	2.89%	\$1.39
Rain Garden	2,392	82	\$91.94	3.43%	\$1.12
Water Conservation	1,593	75	\$86.92	4.71%	\$1.16
Stormwater	991	57	\$83.22	5.75%	\$1.46
Pet Waste	2,125	57	\$73.35	2.68%	\$1.29
Yard Waste Disposal	1,964	57	\$84.77	2.90%	\$1.49
Food Disposal	2,342	48	\$69.38	2.05%	\$1.45
Bay Star Homes	217	47	\$33.68	21.66%	\$0.72
Fats Oil Grease Disposal	1,009	41	\$60.37	4.06%	\$1.47
	<b>210,695</b>	<b>11,087</b>	<b>\$14,472.56</b>	<b>5.26%</b>	<b>\$1.31</b>

# 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 appeal to green-minded residents, many are geared towards the general public. This provides an important opportunity for askHRgreen.org volunteers to share information about eco-friendly behaviors with those who may be hearing them for the first time. One important engagement tool for community events is the askHRgreen.org trailer. Originally part of the HR WET program formed in the early 1990s, the trailer was first wrapped with an askHRgreen.org design in 2011. The four askHRgreen.org committees worked together to fund important repairs to the trailer in FY19. The repairs included a new wrap designed to match the updated askHRgreen.org website; repairing punctures to exterior sheet metal; and new tires, marker lights, window seals, electrical wiring and more. In total, the askHRgreen education committees invested about \$6,500 to extend the life of the askHRgreen.org trailer.

From employee appreciation days to home improvement shows to the Virginia State Fair, community events provide askHRgreen.org volunteers an opportunity to network with residents and distribute program materials including promotional items and brochures. Events are a critical part of increasing the following of the askHRgreen.org newsletter. In FY19, over 225 people signed up to receive our news and information during outreach events. In addition, more than 325,800 event attendees may have seen askHRgreen.org materials or interacted with program volunteers at the 42 events attended in 2018-2019.



2018-2019 Regional Events			Estimated Attendance
8/18	Unity in the Community	Chesapeake	500
8/25	Bufflow Family & Friends Community Day	Chesapeake	1000
9/8	Go Green Festival	Newport News	1000
9/29	James Riverfest	Williamsburg/James City County	600
10/1	Virginia State Fair	Doswell, VA	250000
10/4 - 10/7	Peanut Festival	Suffolk	50000
10/23 -	HII Environment, Health & Safety Expo	Newport News	2100
10/29	6th Annual Monster Mega Mixer &	Virginia Beach	800
11/3	Litter & Recycling Expo	James City County	100
11/8	Canon Virginia Annual Safety &	Newport News	unavailable
11/13	Anthem Eco Fair	Virginia Beach	300
11/15	Anthem Eco Fair	Norfolk	300
12/14	Continental Automotive Energy &	Newport News	150
1/12	Jam'n Jamz	Norfolk	400
1/14 - 1/17	Home Gardener Day + MAHSC	Virginia Beach	677
1/25 - 1/27	Virginia Flower & Garden Expo	Virginia Beach	unavailable
2/9 - 2/10	Hampton Roads Home Show	Hampton	5200
2/10	Engage Norfolk	Norfolk	150
2/19	Colonial Heritage Garden Club	Williamsburg/James City County	75
3/9	CA Day	Virginia Beach	641
3/20	Las Gaviotas Green Forum	Chesapeake	20
3/23 - 3/24	Mid Atlantic Home & Outdoor Living Show	Virginia Beach	4525
4/6	Southern Chesapeake Community Day	Chesapeake	unavailable
4/6	Hampton Touch a Truck	Hampton	101
4/14	Wings & Things Spring Fling	Portsmouth	unavailable
4/18	Norfolk Naval Shipyard Earth Day Fair	Norfolk	300
4/20	Virginia Living Museum Earth Day	Newport News	1300
4/22	TCC Cares	Chesapeake	100
4/23	VA AWWA 30th Annual Water Distribution	Norfolk	75
4/27	Celebrate the Park	Newport News	400
4/27	Community Empowerment Day	Newport News	200
4/28	Stand Up Rally and Expo	Williamsburg	150
5/8	City of Virginia Beach Public Utilities	Virginia Beach	275
5/10	City of Suffolk Employee event	Suffolk	1400
5/11	Virginia Landscapes Exhibition at the	Newport News	150
5/16	Sensible Seafood Fest	Virginia Beach	400
5/23	City of Virginia Beach Public Works	Virginia Beach	415
5/31	CARE and Wellness day	Chesapeake	250
6/2	Colonial Coast Girl Scout World	Chesapeake	50
6/6	NASA Langley Safety & Health Expo	Hampton	500
6/23	Elizabeth River Fest	Virginia Beach	3000
6/28	TGIF Summer Concert Series	Suffolk	200

## Bay Star Homes

The Bay Star Homes program entered its third year of operation in FY19. The program recognizes residents who pledge to avoid environmentally-harmful behaviors 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 such as waste reduction and fat free drains. In FY19, there were 379 new Bay Star Homes added across the region, bringing the program total to nearly 3,100 households.

Bay Star Homes Registrants	
City/County	Number
Chesapeake	130
Franklin	13
Gloucester	19
Hampton	106
Isle of Wight	9
James City	10
Newport News	211
Norfolk	2092
Poquoson	15
Portsmouth	36
Smithfield	13
Southampton	2
Suffolk	134
Surry	2
Virginia Beach	204
Williamsburg	8
York	68
<b>Total</b>	<b>2,708</b>



## Great American Cleanup

The Team Up 2 Clean Up (TU2CU) program moved from education to action during FY19. Launched in 2018, the TU2CU program makes it easier for residents and businesses alike to get involved with litter prevention and cleanup initiatives. An online outreach toolkit includes resources for everyone from schools and civic leagues to businesses and neighbors. Anyone can download these resources to educate their peers/employees about litter.

During FY19, the askHRgreen.org Recycling & Beautification Committee hosted a National Kickoff to the Great American Cleanup on May 3-4, 2019. In partnership with Keep Virginia Beautiful, the Committee worked together to plan cleanup and beautification projects in 13 Hampton Roads localities on each day of the event. Volunteers were recruited through the website, social media, newsletters, paid media, and word of mouth. In the end, 71 public spaces were improved through the work of over 1,000 volunteers. Improvements included removing more than 15 tons of litter from the environment including over 150 tires, as well as tending community gardens by weeding, spreading mulch, and planting new plants and trees. Odd and unusual finds from the litter cleanup were set aside and delivered to local scrap artist, Sam Hundley, who transformed found objects into a trash-to-treasure art piece to commemorate the event and extend the TU2CU message throughout the community. The artwork will be on display in venues across the region in 2019 and 2020 to inspire citizens to get involved with cleanup initiatives.



## Imagine a Day Without Water

Municipal water services are a vital service for both residents and businesses in Hampton Roads. Local breweries and coffee shops are particularly dependent on a consistent supply of clean, healthy tap water. Tapping into these natural advocates for clean water, the askHRgreen.org Water Awareness Committee partnered with local breweries and coffee shops to raise awareness about the importance of water. The campaign included branded coffee sleeves and coasters that donned messages illustrating that coffee and beer are 95-99 percent water.

This special promotion engaged 23 local breweries and coffee shops around the region. The coffee sleeves and coasters were distributed starting on October 10, 2018, as part of the national Imagine a Day Without Water campaign. This advocacy and awareness campaign addresses the importance of maintaining the water and wastewater systems that bring a steady flow of water to and from residents, businesses, schools, hospitals and emergency outlets. Two videos were produced with Traditions Brewing and Coaster Coffee to give business owners an opportunity to talk about the important role water plays in brewing their beverages of choice. The campaign was also supported on social media and extended through the social media accounts of partnering establishments.



## Straw-Free Earth Day

Single use plastics, particularly straws, received considerable international attention in FY19. In order to leverage the increased public awareness surrounding this issue, the askHRgreen.org Recycling & Beautification Committee recruited restaurants to go straw-free for Earth Day in April 2019. In partnership with Keep It Beachy Clean and Clean Virginia Waterways, the Committee asked restaurants to supply straws only upon request on April 22nd and, if possible, for the preceding weekend. The Committee provided participating restaurants with a sample of paper straws to provide to customers who requested a straw during the promotion, as well as branded window clings, menu cards, table tents, and educational placemats. These materials helped educate the public about the wastefulness of straws and encouraged everyone to skip the straw. Through grassroots outreach, 69 restaurants across seven localities joined this campaign and went straw-free for Earth Day.

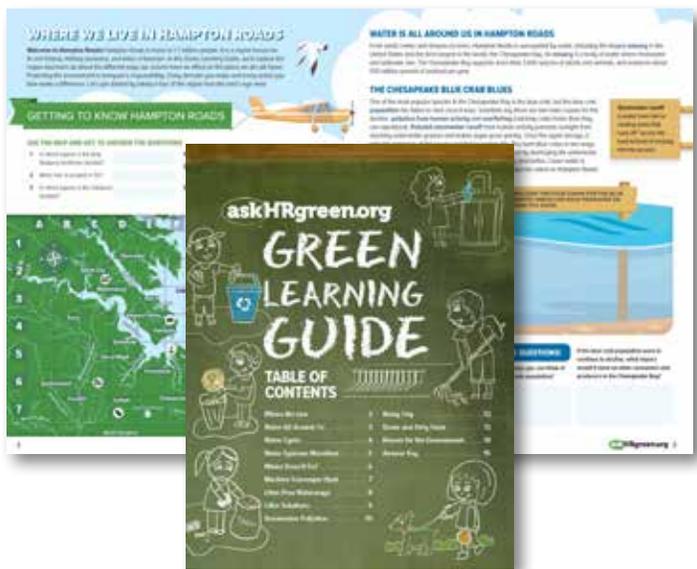


## Green Learning Guide

Completed in FY18, the second edition of the askHRgreen.org Green Learning Guide was tailored to fit the environmental education needs of the region's third grade students. With help from a Chesapeake Bay Restoration Fund grant and financial support from local cities and counties, the third grade Green Learning Guide was designed to meet Virginia SOL standards, making it easy for teachers to bring environmental concepts into the classroom. These 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. A similar sixth grade Green Learning Guide was first published by askHRgreen.org in 2012, but the third grade edition was brand new for the 2018-19 school year.

During the fall of 2018, HRPDC staff worked with local science coordinators and other school administrators in the 13 school districts of Hampton Roads to develop a distribution strategy to get free copies of the Green Learning Guide into the hands of every third grade public school student in the region. In total, about 22,000 copies of the guide were provided to schools at no charge. Once distribution was complete, there were about 9,000 copies remaining, which will be available on demand for private schools, homeschool students, and third grade students during the 2019-2020 school year.

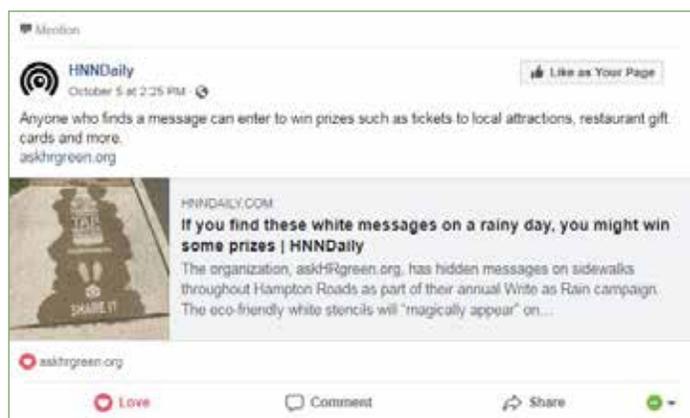
Both editions of the Green Learning Guide and accompanying teacher's guides are available for download on the askHRgreen.org website.



## Sidewalk Message Campaign

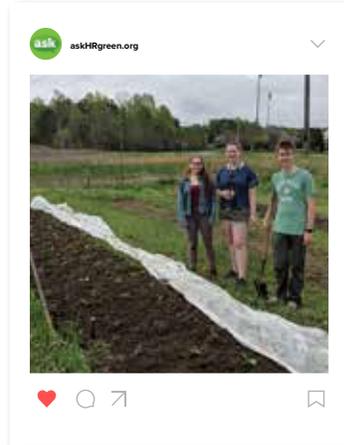
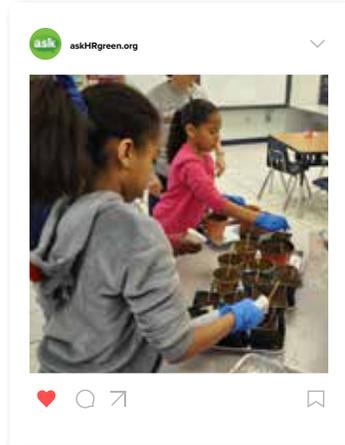
All four askHRgreen.org education committees worked together to revamp the Write as Rain project in FY19. Originally launched in 2017, the Write as Rain campaign involves installing stylized messages on sidewalks around the region using a hydrophobic spray that allows the messages to be seen only after rain.

The FY19 outreach strategy specifically targeted youth and their parents. In advance of the new school year, local staff partnered with schools and community centers to install messages to area sidewalks. This year's four new designs asked students and parents to make a pledge for a cleaner environment. Messages included "Purge the plastic, I choose tap water," "I won't stand for litter," "I pledge only rain down the drain," and "I won't add wipes to our pipes." The campaign was accompanied by a social media contest asking residents to post pictures of the stencils in exchange for a chance to win gift certificates to local restaurants and attractions. In total, nearly 80 locations across nine cities and counties were tagged with a Write as Rain message as part of this campaign.



## Environmental Education Mini Grant Program

Supporting environmental education in the classroom has been a long standing commitment of askHRgreen.org. With a small amount of grant funding, local educators are able to spark an idea in the minds of our region's youth and encourage tomorrow's leaders to make a positive impact on our environment. askHRgreen.org offers all Hampton Roads teachers (K-12), youth leaders, or organizations working with youth environmental education mini grants of up to \$500 to provide funding for environmentally-themed projects. In FY19, \$9,668.06 in grant funding was awarded to support 20 projects in and out of the classroom. These projects reached nearly 7,500 students across Hampton Roads and included drip irrigation for water conservation, demonstration rain gardens, air quality monitoring, new recycling programs, upcycled trash cans and bottle caps, and for the first time, a schoolyard chicken coop.



Project	# Students	Project Description	School/Organization	City/County	Grant
Be Fantastic, Use Less Plastic	1200	This project will install water bottle filling stations at Hugo Owens Middle School.	Hugo Owens Middle School	Chesapeake	\$500.00
Butterfly and Bee Garden	397	A butterfly garden was planted at Barron Fundamental Elementary School.	Barron Fundamental Elementary School	Hampton	\$250.00
Chicken Coop in Our Garden	40	This project funded a chicken coop designed and constructed by garden club students.	Maury High School	Norfolk	\$500.00
Community Learning Garden and Beautification Project	40	This project mitigated drainage issues along the front walkway to Saunders Elementary and the installation of a community learning garden.	Saunders Elementary/ Youth Volunteer Corps of Hampton Roads	Newport News	\$500.00
Creating, Conserving, and Protecting Monarch Habitats	569	This project features a compost bin, and raised garden beds to be built in the fall. Students also will place milkweed with butterfly eggs in mesh cages to observe the life cycle of the butterfly.	Great Bridge Primary School	Chesapeake	\$500.00
Downstream Collaborative	79	This grant sought to create and support meaningful watershed opportunities that connect students with community partners.	Kempsville Meadows Elementary School	Virginia Beach	\$500.00
Drip Smart	80	The Drip Smart project helped convert the Williamsburg Community Growers farm to a drip irrigation system.	Williamsburg Community Growers	Lightfoot	\$500.00
Eaton Middle School Lunch Recycling Program	650	This project helped create a lunchroom recycling and composting program run by Ecology Club students.	Eaton Fundamental Middle School	Hampton	\$418.06
Granby Go Green	20	This project beautified the garden and repaired a trellis at Granby High School.	Granby High School	Norfolk	\$500.00
Green Run Demonstration Rain Garden	42	This project installed a rain garden at Green Run High School.	Green Run High School	Virginia Beach	\$500.00
Keeping the Chesapeake Bay Clean	925	This project provided library books about environmental stewardship to Western Branch Middle School.	Western Branch Middle School	Chesapeake	\$500.00
Keeping the Vibrance and Learning in Our Gardens	530	This project was a continuation of a multi-year effort at to expand Newtown's morning garden club.	Newtown Elementary School	Virginia Beach	\$500.00
Lights of Love for the Hague	50	The Lights of Love Attraction created a walking path around the Hague with luminaries decorated by guests and facilitated by volunteers from Maury High School.	Breathe Easy and Smile Yoga Co.	Norfolk	\$500.00
Little Hands Big Clean Up	600	This project implemented a recycling program at Granby Elementary School.	Granby Elementary School	Norfolk	\$500.00
Norfolk Academy Pollinator Garden	400	This project involved building raised bed gardens and a new greenhouse at Norfolk Academy.	Norfolk Academy	Norfolk	\$500.00
One Man's Trash is Another Man's Treasure	25	This beautification project took trash cans throughout the school and transformed them into works of art.	Western Branch Middle School	Chesapeake	\$500.00
Plants & Air Quality	100	This project will fund the use of an Air Quality Egg learning system in York County high schools.	York County Beautification Committee	Yorktown	\$500.00
Plastic Bottle Art	150	This project will continue efforts at Lakeland High School to create art from recycled items.	Lakeland High School	Suffolk	\$500.00
Snip-N-Drip	1400	This project installed a watering system in the school pollinator and vegetable gardens.	Old Donation School	Virginia Beach	\$500.00
Soak Up the Rain!	200	This project guided students to create a rain garden in an eroded area and conduct monthly litter clean-ups.	Spratley Gifted Center	Hampton	\$500.00
<b>7,497</b>					<b>\$9,668.06</b>

## Business Outreach

### Bay Star Business Program

Launched in June 2018 by the Stormwater Subcommittee, the Bay Star Business Program offers a free, pledge-based program to Hampton Roads companies that are committed to protecting water quality in the region. Business owners sign up online and select at least five of 15 suggested practices to become part of the program. Practices promoted through the program include conserving water, recycling, cleaning and preventing litter, maintaining company vehicles, organizing a community cleanup, and more. Most action items are no- or low-cost solutions to help businesses run more efficiently while being stormwater stewards. In return for their pledge, HRPDC staff mails the business a welcome packet including pertinent information from askHRgreen.org and the city or county in which they operate, as well as Bay Star Business window clings to display in their office or on company vehicles. Participating businesses also receive recognition on the askHRgreen.org website and Facebook page.

