



**COUNTY OF YORK
VIRGINIA**

**VSMP
ANNUAL REPORT**

FISCAL YEAR 2013



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Summary

This Annual Report is for Fiscal Year 2013 and is being submitted to the Department of Environmental Quality (DEQ) as part of the County of York's Virginia Stormwater Management Program (VSMP) Permit requirements for the Municipal Separate Stormwater System (MS4), Phase II locality.

The report addresses the status of the six minimum control measures for the fiscal year in York County. (Attachment A)

The six measures are:

1. Public Education – Outreach
2. Public Participation – Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Controls
5. Post Construction Controls
6. Pollution Prevention – Good Housekeeping

It also addresses the plan for the program next fiscal year (FY14) as well as any proposed changes. The County receives assistance with the program from the Hampton Roads Planning District Commission (HRPDC) on the educational, training, tracking and other permitting requirements.

Other sections of the report address the impaired waters in York County that have a Waste Load Allocation (WLA) for the Total Maximum Daily Load (TMDL) of the designated pollutant.

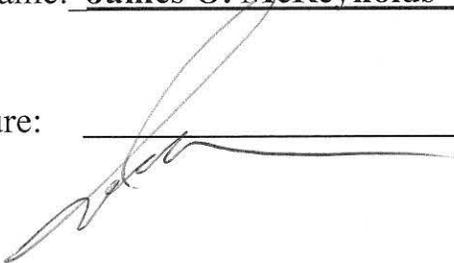
The report includes the number of reported illicit discharges and land disturbing activities as well as BMP's, inspections and maintenance projects the County has had over the past fiscal year.

A. Background Information

1. County of York –VAR040028
2. Permit Year 5 – FY2013
3. There have been no modifications to the operator's roles and responsibilities since the permit registration statement submittal dated January 6, 2008.
4. There have been 2 outfalls with acreage of 6AC added to HUC CB-21 as well as 1 outfall with acreage of 2AC added to HUC YO-69 in FY2013.
5. **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."

Print Name: James O. McReynolds

Title: County Administrator

Signature: 

Date: 01/10/13

B. Status of Compliance With Permit Conditions

1. See Attachment A – Minimum Control Measures FY2013
 - (a) Attachment A1 – Activities Planned for FY2013
 - (b) Attachment A2 – Attendance to Meetings
 - (c) Attachment A3 – Attendance to Training
 - (d) Attachment A4 – Training Matrix
 - (e) Attachment A5 – Promotion Giveaway Items List
 - (f) Attachment A6 – HRPDC Training
 - (g) Attachment A7 – Stormwater Construction Maintenance
 - (h) Attachment A8 – Ditch Maintenance

C. Results of information collected and analyzed, including monitoring data during reporting period.

1. No information was collected during this time period of July 1, 2012 and June 30, 2013.

D. Summary of the stormwater activities York County plans to undertake during the reporting cycle July 1, 2013 and June 30, 2014.

1. See Attachment B – Minimum Control Measures FY2014

E. Changes in any identified Best Management Practices or Measurable Goals for the Minimum Control Measures.

1. There are no changes planned at this time

F. Notice of York County relying on another government to satisfy some of the permit obligations.

1. Attachment C – HRPDC MOA
2. Attachment D1 – HRPDC HRSTORM FY13 Annual Report
3. Attachment D2 – HRPDC HRGreen FY13 Annual Report

G. Status of Programs pursuant to Section II C of the General Permit

1. Not applicable – No programs

- H. Total Maximum Daily Load (TMDL) Information required pursuant to Section I B 9 of the General Permit
 - 1. Attachment E for the County of York list of Impaired Waters and TMDL Waste Load Allocation (WLA)
 - (a) Attachment E1 – TMDL WLA calculations
 - (b) Attachment E2 – Septic Tank Pump Outs

- I. Illicit Discharges Identified and Resolved pursuant to Section II B 3 of the General Permit
 - 1. Attachment F1 – Impaired Waters Drainage Areas
 - 2. Attachment F2 – Hansen database printout
 - 3. Attachment F3 – SSORS Report
 - 4. Attachment F4 – New Sewer Connections for 2013
 - 5. Attachment F5 – Municipal Facility Checklist
 - 6. Attachment F6 – Outfall Inspection Form

- J. Regulated Land Disturbing Activities Data pursuant to Section II 4 c of the General Permit
 - 1. Attachment G1 – E & S Database (excel spreadsheet)
 - 2. Attachment G2 – E&S Letter from DCR
 - 3. Attachment G3 – Hansen Complaints

- K. All known Stormwater Management Facilities (SWMF) in York County pursuant to Section II B5 b (6) of the General Permit
 - 1. Attachment H – SWMF Database (excel spreadsheet)
 - 2. Attachment H1 – SWMF Inspections

- L. List of Agreements between the County of York and third party, HRPDC, for assistance on portions of Implementation of Minimum Control Measures
 - 1. See Attachment C – HRPDC MOA

- M. Copies of Written comments during Public comment period regarding the MS4 Program Plans or modifications
 - 1. No written comments during July 1, 2012 and June 30, 2013

1. Public Outreach and Education							
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents	FY2013 Status
1.1	Participate in regional committees: HRSTORM, HR GREEN, RSMC, and SW Phase II Subcommittee					HR STORM Annual Report, MOA, HRPDC Regional Cooperation in Stormwater Management	
1.1a	<i>Regional Cooperation</i>	Renew MOA with the HRPDC to participate in the regional processes, including the Regional Stormwater Management Program, the Stormwater Phase II Subcommittee and HR STORM.	Maintain valid MOA	HRPDC	Continuously	Hampton Roads Regional Stormwater Management Program MOA; Appendix C	MOA was renewed during FY2013.
1.1b	<i>HR STORM and HR GREEN</i>	Participate in at least 50% of monthly HR STORM meetings	Number of meetings attended/Number of meetings held	York County	Annually	Attendance Sheet in Appendix A1	Attendance FY13-Attachment A2
		Participate in annual HR GREEN meetings and subcommittee meetings as appropriate.	Number of meetings attended	York County	Annually	Attendance Sheet in Appendix A1	Attendance FY13-Attachment A2
		Participate in the development of regional Strategic Plans and Communication Plans for HR STORM and HR GREEN.	Participation	York County	Annually	Meeting Minutes	
1.1c	<i>Stormwater Phase II Subcommittee</i>	Participate in at least 50% of monthly SW Phase II Subcommittee Meetings.	Number of meetings attended/Number of meetings held	York County	Annually	Attendance Sheet in Appendix A1	Attendance FY13-Attachment A2
		Participate in identifying stormwater education needs and priorities through the HRPDC Phase II Subcommittee.	Participation	York County	Annually		Locality staff identified education priorities at a Phase II stormwater committee meeting in September 2011. These priorities are reviewed and updated annually by the stormwater education subcommittee of askHRGreen. Annual media campaigns and outreach efforts are focused on these priorities.
1.2	Educate citizens on techniques to reduce impacts of stormwater pollution on public waterways with an emphasis on impaired waters.						
1.2a	<i>Distribute educational materials developed through HR STORM.</i>	Distribute materials developed through HRSTORM to target audience in locality.	Number of materials distributed	York County	Continuously	Documentation spreadsheet in Appendix A4. Education materials provided by HRPDC.	Attachment A5 - Give Away Items
1.2c	<i>Ensure distribution of regional environmental tabloid to all 6th graders and teachers' guides to all 6th grade teachers</i>	Develop and Distribute environmental tabloids	Number of tabloids distributed	HRPDC	Permit Cycle	Tabloid	Distributed in Fall 2012.

1. Public Outreach and Education							
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents	FY2013 Status
1.2d	<i>Regional Media Campaign</i>	Participate in the HR STORM regional media campaign which will make impressions with a stormwater message via print, television (local municipal access, cable and local affiliate), and radio with a target of reaching 72% of adults (25-54) three times over.	Demographic, reach and frequency	HRGreen	Annually	Copies of ads	Details of the Hamton Roads media campaign for FY2012 is located in the askHRGreen Annual Report.
1.2e	<i>"Scoop the Poop" Campaign</i>	Make "Scoop the Poop" information and giveaways available where citizens receive animal licenses and at pet-related events as appropriate	Number of giveaways distributed	locality	Annually	Spreadsheet	Attachment A5 - Give Away Items
1.2f	<i>Plant More Plants</i>						
	<i>Target Homeowners</i>	Educate homeowners on the benefits of reducing turf grass and increasing other plants on their property.	Number of materials distributed, number of web hits, and number of media spots.	HRGreen	PY3-PY4	Details provided in the askHRGreen.org annual report provided in Appendix D	Continue to publicize program through website, social media, and blog articles and distribute giveaways provided by DCR at events. Lawn care and fertilizer education campaign run in October 2012.
	<i>Target Garden Centers and Retail Nurseries</i>	Encourage local garden centers and retail nurseries to sign up for DCR's program.	Number of local business members	DCR/HRGreen	PY4-PY5		Four landscape professionals and five nurseries are listed as partners on the plant more plants website.
1.3	Illicit Discharge Elimination Education						
1.3a	<i>Educate public employees on hazards and legal implications of illegal discharges and improper disposal of waste.</i>	Identify and prioritize education and training needs for city/county employees through the HRPDC Phase II Subcommittee.	Prioritized list of training needs and number of employees that need training.	Locality	End of PY1	Prioritized needs list	completed
		Conduct 2 trainings per permit cycle	Number of trainings, and # of attendees	HRPDC	Permit Cycle	Pollution Prevention training was conducted in PY2 and PY5. PY5 materials are included in Appendix D.	Pollution Prevention training was provided on May 1 and 2, 2013. See Attachments A3 and A6.
		Ensure at least 20% of appropriate employees attend IDDE training(s) coordinated by the HR PDC.	Number of participants/ Number of identified appropriate employees	York County	Permit Cycle	List of attendees provided in Appendix.	
1.3c	<i>Educate business owners on hazards and legal implications of illegal discharges and improper disposal of waste.</i>	Distribute educational materials developed through the HRPDC to groups with high risk for producing illicit discharges.	Number of materials distributed.	York County	Permit Cycle	Education materials and distribution list.	In PY5, askHRgreen.org continued its education campaign to educate businesses through the FOG Regional Training Program. Details are contained in the askHRgreen annual report. See Attachment D2.
1.4	Encourage involvement in local water quality improvement initiatives.						
		Post volunteer opportunities on local website.	Number and types of events	York County	Quarterly	City/Co. website	
		Submit articles for HR Green regional e-newsletter for public participation in water quality improvement initiatives.	Number and types of events submitted	York County	Quarterly	E-newsletter	
		Post volunteer opportunities through HR STORM and/or HR Green	Number and types of events submitted	HRPDC Environmental Educator	Quarterly	websites	
1.5	Diversify strategies to target local MS4 specific audiences.	Expand fact sheet series	Identify and prioritize targets	HRGreen	PY 2		completed in PY2

1. Public Outreach and Education							
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents	FY2013 Status
			Produce specific fact sheets	HRGreen	PY 3-5	Factsheets, e-newsletters, and websites	Car wash rack card for fundraising car washes and residential good housekeeping brochure were developed in FY11, and continued to be distributed through FY13. The askHRgreen.org website contains information on stormwater freindly practices at home and in the yard. Articles on responsible stormwater practices are regularly featured on the website's blog.
1.6	Improve outreach program to address concerns of target audience as well as minorities, disadvantaged audiences, and minors .	Improve outreach to school-aged children	Reprint of HR STORM tabloid size newspaper for elementary schools	HR STORM/ HRGreen	PY 1, 3, and 5	Appendix D	The askHRgreen.org learning guide was produced and distributed to the Region's 6th graders during fall 2012.
		Improve outreach to disadvantaged and minority audiences.	Targeted ads through channels such as CW, BET, and urban radio stations.	HRGreen	Annually	askHRgreen.org annual report, Appendix D.	
1.7	Evaluation and Assessment	Evaluate and assess progress towards meeting measurable goals.	In accordance with Section I E of 4VAC50-60-1200	York County	Annually	Annual report	

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		Conduct 2 trainings per permit cycle	Number of trainings, and # of attendees	HRPDC	Permit Cycle	Pollution Prevention training was conducted in PY2 and PY5. PY5 materials are included in Appendix D.	Pollution Prevention training was provided on May 1 and 2, 2013. See Attachments A3 and A6.
		Ensure at least 20% of appropriate employees attend IDDE training(s) coordinated by the HRPDC.	Number of participants/ Number of identified appropriate employees	York County	Permit Cycle	List of attendees provided in Appendix.	
1.3c	<i>Educate business owners on hazards and legal implications of illegal discharges and improper disposal of waste.</i>	Distribute educational materials developed through the HRPDC to groups with high risk for producing illicit discharges.	Number of materials distributed.	York County	Permit Cycle	Education materials and distribution list.	In PY5, askHRgreen.org continued its education campaign to educate businesses through the FOG Regional Training Program. Details are contained in the askHRgreen annual report. See Attachment D2.
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		Post volunteer opportunities through HR STORM and/or HR Green	Number and types of events submitted	HRPDC Environmental Educator	Quarterly	websites	
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1. Public Outreach and Education							
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1.6	Improve outreach program to address concerns of target audience as well as minorities, disadvantaged audiences, and minors .	Improve outreach to school-aged children	Reprint of HR STORM tabloid size newspaper for elementary schools	HR STORM/ HRGreen	PY 1, 3, and 5	Appendix D	The askHRgreen.org learning guide was produced and distributed to the Region's 6th graders during fall 2012.
		Improve outreach to disadvantaged and minority audiences.	Targeted ads through channels such as CW, BET, and urban radio stations.	HRGreen	Annually	askHRgreen.org annual report, Appendix D.	
1.7	Evaluation and Assessment	Evaluate and assess progress towards meeting measurable goals.	In accordance with Section I E of 4VAC50-60 1200	York County	Annually	Annual report	