New in 2019, a Google map was added to the website to visually display all participants. This makes it easier for residents to find a Bay Star Business near them while also illustrating the geographic reach of the program. The



program has grown to include nearly 40 companies in its first year from a diverse range of businesses including real estate firms, landscapers, museums, marinas, schools, and restaurants.

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

The regional 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 FY19. The changes improved the user experience but also made it easier for administrators to clean up and manage data. HRPDC staff now have access to data pulls from the database making it possible to proactively monitor the database for fraudulent accounts and duplicate user and business profiles. The developer has also taken the first steps to convert the website to a responsive design. Once the conversion is complete, FOG program administrators will be better able to administer tests in the field and will have to rely less often on paper tests.



The FOG Education Subcommittee also produced two new brochures to use in outreach to local restaurants. The first combines the best management practices poster with descriptions of FOG, common sources, and how to comply with local FOG ordinances. The second piece was developed to help FOG inspectors educate local restaurant owners about proper storage and management of yellow grease, including how to respond to spills.

In FY19, the FOG Education Subcommittee reviewed the 2007 Memorandum of Agreement (MOA) between HRSD and participating localities. It came to light that not all localities had adopted the MOA when it was originally created in 2007. The Subcommittee recommended several changes to the document to be more inclusive for localities that do not have a FOG ordinance or no FOG enforcement program. The updated MOA was presented for review and approved by the Directors of Utilities. Each locality plans to formally adopt the new MOA during FY20.

## Illicit Discharge Rack Cards

Certain industries have a greater potential to discharge harmful waste into the stormwater system and local waterways through the course of their work. In order to arm local stormwater inspectors with better tools for education and outreach, the askHRgreen.org Stormwater Education Subcommittee developed industry-specific rack cards for the following high priority industries: lawn care and landscaping, automotive services (such as car dealers, repair shops, and fleet maintenance), and animal services (including animal boarding facilities, animal shelters, pet groomers, and veterinary offices). Each rack card addresses sources of pollution produced by that industry and recommends the proper steps to take to prevent illicit discharges.

The Subcommittee targeted the lawn care industry further by mailing letters and educational resources to landscaping businesses licensed in the following cities: Chesapeake (51), Hampton (40), Newport News (257), Norfolk (208), Portsmouth (188), Suffolk (211), and Virginia Beach (397). In total, 1,352 letters were mailed to landscape and lawn care companies in Hampton Roads to help companies better understand how they can comply with local stormwater requirements and prevent water pollution from illicit discharge.

### Managing Fats, Oils and Grease

Never	Always
<p><b>NEVER</b> pour cooking residue directly into the drain.</p> <p><b>NUNCA</b> vierta residuos de cocina directamente en el drenaje.</p> <p>切勿将烹饪残渣直接倒入下水道。</p>	<p><b>ALWAYS</b> wipe pots, pans, and work areas prior to washing.</p> <p><b>SIEMPRE</b> limpie con un paño los ollas, sartenes y áreas de trabajo antes de lavarlas.</p> <p>请务必在清洗之前擦净厨具并清洁工作区域。</p>
<p><b>NEVER</b> dispose of food waste into the garbage disposal.</p> <p><b>NUNCA</b> eche restos de comida en la trituradora de basura.</p> <p>切勿将食物残渣倒入垃圾处理器中。</p>	<p><b>ALWAYS</b> dispose of food waste directly into the trash can.</p> <p><b>SIEMPRE</b> elimine los restos de comida directamente en el contenedor de basura.</p> <p>请务必将食物残渣直接倒入垃圾桶。</p>
<p><b>NEVER</b> pour waste oil down the drain.</p> <p><b>NUNCA</b> vierta restos de aceite en el drenaje.</p> <p>切勿将废油倒入下水道。</p>	<p><b>ALWAYS</b> collect waste oil and store for recycling.</p> <p><b>SIEMPRE</b> recolecte los restos de aceite y guárdelos para su reciclaje.</p> <p>请务必收集废油并存储以进行循环再利用。</p>
<p><b>NEVER</b> wash floor mats where water will run off directly into the storm drain.</p> <p><b>NUNCA</b> lave tapetes de piso en sitios donde el agua corra directamente hacia el drenaje de lluvias.</p> <p>切勿在水可直接流入雨水排水沟的地方清洗地垫。</p>	<p><b>ALWAYS</b> clean mats inside over a utility sink that is connected to a grease control device.</p> <p><b>SIEMPRE</b> lave los tapetes de piso en un fregadero de lavado que esté conectado a un atrapagrasas.</p> <p>请务必在接好油控装置的公用水槽中清洗地垫。</p>

For more information, please contact the askHRgreen.org FOG Program  
757 420 8300 | HRfog.com

#### WORKING TOGETHER FOR CLEAN, HEALTHY WATERWAYS

**GOOD TO KNOW**  
How we maintain vehicles plays an important role in keeping local waterways clean.

- Outside operations and maintenance activities can contaminate stormwater runoff.
- Motor oil, anti-freeze, gasoline, and brake contain toxic chemicals and metals that pollute local waterways.
- Wash water contains detergent, dirt, and chemicals that harm the environment and are illegal to discharge.

**The Source of Stormwater Pollution**

- Vehicle leaks.
- Washing vehicles on paved surfaces.
- Improper chemical storage.
- Waste from grinding, painting, coating, sandblasting, or parts cleaning.

**The Impact of Stormwater Pollution**

- Chemicals and metals contaminate local waterways, making them unsafe for swimming.
- Contaminated wash water clouds waterways, harming aquatic life.

**Following best management practices protects our waterways.**

Learn more at [askHRgreen.org](http://askHRgreen.org)

#### WORKING TOGETHER FOR CLEAN, HEALTHY WATERWAYS

**TO KNOW**  
Lawn care, landscaping, and other pet care activities have cleaning products and waste materials that, if not disposed of properly, can pollute waterways and harm the public.

**The Water Flows**  
Local stormwater systems are separate from the sewer system. Stormwater is collected in storm drains and carries water to a treatment plant. The stormwater system carries rain and runoff from streets, sidewalks, and paved areas, winding their way through streets and storm drains before entering our local waterways.

**The Causes**

- Poorly positioned sprinklers waste water and increase the flow of pollutants into storm drains.
- Leaves, grass clippings, and tree trimmings that are swept or blown into the street can clog storm drains and pollute our waterways.
- Fertilizers, pesticides, and herbicides that wash off lawns and landscaped areas contaminate waterbodies.

**The Impact**

- Yard waste encourages algal blooms to form, robbing the water of oxygen.
- Lawn chemicals harm fish and other aquatic life.
- Streets flood easily when storm drains are clogged with yard waste.

**Following best management practices protects our waterways.**

Learn more at [askHRgreen.org](http://askHRgreen.org)

## 2018-19 Media Campaigns

### Waste Reduction

With turbulent recycling markets and changing municipal recycling contracts, the priority of the Recycling & Beautification Subcommittee has increasingly focused on waste reduction. While recycling education continues to be an important initiative, the waste reduction message helps residents decrease their waste contribution no matter the state of recycling. The Subcommittee's message for residents is that we should all choose to reduce our waste production first before focusing on what can and cannot be recycled.

**Paid Media.** A one-week radio, two-week digital media campaign ran from January 28 to February 10, 2019. The campaign included new creative using the theme Choose to Refuse. The campaign focuses on single use plastics including bottled water, straws, utensils, take out containers, and plastic bags. Viewers are urged to refuse disposable products and choose reusable alternatives. The campaign included radio, Spotify, digital display ads and retargeting, native content ads, social media, and targeted pre-roll. Throughout the year, specific waste reduction messages were included in the Google SEM campaign, driving traffic to the askHRgreen.org website from relevant keyword searches.

**Outreach Materials.** In support of the waste reduction message, the Committee purchased reusable portable cutlery sets and reusable straws to distribute at outreach events. Both items provide a practical alternative to help residents reduce their use of single use disposable plastics.

**Public Relations.** Public relations support succeeded in promoting the waste reduction message through a variety of media channels including news releases, interviews with local TV (WTKR) and radio shows, print coverage (Suffolk News Herald, Southside Daily), and articles in the askHRgreen.org newsletter.

**Social Media.** We engaged with the community via Facebook, Twitter, and Instagram. Outreach included sharing waste reduction tips, upcycling projects, and stories about the negative environmental impacts of plastics and our throw away culture. The paid Facebook

campaign for the Choose to Refuse campaign was the highest performing campaign in FY19, reaching over 106,000 users in February 2019.



### Litter Prevention

Litter was a major focal area for the Recycling & Beautification Committee in FY19. In partnership with Keep Virginia Beautiful, the Committee organized and hosted the National Kickoff to the Great American Cleanup on May 3-4, 2019. More than 1,000 volunteers took to the streets to remove litter from parks and roadways, plant trees, tend gardens, and freshen up public spaces across Hampton Roads. In total, 71 locations across 13 cities and counties were spruced up as a result of the effort. The Committee also promoted litter prevention and the Team Up 2 Cleanup campaign in the following ways:

**Paid Media.** A one-week media campaign ran from April 1-7. The campaign included radio and social media. The purpose of the campaign was to educate residents about local litter problems and recruit volunteers to take action by joining one of the events planned for May 3-4. 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.** Through the Virginia Litter

Prevention and Recycling Competitive Grant, the Committee purchased 800 class 3 hi-vis safety vests with the Team Up 2 Clean Up logo imprinted on the back. The new vests improve morale among volunteers and help identify roadside cleanups as voluntary acts of community service.

**Public Relations.** Public relations was an important part of litter prevention messaging in FY19. Messages about litter prevention and cleanups were featured in various media channels including news releases, interviews with local radio and TV shows (WCTV, WVEC, Wavy, WTKR), print coverage (Coastal Virginia Magazine), Write as Rain messages, and articles in the askHRgreen.org newsletter.



**Social Media.** We engaged with the community via Facebook, Twitter, and Instagram. Outreach topics included the negative impacts of litter, advertising cleanup opportunities, and reporting the results of local litter cleanups. The aftermath of Floatopia, an unofficial event in Virginia Beach over Memorial Day Weekend that resulted in tons of litter left on Chic's Beach, was a hot topic on social media in FY19.

## Residential Recycling Practices

Due to turbulent recycling markets and changes in municipal recycling contracts, the Recycling & Beautification Subcommittee was hesitant to put a lot of resources into paid media around recycling in FY19. They did, however, continue to include recycling messages in all other marketing channels and began work to develop a web lookup tool that will make it easier for residents to find out what is (and is not) recyclable in each city/county in Hampton Roads. The new tool will be available on the askHRgreen.org website in FY20.

**Paid Media.** Throughout the year, specific recycling topics were featured in the Google SEM campaign, driving traffic to the askHRgreen.org website from relevant keyword

searches. Recycling continues to be the top driver of website traffic from the SEM campaign.

**Public Relations.** News releases on Christmas tree recycling and America Recycles Day were issued. The America Recycles Day release discouraged “wishful” recycling in an effort to help reduce contamination. The recycling message was also included in a variety of media channels including news (*Suffolk News Herald*, *The Virginian Pilot*, Hampton Newport News Daily), interviews with local radio and TV shows (WTKR), and multiple articles in the askHRgreen.org newsletter.

**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. HRPDC staff created a series of “Recycle This, Not That” graphics to feature on the askHRgreen Facebook and Instagram account for America Recycles Day.

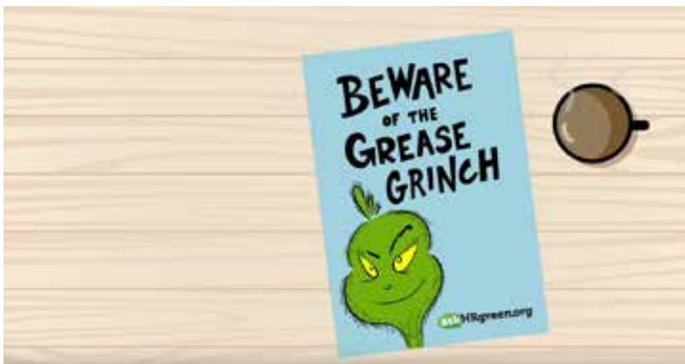


## Fats, Oils & Grease (FOG) Disposal

The FOG Subcommittee focuses each year on helping residents and local restaurants understand what FOG is, where it comes from, how it harms the sanitary sewer system, and the best management practices needed in

order to prevent sanitary sewer overflows. This focal area was addressed with the following strategies:

**Paid Media.** The Committee created a new holiday FOG message in FY19. The “Grease Grinch” spot took viewers through a holiday cooking scene with a lurking Grease Grinch ready to spoil the holiday fun with a backed up drain. The campaign ran online for five weeks (digital display ads and retargeting, social media, targeted pre-roll, digital TV) and on radio for two weeks. Throughout the year, specific FOG messages were included in the Google SEM campaign, driving traffic to the askHRgreen.org website from relevant keyword searches.



**Outreach Materials.** The FOG Subcommittee continued to distribute relevant promotional items 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, print coverage (Southside Daily), interviews with local radio and TV shows, and multiple articles in the askHRgreen.org newsletter.

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

## What Not to Flush

The FOG Subcommittee continues to educate the public about proper flushing etiquette and the harmful side

effects of flushing personal hygiene products like wipes, dental floss, cotton swabs, and more:

**Paid Media.** The Subcommittee used the “man on the street” style video campaign and a new radio creative for a one-week media campaign. The video shows local residents guessing what items are flushable or not. The newly developed radio spot reflected the Q&A format as two men discuss wipes and other items that should not be flushed. The campaign included radio, digital display ads and retargeting, social media, targeted pre-roll ads, and digital TV. Throughout the year, specific “what not to flush” messages were included in the Google SEM campaign, driving traffic to the askHRgreen.org website from relevant keyword searches.



**Outreach Materials.** The FOG Subcommittee continued to distribute washcloths and toilet stress squeezers to support the message.

**Public Relations.** Public relations supported the what not to flush message through a variety of media channels including news releases, interviews with local radio and TV shows, and articles in the askHRgreen.org newsletter.

**Social Media.** We engaged with the community via Facebook, Twitter, and Instagram. Outreach topics included the damaging side effects of flushing trash, deragging photos, proper medication disposal, and the myth of flushable wipes.

## Communicating the Value of Water

The Water Awareness Subcommittee continued to promote the value of water to the Hampton Roads

community. Beyond our daily needs, water also fuels our economy, fire protection, sanitation, and public health:

**Paid Media.** 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. There were also two separate media campaigns for the value of water message during FY19, both coordinating with larger national awareness campaigns.

*Imagine a Day Without Water.* A one-week media campaign ran from October 8-14 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. The paid campaign complimented the partnership with local breweries and coffee shops to distribute branded coasters and coffee sleeves on October 10. The video assets were pickups of videos previously produced which illustrate the importance of tap water for local quality of life. Similarly, the new radio creative features two men discussing the value of water and all the things they would miss without access to tap water.



*Drinking Water Week.* A one-week media campaign ran from May 5-11 as part of the national Drinking Water Week awareness campaign from American Water Works Association. The campaign included radio, digital display ads, native content ads, social media, and advanced TV.

The campaign creative again featured the new radio spot with two men discussing the value of water. The video assets were also a pickup, but this time used the “man on the street” style video with diverse people explaining in one word what water means to them.

**Outreach Materials.** The Committee continued to distribute a variety of promotional items including water bottles, mood pencils, sponges, toothbrushes, and more.

**Public Relations.** Public relations exposure came from features on various media channels including news releases, print coverage (Williamsburg-Yorktown Daily, Southside Daily, Hampton Newport News Daily, The Virginia Gazette), interviews with local radio and TV shows, Write as Rain messages, and articles in the askHRgreen.org newsletter.

**Social Media.** We engaged with the community via Facebook, Twitter, and Instagram. HRPDC staff produced two videos featuring owners of Traditions Brewery in Newport News and Coaster Coffee in Norfolk as they discussed the important role water plays in operating their business and what would happen on a day without water. The videos were promoted on social media during the Imagine a Day Without Water campaign.

## Water Conservation

The Water Awareness Subcommittee continued to raise awareness about conserving water in Hampton Roads. Central topics for this focal area include fixing leaks, water-conserving landscaping practices, WaterSense fixtures, and general indoor/outdoor conservation tips.

**Paid Media.** In promotion of Fix-a-Leak Week, a nationwide campaign from EPA, a one-week media campaign ran from March 18-24. The campaign utilized a new video creative showing locals answer questions about water waste and how to find and fix a leaky toilet. 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 Subcommittee distributed numerous promotional items to help remind residents to conserve water. Items included rain gauges, 5-min shower timers, toilet leak detection dye tablets, black-eyed Susan seed packets, and hose nozzles. They also developed a new print brochure to help residents detect and fix common household water leaks.



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

**Social Media.** We engaged with the community via Facebook, Twitter, and Instagram. Outreach topics included rain barrels, the use of drought tolerant and native plants, finding and fixing household water leaks, and winterizing the home to prevent burst pipes during freezing temperatures.

## Storm Drain Awareness

New in FY19, the Stormwater Education Committee prioritized storm drain education. The new campaign raises public awareness about storm drains: what they are, where they go, and what's safe to put down them. The campaign features the "only rain down the drain" theme and highlights many other best management practices like reducing fertilizer use, proper yard debris disposal, and scooping the poop.

**Paid Media.** New creative was developed using a "man on the street" interview in which local residents were asked to identify a storm drain and describe what types of materials could safely go down the drain. A week-long media campaign ran from June 17-23. The campaign included digital display and retargeting ads, native content ads on WTKR.com, social media, and advanced TV. Throughout the year, specific stormwater messages were included in our Google SEM campaign, driving traffic to the askHRgreen.org website from relevant keyword searches.

**Outreach Materials.** The Subcommittee maintains a comprehensive library of brochures and rack cards and distributes outreach materials such as stormwater message pens and mood pencils. Select localities also purchased storm drain medallions to support local storm drain marking programs.