2. Public Involvement/Participation							
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents	FY2013 Status
2.1	Provide Public Notice of Program Plan and Modifications	Promote the availability of the operator's MS4 Program Plan and any modifications for public review and comment in accordance with public law.	public notice of modifications.	York County	As necessary	Virginia Code reference, updated plan	On Website
2.2	Make Program Plan and other Stormwater Program Information Available to Public	Provide the program plan, stormwater annual reports, the stormwater permit, and the stormwater ordinances on the City/County website.	presence of materials on website	York County	Continuously		On Website
2.3	Participate in local activities to improve water quality			York County	As appropriate		
2.4	Evaluation and Assessment	Evaluate and assess progress towards meeting measurable goals.	In accordance with Section I E of 4VAC50-60-1200	York County	Annually	Annual report	

3. Illicit Discharge Detection and Elimination								
BMP	BMP Description		Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents	FY2013 Status
3.1	Storm Sewer System Map		Map all known outfalls	map # of outfalls catalogued	York County	20% of remaining outfalls annually	map	Mapping Outfalls into GIS
3.2	Illicit Discharge Detection & Elimination Ordinance		Continue implementing and enforcing the illicit discharge/stormwater ordinance.	number of investigations and actions taken	York County	annually	ordinance	
			Track illicit discharge detection and elimination activities.	number of investigations and actions taken	York County	ongoing	PARS	See Attachment F2
3.4	Prevent or minimize the discharge of hazardous substances and oil in the MS4 stormwater discharge.		Yard inspections; Develop/enhance reporting relationship with FD/Haz Mat Team; targeted education	number of responses/ number of inspections	York County		Inspection forms	See Attachment F5
3.5	Cooperation with adjacent MS4s		Identify and notify, in writing, any downstream regulated MS4 to which the small regulated MS4 is physically interconnected of the small regulated MS4's connection to that system.	Develop map, Regional Phase II Stormwater Subcommittee Meetings, letters	York County	PY1	letters; meeting attendance	See Attachment A2
3.6	Report all spills that reach state waters to DEQ and DCR							
3.6a	Report non sewer spills and releases from small MS4 operated properties that reach State waters to DEQ.		Report spills to The Department of Environmental Quality's Pollution Response Program (PREP).	Obtain PREP number.	York County	Report in accordance to Section III. G.		No Spills Reached State Waters
3.6b	Report Sanitary Sewer Overflows through SSORS database.		Continue to utilize SSORS to report Sanitary Sewer Overflows	Number of overflows	York County	continuously		See Attachment F3
3.7	Continue Sanitary Sewer System improvements in coordination with SSO consent order							See Attachment F4
3.8	Evaluation and Assessment		Evaluate and assess progress towards meeting measurable goals.	In accordance with Section I E of 4VAC50-60-1200	York County	Annually	Annual report	

4. Construction Site Storm Water Runoff Control							
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents	FY2013 Status
4.1	Local Erosion and Sediment Control Ordinance	Continue to implement the site plan review, LID implementation where deemed appropriate, construction site BMP, and inspection provisions of the local Erosion and Sediment Control Ordinance.	# of inspections; # plan reviews, # enforcement actions	E&S Program Administrator	annually	spreadsheets	See Attachment G1
		"At a minimum be consistent with the VA ESC Law and regulation"	Soil and Water Conservation Board finding of consistency	E&S Program Administrator	continuously	Letter from DCR	See Attachment G2
		Continue to receive and respond to information from citizens relating to the local erosion and sediment control program through personal visits, email, telephone, and the City/County web page.	# of calls/requests, #site visits	E&S Program Administrator	annually		See Attachment G3
4.2	VSMP Permits	Continue to direct applicants, proposing to disturb an acre or more of land or part of a larger common plan of development or sale that would disturb one acre or more, or \geq 2,500 sq. ft. in CBPA areas to VDCR to secure a VSMP Permit for Discharges of Stormwater from Construction Activities. Ensure permit has been obtained.	#of permit applications and permits issued.	E&S Program Administrator	Continuously		Evidence of a VSMP Permit required prior to issuing a LDA Permit.
4.3	Training	Participate in the development of at least one regional contractor training session during the life of the permit.	Trainings Completed	HRPDC & Phase II SW Committee	One per permit cycle	training sessions and eval forms contained in Appendix X.	Training was held on May 30, 2013.
		Ensure that plan reviewers, inspectors, and program administrators obtain the appropriate certifications as required under the Erosion and Sediment Control Law	certifications obtained	E&S Program Administrator	ongoing		All Certifications Current
4.4	Tracking and Reporting	Continue to track and report the total number of permitted land disturbing activities as well as the total disturbed acreage.	number of permits & acres disturbed	E&S Program Administrator	annually	Annual Report	
4.5	Evaluation and Assessment	Evaluate and assess progress towards meeting measurable goals.	In accordance with Section I E of 4VAC50-60-1200	Locality	Annually	Annual report	Updating Ordinances to be Compliant

5. Post Construction Storm Water Management in New Development and Redevelopment							
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents	FY2013 Status
5.1	Stormwater Management Ordinance	Continue to implement the stormwater criteria of the Stormwater Management Ordinance for new development and redevelopment, and update ordinance to comply with Section II.5.a of the General Permit.	Ordinance updates	SW Program Administrator		Ordinance	Continue to Implement
5.2	Encourage the use of Low-Impact Development (LID)	Develop fact sheet/checklist to help developers and local staff determine appropriateness of LID for project(s)	Checklist developed	HRPDC & Regional Stormwater Mgt. Committee	PY5	Factsheet included in Appendix X.	LID factsheet was produced in FY13 and can be downloaded here: http://www.hrpdcva.gov/uploads/docs/LID%20Checklist.pdf
5.3	VSMP Permits	Continue to direct applicants, proposing to disturb an acre or more of land or part of a larger common plan of development or sale that would disturb one acre or more, or >= 2,500 sq. ft. in CBPA areas to VDCR to secure a VSMP Permit for Discharges of Stormwater from Construction Activities.					
5.4	BMP Maintenance Agreements	Require BMP maintenance agreements as directed by the Stormwater Management Ordinance.	# of agreements & inspection schedules	SW Program Administrator	Ongoing	Maint. Agreements	A requirement for site plan approval.
5.5	BMP Maintenance Program	Update mapping of locally owned structural stormwater controls with reference to HUC and any impaired waters in drainage area.	map	SW Program Administrator	As needed	map	Mapping Updated
		Develop schedules for regular inspection and maintenance of locally owned stormwater control structures in accordance with SWM regulations.	Inspections	SW Program Administrator	Annually	PARS	See Attachment H
5.6	Site Inspection and Enforcement	Conduct site inspections	#Inspections & Reinspections; NOVs	SW Program Administrator	As designated	PARS	See Attachment H2
5.7	BMP Tracking	management facilities that discharge to the regulated small MS4 and submit the following information: (a) Type of structural stormwater management facility installed as defined in the Virginia Stormwater Management Handbook; (b) Geographic location (HUC); (c) Where applicable, the impaired surface water that the stormwater management facility is discharging into; (d) Number of acres treated.	#&type of BMP, location, watershed, acres treated, impaired waters	SW Program Administrator	Annually	via PARS	See Attachment H1
5.8	Evaluation and Assessment	Evaluate and assess progress towards meeting measurable goals.	In accordance with Section I E of 4VACS0-60-1200	York County	Annually	Annual report	

6. Pollution Prevention/Good Housekeeping for Municipal Operations							
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents	FY2013 Status
6.1	Employee Education & Training	Identify and prioritize pollution prevention education and training needs for municipal employees based on relative risk for stormwater pollution from municipal operations through the HRPDC Phase II Subcommittee.	Training Schedule	HRPDC & Localities	1 during permit cycle	training schedule, Appendix X.	completed.
		Develop training materials to eliminate illicit discharges from storage yards, fleet or maintenance shops, outdoor storage areas, rest areas, waste transfer stations, and other municipal facilities.	Develop fact sheets	HRPDC	Permit Cycle	Training documents, Appendix X.	Pollution prevention training was held in May 2013.
		Develop and distribute training materials to inform employees on proper waste disposal techniques.	Develop fact sheets	HRPDC	Permit Cycle	Training documents, Appendix X.	Pollution prevention training was held in May 2013.
		Educate local government employees on protecting soluble and erodible materials from exposure or precipitation.	Develop fact sheets	HRPDC	Permit Cycle	Training documents, Appendix X.	Pollution prevention training was held in May 2013.
		Educate local government employees on proper techniques for fertilizer and pesticide application.	Develop fact sheets	HRPDC	Permit Cycle		Fertilizer training was held in March 2011. Locality staff were encouraged to attend free pesticide training conducted by the Virginia Cooperative Extension.
		Distribute pollution prevention educational materials developed through the HRPDC/HR STORM to municipal employees engaging in operations with a high risk of discharging pollutants into the MS4.	# of items distributed	HRPDC & Localities	annually	Training documents, Appendix D.	Pollution prevention training was held in May 2013.
		Participate in at least one regional annual training workshop for municipal employees engaging in operations with a high risk of discharging pollutants into the MS4 coordinated by the HRPDC Phase II Subcommittee.	# employees attending	SW Program Administrator	annually	Training materials in Appendix D.	See Attachment D.
6.3	Operations & Maintenance Program	Document or develop formal O&M Program for municipally owned stormwater facilities to include activities, schedules, and inspection procedures that include provisions and controls to reduce pollutant discharges into the regulated small MS4 and receiving surface waters.	O&M Plan	Locality	By the end of the permit cycle	O&M Plan	See Attachment F5.
6.4	Evaluation and Assessment	Evaluate and assess progress towards meeting measurable goals.	In accordance with Section I E of 4VAC50-60-	Locality	Annually	Annual report	

	12-Jul	12-Aug	12-Sep	12-Oct	12-Nov	12-Dec	13-Jan	13-Feb	13-Mar	13-Apr	13-May	13-Jun	
Chesapeake	Elizabeth Vaughn	Elizabeth Vaughn	Elizabeth Vaughn	Elizabeth Vaughn	Elizabeth Vaughn	No meeting	Elizabeth Vaughn		Elizabeth Vaughn			Elizabeth Vaughn	
Gloucester													
Hampton	Cris Ausink	Cris Ausink	Cris Ausink		Cris Ausink		Cris Ausink	Cris Ausink	Cris Ausink	Cris Ausink			Cris Ausink
Isle of Wight			Melissa Lindgren	Andy Reed	Erin Belt		Erin Belt	Erin Belt, Melissa Lindgren	Melissa Lindgren	Melissa Lindgren	Erin Belt, Melissa Lindgren		
James City County	Suzanne Dyba		Suzanne Dyba		Suzanne Dyba		Suzanne Dyba		Suzanne Dyba				Suzanne Dyba
Newport News	David Kuzma						David Kuzma		David Kuzma	David Kuzma	David Kuzma	David Kuzma	
Norfolk		Gina Shaw	Fleta Jackson	Fleta Jackson, Gina Shaw	Fleta Jackson, Gina Shaw		Fleta Jackson	Fleta Jackson, Gina Shaw	Fleta Jackson	Fleta Jackson			
Poquoson	Sherry Coffey	Sherry Coffey	Sherry Coffey					Sherry Coffey					
		Zach Jones	Zach Jones	Zach Jones			Zach Jones	Zach Jones			Kari Lynch, Kelsey	Kari Lynch, Kelsey	Zach Jones
Smithfield							Wayne Griffin						
Suffolk	Erin Rountree	Ed Heide	Ed Heide	Ed Heide	Ed Heide		Ed Heide	Ed Heide	Erin Rountree	Ed Heide	Erin Rountree	Erin Rountree	Shinon Clark
Virginia Beach	Bill Johnston	Bill Johnston		Bill Johnston	Bill Johnston, H		Bill Johnston	Bill Johnston		Bill Johnston	Bill Johnston	Bill Johnston	Bill Johnston
Williamsburg	Tammy Rojek			Tammy Rojek				Aaron Small	Aaron Small	Tammy Rojek		Tammy Rojek	Tammy Rojek
York	Amy Green	Amy Green	Amy Green		Brandi McCoy		Brandi McCoy	Brandi McCoy	Brandi McCoy	Brandi McCoy	Amy Green, Brandi McCoy		
	All-Hands askHRgreen.org Retreat							All-Hands askHRgreen.org Research Mtg.			All-Hands askHRgreen.org Meeting		

Phase II Meeting Attendance FY 12-13

Meeting Dates	Phase I and II									Regional SW			# Meetings	% Attended		
	7/18/2012	8/15/2012	9/18/2012	10/17/2012	11/14/2012	12/19/2012	1/16/2013	2/20/2013	3/21/2013	4/17/2013	5/15/2013	6/19/2013			Workgroup	Workgroup
Phase II Localities:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	12	100%
Isle of Wight County	1	-	1	1	1	1	1	1	1	1	-	1	1	1	10	83%
James City County	1	1	1	1	1	1	1	1	1	-	1	1	1	1	11	92%
Poquoson	1	1	1	1	-	1	1	1	1	1	-	-	-	-	9	75%
Suffolk	1	1	1	1	1	1	1	1	1	1	1	1	1	1	12	100%
Williamsburg	-	1	1	-	-	-	1	1	1	1	1	1	1	1	8	67%
York Co.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	12	100%