**Public Relations.** Public relations supported this focal area through news releases, print articles, interviews with local radio and TV shows, Write as Rain messages, and features in the askHRgreen.org newsletter.

**Social Media.** We engaged with the community via Facebook, Twitter, and Instagram. Outreach included sharing news about local water quality concerns, promoting events/workshops, and promoting best management practices. Social media was also an important part of promotions in FY19. Native plants, soil test kits, and goodie bags were given away as prizes for various contests involving stormwater management.

**Chesapeake Bay Restoration Fund Grant (CBRF).** The Subcommittee hosted four rain barrel workshops using funds from the CBRF grant. The workshops were held in Suffolk, Virginia Beach, Newport News, and James City County. Participants paid a modest \$20 registration fee and received stormwater management information, a rain barrel, and a selection of native plants to take home. The workshops were very popular and had over 60 participants with 60 rain barrels and 83 native plants distributed.



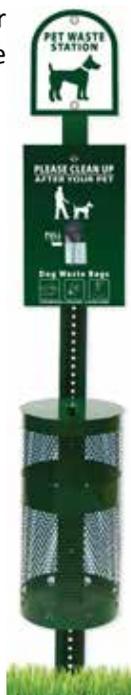
## Pet Waste Disposal

The Stormwater Education Subcommittee continued to raise awareness about the importance of scooping the poop and the harmful impacts of bacteria-laden waste on local water quality.

**Paid Media.** The Subcommittee ran a two-week media campaign from June 3-16. The campaign used new creative featuring a “poo-em” about cleaning up after your pet and the harmful impacts of pet waste on local water quality. The campaign included radio, digital display ads, native content ads, social media, and advanced TV.

**Outreach Materials.** The Committee purchased 5,000 dog waste bag holders and 2,500 hand sanitizers for distribution. The message pens also contain scoop the poop information.

New Pet Waste Stations in FY19	
Chesapeake	9
Hampton	6
Isle of Wight	2
James City	8
Newport News	12
Norfolk	5
Poquoson	1
Portsmouth	2
Smithfield	3
Suffolk	7
Virginia Beach	7
York	2
	<b>64</b>



**Public Relations.** The pet waste message was promoted in news releases, print articles, interviews with local radio and TV shows, and features in the askHRgreen.org newsletter.

**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.

**Pet Waste Station Grant Program.** The askHRgreen Pet Waste Station Grant Program, which began in 2013, continued to thrive in FY19. Geared toward neighborhood associations, community groups, and property management companies, the regional program gives citizens an opportunity to receive a free pet waste station to install and maintain in their neighborhoods. Approved applicants are responsible for installing the station, emptying the trash regularly, and replacing the bags as needed. The neighborhood is also tasked with sharing information with residents about the negative impact of pet waste on local water quality. Since the launch of the program, 349 pet waste stations have been awarded and installed across the region. Of those, 64 were awarded and installed during FY19.

Total Pet Waste Stations Awarded FY14 to FY19	
Chesapeake	39
Franklin/Southampton	8
Gloucester	5
Hampton	31
Isle of Wight	6
James City	30
Newport News	72
Norfolk	13
Poquoson	5
Portsmouth	18
Smithfield	8
Suffolk	33
Virginia Beach	57
Williamsburg	5
York	19
	<b>349</b>

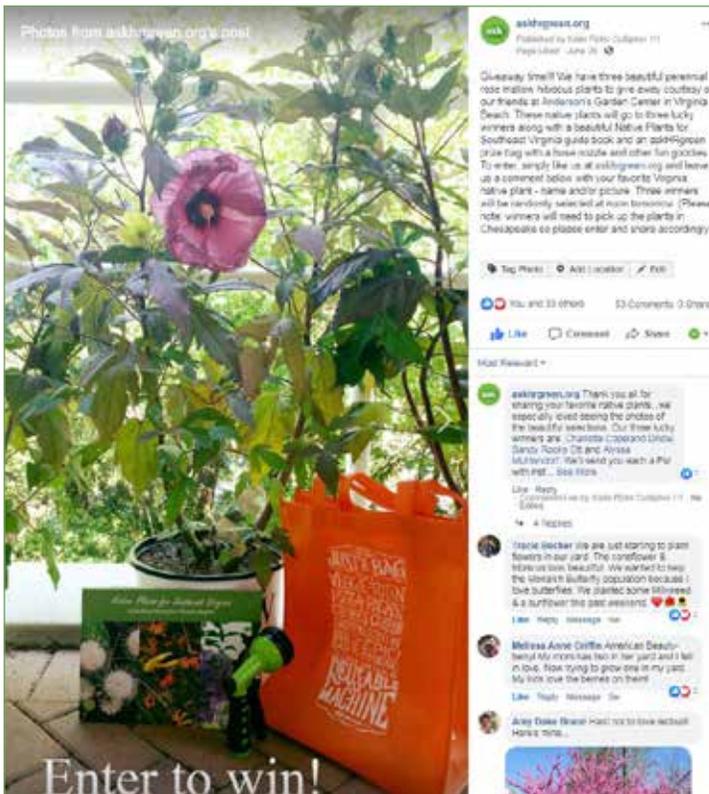
## Lawn Care & Fertilizer

**Paid Media.** Throughout the year, lawn care, native plants, fertilizing, and soil testing topics were included in our Google SEM campaign, driving traffic to the askHRgreen.org website from relevant keyword searches.

**Outreach Materials.** The Stormwater Education Subcommittee distributes many brochures related to lawn care best management practices, fertilizing and how to properly take a soil test. Soil test kits are also distributed to the public at community events. The Subcommittee additionally targeted lawn care companies by mailing a letters and educational resources to lawn care companies licensed in the following cities: Chesapeake (51), Hampton (40), Newport News (257), Norfolk (208), Portsmouth (188), Suffolk (211), and Virginia Beach (397). In total, 1,352 letters were mailed to landscape and lawn care companies in Hampton Roads to help companies better understand how they can comply with local stormwater requirements and prevent pollution from illicit discharge.

**Public Relations.** Fertilizer and lawn care best management practices are commonly included in various public relations strategies throughout the year including news releases, print articles, interviews with local TV and radio stations, and features in the askHRgreen.org newsletter. In June 2019, askHRgreen.org partnered with Anderson's Garden Center to discuss native plants and host a native plant giveaway. Three native rose mallow hibiscuses were donated by Anderson's Garden Center and raffled off to participants through a Facebook contest.

**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. As mentioned above, social media was also an important part of promotions in FY19. Native plants, soil test kits, and goodie bags were all given away as prizes for various contests involving stormwater management.



# 2018-2019 Media Campaigns & Results

## NOVEMBER 19 - DECEMBER 24 "Grease Grinch"

Radio, digital display ads, native content ads, social media, video pre-roll, advanced TV

Impressions: 1,535,051  
Video Views: 74,631  
Clicks/Actions: 3,271

**BUDGET: \$18,636 | VALUE: \$29,501 | ROI: 1.58:1**

## JANUARY 28 - FEBRUARY 10 "Choose to Refuse: Waste Reduction"

Radio, digital display ads, native content ads, social media, video pre-roll

Impressions: 1,012,319  
Video Views: 26,483  
Clicks/Actions: 1,629

**BUDGET: \$14,635 | VALUE: \$25,374 | ROI: 1.73:1**

## MARCH 18 - 24 "Fixing Household Water Leaks"

Radio, digital display ads, native content ads, social media, video pre-roll, advanced TV

Impressions: 1,272,672  
Video Views: 53,691  
Clicks/Actions: 833

**BUDGET: \$14,775 | VALUE: \$21,240 | ROI: 1.44:1**

## MAY 5 - 11 "The Value of Tap Water"

Radio, digital display ads, native content ads, social media, video pre-roll, advanced TV

Impressions: 882,815  
Video Views: 62,591  
Clicks/Actions: 1,389

**BUDGET: \$14,775 | VALUE: \$24,556 | ROI: 1.66:1**

## JUNE 17 - 23 "Storm Drains - Only Rain Down the Drain"

Digital display ads, native content ads, social media, video pre-roll

Impressions: 174,506  
Video Views: 38,065  
Clicks/Actions: 687

**BUDGET: \$5,425 | VALUE: \$5,828 | ROI: 1.07:1**

## OCTOBER 8-14 "Imagine a Day Without Water"

Radio, digital display ads, native content ads, social media, advanced TV

Impressions: 1,277,598  
Video Views: 29,973  
Clicks/Actions: 2,038

**BUDGET: \$15,185 | VALUE: \$26,012 | ROI: 1.71:1**

## MARCH 4 - 10 "What Not to Flush"

Radio, digital display ads, native content ads, social media, video pre-roll, advanced TV

Impressions: 966,787  
Video Views: 57,627  
Clicks/Actions: 473

**BUDGET: \$14,275 | VALUE: \$21,600 | ROI: 1.51:1**

## APRIL 1 - 7 "Team Up 2 Clean Up: Great American Cleanup"

Radio, social media, billboards

Impressions: 1,106,107  
Clicks/Actions: 1,034

**BUDGET: \$8,100 | VALUE: \$46,595 | ROI: 5.75:1**

## JUNE 3 - 16 "Pet Waste - Scoop the Poop"

Radio, digital display ads, native content ads, social media, video pre-roll

Impressions: 827,316  
Video Views: 34,943  
Clicks/Actions: 1,782

**BUDGET: \$14,278 | VALUE: \$21,013 | ROI: 1.47:1**

## 2018-2019 askHRgreen.org Public Relations Value

Date	Media Outlet	Topic	Length	Circ./ Imp	PR Value
Tuesday, July 31, 2018	Inside Business	Hampton Roads companies pledge to go green with Bay Star Business	16 column inches	9,000	\$3,500.00
Sept. 28, 2018	WCTV-TV Chesapeake	Write as Rain interview with Katie Cullipher and Megan Hale	1:05 minutes	1,500	\$600.00
Sept. 30, 2018	WVEC-TV Coastal Connections	Write as Rain interview with Katie Cullipher and Megan Hale	5:00 minutes	3,600	\$1,125.00
	WCTV-TV Chesapeake	Fall tips interview with Katie Cullipher	1:00	1,500	\$600.00
Oct. 5, 2018	Newport News Now Newsletter	Sidewalk messaging campaign Write as Rain	N/A	1,500	\$600.00
Oct. 5, 2018	Southside Daily News	If you find these white message one rainy day, you might win some prizes	10 column inches	3,600	\$900.00
Oct. 5, 2018	Hampton-Newport News Daily	If you find these white message one rainy day, you might win some prizes	10 column inches	3,600	\$900.00
Oct. 9, 2018	Williamsburg-Yorktown Daily	These companies are going to help you imagine a day without water	16 column inches	300	\$900.00
Oct. 9, 2018	Southside Daily News	These companies are going to help you imagine a day without water	16 column inches	3,600	\$900.00
Oct. 9, 2018	Hampton Newport News Daily	Can you imagine a day without water?	16 column inches	3,600	\$900.00
Oct. 9, 2018	The Virginia Gazette	Local businesses participate in A Day Without Water	10 column inches	12,300	\$825.00
Nov. 2, 2018	Beacon	Environmental group hopes invisible style messages will do the trick	1/2 page	41,598	\$6,525.00
Nov. 2, 2018	Bridges	Environmental group hopes invisible style messages will do the trick	1/2 page	26,186	\$2,745.00
Nov. 2, 2018	Clipper	Environmental group hopes invisible style messages will do the trick	1/2 page	31,967	\$3,300.00
Nov. 4, 2018	Suffolk News-Herald	No wishful thinking when it comes to recycling	20 column inches	10,431	\$1,965.00
Nov. 11, 2018	The Virginian-Pilot	No wishful thinking when it comes to recycling	20 column inches	120,771	\$10,230.00
Nov. 14, 2018	Hampton Newport News Daily	This Hampton Roads organization wants residents to know how to recycle properly	N/A	3,600	\$900.00
Dec. 2, 2018	Southside Daily	Heard about FOG? It can really mess up your local waterways	14.5 column inches	3,600	\$900.00
Dec. 26, 2018	WTKR-TV Online	Want to recycle your Christmas tree?	93 words	5,000	\$225.00
Mar. 29, 2019	WCTV-TV Chesapeake	Great American Cleanup "A Closer Look" interview with Katie Cullipher	7.30 minutes	1,500	\$600.00
Apr. 15, 2019	WVEC-TV	Hampton Roads gets ready for GAC "13news@noon" interview with Mike Baum	3:05	34,000	\$2,250.00
Apr. 17, 2019	Suffolk News-Herald	Skip the straws, save the turtles	21.5 column inches	10,431	\$2,115.00
Apr. 22, 2019	Southside Daily News	Celebrate Earth Day by going strawless at these Hampton Roads restaurants	15.6 column inches	3,600	\$900.00
Apr. 22, 2019	WTKR-TV	Straw-free Earth Day -- 3 live reports airing at 5 am, 6 am,, 7 am	3 @ 2:30 minutes	109,000	\$6,225.00
May-June issue 2019	Coastal Virginia Magazine	Great American Cleanup	5 column inches	35,000	\$2,220.00
Friday, May 03, 2019	WAVY-TV 10	Volunteers in Hampton Roadss Taking Part in Great American Cleanup	2:10 minutes	52,000	\$2,025.00
Wednesday, June 26, 2019	WTKR-TV Coast Live	Replacing your lawn with native plants interivew with Katie Cullipher, Michelle Williams	4:37 minutes	36,000	\$2,025.00
Saturday, June 29, 2019	TheVirginian-Pilot Home + Living section	Condo pet policies are a hot topic -- mention of askHRgreen.org Scoop the Poop	93 words	120,771	\$675.00
				<b>689,555</b>	<b>\$57,575</b>

# PUBLIC RELATIONS RESULTS

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Total circulation or audience	689,555
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Total articles and interviews	28
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Total budget	\$5,280
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Total publicity value	\$57,575
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Return on Investment (ROI)	10.9:1
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# COMBINED MEDIA RESULTS

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PAID ADVERTISING WEEKS	52 consecutive
TOTAL MEDIA IMPRESSIONS	11,055,464
TOTAL VIDEO VIEWS	378,004
TOTAL CLICKS	25,631
TOTAL PROMOTIONAL CAMPAIGN BUDGET	\$157,257
TOTAL MEDIA EXPOSURE VALUE	\$311,188
COST PER THOUSAND IMPRESSIONS	\$14.22
RETURN ON INVESTMENT (ROI)	1.98:1

**askhrgreen.org**  
Published by Rebekah Jones Easter (11 - June 27)

We have lots of environmental tips and we hope you follow them all. But we also want you to know that everyone has bad habits. You just have to do SOMETHING to reduce your impacts and keep moving forward towards sustainability.

More on the Green Living blog:  
<http://askhrgreen.org/100-habits/>... See More



**You don't have to do everything to save the planet. You just have to do something.**

Get More Likes, Comments and Shares  
Boost this post for \$15 to reach up to 3,000 people

2,647 People Reached    237 Engagements    [Boost Post](#)

**askhrgreen.org**  
Published by Rebekah Jones Easter (11 - December 27, 2019 at 1:45 PM)

A local example of why it's important to keep our sewer lines free of grease, food scraps, wipes, and anything other than toilet paper and your "personal contribution." Sewer overflows are not only gross. They have a direct impact on our local economy. [#cleanthegrease](#) [#nosupersinthepipes](#)



PILOTONLINE.COM  
**Sewage spill temporarily halts shellfish harvesting in Newport News**

4,575 People Reached    452 Engagements    [Boost Post](#)

**askhrgreen.org**  
Published by Laine (11 - March 8)

Tired of winter? Are you over being cold? Show us with a meme or GIF below and you could be one of the fifty we pick to WIN an askHrGreen.org goodie bag that includes a SOIL TEST KIT and other cool stuff.

While we're still in the "coming in like a lion" part of March, we can prepare for the "going out like a lamb" end of the month. How do you feel about prepping your lawn and garden for spring? Love it like sunshine and butterfly? Hate it like rose thorns and poison ivy? So... See More



**SAID I WOULD PREP MY LAWN BEFORE SPRING**

**ACTUALLY DID IT**

askHrGreen.org

21,888 People Reached    2,945 Engagements    [Boost Post](#)

**askhrgreen.org**  
Published by Rebekah Jones Easter (11 - September 11, 2018)

Searching for bottled water? Don't overlook your tap! Convert any container with a lid into "bottled" water to use if you lose water services during Hurricane Florence. Milk jugs and soda bottles are perfect. Stay safe. Hampton Roads [#staySafe](#) [#hurricaneflorence](#) [#stormmode](#)



Get More Likes, Comments and Shares  
Boost this post for \$15 to reach up to 3,000 people

2,884 People Reached    371 Engagements    [Boost Post](#)

**askhrgreen.org**  
Published by Laine (11 - May 31)

Beneath your feet, there is a vast infrastructure — more than 6,500 miles of water distribution pipeline and 5,000 miles of sanitary sewer lines throughout Hampton Roads. These systems (drinking water, sanitary sewer and stormwater), and the people who maintain them, work silently and reliably to keep the water flowing.

Out of sight, out of mind, right? Not if we have anything to do with it! Let's not take these critical pipelines and their proper maintenance for granted. What? See More



**askHrGreen.org**

Get More Likes, Comments and Shares  
Boost this post for \$15 to reach up to 3,000 people

2,825 People Reached    141 Engagements    [Boost Post](#)

**askhrgreen.org**  
Published by askhrgreen (11 - November 9, 2018)

Leaves are raining down along with rain drops. Remember, only rain can safely go down the storm drain!

Keeping leaves and other trash out of the drain helps prevent street flooding and local water pollution. [🍂](#) [🌧️](#) [💧](#)

#OnlyRainDownTheDrain #TGIF City of Norfolk Government Keep Norfolk Beautiful



YOUTUBE.COM  
**Only Rain Down the Storm Drain!**

To ensure a beautiful community and healthy environme...

Learn More

2,730 People Reached    82 Engagements    [Boost Again](#)

**askhrgreen.org**  
Published by Rebekah Jones Easter (11 - May 17)

Personal wipes, public problem.

Miami-Dade Water & Sewer Department can attribute up to \$1.5 million in operating costs to the management of trash flushed down the toilet. Some pump stations need to be cleaned up 3x more often than 18 years ago.