SM SM

Erosion and Sediment Control Attendance May 30, 2013

Attended	Last Name:	First Name:	Email Address:	Company:
1	Archbell, Jr	Mike	mike@awcontractors.com	A&W Contractors, Inc.
0	Arnette	Perry	prnette@gmail.com	Coastal Virginia Development
1	Arocho	Jose'	jose.aroch@norfolk.gov	City of Norfolk
1	Arredondo	Martin	marredondo@clarknexsen.com	Clark Nexsen
1	Baggett	Kevin	kbaggett@cabarrs.com	C.A. Barrs Contractor
	Batiste	Earl	ebat.4u@gmail.com	EHB Homes, LLC Construction & Development
1	Belt	Erin	erin.belt@isleofwightus.net	Isle of Wight County
	Black	Byron	sfigeac@sasserhomes.com	Sasser Construction LC
1	Boohaker	James	jboohaker@eastbeachnorfolk.com	East Beach Company
1	Bozeman	Ralph	bigdogconstructioninfo@gmail.com	Big Dog Plumbing and Heating, LLC
1	Clifton	Jack	jack@lawsoncompanies.com	R. A. Lawson Corp.
1	Crist	Kelsey	crstk@portsmouthva.gov	City of Portsmouth
1	Edwards	Matthew	matthew.edwards@whiting-turner.com	The Whiting-Turner Contracting Company
1	Fluharty	Shawn	shawn.fluharty@norfolk.gov	City of Norfolk
	Foster	Lawrence	lfoster@tucincva.com	tidewater utilities
1	Gilley	Meredith	gilleyconstructionllc@gmail.com	Gilley Construction, LLC
1	Gillikin	Michael	michael.gillikin@norfolk.gov	City of Norfolk
1	Glenn	Odell	odell.glenn@norfolk.gov	The City of Norfolk
1	Goodwin	Norman (Leigh)	norman.goodwin@norfolk.gov	City of Norfolk
	Grover	Lee	lee@siteworksouth.com	Sitework South LC
1	Hansen	Michael	mhansen@tucincva.com	Tidewater Utility Construction, Inc.
1	Hargrave	Michael	michael.hargrave@isleofwightus.net	Isle of Wight County
	Harris	Shane	shane@tasheetsinc.com	T. A. Sheets General Contractors Inc.
1	Hart	Michael	mhart@clarknexsen.com	Clark Nexsen
	Henderson	Loredana	infinitevelop@aol.com	Big Dog Plumbing and Heating
1	Hines	John	john.hines@whiting-turner.com	Whiting-Turner
1	Horton	Ric	rhorton@sussexdevelopment.com	Sussex Development Corporation
	Hovey	Matt	mhovey@sasserhomes.com	Sasser Construction LC
	Howard	Matt	howard_m42@yahoo.com	Coastal Virginia Developers
1	Indzeris	Bill	bindzeris@thebreedencompany.com	Breeden Construction
	Jones	John	cjjonesbldr@aol.com	Custom Homes by C.J. Jones, Inc.
1	Jorgensen	Jeff	riprapr@yahoo.com	JORGENSEN MARINE CONSTRUCTION
1	Jorgensen	Thomas	tjorg002@odu.edu	JORGENSEN MARINE CONSTRUCTION
1	Kerns	Ford	fordkerns@gmail.com	TSK Construction
1	King	Thomas	thomas.king@norfolk.gov	City of Norfolk
1	Knight	Bill	billk@thebreedencompany.com	Breeden Construction
1	Lippincott	Jenny	jennifer.lippincott@norfolk.gov	PW Operations-Stormwater
	Liskey	Tony	tony.liskey@whiting-turner.com	The Whiting-Turner Contracting Company
1	Lowenthal	John	john.lowenthal@cardnotec.com	Cardno TEC
1	Marion	Rick	rick.marion@whiting-turner.com	Whiting-Turner

Attacment A3

York County Annual Report FY13

1 Marsh	Thomas	thomas.marsh@pps.k12.va.us	Portsmouth Public Schools-Operations
Mensia-Joseph	Nita	nita.mensia-joseph@pps.k12.va.us	Portsmouth Public Schools--Operations
1 Merner	Ken	kenm@boydhomes.com	Boyd Homes
1 Lane	Mike	lanewmike@aol.com	Lane Environmental Consultants
1 Mills	Kelly	kmills@cityofchesapeake.net	City of Chesapeake Development & Permits
1 Moneyhan	Allan	awmoneyhan@aol.com	Hampton Roads Holding Company, LLC
Moore	Jeff	moorej@yorkcounty.gov	York County
Nemes	Louis	l_nemes@cox.net	Big Dog Plumbing And Heating
1 Nicholson	Natasha	natasha.nicholson@obg.com	O'Brien & Gere
1 O'Bryan	Patrick	patrick.obryan@whiting-turner.com	Whiting-Turner
1 Ocker	Jeff	jocker@sussexdevelopment.com	Sussex Development Corporation
1 Opoka	Jared	jaredopoka@gmail.com	Breeden Construction
Opoka	Mark	mopoka@c2c-services.com	C2C Profesional Services
1 Otis	Jennifer	jennifer.otis@norfolk.gov	City of Norfolk
1 Outland	Leo	outlandleo@gmail.com	Outland Construction
Outten	John	john@ainsliegrouop.com	Ainslie Group
1 Parrish	Woody	woody@parrishpm.com	Parrish Project Management
1 Patton	Jay	jpatton@hampton.gov	City of Hampton
1 Ridley	Danielle	dridley@isleofwightus.net	Isle of Wight County
Sager, Jr.	H. Guy	greenfieldhomes@msn.com	Greenfield Homes Corporation
1 Scott	James	jmscott1090@aol.com	Inner-View Ltd
Scott	Kaitlin	kaitlin.scott@norfolk.gov	City of Norfolk
1 Scott	Terrance	terrance.scott@pps.k12.va.us	Portsmouth Public School-Operations
1 Silverthorne	Collin	cpsilverthorne@gmail.com	Sasser Construction LC
1 Slawson	David	david@classicdesignbuilders.com	Classic design builders
1 Snodgrass	Randy	rsnodgrass@cabarrs.com	C.A.Barrs Contractor
1 St. Clair	Scott	sstclair@cabarrs.com	C.A. Barrs Contractor
1 Street	Ray	rstreet@sasserhomes.com	Sasser Construction LC
Sutton	Richard	richard.sutton@yorkcounty.gov	York County
1 Swafford	Alex	alex.swafford@norfolk.gov	City of Norfolk
1 Tull	Frank	ftull@thebreedencompany.com	Breeden Construction
1 White	Caprice	caprice.white@pps.k12.va.us	Portsmouth Public Schools-Operations
1 Wilkins	Jenifer	jlwilkins@hampton.gov	CITY OF HAMPTON
1 Eason	Mary	meason@chesapeake.gov	City of Chesapeake
1 Goodman	William	wdgoodman@chesapeake.gov	City of Chesapeake
1 Martinez	Mario		Big Dog Plumbing and Heating
1 Lynch	Kari	lynchk@portsmouthva.gov	City of Portsmouth
1 Schuster	Chris		Inner-View Ltd
1 wilson	robert	robertw@thebreedencompany.com	Breeden Construction
1 Hill	Noah	Noah.Hill@dcr.virginia.gov	DCR
1 McCarthy	Seamus	seamus.mccarthy@norfolk.gov	Norfolk
1 lesniak	zuzanna	zuzanna.lesniak@norfolk.gov	Norfolk
1 Shacochis	kristen	ksacochis@resources.com	Resource international
1 Gird	Andrew	andy@stephenalezanderhomes.com	Stephen Alexander Homes

Phase II Stormwater Training Topics

Referenced in the following Program Plan Components: 1.1c, 1.3a, and 6.1

Topic	Last offered	Previous dates	Planned	Notes
Fleet Maintenance	Mar-05			No longer a priority, just include vehicle washing SOPs under Pollution Prevention Training.
Landscaping	Mar-06			
IDDE	Oct-09	5/1/2007, 2/1/2008	Winter 2012/Spring 2013	Will likely combine with Pollution Prevention Training.
General Pollution Prevention	Feb-09	Mar-04	Winter 2012	
Parks & Open Space Mgt. (Nutrient Management)	Mar-11			

Note: Training topics are reviewed and prioritized at least twice during the permit cycle. Topics were reviewed and prioritized most recently at the September 2011 Ph II meeting, as documented in the meeting summary kept on file at the HRPDC.

Attachment A:	Askhrgreen Materials Give Away Items									
Name:	Reusable Bag	Plant More	Plant: Healthy Ches Bay	Scoop the Poop	STP-Poop Bags	Outdoor H2O Tips	Green Living	Green Learning	Carwash Tips	Askhrgreen Pens
Green Hands Garden Center	15	30	30			30	30	20		
Cruz Thru Car Wash & Lube							20	15	30	
Grafton Animal Hospital				12	20		20	15		15
Salty Paws Vet Hospital				12	20		20	15		15
Total	15	30	30	24	40	30	90	65	30	30

Erosion and Sediment Control Training for Contractors
May 30, 2013
Newport News Waterworks

12:00 Check-in and lunch

12:30 Welcome and Introduction to E and S – Noah Hill, DCR

1:00 Local Inspector Perspectives - Common Violations and Remedies.

Seamus McCarthy, City of Norfolk

- construction entrance
- inlet protection
- silt fence
- dewatering
- street sweeping

Erin Belt, Isle of Wight County

- sediment trap basins
- diversions

2:15 Break

2:30 E and S on State and linear projects – Ian Edwards, DCR

3:00 Local Perspectives Continued

Jason Trimyer, City of Suffolk

- tree protection
- topsoiling and seeding

3:30 Revised Stormwater Regulations – Noah Hill, DCR

4:00 Wrap-up

Introduction to the Virginia Erosion & Sediment Control Program

**Noah M. Hill,
Regional Manager**

History of the E&S Program



Geologic Erosion-The natural process



Water,



.....*wind,*



..... *ice,*

Freezing and thawing action results in detachment of soil particles

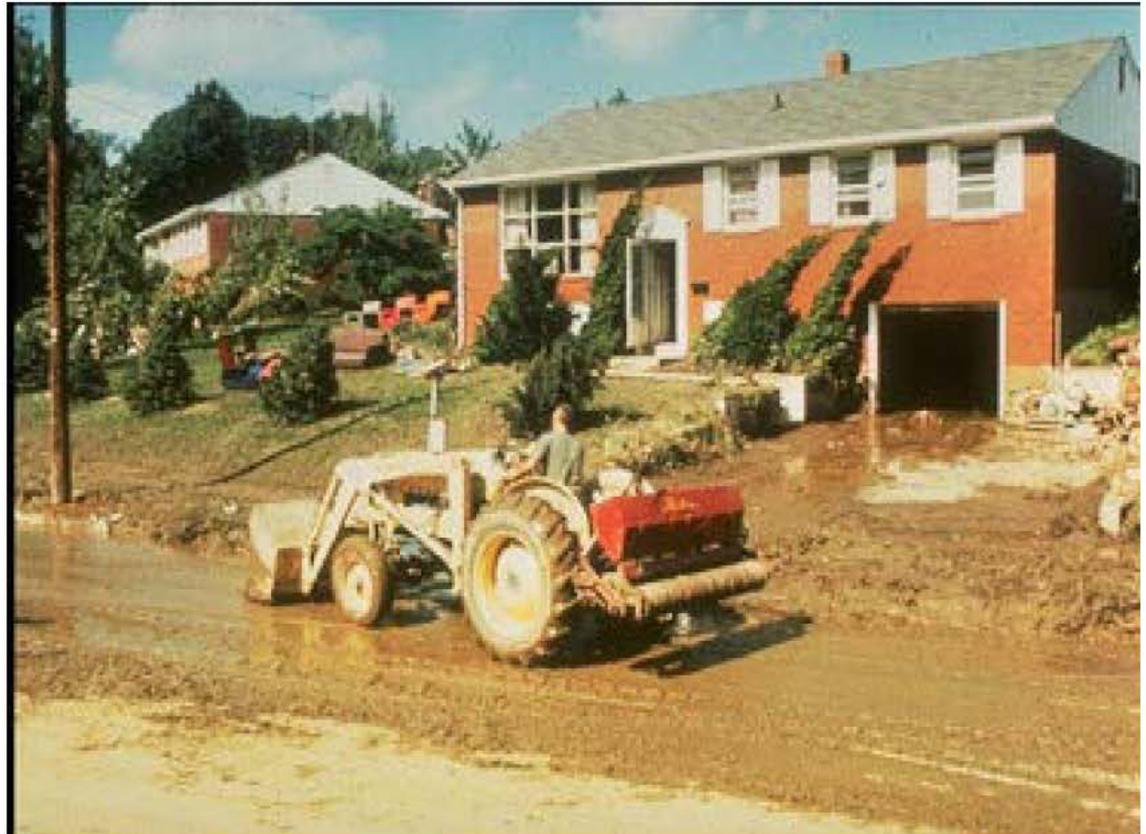


and by gravity.



Accelerated Erosion (Human Induced Process 70%)

- *Geologic rate increased by man's intervention*
- *70% all erosion*



Major “Activities” that cause Accelerated Erosion

- *Surface Mining*



Major “Activities” that cause Accelerated Erosion

- *Forestry*



Major “Activities” that cause Accelerated Erosion

- *Agriculture*



Major “Activities” that cause Accelerated Erosion

- *Urban Construction*



Sediment Production

- Rate of erosion is greater per acre on urban construction projects.*

Sediment Volume

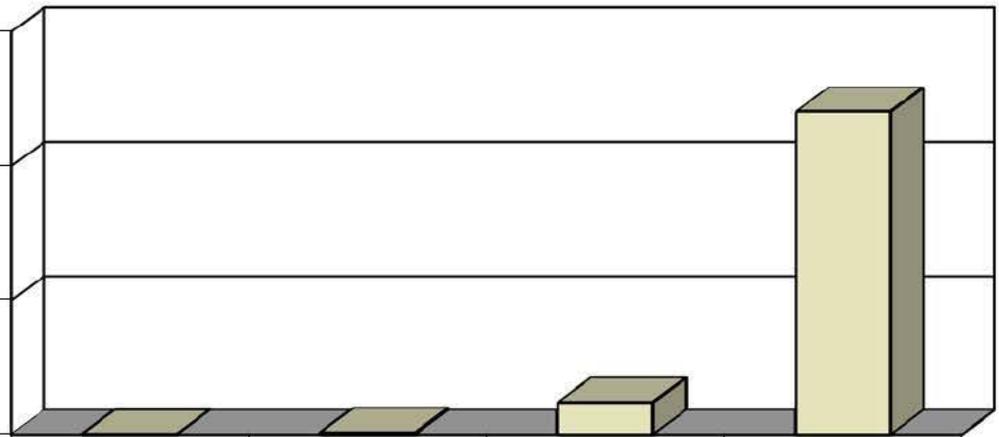
□ *T/SqMi/Y*

60000

40000

20000

0



□ *T/SqMi/Y*

Forest

Grass

Crop

Const

24

240

4,800

48,000

Law History

- **Public Law 46-Established the Soil Conservation Service**
- **Soil & Water Conservation Districts (SWCD) were established under the Franklin D. Roosevelt administration.**
- **VA Soil and Water Conservation District Law (Title 21) 1938**
- **Mainly concerned with agricultural practices**
- **Voluntary programs were not very effective**

Law History

- **Urban areas began to adopt local E&S ordinances to control erosion on construction sites. - Fairfax County was the first.**
- **1973 - VA Erosion and Sediment Control Law as addendum to the 1938 Law - was re-codified to Title 10 of the Code of Virginia**

1973 E&S Law

- **The Law required the Soil & Water Conservation Commission to establish criteria to control erosion**
- **Localities/districts had to develop local E&S programs (164)**
- **Counties, Towns, Cities**

Mid-1980's

- **General Assembly (GA)- was given evidence of the need to improve the structure & implementation of the local and state programs**
- **Results - 1986 Appropriations Act**

1986 Appropriations Act

- **Required DSWC to conduct a review of local compliance with the E&S Law**
- **The Department produced a report which became House Document 15 and was presented to the GA in 1987**
- **1988 Law change required the SWC Board to promulgate regulations for controlling erosion**

1993- E&S Law

- **General Assembly strengthened the Law**
- **The Soil and Water Conservation Board could decertify the local program if deficient**

1995- E&S Law

- **New regulations**
- **Added certification program**
- **Better outlined the enforcement process**

2001 Amendment

Effective July 1, 2001

A Certified Responsible Land Disturber (RLD) must be named as a prerequisite to plan approval. The RLD is the person who is in charge of and responsible for carrying out the land disturbing activity.

2003 Amendment

Effective July 1, 2003

A Certified Responsible Land Disturber (RLD) must be named as a prerequisite to engaging in land disturbing activities. The RLD is the person who is in charge of and responsible for carrying out the land disturbing activity in accordance with the approved E&S plan.

2003 Amendment

Effective July 1, 2003

Plan-approving authorities have the option to waive the RLD requirement for an agreement in lieu of a plan for construction of a single family residence provided that no erosion and sediment control violation occurs. If a violation occurs, then the person responsible for carrying out the agreement in lieu of a plan shall correct the violation and provide the name of an RLD.

2012 Integration Bill (House Bill 1065)

- **Amends and Reenacts:**
 - (1) The Erosion and Sediment Control Act;**
 - (2) The Chesapeake Bay Preservation Act; and**
 - (3) The Stormwater Management Act**
- **The amendments remove contradictions between the three acts and provides a definitions section that is applicable to all three acts.**

Basic Program Concept

- **Anyone wishing to disturb land must prepare an erosion and sediment control plan that satisfies certain minimum standards.**
- **The plan must be submitted and approved.**
- **Compliance with the approved plan and Minimum Standards must be adhered to.**

State and Local Program Implementation

- ***Virginia delegates powers to localities through the Virginia Constitution.***
- ***Localities can only exercise powers and authority granted to them by state law.***
- ***Localities must carry out duties and responsibilities mandated to them.***
- ***This legal approach is known as “Dillon’s Rule”.***

State and Local Program Implementation

- ***All local programs must be approved by the Virginia Soil & Water Conservation Board and have been designated as a Virginia Erosion and Sediment Control Program (VESCP)***
- ***Each local program must meet minimum requirements set forth by the law and the Virginia Erosion and Sediment Control Regulations.***

State and Local Program Implementation

- ***The Department of Conservation & Recreation periodically evaluates each local E&S program for effectiveness and consistency with the law and regulations.***
- ***This process is known as a Program Review.***

Four components of a local program

- 1) Administration***
- 2) Plan Review***
- 3) Inspection***
- 4) Enforcement***

Local E&S Programs Enforcement

10.1-562-1

- ***Allows local programs to adopt an ordinance providing for Civil penalties in lieu of criminal sanctions for violations.***
 - ***Civil penalty for any one violation with an approved plan shall be \$100 to 1,000 per day , with a max. total of \$ 10,000***

Regulated Activities & Overview of the E&S Law

- ***Intent of the law is to regulate most construction-related land-disturbing activities exceeding 10,000 square feet in area***
- ***Localities may choose to make this more restrictive (ex. Chesapeake Bay Act requirements)***

..... clearing



..... grading,



..... excavating,



.....transporting,



.....and filling of land.



But shall not include:

Minor land-disturbing activities such as home gardens, landscaping, repairs and maintenance work.

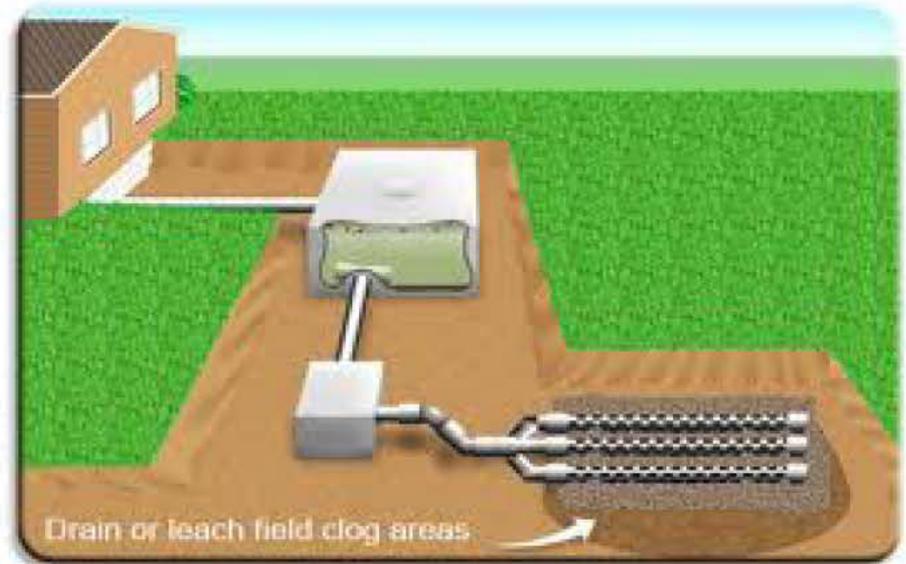


Individual Service Connections



– Installation, maintenance or repair of any underground public utility lines on an existing hard surface road, street or sidewalk confined to that area

–Septic tank or drainage field lines unless included in an overall plan



*Permitted** Surface or deep mining



***Permitted* exploration or drilling for oil or gas
including the well site, roads, feeder lines
and off site disposal***



Tilling, planting, or harvesting of agricultural or horticultural, or forest crops, feeder lot operations; engineering operations, or as additionally set forth by the Board in regulation*



Repairing or rebuilding of tracks, right-of-ways, bridges, etc. of a railroad company



Agricultural engineering operations- "terraces, de-silting basins, contour cultivating, irrigation ponds..."



Disturbed land of less than 10,000 square feet, or 2,500 square feet in all areas of the jurisdictions designated as subject to the Chesapeake Bay Preservation Area Designation government authority may reduce this amount



Installation of fence or sign posts



Shore erosion control projects on tidal waters – when within the regulatory authority of local wetlands boards, COE, VMRC; but outside of exempted area – activity subject to ESC law



***Emergency work to protect life, limb, or property -
other approval***



State Agency Projects

- ***State agencies are required to submit E&SC (and Stormwater) plans to DCR for approval.***
- ***If federal entities submit plans, work can not start before the plans have been reviewed and approved.***
- ***Department 60 days for plan review***

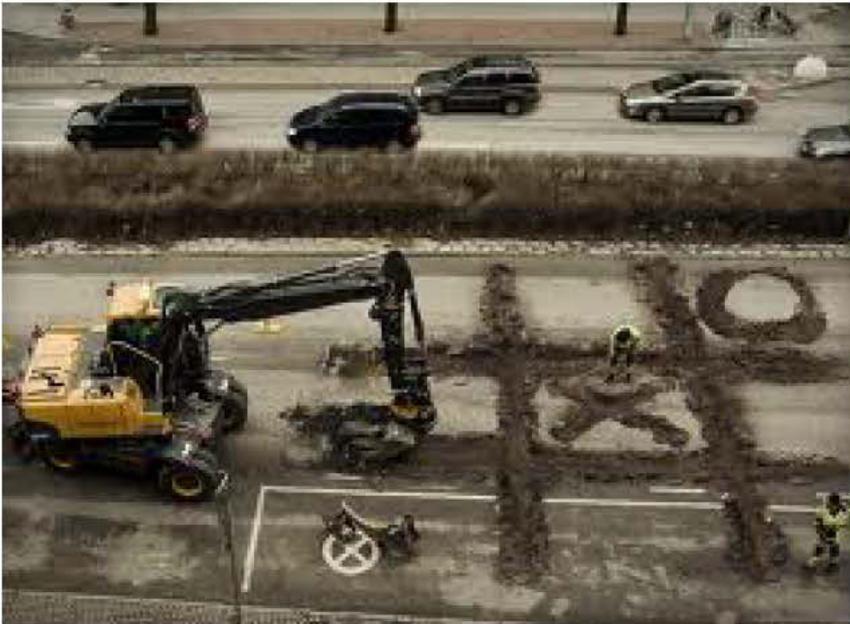
State Agency Projects

- ***State agency are responsible for compliance with approved plans.***
- ***DCR is responsible for inspections and enforcement.***
- ❖ ***State and federal agencies are required to comply with more stringent local program standards.***

Annual Standards and Specifications

- ***Allows state & federal agencies, gas and utility companies to review plans and conduct inspections***
- ***DCR provides oversight, enforcement, compliance review and evaluation.***
- ***Must be approved by the SWCB***
- ❖ ***Submission of AS&S DOES NOT eliminate the need for project specific erosion and sediment control plans – VAC50-30-30B***

Questions?



Contact Information

Noah M. Hill

Regional Manager

DCR-DSWM

Noah.hill@dcr.virginia.gov

757-925-2392

Bureau of Environmental Services



Overview of Regulatory Programs

Seamus McCarthy – Environmental Engineer
Odell Glenn – Construction Inspector II



Regulatory Programs

- **Wetlands & Sand Dunes/Beaches**
- **Chesapeake Bay Preservation**
- **Erosion & Sediment Control**

What is a Wetland?

- ▶ Wetlands Vegetation
- ▶ Wetlands Hydrology
- ▶ Wetland Soils



Why Are Wetlands Important?