#TheMoreYouKnow #a3Friday #NoWipesInThePipes #ToiletsNotTrashCans #WipesClogPipes HRSDD



Miami CBSLOCAL.COM  
**Wipes Clogging Up Miami-Dade Sewer System**

Those single use flushable wipes are popular, but are they causing an ev...

Get More Likes, Comments and Shares  
Boost this post for \$15 to reach up to 3,000 people

4,075 People Reached    452 Engagements    [Boost Post](#)

**askhrgreen.org**  
Published by Rebekah Jones Easter (11 - May 25)

More on the viral video from this weekend showing the mess left behind after the Floatopia event in Chic Beach. Shout out to City of Virginia Beach Waste Management Division for getting this mess cleaned up ASAP! [#TeamUp2CleanUp](#) [#TrashFreeWaters](#) [#LeaveOnlyFootprints](#)



WTOR.COM  
**Large amounts of trash left on beach after 'Floatopia' upsets Virginia Beach residents**

Get More Likes, Comments and Shares  
Boost this post for \$15 to reach up to 3,000 people

4,915 People Reached    987 Engagements    [Boost Post](#)

**askhrgreen.org**  
Published by askhrgreen (11 - January 31)

Hampton Roads is slowly being buried by #singleuseplastic (those plastic items we encounter every day that are meant to be used just once before being thrown away 🗑️). What can you do?

CHOOSE TO REFUSE! 🚫

Say "No, thank you" single-use plastics such as plastic bags, straws, and utensils. You can carry reusable shopping bags for all your retail shopping needs. Bring your own glass or metal water bottle instead of buying bottled drinks. And pack lunches using reusable containers. See More



**Choose To Refuse Single-Use Plastic!**

0121

ADDERGREEN.ORG  
**Choose To Refuse Single-Use Plastic!**

Learn More

58,125 People Reached    1,706 Engagements    [Boost Post](#)

# Terms

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## **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.

### Search Engine & Online Marketing Results July 2018 - Jun 2019

Campaign Overview: The below report represents the traffic to AskHRGreen.org from the months of July 2018 – June 2019 from the Pay Per Click campaign managed by Tribune Digital. In the span of your last fiscal year, Tribune has accounted for 11,087 clicks to AskHRGreen.org from serving 210,695 impressions for a click thru rate of 5.26%. That means that for every 20 ads that appear, it resulted in one click to the website.

Here is how the campaign looks by month:

#### July 2018:

For the month of July, we delivered a total of **18,091 impressions** to adults in the Hampton Roads market, and those impressions drove the following activity:

- We drove a total of **920 clicks** to your website, which is **23%** of your total site traffic, only behind google organic searches.
- 9 of your top 25 pages visited in that same time period were a direct result of wtkr's efforts.
- Knowing that recycling is one of your biggest initiatives, 6 of the top 7 keyword groups for July were recycling related, generating **606 clicks** to the site, accounting for **66% of all site traffic** from the search campaign (920 clicks).
- Top five keyword groups for July were:
  1. Electronics Disposal
  2. Reduce Reuse Recycle
  3. TMDL
  4. Battery Disposal
  5. Great American Cleanup
  6. Medication Disposal
  7. Recycling At Home
  8. Native Plants
  9. Tap Water
  10. askHRGreen General

#### August 2018:

For the month of August, we delivered a total of **19,586 impressions** to adults in the Hampton Roads market, and those impressions drove the following activity:

- We drove a total of **933 clicks** to your website, which is **24%** of your total site traffic, only behind google organic searches.
- 11 of your top 25 pages visited in that same time period were a direct result of wtkr's efforts.
- Knowing that recycling is one of your biggest initiatives, 5 of the top 6 keyword groups for August were recycling related, generating **579 clicks** to the site, accounting for **62% of all site traffic** from the search campaign (933 clicks).
- Top five keyword groups for August were:
  1. Electronics Disposal
  2. Reduce Reuse Recycle
  3. Recycling At Home
  4. TMDL
  5. Battery Disposal
  6. Great American Cleanup
  7. Native Plants
  8. askHRGreen General
  9. Medication Disposal
  10. Plastic Bag Recycling

### September 2018:

For the month of September, we delivered a total of **15,484 impressions** to adults in the Hampton Roads market, and those impressions drove the following activity:

- We drove a total of **764 clicks** to your website, which is **20%** of your total site traffic, only behind google organic searches and direct traffic.
- 8 of your top 25 pages visited in that same time period were a direct result of wtkr's efforts.
- Knowing that recycling is one of your biggest initiatives, 4 of the top 5 keyword groups for September were recycling related, generating **436 clicks** to the site, accounting for **57% of all site traffic** from the search campaign (764 clicks).
- Top five keyword groups for September were:
  1. Electronics Disposal
  2. Reduce Reuse Recycle
  3. TMDL
  4. Recycling At Home
  5. Battery Disposal
  6. askHRGreen General
  7. Great American Cleanup
  8. Native Plants
  9. Tap Water
  10. Medication Disposal

### October 2018:

For the month of October, we delivered a total of **15,463 impressions** to adults in the Hampton Roads market, and those impressions drove the following activity:

- We drove a total of **875 clicks** to your website, which is **17%** of your total site traffic, only behind google organic searches and direct traffic.
- 8 of your top 25 pages visited in that same time period were a direct result of wtkr's efforts.
- Knowing that recycling is one of your biggest initiatives, 3 of the top 5 keyword groups for October were recycling related, generating **321 clicks** to the site, accounting for **37% of all site traffic** from the search campaign (875 clicks).
- Top five keyword groups for October were:
  1. Electronics Disposal
  2. TMDL
  3. Recycling At Home
  4. Reduce Reuse Recycle
  5. Native Plants
  6. Medication Disposal
  7. Great American Cleanup
  8. Battery Disposal
  9. Lawn Care
  10. Tap Water

### November 2018:

For the month of November, we delivered a total of **17,312 impressions** to adults in the Hampton Roads market, and those impressions drove the following activity:

- We drove a total of **848 clicks** to your website, which is **17%** of your total site traffic, only behind google organic searches and direct traffic.
- 8 of your top 25 pages visited in that same time period were a direct result of wtkr's efforts.
- Knowing that recycling is one of your biggest initiatives, 4 of the top 5 keyword groups for November were recycling related, generating **462 clicks** to the site, accounting for **54% of all site traffic** from the search campaign (848 clicks).
- Top five keyword groups for November were:
  1. Electronics Disposal
  2. Reduce Reuse Recycle
  3. TMDL
  4. Recycling At Home
  5. Battery Disposal
  6. America Recycles Day
  7. askHRGreen General
  8. Great American Cleanup
  9. Native Plants
  10. Tap Water

### December 2018:

For the month of December, we delivered a total of **15,457 impressions** to adults in the Hampton Roads market, and those impressions drove the following activity:

- We drove a total of **793 clicks** to your website, which is **14%** of your total site traffic, only behind google organic searches, direct traffic and our Facebook campaign.
- 7 of your top 25 pages visited in that same time period were a direct result of wtkr's efforts.
- Knowing that recycling is one of your biggest initiatives, 4 of the top 5 keyword groups for December were recycling related, generating **428 clicks** to the site, accounting for **54% of all site traffic** from the search campaign (793 clicks).
- Top five keyword groups for December were:
  1. Electronics Disposal
  2. Reduce Reuse Recycle
  3. TMDL
  4. Recycling At Home
  5. Battery Disposal
  6. Native Plants
  7. Tap Water
  8. Plastic Bag Recycling
  9. American Recycles Day
  10. Great American Cleanup

### January 2019:

For the month of January, we delivered a total of **16,956 impressions** to adults in the Hampton Roads market, and those impressions drove the following activity:

- We drove a total of **944 clicks** to your website, which is **19%** of your total site traffic, only behind google organic searches and direct traffic.
- 7 of your top 25 pages visited in that same time period were a direct result of wtkr's efforts.
- Knowing that recycling is one of your biggest initiatives, 4 of the top 5 keyword groups for January were recycling related, generating **491 clicks** to the site, accounting for **52% of all site traffic** from the search campaign (944 clicks).
- Top five keyword groups for January were:
  1. Electronics Disposal
  2. Reduce Reuse Recycle
  3. TMDL
  4. Recycling At Home
  5. Battery Disposal
  6. Native Plants
  7. Tap Water
  8. Plastic Bag Recycling
  9. America Recycles Day
  10. Great American Cleanup

### February 2019:

For the month of February, we delivered a total of **16,931 impressions** to adults in the Hampton Roads market, and those impressions drove the following activity:

- We drove a total of **902 clicks** to your website, which is **21%** of your total site traffic, only behind google organic searches and direct traffic.
- 9 of your top 25 pages visited in that same time period were a direct result of wtkr's efforts.
- Knowing that recycling is one of your biggest initiatives, 4 of the top 5 keyword groups for February were recycling related, generating **433 clicks** to the site, accounting for **48% of all site traffic** from the search campaign (902 clicks).
- Top five keyword groups for February were:
  1. Electronics Disposal
  2. Reduce Reuse Recycle
  3. TMDL
  4. Recycling At Home
  5. America Recycles Day
  6. Native Plants
  7. Medication Disposal
  8. askHRGreen General
  9. Battery Disposal
  10. Great American Cleanup

### March 2019:

For the month of March, we delivered a total of **17,931 impressions** to adults in the Hampton Roads market, and those impressions drove the following activity:

- We drove a total of **962 clicks** to your website, which is **17%** of your total site traffic, only behind google organic searches and direct traffic.
- 7 of your top 25 pages visited in that same time period were a direct result of wtkr's efforts.
- Knowing that recycling is one of your biggest initiatives, 3 of the top 5 keyword groups for February were recycling related, generating **322 clicks** to the site, accounting for **33% of all site traffic** from the search campaign (962 clicks).
- Top five keyword groups for March were:
  1. Electronics Disposal
  2. TMDL
  3. Reduce Reuse Recycle
  4. Native Plants
  5. Battery Disposal
  6. Great American Cleanup
  7. Medication Disposal
  8. Recycling at Home
  9. American Recycles Day
  10. AskHRGreen General

### April 2019:

For the month of April, we delivered a total of **20,219 impressions** to adults in the Hampton Roads market, and those impressions drove the following activity:

- We drove a total of **1,099 clicks** to your website, which is **17%** of your total site traffic, only behind google organic searches and direct traffic.
- 8 of your top 25 pages visited in that same time period were a direct result of wtkr's efforts.
- Knowing that recycling is one of your biggest initiatives, 5 of the top 7 keyword groups for April were recycling related, generating **537 clicks** to the site, accounting for **49% of all site traffic** from the search campaign (1,099 clicks).
- Top five keyword groups for April were:
  1. Electronics Disposal
  2. Native Plants
  3. Reduce Reuse Recycle
  4. Recycling At Home
  5. TMDL
  6. Battery Disposal
  7. Medication Disposal
  8. askHRGreen General
  9. Great American Cleanup
  10. Rain Barrels

### May 2019:

For the month of May, we delivered a total of **19,481 impressions** to adults in the Hampton Roads market, and those impressions drove the following activity:

- We drove a total of **976 clicks** to your website, which is **20%** of your total site traffic, only behind google organic searches and direct traffic.
- 9 of your top 25 pages visited in that same time period were a direct result of wtkr's efforts.
- Knowing that recycling is one of your biggest initiatives, 5 of the top 7 keyword groups for May were recycling related, generating **537 clicks** to the site, accounting for **55% of all site traffic** from the search campaign (976 clicks).
- Top five keyword groups for May were:
  1. TMDL
  2. Electronics Disposal
  3. Native Plants
  4. Reduce Reuse Recycle
  5. Great American Cleanup
  6. Battery Disposal
  7. Recycling at Home
  8. askHRGreen General
  9. Rain Barrels
  10. Tap Water

## **June 2019:**

For the month of June, we delivered a total of **17,784 impressions** to adults in the Hampton Roads market, and those impressions drove the following activity:

- We drove a total of **1,107 clicks** to your website, which is **18%** of your total site traffic, only behind google organic searches and direct traffic.
- 11 of your top 25 pages visited in that same time period were a direct result of wtkr's efforts.
- Knowing that recycling is one of your biggest initiatives, 4 of the top 6 keyword groups for June were recycling related, generating **546 clicks** to the site, accounting for **49% of all site traffic** from the search campaign (1,107 clicks).
- Top five keyword groups for June were:
  1. Electronics Disposal
  2. Reduce Reuse Recycle
  3. Recycling At Home
  4. TMDL
  5. Native Plants
  6. Battery Disposal
  7. Great American Cleanup
  8. askHRGreen General
  9. Medication Disposal
  10. Plastic Bag Recycling

High Priority Issues - Education and Outreach Plan  
Date Developed - April 19, 2019

Permit Cycle: Nov. 1, 2018 - October 31, 2023

				Anticipated Schedule - FY19 and beyond	
High Priority Issue	Rationale for Selecting this Issue	Target Audience	Strategies Used		
1	Pet Waste: Scoop the Poop	Reducing impacts to waterways with local bacteria impairments and seasonal algal blooms	Dog owners	Paid media campaign (TV, radio, newspapers)	Summer 2019
				askHRgreen e-newsletter and social media posts	Each Summer
				Green Learning Guide for every 3rd grader	Dec. 2018
				Bulk purchase of pet waste stations	Fall 2019
				Printed brochures	Ongoing
				Promotional items - Dog waste bag holders, bumper stickers, and hand sanitizers	Ongoing
				Information on askHRgreen.org	Ongoing
2	Lawn Care	Reducing algal blooms and nutrients concentrations in surface waters	Homeowners	Paid media campaign (TV, radio, newspapers)	Summer 2019
				askHRgreen e-newsletter and social media posts -fertilizer	Each Spring
				askHRgreen e-newsletter and social media posts -leaves and lawn debris	Each Fall
				Rainbarrel Workshops	Spring 2019
				Promotion of soil test kits	Spring 2019
				"Drains to Waterways" storm drain medallions	Ongoing
				Printed brochures	Ongoing
				Promotional items - message pens, soil test kits	Ongoing
				Information on askHRgreen.org	Ongoing
3	Proper Disposal of Fats, Oils, and Greases (FOG)	Preventing sanitary sewer overflows caused by improper disposal of fats, oils, and grease	Restaurant owners and employees, grease haulers, and general public	Paid media campaign (radio ads, social media ads, and targeted display ads)	Nov. and Dec. 2018 & Nov. and Dec. 2019
				askHRgreen e-newsletter and social media posts	Each Winter
				Training and certification website - www.HRFOG.com	Ongoing
				Promotional items - grease can lids, scrapers, sponges, sink strainers	Ongoing
				Printed brochures	Ongoing
				Information on askHRgreen.org	Ongoing
4	Pollution prevention education to commercial entities: 1) Auto Care Businesses, 2) Pet Care/Groomers/Boarding Businesses, 3) Landscaping and Lawn Service Providers	Prevention of Illicit discharges from businesses most likely to contribute oils, bacteria, and nutrients	Owners and employees of businesses most likely to contribute oils, bacteria, and nutrients	Bay Star Businesses program	Ongoing
				Three new rack card brochures tailored to each business type	Nov. 2018
				Direct mailing to landscapers	March 2019
				Promotional items - Bay Star Businesses window clings and notepads	Ongoing
				Information on askHRgreen.org	Ongoing

### Giveaway Tracking- Permit Year 1

Giveaway Tracking	TGIF 7/20/2018	TGIF 7/27/2018	TGIF 8/10/2018	TGIF 8/17/2018	National Night Out	Master Gardeners Intro	Master Gardeners Class	Taste of Suffolk	Trunk or Treat	Kings Fork Middle School	Star Pointe Academy Explore Visit	Holland Ruritan Club
Item												
Pens	6	7	8	2			20					20
Pencils										100		
Residential Guide Brochures ( Healthy Bay Starts at Home)	2	3	5	1		25		25	100			20
Seed Packets	20	18	10	15			20			100		20
Medallions											10	
Native Plant Guide												20
Car Wash Brochure												
Plant More Plants Brochure/Card												
Dog Waste Bags	4	10	4	1	30			25				10
Dog Waste Rack Cards	1	4	2	5	30			25				
Dog Waste Stickers	5	6	2	3								10
Green Living Brochure												
Crossword Puzzle												
Hrgreen Bag						25			100			
Green Learning Guides												
Teachers Guides												
Down the Drain Brochure	2	1	4	2								
Time to Fertilize Brochure	2	1	2	2	30							20
Coastal Virginia Magazine												
Hampton Roads TMDL Rack Card												
Bay Star Homes Flag Pole												
Bay Star Home Info Sheet	1	2	1	1		25	20	25	100			
Bay Star Home Stickers												
Bay Star Homes Flag												
Illicit Discharge Business Card	2	1	1	1			20	25	100			20
Soil Testing Kit												
Hand Sanitizer							20					
Smoking Litter cup ash try												
Smoking Litter pocket ash tray												
Household recycling made easy	2	1	2	3								
Gold fish crackers												
Swedish Fish Candy	20	12	8	12	8							
Water in HR												
Wrist Bands												
Choose Tap												
Hampton Roads Defined by Water						25						
Waterwise Book												
BSH Window Cling												
Floating key chains	8	5					20					20
Pet Waste Stations												
<b>Total</b>	75	71	49	48	98	100	120	125	400	200	10	160