Tidal Wetlands: intertidal zone



Spartina alterniflora
(saltmarsh cordgrass)

Tidal Wetlands: high marsh



Tidal Wetlands: high marsh vegetation



01/11/2007

Tidal Wetlands: Forested Ditch



Typical “Landscape” Violations

Mowing



Typical “Landscape” Violations Fill



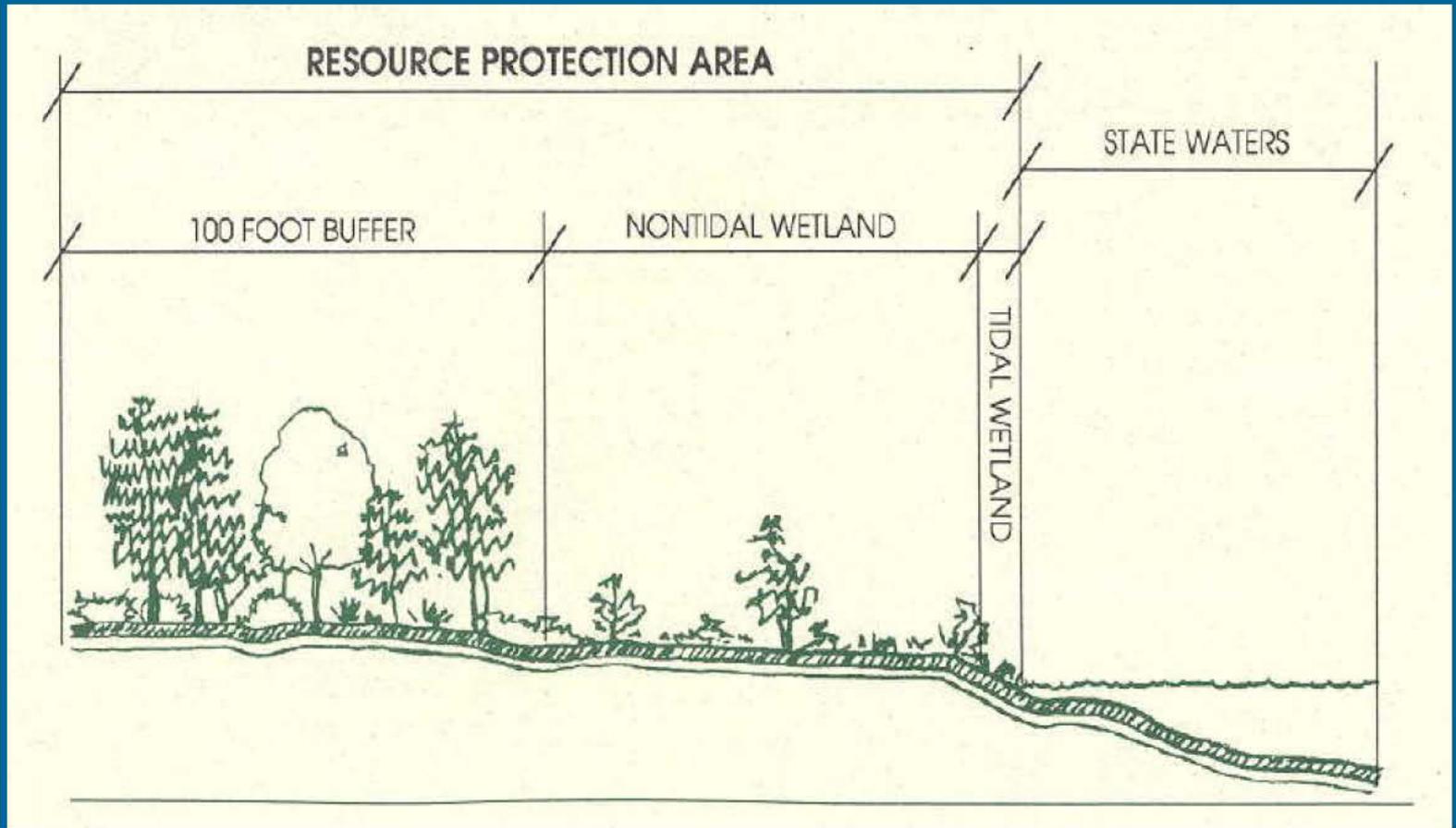
3.25.2005

Chesapeake Bay Preservation Areas Program



- **State-mandated program**
- **Goal – To protect water quality**
- **Regulates new development & redevelopment**
- **Protects wetlands & buffers**

Chesapeake Bay Preservation Area (CBPA)



CBPA 100' BUFFER



CBPA BUFFER



CBPA Features



Buffer Area

CBPA RPA Buffer Violations



CBPA RPA Buffer Violations



Erosion & Sediment Control Program



- **State-mandated program**
- **Goal – To prevent erosion of land and degradation of state waters**
- **Regulates land disturbances greater than 2,500 sq. ft.**
- **Program applies city-wide**

No Erosion Control



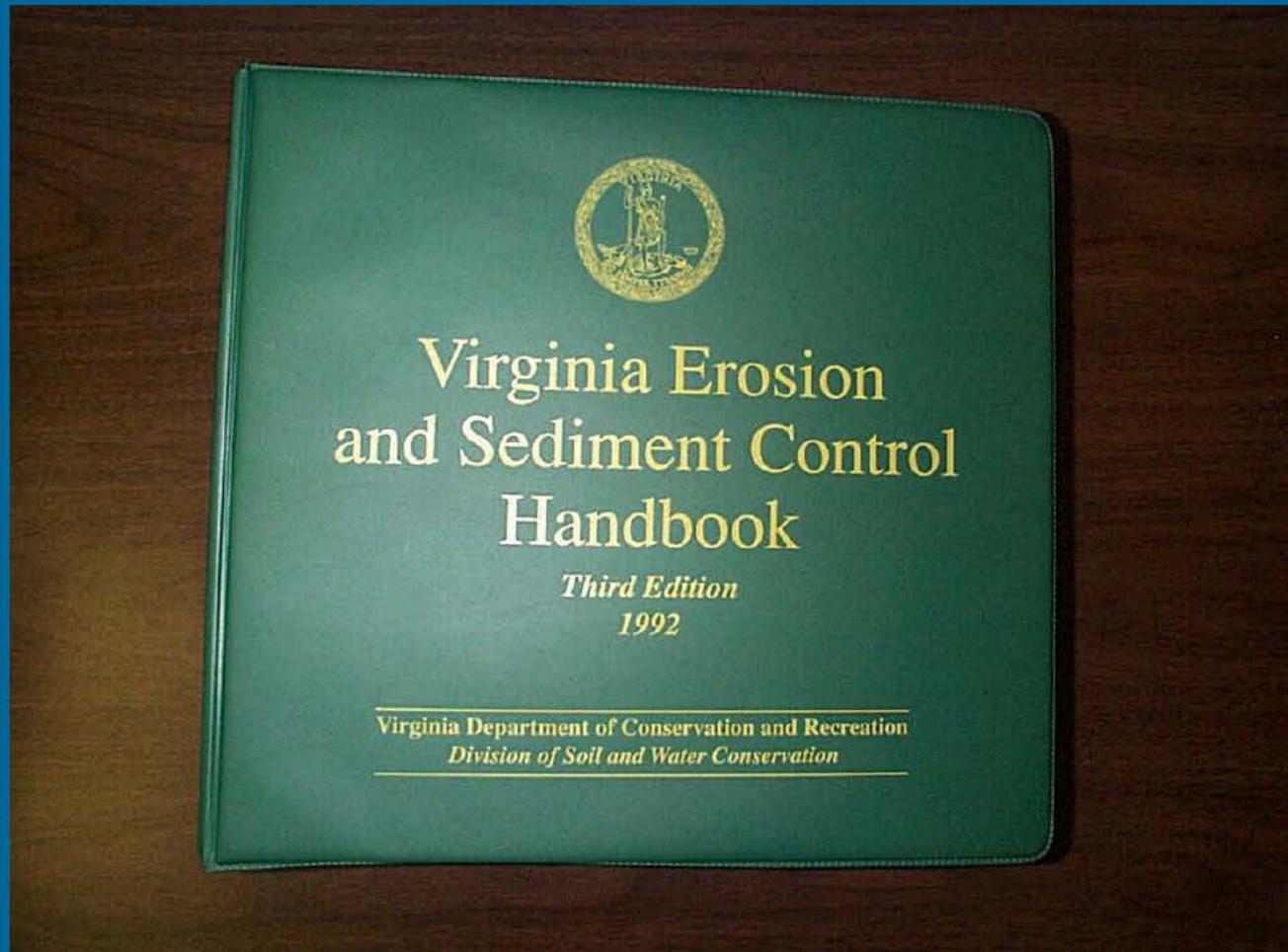
Sediment Entering Storm Drain System



Sediment Entering Creek



Erosion & Sediment Control Handbook



City of Norfolk E&S



City of Norfolk Standard Erosion & Sediment Control Notes

1. Unless otherwise indicated, all vegetative and structural erosion and sediment control practices will be constructed and maintained according to minimum standards and specifications of the Virginia Erosion and Sediment Control Handbook (3rd Edition, 1992) and the City of Norfolk erosion and sediment control ordinance.
2. The contractor shall contact the City of Norfolk, Bureau of Environmental Services (664-4368) at least 48 hours prior to any land disturbing activity (including demolition) so that a preconstruction conference can be scheduled.
3. The contractor shall apply permanent or temporary soil stabilization to all denuded or disturbed areas within 7 days after final grade is reached on any portion of the site. Soil stabilization must also be applied to denuded or disturbed areas which may not be at final grade but which will remain undisturbed for longer than 30 days. Soil stabilization measures include vegetative establishment, mulching and the early application of gravel base material on areas to be paved.
4. All erosion and sediment control measures are to be placed prior to or as the first step in construction.
5. The contractor shall inspect all erosion control measures periodically and after each runoff producing rainfall event. Any necessary repairs to maintain the effectiveness of the erosion control devices and cleanup of sedimentation are the responsibility of the contractor and shall be made immediately.
6. The contractor shall limit site access by construction vehicles to entrances protected by a stone construction entrance (VESCH Std. & Spec. 3.02) or an approved comparable control measure. Sediment shall be removed from paved areas on a daily basis.
7. Stock piles of soil and other erodible materials shall be stabilized or protected with sediment trapping measures. The contractor is responsible for the temporary protection and permanent stabilization for stockpiles on site as well as for materials transported from the project site.
8. The contractor shall monitor and take precautions to control dust including (but not limited to) use of water, mulch, or chemical dust adhesives and control of construction site traffic.
9. Effluent from de-watering operations shall be filtered or passed through an approved sediment trapping device, or both, and discharged in a manner that does not adversely affect adjacent properties, wetlands, waterways or the storm drainage system.
10. The contractor is responsible for installation and maintenance of any additional control measures necessary to prevent erosion and sedimentation as determined necessary by the plan approving authority.
11. Temporary erosion and sediment control measures are not to be removed until all disturbed areas are stabilized. After stabilization is complete, all measures shall be removed within 30 days. Trapped sediment shall be spread and seeded.

EPA Fines

Local developer agrees to pay \$9,700 in EPA settlement

BY SCOTT HARPER
THE VIRGINIAN-PILOT

VIRGINIA BEACH — A local developer, Bishard Development Corp., has agreed to pay \$9,700 to settle federal environmental violations discovered last year at a Virginia Beach site where the Coastal Walk Condominiums were being built.

According to a settlement released Wednesday by the U.S. Environmental Protection Agency, contractors hired by Bishard Development did

not follow anti-pollution plans for keeping dirt, mud, oil and debris from washing off the site and tainting a small creek feeding Linkhorn Bay.

The agreement does not say whether any environmental damage resulted from the violations, only that multiple infractions of storm water and sediment-control rules were noted during an August 2004 inspection of the site on Old Virginia Beach Road.

Acting on a complaint, EPA officials found inadequate silt fences that are supposed to

EPA officials found inadequate silt fences that are supposed to block muddy runoff, unprotected piles of dirt, a poorly maintained sediment trap and no proof that required self-inspections had been done.

block muddy runoff, unprotected piles of dirt, a poorly maintained sediment trap and no proof that required self-inspections had been done, according to the settlement.

Bishard Development has 180 days to pay the \$9,700 penalty, which the company

will do in six installments, the settlement said.

The company's president, Steven Bishard, signed the settlement last month. He did not return phone messages seeking comment Wednesday.

The EPA said the company "fully cooperated" and took

"prompt action" to comply with the Clean Water Act once the violations were outlined.

Regulating sediment and storm water pollution from construction sites used to fall to the Virginia Department of Environmental Quality. That changed last year, when the task was shifted to the Virginia Department of Conservation and Recreation, as directed by state lawmakers.

The EPA got involved in this case because the federal agency was contacted directly by the complainant. The agency

then contacted the state, and the two entities jointly visited the property, officials said.

Sediment can make waterways more shallow and smother aquatic life. Storm water carries such mud to public waters, as well as any fertilizers, oils, chemicals and nutrients on the land. The two pollutants are considered major obstacles to a healthier Chesapeake Bay.

■ Reach Scott Harper at (757) 446-2340 or at scott.harper@pilotonline.com.

EPA Fines

Friday Hampton Roads | 10.14.11 | THE VIRGINIAN-PILOT | PAGE 5

SANCTIONS

Company to pay \$51K fine for environmental errors

By Scott Harper
The Virginian-Pilot

CHESAPEAKE

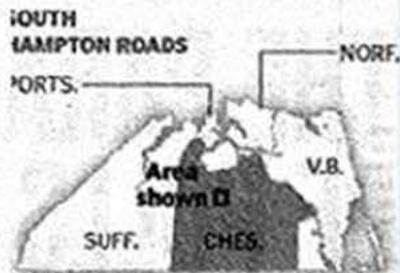
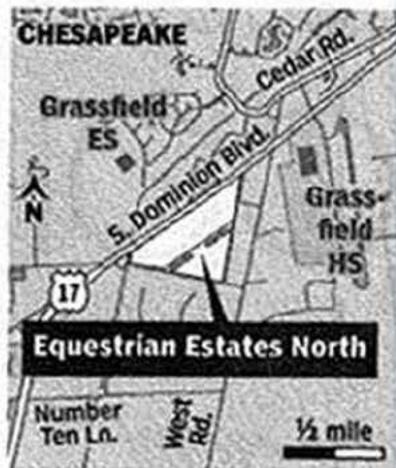
A development company has agreed to pay a federal fine of \$51,000 for various environmental violations at a new-housing site near New Mill Creek, a branch of the Elizabeth River.

Dominion Boulevard Partners LLC, based in Virginia Beach, is paying the fine, sought by the U.S. Environmental Protection Agency, because "it was either pay

ply omitted by the company.

EPA inspectors last year discovered problems at the site, known as Equestrian Estates North, on West Road off Dominion Boulevard, chiefly in how stormwater was being handled in a man-made pond and how required fencing was not adequate to block dirt and sand from washing into a nearby canal.

In one instance, a big stockpile of sand was supposed to be surrounded with a silt fence, but according to records, no fencing existed.



SOURCES: ESRI, Tele Atlas

VP

Before Land Disturbance

1. Must have an **approved site plan** or a **land disturbing permit**.
2. If lay down area is not shown on approved plan contractor must contact Environmental Services to identify E&S controls to be utilized and obtain land disturbing permit.
3. Preconstruction conference at the site with Environmental services. All E&S controls must be in place. Responsible land disturber must be identified.
4. VSMP permit required if land disturbance is over an acre or greater than 2500 sq ft in CBPA (look at cover sheet).

Preconstruction Conference

- Look at installed E&S plan to make sure it complies with approved plan
- Identify Responsible Land disturber
- Go over City E&S policy & expectations during construction

Responsible Land Disturber

Construction Site Information Form

Project name: _____ Date: _____

Project Address: _____

Site Plan Number: _____ Land Disturbance: _____

Responsible Land Disturber (R.L.D.) Notification

The following person _____ (print),

_____ (sign), is identified as responsible for carrying out the land disturbing activity associated with the above-referenced project. This person meets the applicable requirements of Virginia Code Section 10.1 - 563 and 10.1 - 566 by virtue of the following:

Check the category that applies

_____ Responsible Land Disturber Certificate

OR

_____ DCR Certification for Combined Administrator,

OR

_____ Administrator, Plan Reviewer, Inspector, or Contractor

_____ VA Professional Engineer, Land Surveyor, Landscape Architect, or Architect.

R.L.D. contact information:

Company Name: _____

Address: _____

City / State / Zip: _____

Phone #: _____ Cell #: _____

Fax #: _____ Email: _____

VSMP Approval Letter

Douglas W. Domenech
Secretary of Natural Resources



David A. Johnson
Director

COMMONWEALTH of VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION

203 Governor Street
Richmond, Virginia 23219-2010
(804) 786-1712
December 21, 2011

W.F. Magann Corporation
c/o Chris Donnelly
3220 Mariner Ave
Portsmouth, VA 23703

RE: VSMP Construction Stormwater General Permit No. VAR10-12-100887, BAE Systems Norfolk Ship Repair - Commercial - 750 West Berkley Ave. - Norfolk

Dear Christopher E. Donnelly:

The staff has received your registration statement for the proposed land-disturbing project under the VSMP General Permit for Discharges of Stormwater from Construction Activities (VAR10) on 12/19/2011. The project's date of coverage is either the date in which you receive this letter or fifteen business days after the postmark date of the project's complete registration packet submittal to DCR.

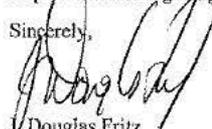
By submission of the registration statement, you acknowledge that the proposed project is eligible for coverage under the General Permit and you have agreed to the conditions in the General Permit including any applicable conditions regarding Total Maximum Daily Loads and impaired waters. Please be aware that § 10.1-603.8:1 of the Code of Virginia and the General Permit contain additional requirements if nonpoint nutrient offsets are chosen to meet the post-development nonpoint nutrient runoff compliance requirements. Section § 10.1-603.8:1 I requires that the permit issuing authority require that nonpoint nutrient offsets or other off-site options achieve the necessary nutrient reductions **PRIOR TO THE COMMENCEMENT OF THE PERMITTEE'S LAND DISTURBING ACTIVITY.**

A copy of the General Permit is available on the DCR web page at http://www.dcr.virginia.gov/soil_and_water/documents/vsmggenpermvar10.pdf. Print the VAR10 permit and read it carefully as you are responsible for meeting all the permit conditions. The General Permit will expire on June 30, 2014.

Your project specific permit registration number is **VAR10-12-100887**. A copy of this permit coverage letter, registration statement, copy of the VAR10 permit, and the project's stormwater pollution prevention plan (SWPPP) must be at the construction site from the date of commencement of the construction activity to final stabilization. In addition, DCR staff conducts periodic site inspections for compliance with the permit.

Additional information on the permit and DCR staff contact information are available at http://www.dcr.virginia.gov/soil_and_water/vsmp.shtml on the DCR web page.

Sincerely,


Douglas Fritz
Stormwater Permits Manager

E&S Compliance

- **Perimeter control – Silt Fence containing limits of disturbance**
- **Construction Entrance at job site and lay down Areas**
- **Street Sweeping**
- **Inlet protection**
- **All dewatering must be filtered**
- **Stockpile area- separate perimeter control**
- **Site Stabilization**

Dewatering



No Filter bag



06/21/2012

No Filter bag



12/21/2011

Extended Dewatering – No check dams



Wrong Size Filter bag



Dewatering causing erosion



Filter bag in Stone



Ineffective Filter bag



Dewatering through stockpile



Dewatering to nearest inlet



Dewatering to nearest inlet



No Filter bag



01/31/2012

No Filter bag



01/31/2012

Dewatering in Creek



Dewatering in Creek



Filter bag in Creek



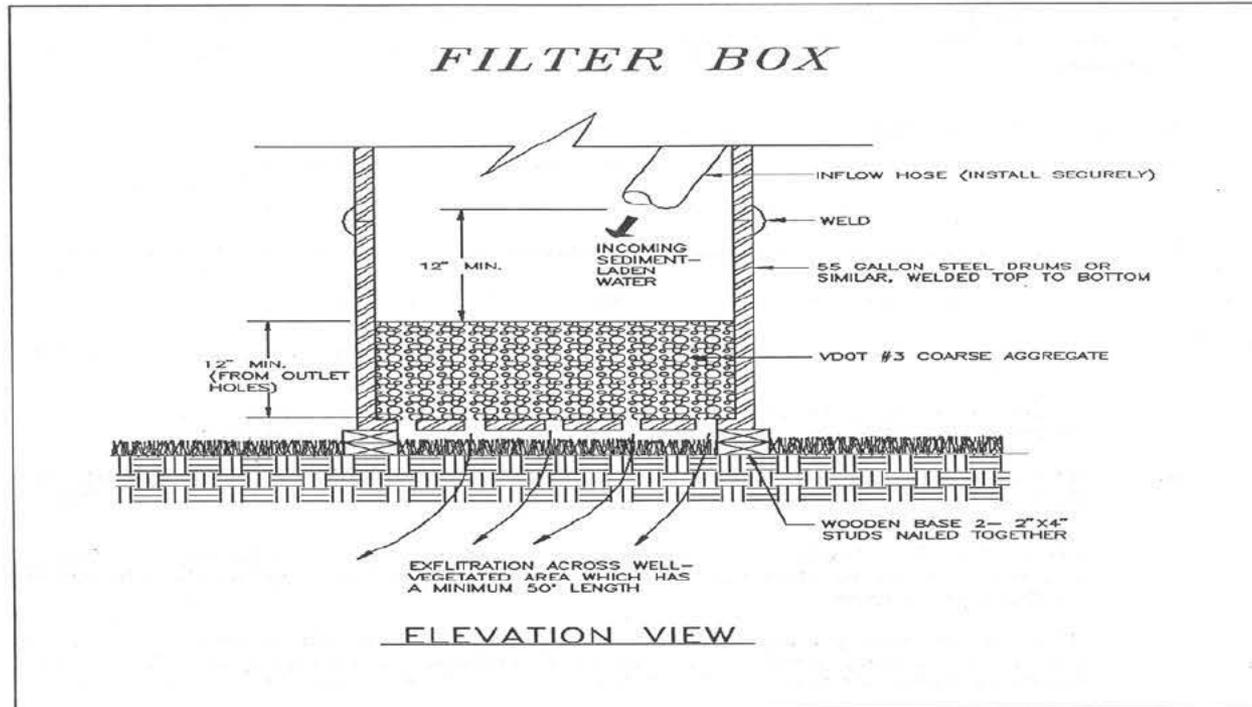
Filter bag in Creek



Filter Box

1992

3.26



Source: Va. DSWC

Plate 3.26-2

- h. Clean-out of the box is required once one-third of the original capacity is depleted due to sediment accumulation. The tank shall be clearly marked showing the clean-out point.
- i. If the stone filter does become clogged with sediment so that it no longer adequately performs its function, the stones must be pulled away from the inlet, cleaned and replaced.

Settling tanks



Settling tanks



Settling tanks



Silt Fence



E&S Good Example



Properly Installed Silt Fence

Silt Fence Installed incorrectly



Stakes on wrong side of silt fence

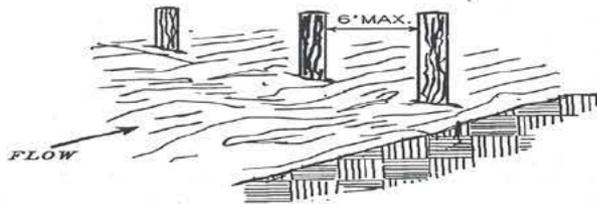
Installing Silt Fence

1992

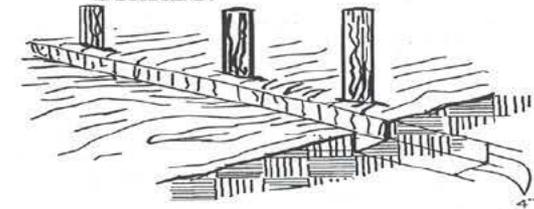
3.05

CONSTRUCTION OF A SILT FENCE (WITHOUT WIRE SUPPORT)

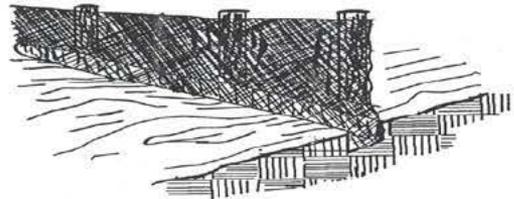
1. SET THE STAKES.



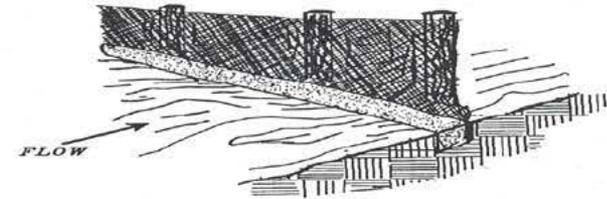
2. EXCAVATE A 4" X 4" TRENCH UPSLOPE ALONG THE LINE OF STAKES.



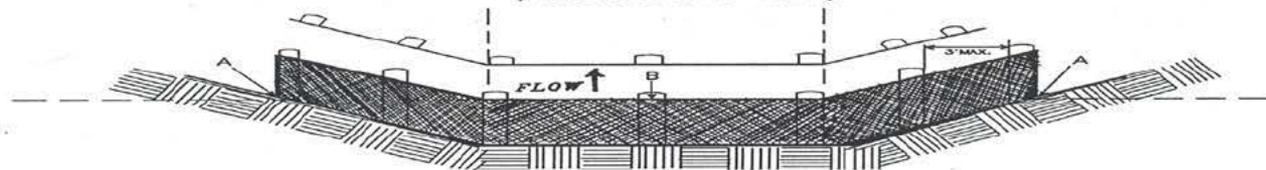
3. STAPLE FILTER MATERIAL TO STAKES AND EXTEND IT INTO THE TRENCH.



4. BACKFILL AND COMPACT THE EXCAVATED SOIL.



SHEET FLOW INSTALLATION
(PERSPECTIVE VIEW)



POINTS A SHOULD BE HIGHER THAN POINT B.
DRAINAGEWAY INSTALLATION
(FRONT ELEVATION)

Source: Adapted from *Installation of Straw and Fabric Filter Barriers for Sediment Control*, Sherwood and Wyant

Plate 3.05-2

Improperly Installed Silt Fence



No Silt Fence



No Silt Fence



04/20/2012

Ineffective Silt Fence



E&S Bad Example



Controlling Vehicle Access

E&S Good Example



04 04 2005

Properly Installed Silt Fence



Properly Installed Silt Fence



Properly Installed Silt Fence



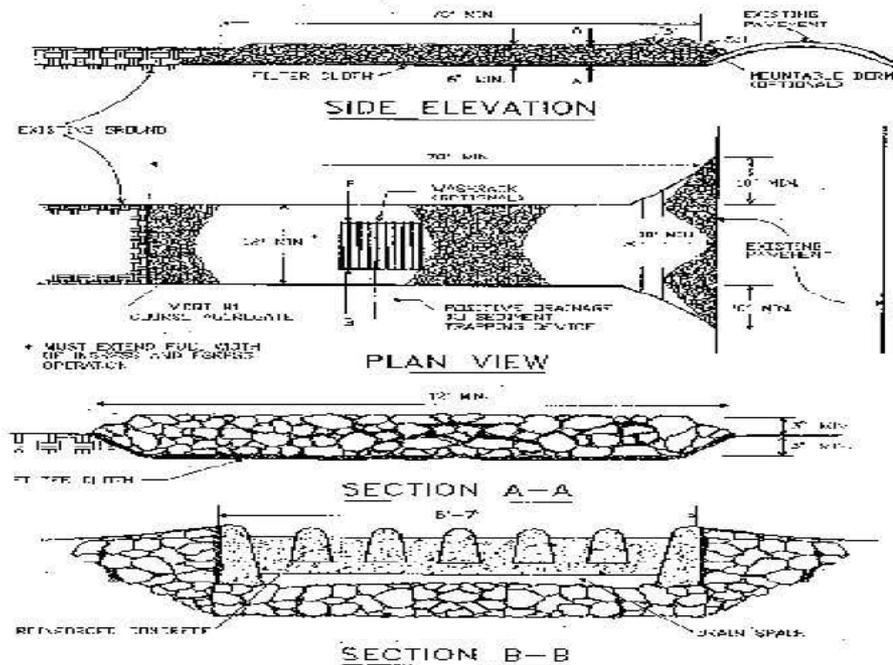
Construction Entrance



1992

3.02

STONE CONSTRUCTION ENTRANCE



Source: Adapted from 1985 Maryland Standards for Soil Erosion and Sediment Control, and Va. DSWC