**Giveaway Tracking- Permit Year 1**

Giveaway Tracking	Plants of the Great Dismal Swamp National Wildlife Refuge (Volunteer)	Norfolk Naval Shipyard	Rain Barrel Workshop (Volunteer)	Public Works Week	TGIF 6/14/2019	TGIF 6/21/2019	TGIF 6/28/2019	Bay Star Homes	Pet Waste Station Creek View	Pet Waste Station Hargrove Landing	Pet Waste Station Kings Fork Farm
Item											
Pens	15	26	15	50	15	15		25			
Pencils				20							
Residential Guide Brochures ( Healthy Bay Starts at Home)	15		15	20	2	2		25			
Seed Packets	15		15	40	15	15		25			
Medallions											
Native Plant Guide	15		15								
Car Wash Brochure											
Plant More Plants Brochure/Card											
Dog Waste Bags		20		50	15	15	10				
Dog Waste Rack Cards					15	15	10				
Dog Waste Stickers				20	4	5	10	25			
Green Living Brochure					6	2		25			
Crossword Puzzle											
Hrgreen Bag	15		15					25			
Green Learning Guides											
Teachers Guides											
Down the Drain Brochure	15				2	3		25			
Time to Fertilize Brochure	15		15	20	2	5		25			
Coastal Virginia Magazine											
Hampton Roads TMDL Rack Card	15							25			
Bay Star Homes Flag Pole								25			
Bay Star Home Info Sheet				20	2	2					
Bay Star Home Stickers								25			
Bay Star Homes Flag								25			
Illicit Discharge Business Card	15		15					25			
Soil Testing Kit	15		15					25			
Hand Sanitizer	15	20	15		15	15		25			
Smoking Litter cup ash try											
Smoking Litter pocket ash tray											
Household recycling made easy					2	2		25			
Gold fish crackers											
Swedish Fish Candy											
Water in HR											
Wrist Bands					2						
Choose Tap					2	1		25			
Hampton Roads Defined by Water								25			
Waterwise Book					3	7					
BSH Window Cling											
Floating key chains					15	15					
Pet Waste Stations								1	1	1	1
<b>Total</b>	<b>165</b>	<b>66</b>	<b>135</b>	<b>240</b>	<b>117</b>	<b>119</b>	<b>30</b>	<b>451</b>	<b>1</b>	<b>1</b>	<b>1</b>

### Giveaway Tracking- Permit Year 1

Giveaway Tracking	Pet Waste Station The Masters of Harbourview	Station The Residences at Hampton Roads Crossing	Pet Waste Station Prentis Place	Total
Item				
Pens				224
Pencils				120
Residential Guide Brochures ( Healthy Bay Starts at Home)				260
Seed Packets				328
Medallions				10
Native Plant Guide				50
Car Wash Brochure				0
Plant More Plants Brochure/Card				0
Dog Waste Bags				194
Dog Waste Rack Cards				107
Dog Waste Stickers				90
Green Living Brochure				33
Crossword Puzzle				0
Hrgreen Bag				180
Green Learning Guides				0
Teachers Guides				0
Down the Drain Brochure				54
Time to Fertilize Brochure				139
Coastal Virginia Magazine				0
Hampton Roads TMDL Rack Card				40
Bay Star Homes Flag Pole				25
Bay Star Home Info Sheet				199
Bay Star Home Stickers				25
Bay Star Homes Flag				25
Illicit Discharge Business Card				225
Soil Testing Kit				55
Hand Sanitizer				125
Smoking Litter cup ash try				0
Smoking Litter pocket ash tray				0
Household recycling made easy				37
Gold fish crackers				0
Swedish Fish Candy				60
Water in HR				0
Wrist Bands				2
Choose Tap				28
Hampton Roads Defined by Water				50
Waterwise Book				10
BSh Window Cling				0
Floating key chains				83
Pet Waste Stations	1	2	1	8
<b>Total</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2786</b>

## **Appendix C**

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

**Outreach and Involvement Events- Permit Year 1**

Event	Date	Details	Beneficial to improving water quality?
Suffolk TGIF Summer Concert Series	7/20/2018, 7/27/2018, 8/10/2018, 8/17/2018, 6/14/2019, 6/21/2019, 6/28/2019,	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.	Yes
National night out	8/7/2018	National Night Out is an annual community-building campaign that promotes police-community partnerships and neighborhood camaraderie to make our neighborhoods safer, better places to live. Distributed information about dog waste, fertilization, and stormwater runoff.	Yes
Master Gardeners Intro	9/4/2018	Gave bags, stormwater runoff brochures, water wise magazines, and illicit discharge business cards to Suffolk's master gardeners in training.	Yes
Taste of Suffolk	9/8/2018	This festival features some of Suffolk's local restaurants, crafters, vendors and merchants. They have live entertainment and contest. 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.	Yes
Master Gardeners Class (Volunteer)	10/2/2018	Attended the groups monthly meeting and presented on the City's stormwater program, pollution in stormwater runoff and what citizens can do to help. Promoted the upcoming recycling drive and write as rain campaign. Distributed some hands on materials and giveaways.	Yes
Suffolk Peanut Fest	10/4-7/2018	This festival honors the city's 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.	Yes
Trunk or Treat Suffolk Library	10/20/2018	Gave reusable bags to Suffolk Library event organizers so they can give to kids. Also handed out rack cards and IDDE Business Cards. Reached 100 citizens	Yes
Yappy Hour	10/26/2018	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 50 Pet owners	Yes
Forest Glen 6th Grade	1/9/2019	Educated 6th grade science students about our watershed and pollution prevention with enviroscape. Illicit discharge pictures were used to demonstrate real life pollution. True or false questions concerning our watershed and local ordinances. Reached approximately 100 Students	Yes
Kings Fork Middle School Career Day	2/26/2019	Educated 6th grade students about stormwater and how technicians help keep our waterways clean by upholding our MS4 permit. Gave pencils and wildflowers out. Reached 100 Students	Yes
Star Pointe Academy Explore Visit	3/4/2019	Students and parents spent the day with Jamie at City Hall. Jamie educated them on our MS4 permit and how we uphold the permit by out 6 minimum control measures. They also were educated on illicit discharges. Field visit around city hall to see our stormdrain conveyance system and litter pick up. Reached 12 citizens.	Yes
Nansemond River High School	3/18-19/19	Educated high school science students about our watershed and pollution prevention with enviroscape. Illicit discharge pictures were used to demonstrate real life pollution. True or false questions concerning our watershed and local ordinances. Reached approximately 120 Students	Yes
Nansemond Suffolk Academy	3/20/2019	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.	Yes
Holland Ruritan Club	4/4/2019	Spoke to Suffolk's Holland Ruritan club about stormwater and litter control. Used PowerPoint to educate club on out MS4 permit and the minimum control measures. Educated club on what they can do around their house to minimize polluter stormwater runoff. Gave away educational brochures and giveaways to remind club to always be an environmental steward.	Yes
Plants of the Great Dismal Swamp National Wildlife Refuge (Volunteer)	4/6/2019	Partnered with the Suffolk Visitors Center and Great Dismal Swamp for Free activity for both school-age children and adults that will address how to identify certain trees, native plants and their uses, the benefits of growing native plants, wildlife uses and environmental benefits. Gave away native plant guides, stormwater pollution prevention brochures, illicit discharge rack cards, when to fertilize brochures and Bay Star Home info.	Yes
Pioneer Elementary	4/10/2019	Educated every 4th and 5th grade student about pollution in stormwater runoff using the EnviroScape model. Reached 160 Students	Yes

**Outreach and Involvement Events- Permit Year 1**

<b>Event</b>	<b>Date</b>	<b>Details</b>	<b>Beneficial to improving water quality?</b>
<b>Spring R(e)cycling Drive (Volunteer)</b>	4/13/2019	The Spring R(e)cycling Drive and Tire Amnesty Day was an opportunity for residents to responsibly dispose of a variety of items, including tires, household hazardous waste, and old electronics in an effort to help the community become cleaner and greener. The event was organized by Keep Suffolk Beautiful and hosted by Lowes. 136 residents dropped off household hazardous waste (disposed of by SPSA), 11.99 tons of tires (disposed of by SPSA), and 500 cars participated in the event (approximately 800 people).	Yes
<b>Fall R(e)cycling Drive (Volunteer)</b>	10/13/2018	The Fall R(e)cycling Drive and Tire Amnesty Day was an opportunity for residents to responsibly dispose of a variety of items, including tires, household hazardous waste, and old electronics in an effort to help the community become cleaner and greener. The event was organized by Keep Suffolk Beautiful and hosted by Lowes. 127 residents dropped off household hazardous waste (disposed of by SPSA), 13.35 tons of tires (disposed of by SPSA), and 400 cars participated in the event (approximately 700 people).	Yes
<b>Hampton Public Works Academy</b>	4/16/2019	Used the EnviroScape watershed model to help demonstrate the stormwater water runoff and pollution. Used PowerPoints to go over illicit discharge examples and preventive techniques. Reached 25 students	Yes
<b>Norfolk Naval Shipyard</b>	4/18/2019	Gave away informational materials at Norfolk's Naval Shipyards Earth Day event. Offering information on stormwater run off, lawn care practices, used oil, native plants, scooping the poop, water quality, TMDLs and recycling/litter prevention.	Yes
<b>Rain Barrel Workshop (Volunteer)</b>	4/20/2019	Participants built a rain barrel to take home. Gave away soil test kits, Stormwater Pollution Prevention flyers, Illicit Discharge info and Bay Star Home info. Reached 30 citizens. Collaborated with HRPDC to obtain materials.	Yes
<b>Suffolk Public Library North Suffolk</b>	4/24/2019	Partnered with Suffolk Public Library to teach homeschooled children about the watershed and stormwater pollution prevention. Used the envirosape, and PowerPoints to show stormwater runoff and real life illicit discharges. Reached students from age 2-17 and adults. Reached 30 citizens total.	Yes
<b>Suffolk Public Library Downtown</b>	4/30/2019	Partnered with Suffolk Public Library to teach homeschooled children about the watershed and stormwater pollution prevention. Used the envirosape, and PowerPoints to show stormwater runoff and real life illicit discharges. Reached students from age 2-17 and adults. Reached 30 citizens total.	Yes
<b>NRPA Marshfield Study (Spring)</b>	5/7-8/2019	Educated 7th graders in Suffolk Public Schools about pollution in stormwater runoff using the EnviroScape model. Approximately 450 students participated in this two day event.	Yes
<b>NRPA Marshfield Study (Fall)</b>	10/9-10/2018	Educated 7th graders in Suffolk Public Schools about pollution in stormwater runoff using the EnviroScape model. Approximately 450 students participated in this two day event.	Yes
<b>Suffolk Employee Appreciation Lunch</b>	5/10/2019	Brought the askHRgreen trailer to the Suffolk Employee Food Truck Rodeo. Reached every Suffolk Employee. Offered information on stormwater run off, lawn care practices, used oil, native plants, scooping the poop, water quality, TMDLs and recycling/litter prevention. Reached 1500 employees.	Yes
<b>Public Works Week</b>	5/20-25/2019	Participated in various activities around the city for public works awareness week. Offered information on stormwater run off, lawn care practices, used oil, native plants, scooping the poop, water quality, TMDLs and recycling/litter prevention	Yes
<b>International Coastal Cleanup</b>	10/27/2018	River and bank clean-up. Volunteers removed bags of trash and other debris by boat and by foot. A total of 60 volunteers participated and removed approximately 2500 lbs of trash (100 bags x 25 lbs).	Yes
<b>Clean the Bay Day</b>	6/2/2019	River and land clean-up. Approximately 75 volunteers participated and 1250 lbs of trash were removed (50 bags x 25 lbs) despite rainy conditions that resulted in an early ending to the event.	Yes
<b>Adopt-a-Programs and Community Clean-ups</b>	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 permit year, 1272 volunteers donated 2844 hours and collected 1230 bags of trash throughout the city.	Yes
<b>Tree and Wildflower Plantings</b>	Year Round	The City of Suffolk coordinated several planting events during the last permit year including: 11 raised beds at East Suffolk Community Garden planted by 60 volunteers; 20 trees planted at Planters Park by 25 volunteers; 8 trees planted at Lake Meade Park by 6 volunteers; 24 blueberry bushes and raised beds planted by 11 volunteers at East Suffolk Community Garden; 15 trees planted by 10 volunteers at Bennett's Creek Park.	Yes

\*Highlighted events are the 4 activities chosen to report on in the Program Plan.