Plate 3.02-1

Construction Entrance



Construction Entrance



**Stone in gutterpan
vs. soil**

04/04/2011

Ineffective Construction Entrance



05/04/2012

Ineffective Construction Entrance



Ineffective Construction Entrance



Construction Entrance



05/17/2012

Construction Entrance



Construction Entrance



Construction Entrance



04/01/2013 01:30

Construction Entrance



Loading on pavement to prevent tracking

Sediment Tracking Onto *Street*



Sediment Tracking onto City Streets

- **Sediment must be swept on a daily basis**
- **State minimum Standard and City E&S Code**

Tracking



Tracking



07/12/2012

Tracking



Tracking



10/06/2010 15:42

Tracking



06/25/2012

Tracking



Tracking



Tracking



Sweeping Street



E&S Good Example



Street Sweeper

E&S Good Example



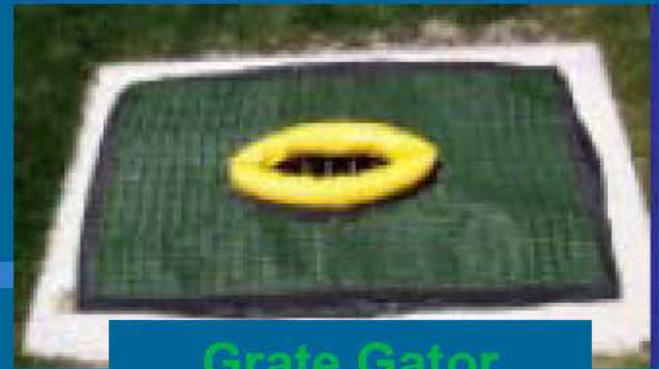
Street Sweeper with collection attachment

Inlet Protection





Dandy Curb Bag



Grate Gator



Silt Sack



Blocksom Filter Fabric



Dandy Pop



Gutter Gator



Ultratech Inlet Guard

Maintenance Issues



Wire mesh and stone

Maintenance Issues



Weekly Maintenance

Gutter Buddy



Inlet Protection



04/02/2008

No Inlet Protection



No Inlet Protection



Gutter Buddy



**Fill pouch with
stone**

08/17/2007

Gutter Buddy Installed Incorrectly



10/11/2011

Ineffective Inlet Protection



Ineffective Inlet Protection



09/28/2010 13:53

Inlet Protection



09/06/2012

No Inlet Protection



07/24/2008

Inlet Protection Moved



12/21/2011

Reinforced Inlet Protection



Reinforced Inlet Protection



Reinforced Inlet Protection



Reinforced Inlet Protection



Inlet Protection



Required along construction vehicle routes

Inlet Protection



Incorrect Inlet Protection



No drop inlet protection

Correct Inlet Protection



Incorrect Inlet Protection



Too short

09/22/2009

Inlet Protection



1 foot
overlap

1 foot
overlap

RAISE
Holes
horizontal

12/21/2011

Contact Information

Somebody call
Environmental Services!!
Odell 705-5198
Seamus 377-1882





Diversion

VESCH STD & SPEC 3.12

Contractor E&S Training – NN Waterworks

May 30, 2013

What is a diversion?

- **Definition:** a channel constructed across a slope with a supporting earthen ridge on the lower side.
- **Purpose:** to reduce slope length and to intercept and divert stormwater runoff to stabilized outlets at non-erosive velocities.

What's wrong with this diversion?









How do I fix the diversion?

- Follow the final approved plan:
 - Grading
 - Stabilization: Seeding/Matting/Straw
- If it still doesn't work – call the engineer.



Questions?



Temp. Sediment Basin

VESCH STD & SPEC 3.14

Contractor E&S Training – NN Waterworks

May 30, 2013

What is a temporary sediment basin?

- **Definition:** a temporary barrier or dam with a controlled stormwater release structure formed by constructing an embankment of compacted soil across a drainageway.
- **Purpose:** to detain sediment-laden runoff from disturbed areas in “wet” and “dry” storage long enough for the majority of the sediment to settle out.

What's wrong with this basin?







06/13/2008







06/13/2008



04/25/2013

How do I fix the basin?

- Follow the sequence of construction on the final approved plan.
- Do not disturb the entire property BEFORE installing the temporary sediment basin.
- IMMEDIATELY stabilize disturbance upstream.
- If it doesn't work, call the engineer!



Questions?

Erosion and Sediment Control on State and Linear Projects and Construction General Permit Violations

Ian Edwards

DCR Stormwater Compliance
Specialist

Construction General Permit & Erosion and Sediment control inspections

- Erosion & Sediment Control
- Land disturbing activities 10,000 sq. ft. or greater or 2,500 sq. ft. or greater if in designated Chesapeake Bay Preservation Act area.
- If locality has more stringent threshold than 10,000 sq.ft.
- Construction General Permit (VSMP permit)
- Land disturbing activities 1 acre or greater or 2,500 sq. ft. if located in a designated Chesapeake Bay Preservation Act area.

Chesapeake Bay Preservation Act (CBPA)

- Designated Areas are Resource Management Areas (RMAs), Resource Protection Areas (RPAs), Intensely Developed Areas (IDAs)
- Check with local Planning or Zoning Dept. to find out if land disturbance is located in area with CBPA designation.
- Some cities and counties have the CBPA areas overlaid on GIS maps available on the locality website.

Virginia Stormwater Management Program General Permit for Stormwater Discharges from Construction Activities

- Known as VSMP permit, VAR 10 permit or Construction General Permit.
- Applies to all land disturbing activities over 1 acre unless exempt.
- Requires a Stormwater Pollution Prevention Plan (SWPPP, pronounced SWiPP)
- Locally approved erosion and sediment control plans incorporated into SWPPP are enforceable under the provisions of the VAR10 permit.

Department of Conservation & Recreation (DCR) /
Department of Environmental Quality (DEQ) Inspection
responsibilities

- State agency land disturbing activities.
- Linear land disturbing projects operating under approved Annual Standards and Specifications e.g. VDOT, railroads, linear utilities such as gas, electric and telephone.
- All land disturbing activities covered under VAR10 permit. Ranges from single family homes to nuclear power stations.

Common Violations



Lack of VAR10 permit coverage

No erosion and sediment controls installed prior to land disturbance.
Each of the SFHs in this development require VAR10 permit coverage as they are part of a common plan of development or sale.



Inadequate temporary or permanent stabilization of denuded areas

Shoreline project where denuded areas had not been stabilized. Site was abandoned without any form of stabilization being installed.



Stormwater pond not adequately stabilized

Pond being used as a sediment basin during construction

Banks not graded or stabilized

Upslope areas not stabilized



Downstream result of lack of stabilization



Same pond after anionic polyacrylamide added.



Lack of maintenance of controls

Turbidity curtain damaged during construction.

Water main damaged during construction.

Resulting flooding of site led to sediment discharge into river.



Lack of Maintenance of Controls

Sediment in trap not removed as required allowing volume to be reduced and sediment to escape into downstream channel.

Area around sediment trap not stabilized.



Improperly / inadequately installed controls

Silt fence check dam not properly installed. Silt fence should extend up sides of channel.

Rock check dam should have been used in this size channel. Erosion occurring due to 'end running'.



Silt fence installed backwards and not entrenched



Inadequately sized aggregate for rock check dam

Stormwater velocities too great for rock check dam. Check dam should have been constructed using class 1 rip-rap and VDOT #1 .

EPA indicated \$100,000 consent order for violations on this site.



Inadequate concrete wash out

Washing out of concrete into stormwater channels or inlets is prohibited.

Washing out in areas where runoff may enter channels or inlets is prohibited.



Poorly maintained washout area

Washout area should be lined with impervious cover to prevent contamination of ground water.

If storm occurred this washout area would overflow.



Inadequate mortar mixing area

Cement mortar wash out being deposited directly onto ground surface.



Satisfactory concrete wash out area

Impermeable liner on pit

Signage to indicate wash out area

Dumpster located nearby to dispose of dried waste



Inadequate storage of construction chemicals

Chemicals have leaked onto ground surface.

Poor housekeeping on site. Trash and litter deposited on ground surface



Windblown construction waste that has become a stormwater pollutant

Inadequate waste storage on site prior to collection for legal disposal.



Disposing of paint washout into stormwater inlet

Fuel Storage and refueling

Spilled fuel on ground surface



Well maintained fueling area



Oil / fuel leaks from equipment

Leaking Oil from Pump

Spill kit readily available





Lined pit to capture leaking oil or fluids

Mechanical pump being used for dewatering. Excavated area lined with impervious material used as control.

Portable sanitary facilities

Consideration of location



Consideration of spillages



Waste material handling

Leaking dumpster



Poor management of waste



Construction Chemical Storage

Open paint containers adjacent to inlet



Potential contaminant covered with impermeable cover



Co-mingling of discharges is not permitted

Masonry Washing



Masonry wash chemical



Construction General Permit and SWPPP requirements

- Self inspections are required to be conducted by the site operator. Every 14 days and within 48 hours of 0.5 inches of rain or more, or every 7 days.
- All areas of the site are required to be inspected including lay down, storage, office and off site areas (borrow, disposal etc.)
- Inspection reports are to be completed and form part of the SWPPP document.

Linear / utility land disturbing projects



Approved Annual Standards and Specifications. What are they?

- Documents that indicate how an agency / company will comply with the requirements of the Virginia Erosion and Sediment Control Law and regulations.
- The documents are reviewed and approved by DCR / DEQ.
- Annual standards and specifications are typically utilized by land disturbing projects that are linear in nature.

Who submits annual ESC standards and specifications? (note E&S only)

- Electric , natural gas and telephone utility companies, interstate and intrastate natural gas pipeline companies, and railroad companies SHALL submit Annual Standards & Specifications
- Authorities created pursuant to 15.2-5102 MAY submit Annual Standards & Specifications e.g. Hampton Roads Sanitation District (HRSD)
- VDOT
- Other State and Federal Agencies MAY submit.
- State owned Universities & Colleges e.g. TCC, MAY choose. If not then plans are required to be submitted to local government for review and approval.
- Individuals engaged in the construction of multi-jurisdictional wetland mitigation and stream restoration bank(s) MAY choose to submit.

What is required?

- Erosion & Sediment Control Plan reviewed and approved by certified plan reviewer.
- Erosion and sediment controls to be installed in accordance with approved plan.
- Inspections carried out every 14 days and within 48 hours of a runoff producing event. Inspections are required to be conducted by certified inspector or Responsible Land Disturber.
- Advise DCR / DEQ 2 weeks prior to land disturbance starting.

Standards & specifications

- Submission of land disturbing plans for review by locality, if operating under approved standards & specifications, is not required.
- May still need to obtain land disturbing permit from locality. Requirement for land disturbing permits is established by local ordinance (not a State requirement).
- May need to obtain VSMP Construction General Permit if land disturbing thresholds are met.

Standards & Specifications

- Sub-contractors working for the utility operating under annual standards and specifications are held to the approved standards for land disturbing activities.
- Some utility annual standard and specifications deviate from what would normally be required of other land disturbing activities. (see below)

- **Third Party Agreement**

Projects done for a third party include new service to residential and commercial developments. **The Company's standard agreement for these projects recognizes the third party as the responsible party for erosion and sediment control.** The method of control to be as required by the locally approved E&S plan for that development. (*Dominion Virginia Power Distribution Annual Standards & Specifications 2012*). This means that it is the holder of the locally issued land disturbance permit or approved plan is responsible for stabilization of disturbed areas from utility installation.

Questions?

Ian Edwards

DCR Stormwater Compliance Specialist

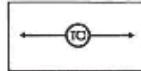
757-925-2467

ian.edwards@dcr.virginia.gov

Topsoiling

Jason Trimyer, City of Suffolk

STD & SPEC 3.30



TOPSOILING

Definition

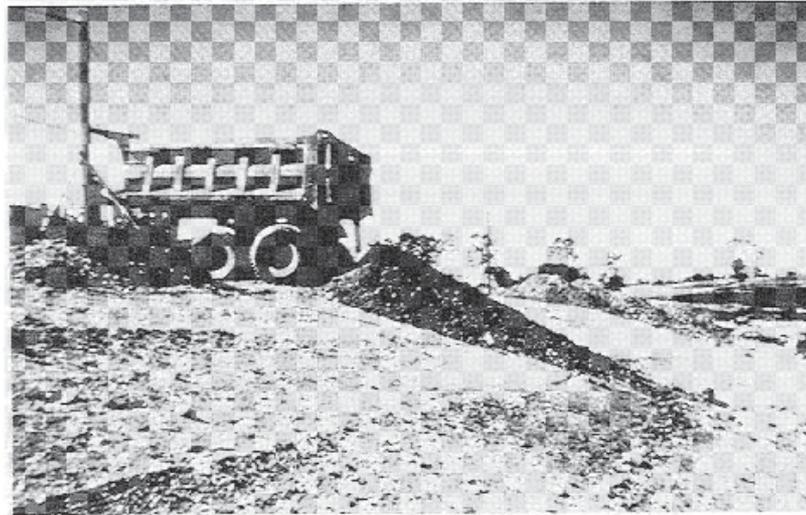
Methods of preserving and using the surface layer of undisturbed soil, often enriched in organic matter, in order to obtain a more desirable planting and growth medium.