## **Appendix D**

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

Dry Weather Screenings- Permit Year 1

Date Inspected	Inspected By	Location	Observations	Facility ID
10/31/2018 10:50	DURDEN, JAMIE L	Pruden BLVD	Ditch wet at pipe from under driveway, then becomes dry. Pipe under driveway was hdpe.	JR-241-OF-0204
10/31/2018 11:00	DURDEN, JAMIE L	Pruden BLVD	Inspected concrete pipe under driveway. That goes to a grassy swale.	JR-241-OF-0203
10/31/2018 11:10	DURDEN, JAMIE L	Pruden BLVD	Stagnant water at pipe because there is no where for the water to go. It is blocked from ponding/sediment. Water standing	JR-241-AP-0011
10/31/2018 11:20	DURDEN, JAMIE L	Northgate		JR-241-OF-0114
10/31/2018 11:30	DURDEN, JAMIE L	Riverview		JR-267-OF-0106
10/31/2018 11:40	DURDEN, JAMIE L	Riverview		JR-267-OF-0022
10/31/2018 01:12	DURDEN, JAMIE L	Kingsboro Heights		JR-267-OF-0030
10/31/2018 01:19	DURDEN, JAMIE L	Kingsboro Heights	Could not find outfall, inspected JR-267-DI-0565, it was dry.	JR-267-OF-0029
10/31/2018 01:23	DURDEN, JAMIE L	Kingsboro Heights		JR-267-OF-0135
10/31/2018 01:35	DURDEN, JAMIE L	Kingsboro Heights		JR-267-OF-0133
10/31/2018 01:50	DURDEN, JAMIE L	Halifax	Outfall submerged, water blocked by natural pool. Inspected first yard drain up, (JR-267-DI-0460), water sitting. Inspected	JR-267-OF-0063
10/31/2018 02:06	DURDEN, JAMIE L	Lloyd Place	Next to railroad tracks. Ditch entrance. A lot of trash and branches built up where ditch turns at riprap. Needs cleaning and	JR-267-DE-0808
10/31/2018 02:25	DURDEN, JAMIE L	Hoffler Apartments	Checked stormdrains up system (JR-268-DI-0254 and Jr-268-DI-0262) and they were dry.	JR-268-OF-0002
10/31/2018 02:39	DURDEN, JAMIE L	Hoffler Apartments		JR-268-OF-0053
01/17/2019 09:20	DURDEN, JAMIE L	Walnut Hill Estates	Outfall full of water, could not see pipe. Stormdrain JR-267-DI-0725 full of water. some trash. 2nd stormdrain JR-267-DI-	JR-267-DE-0067
01/17/2019 10:10	DURDEN, JAMIE L	Walnut Hill Estates	Outfall under culvert, can't see. 1st stormdrain JR-267-DI-0743, had water holding. 2nd stormdrain JR-267-DI-0727, had	JR-267-DE-0068
01/17/2019 11:02	DURDEN, JAMIE L	White Marsh Road	Tested water at first manhole, Jr-267-MH-0391, because there was not enough flow at outfall to get sample. Results above.	JR-267-OF-0005
01/17/2019 12:15	DURDEN, JAMIE L	White Marsh Road		JR-267-OF-0155
01/17/2019 12:43	DURDEN, JAMIE L	White Marsh Road	Tested water coming out of submerged outfall. Results above. 1st stormdrain JR-267-DI-1793 small flow, appeared to be	JR-267-OF-0124
01/17/2019 01:20	DURDEN, JAMIE L	Rosemont	Dumping pine straw near outfall. Door hangers dispersed to surrounding homes.	JR-267-OF-0122
01/17/2019 01:48	DURDEN, JAMIE L	Lake Kennedy Estates	Couldnt see outfall pipe. Hill that drops due to erosion. Pipe has bad undercut. Inspected stormdrain JR-268-DI-0456 and	JR-268-OF-0036
02/6/2019 10:00	DURDEN, JAMIE L	Pinner Street	Outfall under fallen tree.	JR-267-OF-0032
02/6/2019 11:15	DURDEN, JAMIE L	South Suffolk	Outfall in junction box in shingle creek. Clear water flowing from outfall, heavy iron floc on bottom of creek bed. Clear water	JR-267-AP-0049
02/6/2019 11:55	DURDEN, JAMIE L	South Suffolk	Ditch to a driveway pipe.	JR-267-OF-0273
02/6/2019 12:20	DURDEN, JAMIE L	South Suffolk	Could not access outfall. Stormdrains leading into outfall were dry other than JR-267-DI-0811. Water flowing into drain from	JR-267-OF-0157
02/6/2019 10:33	DURDEN, JAMIE L	Old Towne	Could not locate outfall. This information is for stormdrain JR-267-DI-0172. Leaking water meter beside stormdrain. Water	JR-267-OF-0140
05/16/2019 11:36	DURDEN, JAMIE L	Lake Kennedy	This is DI not an outfall. Standing water in DI. A Lot of trash. Checked JR-268-DI-0424, standing water, nothing moving.	JR-268-DI-0391
05/16/2019 09:50	DURDEN, JAMIE L	Lake Kennedy Estates	Outfall blocked by fence. Checked JR-268-DI-0292, standing water and a lot of trash, needs to be cleaned. Checked JR-	JR-268-DE-0023
05/16/2019 10:12	DURDEN, JAMIE L	Lake Kennedy Estates	A lot of dumping around outfall, but appeared to be there for multiple years. Checked JR-268-DI-0407, trickle flow. Tested	JR-268-OF-0014
05/16/2019 10:30	DURDEN, JAMIE L	Lake Kennedy Estates	Only on DI going in, JR-268-DI-0404, could not open man hole. Took picture inside DI with selfie stick. Water appeared to	JR-268-OF-0012
05/16/2019 10:47	DURDEN, JAMIE L	Lake Kennedy Estates	Outfall blocked by fence. Checked JR-268-DI-0453, dry but had a significant amount of pine needles placed in drain. Left	JR-268-OF-0016
05/16/2019 11:00	DURDEN, JAMIE L	Lake Kennedy Estates	Outfall being undercut due to holes in metal flume. Not impeding flow or causing issues.	JR-268-OF-0013
05/16/2019 11:27	DURDEN, JAMIE L	Parker-Riddick/Coaic Homes	Outfall is DI, low flow coming from down the street from, JR-268-DI-0633. That DI had flow from 2 pipes leading in. The pipe	JR-268-DI-0629
05/16/2019 12:50	DURDEN, JAMIE L	Orlando	DI going into BMP had water standing, due to BMP inlet submerged, no flow. DIs on Mahlon Ave were dry but had evidence	JR-267-OF-0197
05/24/2019 01:43	DURDEN, JAMIE L	Jefferson St	Everything was dry other than JR-267-DI-0535. Very small trickle, not enough to grab a sample.	JR-267-OF-0061
05/16/2019 02:05	DURDEN, JAMIE L	Wilson Pines Apartments	Outfall flowing, Jr-268-DI-0147 flowing from across st. JR-268-DI-0145 not flowing. JR-268-CE-0011 flowing from north side.	JR-268-OF-0001
06/4/2019 10:19	DURDEN, JAMIE L	Tynes Park	Could not see outfall at ditch entrance. DE was dry, tracked upstream and small water sitting in bottom of DI. Further	JR-267-DE-0008
06/4/2019 10:34	DURDEN, JAMIE L	Pleasant Hill	Not an outfall, enters Yard Drain. Was Dry.	JR-267-DE-0114
06/4/2019 11:00	DURDEN, JAMIE L	East Suffolk Gardens	Evidence of old dumping at site.	JR-267-OF-0194
06/4/2019 11:35	DURDEN, JAMIE L	East Suffolk Gardens	Found more structures coming into the system. Obvious sewage discharge.	JR-267-OF-0193
06/4/2019 01:24	DURDEN, JAMIE L	East Suffolk Gardens	Dry	JR-267-OF-0284
06/4/2019 01:34	DURDEN, JAMIE L	East Suffolk Gardens		JR-267-OF-0283
06/4/2019 01:48	DURDEN, JAMIE L	Jefferson St	Next DI up had flow. (JR-267-DI-0550). Water flowing into drains on Jefferson (JR-267-DI-0555) from maple St. (JR-267-DI-	JR-267-OF-0062
06/4/2019 02:19	DURDEN, JAMIE L	Kingsboro Heights	Could not find outfall, inspected next DI, (JR-267-DI-0166). Dry.	JR-267-OF-0031
06/4/2019 02:39	DURDEN, JAMIE L	West Jericho	Could not locate outfall. Checked DIs up structure, first two had low flow (JR-267-DI-0459, JR-267-DI-0458). Next had	JR-267-OF-0064
06/4/2019 02:50	DURDEN, JAMIE L	Holland Road	Could not locate outfall, believed to be submerged or under bridge. the next two DIs had trash and small amount of	JR-267-OF-0051
06/4/2019 03:20	DURDEN, JAMIE L	Carolina Road	Outfall Dry, basketball was at edge of pipe.	JR-267-OF-0002
06/5/2019 12:00	DURDEN, JAMIE L	Hall Place	See maps included for details. Inspected with Erin and Heather. Tracked all the way up to saratoga where system stops.	JR-267-DE-0011
06/5/2019 12:00	DURDEN, JAMIE L	Hall Place	Dry coming into junction box and DIs. Inspected with Erin and Heather.	JR-267-DE-0010
06/5/2019 02:50	DURDEN, JAMIE L	South Suffolk	Flowing, always flows. Outfall checked on regular basis for 5 years and has never had any negative test results. Erin,	JR-267-OF-0065
06/5/2019 02:50	DURDEN, JAMIE L	South Suffolk	Flowing, always flows. Outfall checked on regular basis for 5 years and has never had any negative test results. Erin,	JR-267-OF-0156
06/25/2019 12:00	DURDEN, JAMIE L	Creekview	Sink hole over pipe under fence.	JR-216-OF-0032
06/25/2019 12:00	DURDEN, JAMIE L	Brittany Farms	Ditch entrance dry.	JR-216-OF-0005
06/25/2019 12:00	DURDEN, JAMIE L	Brittany Farms		JR-216-OF-0071
06/25/2019 12:00	DURDEN, JAMIE L	Brittany Farms		JR-216-OF-0069
06/25/2019 12:00	DURDEN, JAMIE L	Brittany Farms		JR-216-OF-0070
06/25/2019 12:00	DURDEN, JAMIE L	Creekview		JR-216-OF-0081
06/25/2019 12:00	DURDEN, JAMIE L	Brittany Farms	DI up from outfall flowing, Jr-216-DI-0317, Next 2 DIs also flowing. JR-216-MH-0035 flowing, water cloudy, sediment in DI.	JR-216-OF-0054
06/25/2019 12:00	DURDEN, JAMIE L	Brittany Farms		JR-217-OF-0024
06/25/2019 12:00	DURDEN, JAMIE L	Brittany Farms	Couldn't find outfall. Inspected nearest DI (JR-217-DI-0284)	JR-217-OF-0025
06/25/2019 12:00	DURDEN, JAMIE L	Brittany Farms	DI up from outfall is dry. (JR-217-DI-0285)	JR-217-OF-0026
06/25/2019 12:00	DURDEN, JAMIE L	Brittany Farms	Next DI from outfall (JR-217-DI-0293) had standing water in it. No flow. Next DI (JR-217-DI-0289) dry with leaves standing	JR-217-OF-0027
06/25/2019 12:00	DURDEN, JAMIE L	Brittany Farms		JR-217-OF-0121
06/25/2019 12:00	DURDEN, JAMIE L	Brittany Farms		JR-216-OF-0053
06/25/2019 12:00	DURDEN, JAMIE L	Creekview	Drop down structure dry. Outfall down into creek doesn't appear to be flowing.	JR-217-OF-0056
06/25/2019 12:00	DURDEN, JAMIE L	Pughsville	Small amount of water sitting in pipe but not flowing.	JR-217-OF-0170
06/25/2019 12:00	DURDEN, JAMIE L	Pughsville		JR-217-OF-0174
06/25/2019 12:00	DURDEN, JAMIE L	Pughsville		JR-217-OF-0175
06/25/2019 12:00	DURDEN, JAMIE L	Pughsville		JR-217-OF-0171
06/25/2019 12:00	DURDEN, JAMIE L	Pughsville		JR-217-OF-0176
06/25/2019 12:00	DURDEN, JAMIE L	Pughsville		JR-217-OF-0177
06/25/2019 12:00	DURDEN, JAMIE L	Pughsville		JR-217-OF-0178
06/25/2019 12:00	DURDEN, JAMIE L	Pughsville		JR-217-OF-0179
06/25/2019 12:00	DURDEN, JAMIE L	Pughsville		JR-217-OF-0173
06/25/2019 12:00	DURDEN, JAMIE L	Pughsville		JR-217-OF-0185
06/25/2019 12:00	DURDEN, JAMIE L	Pughsville		JR-217-OF-0186
06/25/2019 12:00	DURDEN, JAMIE L	Pughsville		JR-217-OF-0172
06/25/2019 12:00	DURDEN, JAMIE L	Pughsville		JR-217-OF-0122
06/25/2019 12:00	DURDEN, JAMIE L	Pughsville	Stagnant Water at outfall. No flow.	JR-217-OF-0102
06/25/2019 12:00	DURDEN, JAMIE L	Pughsville	2-15 inch pipes. Water was coming from car washing across the street. Was not using any chemicals to wash car, just	JR-217-OF-0105
06/25/2019 02:15	DURDEN, JAMIE L	Pughsville	Could not see flow, but there was water standing.	JR-217-OF-0161
06/25/2019 12:00	DURDEN, JAMIE L	Pughsville	Flow in stream, no flow coming from fingers going into stream.	JR-217-OF-0169
06/25/2019 12:00	DURDEN, JAMIE L	Pughsville		JR-217-OF-0164
06/25/2019 12:00	DURDEN, JAMIE L	Pughsville	2-15 inch pipes	JR-217-OF-0103
06/25/2019 12:00	DURDEN, JAMIE L	Pughsville		JR-217-OF-0104
06/25/2019 12:00	DURDEN, JAMIE L	Pughsville		JR-217-OF-0106
06/25/2019 12:00	DURDEN, JAMIE L	Pughsville	Could not locate outfall.	JR-217-OF-0116
06/26/2019 12:00	DURDEN, JAMIE L	Quaker Neck	Couldn't locate outfall. First DI up (JR-217-DI-1857) had some water sitting in the bottom, but no flow.	JR-217-OF-0234
06/26/2019 12:00	DURDEN, JAMIE L	Quaker Neck	Couldn't locate outfall. DI up from outfall (JR-217-MH-0053) had small amount of standing water in it, but no flow.	JR-217-OF-0023
06/26/2019 12:00	DURDEN, JAMIE L	Quaker Neck		JR-217-OF-0021
06/26/2019 12:00	DURDEN, JAMIE L	Quaker Neck	Couldn't locate outfall. DI up (JR-217-DI-0241) dry.	JR-217-OF-0019
06/26/2019 12:00	DURDEN, JAMIE L	Quaker Neck	Couldn't locate outfall. DI up (JR-217-DI-0239) Dry	JR-217-OF-0018
06/26/2019 12:00	DURDEN, JAMIE L	Quaker Neck	Rip Rap in front of out,all. impeding flow.	JR-217-OF-0017
06/26/2019 12:00	DURDEN, JAMIE L	Quaker Neck		JR-217-OF-0020
06/26/2019 12:00	DURDEN, JAMIE L	Quaker Neck		JR-217-OF-0022
06/26/2019 12:00	DURDEN, JAMIE L	Glen Forest		JR-217-OF-0115
06/26/2019 12:00	DURDEN, JAMIE L	Glen Forest		JR-217-OF-0114

Dry Weather Screenings- Permit Year 1

Date Inspected	Inspected By	Location	Observations	Facility ID
06/26/2019 12:00	DURDEN, JAMIE L	Glen Forest		JR-217-OF-0113
06/26/2019 12:00	DURDEN, JAMIE L	Bayberry Cove	No flow.	JR-217-OF-0059
06/26/2019 12:00	DURDEN, JAMIE L	Bob White Landing		JR-217-OF-0001
06/26/2019 12:00	DURDEN, JAMIE L	Bob White Landing	Could not locate outfall. Checked next DI (JR-217-DI-0010), stagnant water with some grass clipping. Did not appear to be	JR-217-OF-0002
06/26/2019 12:00	DURDEN, JAMIE L	Bob White Landing	Man hole up from outfall has deep sink holes around it. Also sink holes over pipe near residents fence.	JR-217-OF-0003
06/26/2019 12:00	DURDEN, JAMIE L	Bayberry Cove	MH up from outfall flowing. (jr-217-di-0948). Di up from MH was also flowing. Sniff test clear. (jr-217-di-0947). Next DI was	JR-217-OF-0058
06/26/2019 12:00	DURDEN, JAMIE L	Bayberry Cove	DI up from outfall (jr-217-di-0939) had flow coming from (jr-217-di-0940). That DI had water coming from both directions. DI	JR-217-OF-0057

**Illicit Discharge Response- Permit Year 1**

Complaint Date	Discovered By	Description	Respondent	NOV Issued?	Address	Location Details	Follow Up Date and Activity	Enforcement Action	Resolution	Close Date
3/26/2018	Reported by public	Neighbor is pumping sewage out of the cleanout with his shop vac and dumping it into nearby ravine.	Jamie Durden, Erin Rountree, Heather Baggett	NO	318 Highland Ave	Behind 318 Highland Ave, private cleanout.	3/28/2018, 4/2/18, 4/4/18, 8/6/18. Site visits.	No Action	Did not find evidence of illicit discharge.	8/8/2019
4/2/2018	Reported by city staff	Sewage smell, puddling in back parking lot by sewer system	Jamie Durden	No	6423 Whaleyville Blvd	Yianni's Bar and Grill, back parking lot near septic system.	4/17, 4/24, 6/19, 6/21/18. Site visits, sampling.	Referred to other Department or Agency	Referred to Virginia Department of Health, they are monitoring it. No further discharges have happened.	11/19/2018
4/19/2018	During dry weather screening	Oil stain in front of storm drain	Jamie Durden and Samuel Wesley	No	291 Burnetts Way	Stormdrain in front of 291 Burnetts Way. Oil from parked car.	4/20/18, 4/23/18, 5/7/18, 5/22/18, 6/5/18, 6/11/18, 8/6/18. Site visits, spoke with residents.	Education	Educated citizens at residence and they are taking better measures to prevent contamination of stormwater.	11/19/2018
6/1/2018	Reported by public	Draining garden hose into stormdrain	Samuel Wesley	No	1747 Bridge Rd.	(Dogwood Run) corner of Crittenden and Bridge Rds. Dog pool hose into DI.	6/5/2018, 6-6-18, 7/2/18, 8/9/18. Site visits, spoke with employees.	Education	owner will discontinue draining doggie pool into stormdrain, removed hoses from parking lot	8/9/2018
6/16/2018	Reported by city staff	Straight pipe from second floor	Jamie Durden and Heather Baggett	No	219 Chestnut St.	Straight pipe with sewage running from 2nd story room down to about one foot off of the ground. Right side of house.	8/6/2019. Site visit.	Referred to other Department or Agency	Referred to Community Development. Cited for code violation. Owner of house fixed sewage problem before court date.	8/6/2018
6/27/2018	Reported by public	Ditch install on property	Jamie Durden and Samuel Wesley	No	8316 Crittenden Rd	Right side of property. Ground water.	7/6/2018, 7/27/18, 7/31/18. Site visit, sampling.	No Action	Not an illicit discharge. Trench not draining to city Right of Way.	8/1/2018
7/19/2018	Reported by public	Ponding in resident's backyard	Samuel Wesley, Jamie Durden	No	1110 Pin Oak Dr.	Ponding in backyard. Ground water.	None	Education	site visit, made suggestions	7/19/2018
7/26/2018	Reported by city staff	Laundry wash connected to city ROW ditch.	Jamie Durden	No	1358 Rountree Cres	Left of house in private ditch. Unknown source.	None	Referred to other Department or Agency	Referred to Virginia Department of Health and they educated homeowner. Have not found any evidence of discharge since education.	6/28/2019
7/26/2018	Reported by city staff	House septic connected to city ROW ditch	Jamie Durden, Heather Baggett, Erin Rountree	No	1604 Holland Road	Left of driveway, septic straight pipe.	7/27/2018, 7/30/2018-8/3/2018, 8/6/2018-8/10/2018, 8/13/2018. Site visit. Sampling.	Referred to other Department or Agency	Referred to Virginia Department of Health.	8/30/2018
8/14/2018	Reported by public	Company pressure washing driveway	Jamie Durden	No	1300 Mill Run Ct	Residences in Old Mill Creek. Company water tank.	None	Education	Educated the owner of Economic Pressure Washing, Will, about of MS4 permit and the clean water act. No chemicals were going down the stormdrain.	8/14/2018
8/31/2018	Reported by city staff	Grass clippings in gutter pan	Samuel Wesley	No	133 North St	In gutter pan along Market and North St. Grass clippings.	9/5/2018. Site visit.	Verbal Warning	abated; resident sweeping up clippings	9/5/2018
9/3/2018	Reported by city staff.	Residents throwing lawn clippings and debris into stormdrain and over outfall.	Jamie Durden, Samuel Wesley	No	213 Bunch St	Outfall behind 213 Bunch Ave. Lawn debris.	9/8/2018. Site visit. Spoke with residents.	Education	Educated home owners and Operations cleaned pipe and removed bricks	9/27/2018
9/19/2018	Reported by public	BMP fountain non-functional, fish kill	Jamie Durden, Samuel Wesley	No	1500 Breezeport Way	BMP JR-217-RB-0006, BMP pond.	9/20/18, 9/21/18, 9/24/18,10/1/18, 10/16/18, 10/30/18. Site visit.	Education	algae treated, no fish kill, no odor	10/30/2018
9/19/2018	Reported by city staff	Private Sewage Pump overflowing	Jamie Durden, Erin Rountree	NO	4201 Crowdy Blvd	Pump station off of Townpoint road. Sewage line.	9/21/2018, 9/24/2018, 9/25/2018,9/28/2018. Site visit. Spoke with residence.	Referred to other Department or Agency	Owner of the pump station on Judah lane had completed repairs to the station by turning on the city valve serving the pump station force main.	11/19/2018
9/19/2018	Reported by city staff.	Pine needles in guttering	Samuel Wesley	No	6757 Everets Rd	gutter pans, pine needles.	9/24/2018. Site visit.	Referred to other Department or Agency	both sides of street swept	9/26/2018
10/31/2018	During dry weather screening	Clear oil substance in yard drain	Jamie Durden and Heather Baggett	no	111 Willow St.	Yard drain beside 111 Willow St. unknown source.	2/28/2019. site visit, spoke with residents.	Education	Education to surrounding citizens, no further discharge. Public Works Operations cleaned site. Clean on 6-4-2019.	6/4/2019

**Illicit Discharge Response- Permit Year 1**

Complaint Date	Discovered By	Description	Respondent	NOV Issued?	Address	Location Details	Follow Up Date and Activity	Enforcement Action	Resolution	Close Date
11/14/2018	Reported by city staff	Owner throwing bird waste and yard debris in ditch	Jamie Durden	NO	5817 Walden Road	Back yard at ditch behind property. Pet bird waste.	11/14/2018. site visit.	Education	Left door hangers at address to explain concern and city ordinance.	11/19/2018
11/20/2018	Reported by public	Resident putting leaves down storm drain	Jamie Durden and Samuel Wesley	No	2106 Piedmont Rd.	gutter pan and storm drain in front of residence. Grass clipping from lawn.	11/27/2018. Site visit.	Education	educated to discontinue blowing leaves into gutter	11/27/2018
12/3/2018	Reported by public	Oil spill	Jamie Durden and Samuel Wesley	No	525 Osceola	gutter pan in front of residence. Oil from vehicle.	12/5/18, 12/11/18. Site visit.	Verbal Warning	informed resident of illicit discharge ordinance and educated not to put oil down drain.	12/12/2018
12/6/2018	Reported by public	Holes in front of stormdrain	Jamie Durden	No	6807 Edgefield Ct.	Left side of property near stormdrain due to outfall pipe.	12/6/2018. Site visit.	Referred to other Department or Agency	Not an illicit discharge. Public works fixed joints in pip that were failing.	12/6/2019
12/11/2018	Reported by public	Cement spilled into stormdrains	Jamie Durden and Samuel Wesley		2413 E. Washington St.	Yard drain in front yard. Concrete bags from home owner.	None	Education	Private Property. Did not see any discharge making its way to waterway.	12/12/2018
12/11/2018	Reported by city staff	shopping carts and trash in BMP	Samuel Wesley	No	end of Majesty Dr., S.	in BMP near park area. Trash and debris from nearby facilities.	12/20/18; 1-8-19; 1/23/19; 3/4/19. Site visit. Spoke with owners.	Verbal Warning	property manager removed carts and trash	12/20/2018
1/2/2019	Reported by public.	128 Whaley St always wet in front of house with smell	Jamie Durden and Heather Baggett	no	128 Whaley St.	South side of Whaley St. from 120 Whaley St. to Vaughan St. Source unknown.	1/3/2019,1/10/2019,1/14/2019,1/15-17/2019,1/24/2019,1/31/2019,2/5/2019,2/7/2019,2/13/2019,2/20/2019,2/26/2019,3/7/2019. Site visits, spoke with citizens, sampling.	Referred to other Department or Agency	Area has been dry. Resolved itself.	6/28/2019
1/3/2019	Reported by city staff	Grease spill at dumpster	Jamie Durden and Samuel Wesley	No	5883 Harbourview Blvd	storm drain near dumpsters behind Harbour View Shoppes. Grease from dumpsters.	1/11/2019. Site visit. Spoke with business.	Referred to other Department or Agency	Referred to Community Development. Grease bucket removed, no staining.	1/14/2019
1/3/2019	Reported by city staff	Litter outside dumpster	Jamie Durden and Samuel Wesley	No	5860 Harbour View Blvd	BMP JR-218-BR-0001 at end of Harbour Towne Pkwy. Source unknown.	1/11/2019, 2/4/19. Site visit. Spoke with business.	Referred to other Department or Agency	all trash removed from BMP	2/4/2019
1/9/2019	Reported by public	Gas/oil smell coming from DI.	Jamie Durden and Heather Baggett	no	126 Graystone Trace	Stormdrain beside 126 Graystone Trace. Source unknown.	1/10/2019,1/16/2019. Site visit. Spoke with citizens.	Education	Heather and Jamie distributed door hangers to eight homes on Graystone Trace to inform residents of the oil in the storm drain and educate them about illicit discharges. It was concluded that the transformer box was a possible source of the oil in t	1/16/2019
1/17/2019	During dry weather screening	water leaving front yard during dry weather.	Jamie Durden	no	1104 White Marsh Rd	Entire front and side yard on 1104 White Marsh Rd. water meter.	1/31/2019,2/25/2019,2/28/2019. Site visit. Sampling.	Referred to other Department or Agency	After Pubic Utilities fixed the water meter, there was no other water coming to our system or on ground.	6/28/2019
1/17/2019	Reported by public	Oil container and drainage issues	Samuel Wesley	No	1080 Somerton Rd	Behind house. Stormwater and oil containers.	1/25/2019. Site visit. Spoke with residences.	Verbal Warning	sealed oil containers removed	1/25/2019
1/23/2019	During dry weather screening	Sewage discharge from private cleanout	Jamie Durden	no	608 E. Washington St.	Ding Wing, Clean out in front of business.	1/24/2019,1/25/2019,1/28/2019,1/29/2019,1/30/2019,2/25/2019,2/27-29/2019,3/4/2019. Site visit. Spoke with owner.	Verbal Warning	Worked with multiple agencies to find and fix owners sewage line from facility to Public Utility main line.	6/28/2019
1/31/2019	Reported by city staff	Neighbor around this area is blowing leaves and debris into stormdrain causing flooding on roadway.	Jamie Durden	no	115 Elm Tree Ct.	Between 115 Elm Tree Ct. and 117 Elm Tree Ct. Yard debris. Source unknown.	None	Education	Left door hangers at all houses around problem area that drain to stormdrain.	2/1/2019
2/19/2019	Reported by city staff	BMP pond overfull	Samuel Wesley and Joe Rountree	No	130 Dawson's Lake Ln	BMP near Sleepy Hole Rd. and Bennetts Pasture Rd. Stormwater	None	Education	Determined BMP is not overfilling	2/20/2019
2/25/2019	Reported by city staff	Septic tank drainfield discharging sewage to drainage easement	Jamie Durden and Samuel Wesley	No	8205 Longvue Cir.	Backyard of 8205 Longvue Cir. Septic drainfield.	2/25/2019, 3/1/19, 3/7/19, 4/8/19. Site visit. Sample. Spoke with citizens.	Referred to other Department or Agency	Since results were not a detectable limit the second time taking samples, and no evidence of drain field failing, complaint closed. Complaint was sent to VDH Shellfish sanitation for them to follow up on.	4/8/2019

**Illicit Discharge Response- Permit Year 1**

Complaint Date	Discovered By	Description	Respondent	NOV Issued?	Address	Location Details	Follow Up Date and Activity	Enforcement Action	Resolution	Close Date
2/26/2019	Reported by city staff	Leaves in ditch	Samuel Wesley	No	5329 James Ave	Gutter pan. Unknown source.	2/27/19, 3/1/19, 3/7/19 and 3/15/19. Site visit. Spoke with citizens.	No Action	Operations will monitor ditch for leaves.	3/15/2019
3/5/2019	Reported by city staff	Pipe coming from 1608 Upton Place that smells like sewage.	Jamie Durden	no	1608 Upton place	Beside driveway of 1608 Upton Pl, on Carters Cove Road. Straight pipe.	3/6/2019,3/7/2019,3/12/2019,3/25/2019,4/8/2019,4/19/2019,5/8/2019,5/28/2019. Site visit. Sample. Spoke with owner.	Verbal Warning	Site has been dry. Issue resolved itself.	6/28/2019
3/5/2019	Reported by public	Mobile Campers dumping water from camper onto pavement in parking lot.	Jamie Durden and Heather Baggett	no	237 N. Main St.	Parking lot for First Baptist Church. Campers releasing water.	3/5/2019, 3/6/2019. Site visit. Spoke with owners/campers.	Verbal Warning	Educated mobile campers that no wastewater is allowed to enter our system and gave a verbal warning.	3/6/2019
3/22/2019	Reported by public	Trash/large items dumped in backyard	Samuel Wesley	No	413 Keaton Way	back yard near cul-de-sac off Keaton Way. Source unknown.	None	Referred to other Department or Agency	referred to Community Development	3/22/2019
4/5/2019	Reported by public	Food truck dumping liquid in DI	Samuel Wesley	no	253 Fallawater Way	curb drain in front of property. Gray water from food truck.	4/5/2018,4/8/2019,4/12/2019, 4/19/2019. Visited site. Spoke with owner.	Verbal Warning	discontinued dumping greywater	4/19/2019
4/9/2019	Reported by public	Pool draining directly into stormdrain	Jamie Durden	No	300 Loblolly Ct.	Side of house, hose from pool.	4/19/2019. Visited site. Spoke with owner.	Education	Educated citizen that no hose is to be placed directly into stormdrain. Hose removed	4/19/2019
4/10/2019	Reported by public	Water Bubbling up from ground	Jamie Durden	No	108 Windmill Lane	Behind House, water line.	4/10/2019. Visited site. Spoke with citizens.	Referred to other Department or Agency	Education, and referred to Public Utilities and VDH.	5/9/2019
4/11/2019	Reported by public	Oil discharge from Noble Oil	Jamie Durden and Erin Rountree	Yes	2000 Amedeo Ct.	Behind building at satellite oil tank.	4/19/2019, Site visit.	Notice of Violation	Worked with DEQ, fire marshal, petroChem, and noble oil to clean spill, educate and train staff, and put up signage in case of another spill. Also issued NOV.	4/19/2019
4/18/2019	Reported by public	City cleanout discharging	Jamie Durden and Heather Baggett	no	212 ST. James Ave.	City sewage cleanout in front of address	4/18/2019. Site visit.	Referred to other Department or Agency	Referred to Public Utilities. They cleaned the pipe and TV'd to look for blockages	4/18/2019
4/23/2019	Reported by public	Leaves dumped at outfall	Samuel Wesley	no	1544 Olde Mill Creek Dr.	outfall JR-242-OF-0056. Yard debris from owner	5/3/19. 5/13/19, 5/16/19. Site visit. Spoke with resident.	Verbal Warning	leaves cleared around outfall	5/16/2019
5/16/2019	During dry weather screening	Pine Needles in stormdrain	Jamie Durden	no	616 Kinsey Lane	Stormdrain in front of house. Source unknown.	none	Education	Educated neighbors around area of illicit discharge ordinance and proper ways to handle yard waste.	5/16/2019
5/20/2019	Reported by city staff	Oil Spill from Noble Oil	Jamie Durden and Heather Baggett	no	2000 Amedeo Ct.	Behind building at satellite oil tank	5/24/2019. Site visit.	Referred to other Department or Agency	City of Suffolk Fire Marshal, PetroChem, and Noble Oil services worked together to remedy the spill and prevent another spill from happening. Oil did not enter Suffolk stormwater system.	5/24/2019
5/24/2019	During dry weather screening	cooking oil dumped into stormwater drain	Samuel Wesley	no	515 Mahlon Ave	storm drain in front of 515 Mahlon Avenue. Source unknown.	6/3/19 and 6/10/19. Site visit. Spoke with citizens.	Education	no more cooking oil in storm drain.	6/10/2019
6/4/2019	During dry weather screening	Sewage Discharging from outfall	Jamie Durden	no	404 Wilkie Ct.	Outfall and Stormdrain. City sewage lateral.	None.	Referred to other Department or Agency	Public Utilities is resolving problem with sewage lines.	6/4/2019
6/7/2019	Reported by public	junk complainant concerned contamination leaking into grass swale	Samuel Wesley and Jamie Durden	no	9028 1st Street	yard of residence at 9028 1st St. No source.	None.	No Action	unjustified; could not find scrap material in yard	6/10/2019

**HAZMAT Incident Report- Permit Year 1**

Incident Date	Incident Number	Incident Type/Source	Incident Address	Date Closed	Resolution and Follow-up (if any)
10/1/2018	1800011030	Chemical spill or leak	724 BATTERY Avenue	10/1/2018	Nothing found
6/28/2019	1900007496	Gasoline or other flammable liquid spill	272 BENTON Road	6/28/2019	Public Works Cleanup
5/20/2019	1900005820	Gasoline or other flammable liquid spill	3799 HOLLAND Road	5/20/2019	Wrecker
3/5/2019	1900002536	Gasoline or other flammable liquid spill	801 West CONSTANCE Road	3/5/2019	Cleanup Company SPATCO
2/23/2019	1900002150	Gasoline or other flammable liquid spill	2916 GODWIN Boulevard	2/23/2019	Owner Cleanup
1/30/2019	1900001177	Gasoline or other flammable liquid spill	1928 HOLLAND Road	1/30/2019	Owner Cleanup
12/20/2018	1800014295	Gasoline or other flammable liquid spill	199 South SARATOGA Street	12/20/2018	Nothing found
12/4/2018	1800013648	Gasoline or other flammable liquid spill	819 West WASHINGTON Street	12/4/2018	Owner Cleanup
9/5/2018	1800009966	Gasoline or other flammable liquid spill	509 OSCEOLA Avenue Apt 511	9/5/2018	Nothing found
8/5/2018	1800008689	Gasoline or other flammable liquid spill	418 East WASHINGTON Street	8/8/2018	Hepaco
7/19/2018	1800008052	Gasoline or other flammable liquid spill	1017 UNIVERSITY Boulevard	7/19/2018	Nothing found
5/28/2019	1900006184	Oil or other combustible liquid spill	3605 BRIDGE Road	5/28/2019	Nothing Found
5/20/2019	1900005847	Oil or other combustible liquid spill	2000 AMEDEO Court	5/22/2019	Petro Chem
5/17/2019	1900005662	Oil or other combustible liquid spill	425 East PINNER Street	5/17/2019	Petro Chem
5/6/2019	1900005176	Oil or other combustible liquid spill	1900 PORTSMOUTH Boulevard	5/6/2019	Wrecker
4/11/2019	1900004086	Oil or other combustible liquid spill	2000 AMEDEO Court	4/11/2019	Petro Chem
4/9/2019	1900003962	Oil or other combustible liquid spill	1599 HOLLAND Road and Grove Ave	4/9/2019	W.L. Black
1/9/2019	1900000335	Oil or other combustible liquid spill	2800 BRIDGE Road	1/9/2019	Wrecker
11/26/2018	1800013328	Oil or other combustible liquid spill	4500 HUBBARD Avenue	11/26/2018	Nothing Found

## Sanitary Sewer Overflows- Permit Year 1

DEQ_IR	SSORS_ID	Date Reported	Date of Incident	Date Under Control	Possible Receptor	Site Name	Site Address	Latitude	Longitude	Category	Description	Spill Duration	Corrective Action	Quantity Spilled (gal)	Amount Reached Waterway (gal)
SSORS#201 9-T-105214	105214	7/9/2018	7/8/2018	7/8/2018	Speights Run	MH 062-022	2026 Smalley's Dam Circle	3427209.50000000	12023125.17000000	Maintenance-Debris	Sanitary sewer manhole overflow.	2 hour(s) 15 minute(s)	Cleaned sewer main and cleared debris. ----- July 9, 2018 12:56 PM-----	100	80
SSORS#201 9-T-105215	105215	7/9/2018	7/8/2018	7/8/2018	Nansemond River	MH 116-072	7394 Harbour Towne Pkwy	3484564.22999999	12086059.44000000	Maintenance-Grease	Sanitary sewer overflow at manhole.	0 hour(s) 30 minute(s)	Cleaned sewer main and cleared blockage. ----- --July 9, 2018 01:01 PM-----	50	50
SSORS#201 9-T-105216	105216	7/9/2018	7/9/2018	7/9/2018	Lake Meade	Westhaven Lakes 1	985 Pitchkettle Rd.	3434664.05999999	12039474.00000000	Maintenance-Other	Staff was filling the Vactor truck with water from the sewer force main at PS 120.They where preparing to do a pump curve test at PS 155, but they did not have adequate flow coming into PS 155. Staff went to PS 120 to retrieve water from the the emergenc	0 hour(s) 4 minute(s)	Staff shut the off the the flow by closing the force main valve. ----- July 9, 2018 02:07 PM-----	100	100
SSORS#201 9-T-105222	105222	7/25/2018	7/24/2018	7/24/2018	Lake Meade	MH 136-024	1224 Holland Road	3430724.20500000	12035456.34000000	Maintenance-Debris	Overflow at sanitary sewer manhole.	3 hour(s) 45 minute(s)	Cleaned sewer manhole and main to clear blockage. ----- July 25, 2018 08:12 AM-----	300	100
SSORS#201 9-T-105233	105233	8/1/2018	7/31/2018	7/31/2018	Lake Kilby	Philadelphia	401 Tradd Street	3428370.48999999	12041071.94000000	Maintenance-Other	Staff was removing an emergency pump from PS 022 while disconnecting the discharge hose sewer spilled out.	0 hour(s) 1 minute(s)	Staff has been briefed on an more effective way of removing emergency pump discharge hoses. ----- August 1, 2018 08:32 AM-----	5	5
SSORS#201 9-T-105256	105256	9/4/2018	9/4/2018	9/4/2018	Nansemond River	River Creek	1554 River Creek Crescent	3442871.36999999	12051642.39000000	Maintenance-Other	The emergency pump that was at PS 061 had a bad connection on the air release hose. There was also a fault with one the emergency pump components. These failures resulted in a spill at PS 061.	0 hour(s) 34 minute(s)	Staff removed this emergency pump and turned it into Fleet Maintenance for repairs. ----- September 4, 2018 09:54 AM-----	25	25
SSORS#201 9-T-105266	105266	9/25/2018	9/22/2018	9/22/2018	Nansemond River	MH 041-024	1008 Hillpoint Road.	3449108.83999999	12047445.00000000	Maintenance-Debris	Sewer overflow at sanitary sewer manhole.	0 hour(s) 40 minute(s)	Cleaned sewer main line and cleared blockage. ----- September 25, 2018 09:50 AM-----	500	500
SSORS#201 9-T-105270	105270	10/5/2018	10/4/2018	10/4/2018	Speights Run	Holland Rd	1708 Holland Rd	3427337.17699999	12025531.95300000	Maintenance-Other	Staff was blowing off the force main pressure on the Holland Rd force main. The air release valve that was use for this task failed to close completely. This fault resulted in a spill on Holland Rd.	1 hour(s) 0 minute(s)	Staff was able to eventually get a complete shutdown on the air release valve. ----- -October 5, 2018 08:57 AM-----	700	350
SSORS#201 9-T-105272	105272	10/11/2018	10/10/2018	10/10/2018	Nansemond River	MH 048-255	129 Oakdale Terrace	3431193.84099999	12045487.30200000	Maintenance-Grease	Sewer Overflow at sanitary sewer manhole.	2 hour(s) 0 minute(s)	Cleaned sewer main and cleared blockage. Treated spill will lime and disinfectant. ----- October 11, 2018 10:42 AM-----	500	500

## Sanitary Sewer Overflows- Permit Year 1

SSORS#201 9-T-105280	105280	10/22/2018	10/22/2018	10/22/2018	Shingle Creek	MH 036-036	122 Beamons Mill Trail	3439584.98999999	12058012.15000000	Maintenance-Grease	Sewer overflow at sanitary sewer manhole.	0 hour(s) 50 minute(s)	Cleaned sewer main line and cleared blockage. -----October 22, 2018 11:27 AM-----	50	50
SSORS#201 9-T-105282	105282	10/29/2018	10/27/2018	10/27/2018	Shingle Creek	MH 064-005	919 Truman Road	3427872.25000000	12050540.86000000	Maintenance-Debris	Sewer overflow ant sanitary sewer manhole.	1 hour(s) 17 minute(s)	Cleaned sewer main and cleared blockage. --- --October 29, 2018 11:53 AM-----	500	500
SSORS#201 9-T-105318	105318	12/18/2018	12/18/2018	12/18/2018	Beamons Mill pond	Mill Creek Close	1606 West Falcon Street	3441543.62799999	12057724.15300000	Maintenance-Other	The pressure release valve broke on the emergency bypass pump.	0 hour(s) 19 minute(s)	Staff replaced the emergency bypass pump with another emergency pump. The damaged pump has been turned in to Fleet Maintenance to be repaired. -----December 18, 2018 03:53 PM----- ----December 21, 2018 08:14 AM-----	200	0
SSORS#201 9-T-105326	105326	12/28/2018	12/28/2018	12/28/2018	Lake Meade	Kings Fork Middle School	352 Kings Fork Middle School	3451222.85599999	12040072.91725000	Maintenance-Other	PS 028 had an emergency pump on site. The discharge hose had a faulty seal in it that started to leak. This failure resulted in a spill at PS 028.	0 hour(s) 18 minute(s)	Staff replaced the seal in the discharge hose. -- ---December 28, 2018 10:12 AM-----	75	75
SSORS#201 9-T-105331	105331	1/7/2019	1/6/2019	1/6/2019	Beamons Mill Pond	MH 096-030	3022 Dabney Lane	3441312.75999999	12058930.45000000	Maintenance-Grease	Sewer overflow at sanitary sewer manhole.	1 hour(s) 45 minute(s)	Cleaned sewer main line and cleared blockage. Also cleared debris from site. ----- January 7, 2019 10:49 AM-----	300	200
SSORS#201 9-T-105332	105332	1/7/2019	1/6/2019	1/6/2019	Lake Kilby	MH 004-159	218 Bedford Place	3430670.79599999	12039673.60100000	Maintenance-Debris	Sewer overflow at sanitary sewer manhole.	6 hour(s) 43 minute(s)	Cleaned sanitary sewer mainline segment at MH 004-221 and cleared blockage. Cleared debris from site. -----January 7, 2019 10:58 AM-----	500	500
SSORS#201 9-T-105333	105333	1/7/2019	1/6/2019	1/6/2019	Nansemond River	MH 063-009	810 North Main Street	3435569.77399999	12044390.77000000	Maintenance-Grease	Sewer overflow at sanitary sewer manhole.	0 hour(s) 50 minute(s)	Cleaned sewer main line to clear blockage and cleaned debris from site. -----January 7, 2019 11:10 AM-----	200	200
SSORS#201 9-T-105369	105369	2/11/2019	2/9/2019	2/9/2019	Shingle Creek	MH 123-006	1500 OLDE MILL CREEK DR	3442927.20999999	12053506.54000000	Maintenance-Grease	Sewer overflow at sanitary sewer manhole due to grease and debris.	1 hour(s) 0 minute(s)	Cleaned sewer Main line and cleared blockage. -----February 11, 2019 01:59 PM-----	200	200
SSORS#201 9-T-105377	105377	2/25/2019	2/23/2019	2/23/2019	Nansemond River	Constance Road Sanitary Sewer	216 Dumville Lane	3433453.39999999	12044023.10000000	Capacity-Weather Related	PS 146 failed to operate normal due to high force main conditions during a rain event. Telog data indicates that an overflow occurred, but it was not witness by staff.	2 hour(s) 34 minute(s)	Staff utilized an emergency pump to maintain PS 146 during this event. PS 146 is presently back in normal operation. ----- February 25, 2019 09:59 AM-----	0	0

Sanitary Sewer Overflows- Permit Year 1

SSORS#201 9-T-105378	105378	2/25/2019	2/23/2019	2/24/2019	Lake Kilby	Turlington Rd	651 Turlington Rd	3419186.95999999	12034540.92925000	Capacity-Weather Related	PS 162 failed to operate normal due to high force main pressure during a rain event. Telog indicates that an over flow occurred, but staff did not witness it.	6 hour(s) 18 minute(s)	Staff utilized an emergency pump to maintain PS 162 during this event. PS 162 is now back in normal operation. -----February 25, 2019 10:22 AM-----	0	0
SSORS#201 9-T-105386	105386	3/20/2019	3/19/2019	3/19/2019	Shingle Creek	MH 096-012	2529 Golden Maple Dr	3440955.80000000	12057880.73000000	Damage By Others	Sewer overflow at sanitary sewer manhole. Crew found manhole casting off base. Concrete was in manhole causing grease build up. CCTV inspection available.	0 hour(s) 45 minute(s)	Cleaned sewer manhole with vac-truck and cleared blockage in sewer main. -----March 20, 2019 03:46 PM-----	300	250
SSORS#201 9-T-105403	105403	4/23/2019	4/22/2019	4/22/2019	Bennetts Creek	VL G18-03V	4869 Bennetts Pasture Rd	3470557.53549999	12066576.90899999	Damage By Others	Sewer force main air release valve damaged by other party.	3 hour(s) 30 minute(s)	Used sewer vac-truck suction during sewer overflow to remove liquid and repair air release valve. -----April 23, 2019 11:43 AM-----	5250	3050
SSORS#201 9-T-105428	105428	5/29/2019	5/28/2019	5/28/2019	Nansemond River	MH 146-055	524 E Riverview Drive	3434055.22999999	12043155.88000000	Maintenance-Debris	Sewer overflow at sanitary sewer manhole.	3 hour(s) 30 minute(s)	Cleaned sewer main line and cleared blockage. Also used vac-truck to recover liquid and debris. -----May 29, 2019 09:39 AM-----	1000	700
SSORS#201 9-T-105430	105430	6/10/2019	6/7/2019	6/7/2019	Lake Kilby	Boston	Garfield Avenue	3432510.22999999	12039245.13000000	Capacity-Weather Related	PS 004 pumps failed to operate normal due to high head condition during a heavy rain storm. This failure resulted in an overflow on Garfield Avenue.	2 hour(s) 2 minute(s)	PS 004 head conditions have returned back to normal and PS 004 pumps are operating normal. -----June 10, 2019 07:40 AM-----	12200	12200
SSORS#201 9-T-105431	105431	6/10/2019	6/7/2019	6/7/2019	Lake Kilby	Boston	Garfield Avenue	3432510.22999999	12039245.13000000	Capacity-Weather Related	PS 004 pumps failed to operate normal due to high head condition during a heavy rain storm. This failure resulted in an overflow on Garfield Avenue.	0 hour(s) 9 minute(s)	PS 004 head conditions have returned back to normal. PS 004 pumps are operating normal. -----June 10, 2019 07:47 AM-----	900	900

## **Appendix E**

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

## ESC and SWM Enforcement Actions Summary- Permit Year 1

### Yearly Inspection Tracking

Month/Year: July 1, 2018 to June 30, 2019

#### SINGLE FAMILY

HUC	Total Yearly Inspections	Yearly Completed	Total Enforcement Actions	Stop Work Orders
AS02	62	1		
AS03				
AS04	17			
AS05	39	1	1	
AS06				
CL01	82	10		
CL02	37	3		
CL03	13	3		
CL05				
CU66				
CU69	28	2		
CU70				
JL42				
JL43				
JL44	96	11	4	
JL45	157	8	1	
JL46	39		1	
JL47				
JL48	692	54	56	2
JL49	3187			
JL50				
JL55	80	5	4	
JL59				
Total	4529	98	67	2

#### PROJECTS - SP, EP, ESC

HUC	Total Yearly Inspections	MS Violations	Notice to Comply	Stop Work Orders	SWPPP Inspections
AS02	3				
AS03					
AS04					
AS05					
AS06					
CL01	16				4
CL02					
CL03					
CL05					
CU66					
CU69					
CU70					
JL42	36	8			4
JL43					
JL44	75	19	2	7	21
JL45	102	20	3		28
JL46	5				1
JL47	25	4			9
JL48	206	38	1		40
JL49	650	28			18
JL50	246	30			37
JL55					
JL59					
Total	1364	147	6	7	162

Total Inspections	6055	Total Enforcement Actions	229
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## ESC Complaint Tracking Log- Permit Year 1

#	Date of Complaint	Inspector	Location	Date Complete	Complaint Origin*	Brief Discription of Complaint and Resolution
1	8/17/2018	DL	4424 Coltrane Ave	8/23/2018	Email	Jason received a citizen complaint builder's trash at 4424 Coltrane Avenue. Spoke with Bob Edwards (builder) and had a dumpster on site being delivered. When I followed up on 08-23-18 the builder satisfied trash complaint by having all trash inside dumpster.
2	9/18/2018	DL	5202 Commodore Bluff		Email	Jason received complaint about possible drainage issue at 5202 Commodore Bluff due to new lot being built at 5202 Commodore Bluff. While on site I noticed a retaining wall and pavers all around new home with the approved plan only showing one wall behind the house and 2 swales on each side of lot. Spoke with Kenneth and Matt w/ Sasser and he stated he would send in field changes for approval to include retaining wall, roof drains, and pavers. Also requested grade shots on lot.
3	10/12/2018	DL	5988 Bennetts Creek Lane	10/25/2018	Email	Jason received complaint from planning department at 5988 Bennetts Creek Lane in which they had already placed a stop work order by the time I arrived on site. Homeowners had removed some trees on shore line, building back deck area, and regraded front yard without any permits or E&S measures in place. Planning met with DEQ on site to work with homeowners to bring in compliance with their department and they addressed PW departments with installing silt fence, seeding, and placing jute matt in areas that needed protecting or bare.
4	12/28/2018	DL	AquaLife	12/28/2018	Email	Jason received complaint from DEQ that was a citizen about E&S issues and sediment leaving site. When on site I notified Matt with BECO to rescarify/replish CE and to tighten up a couple of areas of silt fence that appear to need routine maintenance. Appeared no evidence of any sediment leaving site all other E&S measures are in operating order. Notified Lou and he followed up on 01/02/19 and the above mentioned items had been completed and he saw no further action needed at that time.
5	1/16/2019	DL	Nansemond Parkway	1/17/2019	Email	Jason received email from zoning department about a logging and stump removal operation at parcel across from Florence Bowser, on Nansemeand Parkway. After arriving on site it appeared that they were logging but not removing stumps, only clearing, but the land is extemely wet and the equipment has made ruts and made it appear that they were taking stumps out. Spoke with operator and he stated that today was the last day and they were not coming back until summer due to the land being so wet.
6	2/2/2019	Bradshaw	Kings Fork Village	2/7/2019	DEQ	Silt fence, sediment on road, construction entrance/ There were no findings of violations
7	5/2/2019	LM	Chuckatuck Cove	5/2/2019	email	Complaint about dust control. Contractor corrected problem
8	6/12/2019	Bradshaw	2683 Riverwatch	6/12/2019	Trimyer	Silt fence was not installed. Contractor installed
9	6/28/2019	LM	38882 Bridge Road	current	email	Citizen concerned about runoff into Knotts Creek.

\*- Phone, E-mail, In-person, etc.

## **Appendix F**

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

**Training Summary Permit Year 1**  
**Pollution Prevention and Good Housekeeping**  
**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)
<b>Date of Training</b>	7/10/2019	6/11/2019	6/18/19, 6/25/19	6/25/19, 7/1/19	6/26/19, 6/27/19, 7/1/19, 7/2/19, 7/3/19, 7/8/19	6/25/2019	7/24/2019
<b>Number of Attendees</b>	33	63	47	40	11	36	18
<b>Training Objectives</b>							
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			

# **Appendix G**

## **Surface Water Monitoring Program**

**July 1, 2018- June 30, 2019**

## **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 and continued the program through permit year 1. 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.

In 2017 a partnership was initiated 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. Samples are collected monthly (weather permitting) by Public Works staff at predetermined sampling locations on the Nansemond River. Sample analyses are conducted by the Hampton Roads Sanitation District. Currently, the City is in the process of uploading 2019 sampling data to the Chesapeake Monitoring Cooperative database where the data will be available for use by the state and the 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 PY1. Fifteen sites are sampled in total, with twelve 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 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 completed in Shingle Creek during 2016 was used as a model and was extended to the upper Nansemond River watershed, which includes Shingle Creek. The project is being 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.

# Nansemond River Water Monitoring Summary- Permit Year 1

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
7/23/2018																
8/7/2018	10	9.9		9.9	9.9	40	60	90	100	140	260	900	370	300	120	20
9/5/2018	10	9.9	90	9.9	20	9.9	40	70	130	60	100	260	190	100	40	40
10/18/2018	10				10	40	50	60	10	70	60	160	80	110		
11/5/2018	90	9.9		9.9	10	40	70	400	800	560	640	610	380	520	8100	3800
12/4/2018	40	10		55	9.9	9.9	20	90	60	20	60	110	110	100	200	90
1/30/2019																
2/14/2019	9.9	9.9		9.9	9.9	9.9	10	20	60	50	100	40	70	9.9	9.9	9.9
3/28/2019	20	9.9		9.9	9.9	40	60	30	80	9.9	60	50	160	10	9.9	10
4/15/2019																
5/14/2019	20	9.9		9.9	9.9	55	90	210	290	150	250	360	250	350	340	250
6/27/2019	30	9.9		9.9	9.9	9.9	10	20	80	9.9	160	290	180	170	280	360

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
7/23/2018																
8/7/2018	52	9.9		9.9	9.9	9.9	20	52	97	41	41	563	279	41	10	20
9/5/2018	84	9.9	52	9.9	9.9	9.9	20	20	122	31	41	109	145	52	41	9.9
10/18/2018	9.9				10	10	9.9	10	41	20	9.9	52	41	97		
11/5/2018	84	9.9		9.9	9.9	63	63	226	932	488	723	331	749	441	15500	7700
12/4/2018	10	31		41	31	30	9.9	74	51	31	63	63	298	31	203	41
1/30/2019																
2/14/2019	216	10		10	41	31	10	74	86	52	75	63	109	20	10	9.9
3/28/2019	9.9	10		9.9	9.9	20	30	31	10	30	41	20	75	10	30	10
4/15/2019																
5/14/2019	63	10		20	9.9	41	98	226	309	187	299	243	417	327	107	108
6/27/2019	10	9.9		9.9	9.9	10	9.9	10	41	9.9	97	173	185	145	121	197

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
7/23/2018																
8/7/2018	0.02	0.01		0.01	0.02	0.03	0.06	0.08	0.02	0.08	0.02	0.01	0.04	0.01	0.01	0.01
9/5/2018	0.01	0.77	0.02	0.01	0.01	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01
10/18/2018	0.02				0.02	0.02	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.02		
11/5/2018	0.02	0.02		0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.01
12/4/2018	0.01	0.01		0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.04	0.06	0.06	0.07
1/30/2019																
2/14/2019	0.01	0.01		0.03	0.01	0.01	0.02	0.05	0.02	0.05	0.06	0.03	0.05	0.02	0.01	0.02
3/28/2019	0.01	0.02		0.01	0.01	0.02	0.03	0.04	0.02	0.03	0.03	0.02	0.03	0.01	0.02	0.01
4/15/2019																
5/14/2019	0.06	0.08		0.08	0.09	0.08	0.07	0.11	0.08	0.13	0.09	0.04	0.06	0.01	0.01	0.01
6/27/2019	0.03	0.01		0.01	0.02	0.02	0.05	0.07	0.03	0.09	0.12	0.1	0.14	0.07	0.02	0.02

# Nansemond River Water Monitoring Summary- Permit Year 1

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
7/23/2018																
8/7/2018	0.01	0.01		0.01	0.01	0.04	0.04	0.07	0.02	0.07	0.01	0.01	0.04	0.01	0.01	0.01
9/5/2018	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.04	0.01	0.01	0.01
10/18/2018	0.14				0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		
11/5/2018	0.08	0.14		0.12	0.11	0.08	0.06	0.02	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.01
12/4/2018	0.03	0.1		0.06	0.04	0.01	0.01	0.01	0.01	0.02	0.04	0.06	0.07	0.06	0.05	0.05
1/30/2019																
2/14/2019	0.01	0.01		0.01	0.01	0.01	0.01	0.24	0.12	0.29	0.22	0.25	0.18	0.29	0.31	0.3
3/28/2019	0.02	0.04		0.02	0.01	0.01	0.01	0.07	0.01	0.12	0.15	0.21	0.12	0.27	0.28	0.28
4/15/2019																
5/14/2019	0.03	0.05		0.04	0.04	0.03	0.03	0.06	0.04	0.08	0.06	0.03	0.06	0.01	0.01	0.01
6/27/2019	0.01	0.01		0.01	0.01	0.01	0.01	0.07	0.01	0.12	0.1	0.04	0.05	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
7/23/2018																
8/7/2018	0.14	0.1		0.11	0.13	0.14	0.14	0.15	0.15	0.15	0.11	0.09	0.14	0.05	0.05	0.05
9/5/2018	0.13	0.1	0.2	0.11	0.14	0.16	0.17	0.13	0.15	0.11	0.09	0.12	0.14	0.1	0.08	0.07
10/18/2018	0.09				0.09	0.1	0.1	0.1	0.1	0.08	0.07	0.07	0.08	0.07		
11/5/2018	0.08	0.06		0.07	0.07	0.09	0.13	0.11	0.11	0.12	0.1	0.09	0.09	0.08	0.09	0.07
12/4/2018	0.08	0.04		0.04	0.05	0.07	0.08	0.08	0.09	0.08	0.08	0.07	0.07	0.05	0.05	0.05
1/30/2019																
2/14/2019	0.06	0.03		0.04	0.04	0.09	0.09	0.09	0.12	0.08	0.08	0.05	0.05	0.04	0.02	0.03
3/28/2019	0.08	0.07		0.06	0.08	0.14	0.12	0.11	0.13	0.08	0.07	0.05	0.06	0.04	0.03	0.03
4/15/2019																
5/14/2019	0.11	0.08		0.08	0.1	0.16	0.17	0.15	0.17	0.15	0.11	0.08	0.1	0.05	0.04	0.03
6/27/2019	0.12	0.08		0.07	0.09	0.09	0.1	0.1	0.15	0.1	0.11	0.14	0.15	0.12	0.11	0.09

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
7/23/2018																
8/7/2018	31	16		15.3	27.4	26.3	17.8	20.3	23.4	13.1	10.7	11.3	10.8	7	6.4	4.3
9/5/2018	32	17.6	63.3	15.1	35.2	38.5	30	19.6	24	12.9	13	15.8	16.3	8.8	7.4	8.2
10/18/2018	19.1				27.2	20	21.7	15.1	16.5	10.7	11.2	15.8	18	13.7		
11/5/2018	30.2	20.9		22	16	31.8	66.3	26.7	18.3	27.8	25.8	21.8	28.9	13.2	13	10.7
12/4/2018	10.7	10.3		8.6	12.4	17.9	22.4	14.3	12.7	12.6	13.4	11.8	22	7.8	5.8	5.3
1/30/2019																
2/4/2019	15.3	12.3		10.7	12.9	19.7	19.4	15.5	19	12	13.8	7.5	5	4.9	1	3.1
3/28/2019	21.2	24.2		16	22	37	37.6	15.5	20	11.7	11.3	9.8	4.9	6.3	4.1	3.2
4/15/2019																
5/14/2019	67.5	33.8		37.7	43.7	69.2	77.8	38.1	56	21.3	17.5	11.6	11	6	3	4.2
6/27/2019	32.9	25.8		18.2	31.3	15.1	17.8	9.6	18.3	6.9	6.2	8.5	11.3	7.3	7.3	6.3