Purpose

To provide a suitable growth medium for final site stabilization with vegetation.

Conditions Where Practice Applies

1. Where the preservation or importation of topsoil is determined to be the most effective method of providing a suitable growth medium.

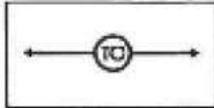


1992

3.30

STD & SPEC 3.30

TOPSOILING



Definition

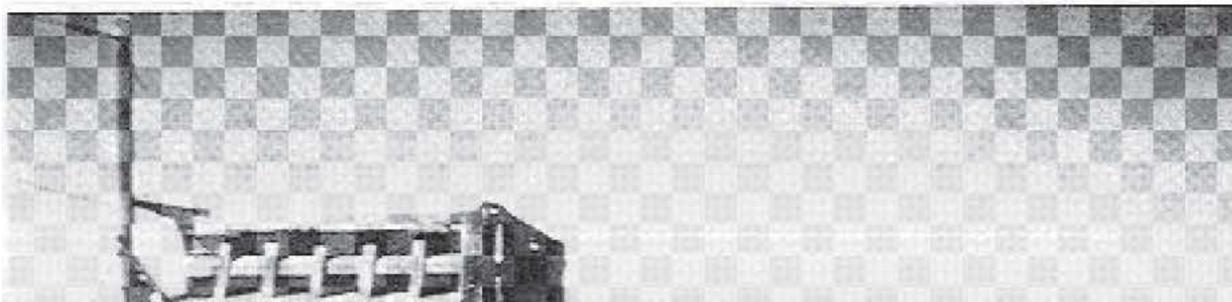
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Topsoiling

Definition

- Methods of preserving and using surface layer of undisturbed soil, often enriched in organic matter, in order to obtain a more desirable planting and growth medium.

Topsoiling

Purpose

- To provide suitable growth medium for final site stabilization with vegetation.

but depth may vary depending on the particular soil. All perimeter dikes, basins, and other sediment controls shall be in place prior to stripping.

Stockpiling

Topsoil shall be stockpiled in such a manner that natural drainage is not obstructed and no off-site sediment damage shall result. Stabilize or protect stockpiles in accordance with MS #2.

Side slopes of the stockpile shall not exceed 2:1.

Perimeter controls must be placed around the stockpile immediately; seeding of stockpiles shall be completed within 7 days of the formation of the stockpile, in accordance with Std. & Spec. 3.31, TEMPORARY SEEDING if it is to remain dormant for longer than 30 days (refer to MS #1 and MS #2).

Site Preparation Prior to and Maintenance During Topsoiling

Before topsoiling, establish needed erosion and sediment control practices such as diversions, grade stabilization structures, berms, dikes, level spreaders, waterways, sediment basins, etc. These practices must be maintained during topsoiling.

Grading: Previously established grades on the areas to be topsoiled shall be maintained according to the approved plan.

Liming: Where the pH of the subsoil is 6.0 or less, or the soil is composed of heavy clays, agricultural limestone shall be spread in accordance with the soil test or the vegetative establishment practice being used.

Bonding: After the areas to be topsoiled have been brought to grade, and immediately prior to dumping and spreading the topsoil, the subgrade shall be loosened by discing or scarifying to a depth of at least 2 inches to ensure bonding of the topsoil and subsoil.



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1972 3.30
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Applying Topsoil

Topsoil shall not be placed while in a frozen or muddy condition, when topsoil or subgrade is excessively wet, or in a condition that may otherwise be detrimental to proper grading or proposed sodding or seeding. The topsoil shall be uniformly distributed to a minimum

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Bonding: After the areas to be topsoiled have been brought to grade, and immediately prior to dumping and spreading the topsoil, the subgrade shall be loosened by discing or scarifying to a depth of at least 2 inches to ensure bonding of the topsoil and subsoil.

Applying Topsoil

Topsoil shall not be placed while in a frozen or muddy condition, when topsoil or subgrade is excessively wet, or in a condition that may otherwise be detrimental to proper grading or proposed sodding or seeding. The topsoil shall be uniformly distributed to a minimum compacted depth of 2 inches on 3:1 or steeper slopes and 4 inches on flatter slopes. (See Table 3.30-A to determine volume of topsoil required for application to various depths). Any irregularities in the surface, resulting from topsoiling or other operations, shall be corrected in order to prevent the formation of depressions or water pockets.

It is necessary to compact the topsoil enough to ensure good contact with the underlying soil and to obtain a level seedbed for the establishment of high maintenance turf. However, undue compaction is to be avoided as it increases runoff velocity and volume, and deters



Example of area that needs “surface roughening” prior to topsoiling

Perimeter controls must be placed around the stockpile immediately; seeding of stockpiles shall be completed within 7 days of the formation of the stockpile, in accordance with Std. & Spec. 3.31, TEMPORARY SEEDING if it is to remain dormant for longer than 30 days (refer to MS #1 and MS #2).

Site Preparation Prior to and Maintenance During Topsoiling

Before topsoiling, establish needed erosion and sediment control practices such as diversions, grade stabilization structures, berms, dikes, level spreaders, waterways, sediment basins, etc. These practices must be maintained during topsoiling.

Grading: Previously established grades on the areas to be topsoiled shall be maintained according to the approved plan.

Liming: Where the pH of the subsoil is 6.0 or less, or the soil is composed of heavy clays, agricultural limestone shall be spread in accordance with the soil test or the vegetative establishment practice being used.

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Topsoil on a riverfront embankment

seed germination. Special consideration should be given to the types of equipment used to place topsoil in areas to receive fine turf. Avoid unnecessary compaction by heavy machinery whenever possible. In areas which are not going to be mowed, the surface should be left rough in accordance with SURFACE ROUGHENING (Std. & Spec. 3.29).

Soil Sterilants

No sod or seed shall be placed on soil which has been treated with soil sterilants until sufficient time has elapsed to permit dissipation of toxic materials.

TABLE 3.30-A

**CUBIC YARDS OF TOPSOIL REQUIRED
FOR APPLICATION TO VARIOUS DEPTHS**

<u>Depth (inches)</u>	<u>Per 1,000 Square Feet</u>	<u>Per Acre</u>
1	3.1	134
2	6.2	268
3	9.3	403
4	12.4	537
5	15.5	672
6	18.6	806

Source: Va. DSWC



Sparse Vegetation due to inadequate topsoil



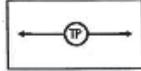


Root matter in the topsoil

Tree Protection

Jason Trimyer, City of Suffolk

STD & SPEC 3.38

TREE PRESERVATION
& PROTECTIONDefinition

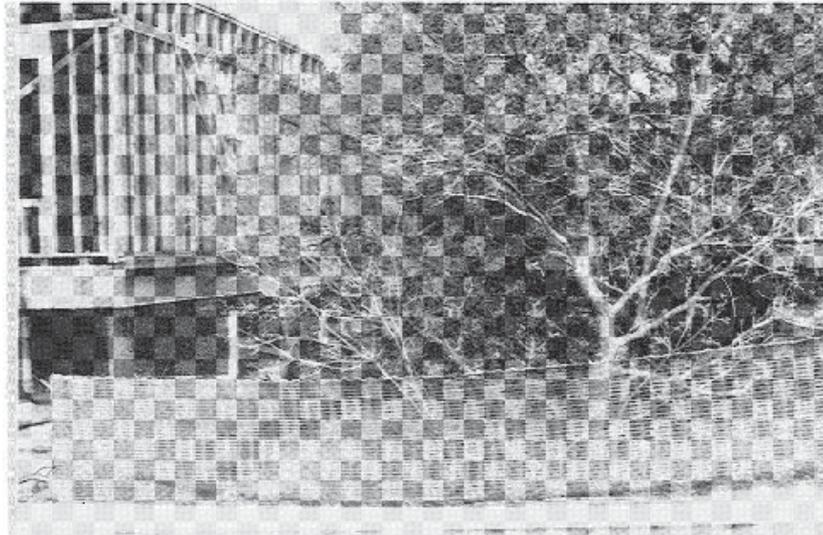
Protection of desirable trees from mechanical and other injury during land disturbing and construction activity.

Purpose

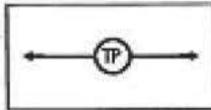
To ensure the survival of desirable trees where they will be effective for erosion and sediment control, watershed protection, landscape beautification, dust and pollution control, noise reduction, shade and other environmental benefits while the land is being converted from forest to urban-type uses.

Conditions Where Practice Applies

Tree-inhabited areas subject to land disturbing activities.



STD & SPEC 3.38

TREE PRESERVATION
& PROTECTIONDefinition

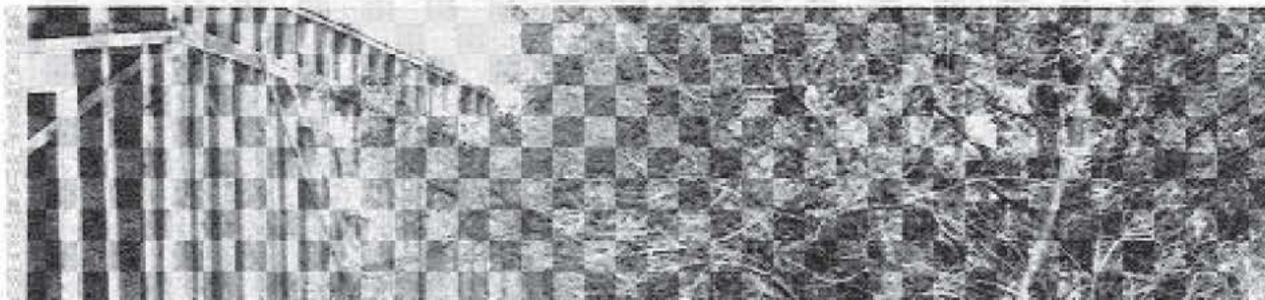
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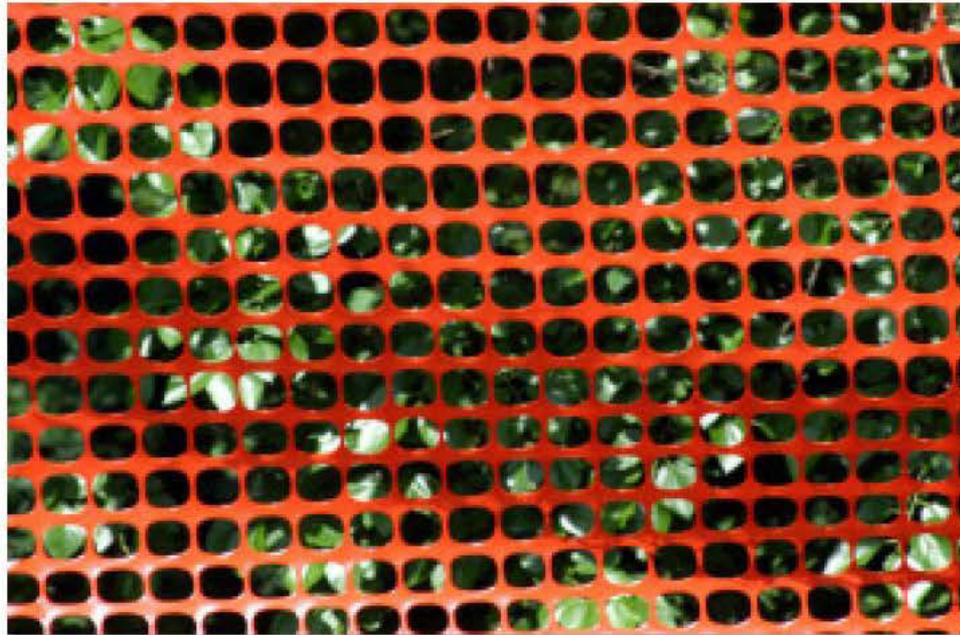
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Tree Protection Examples



8

Fencing and Armoring (Plate 3.38-2): Any device may be used which will effectively protect the roots, trunk and tops of trees retained on the site. However, trees to be retained within 40 feet of a proposed building or excavation shall be protected by fencing. Personnel must be instructed to honor protective devices. The devices described are suggested only, and are not intended to exclude the use of other devices which will protect the trees to be retained.

- a. Snow Fence - Standard 40-inch high snow fence shall be placed at the limits of clearing on standard steel posts set 6 feet apart.
- b. Board Fence - Board fencing consisting of 4-inch square posts set securely in the ground and protruding at least 4 feet above the ground shall be placed at the limits of clearing with a minimum of two horizontal boards between posts. If it is not practical to erect a fence at the drip line, construct a triangular fence nearer the trunk. The limits of clearing will still be located at the drip line, since the root zone within the drip line will still require protection.
- c. Cord Fence - Posts with a minimum size of 2 inches square or 2 inches in diameter set securely in the ground and protruding at least 4 feet above the ground shall be placed at the limits of clearing with two rows of cord 1/4-inch or thicker at least 2 feet apart running between posts with strips of colored surveyor's flagging tied securely to the string at intervals no greater than 3 feet.
- d. Plastic Fencing - 40-inch high "international orange" plastic (polyethylene) web fencing secured to conventional metal "T" or "U" posts driven to a minimum depth of 18 inches on 6-foot minimum centers shall be installed at the limits of clearing. The fence should have the following minimum physical qualities:

Tensile yield: Average 2,000 lbs. per 4-foot width (ASTM D638)

Ultimate

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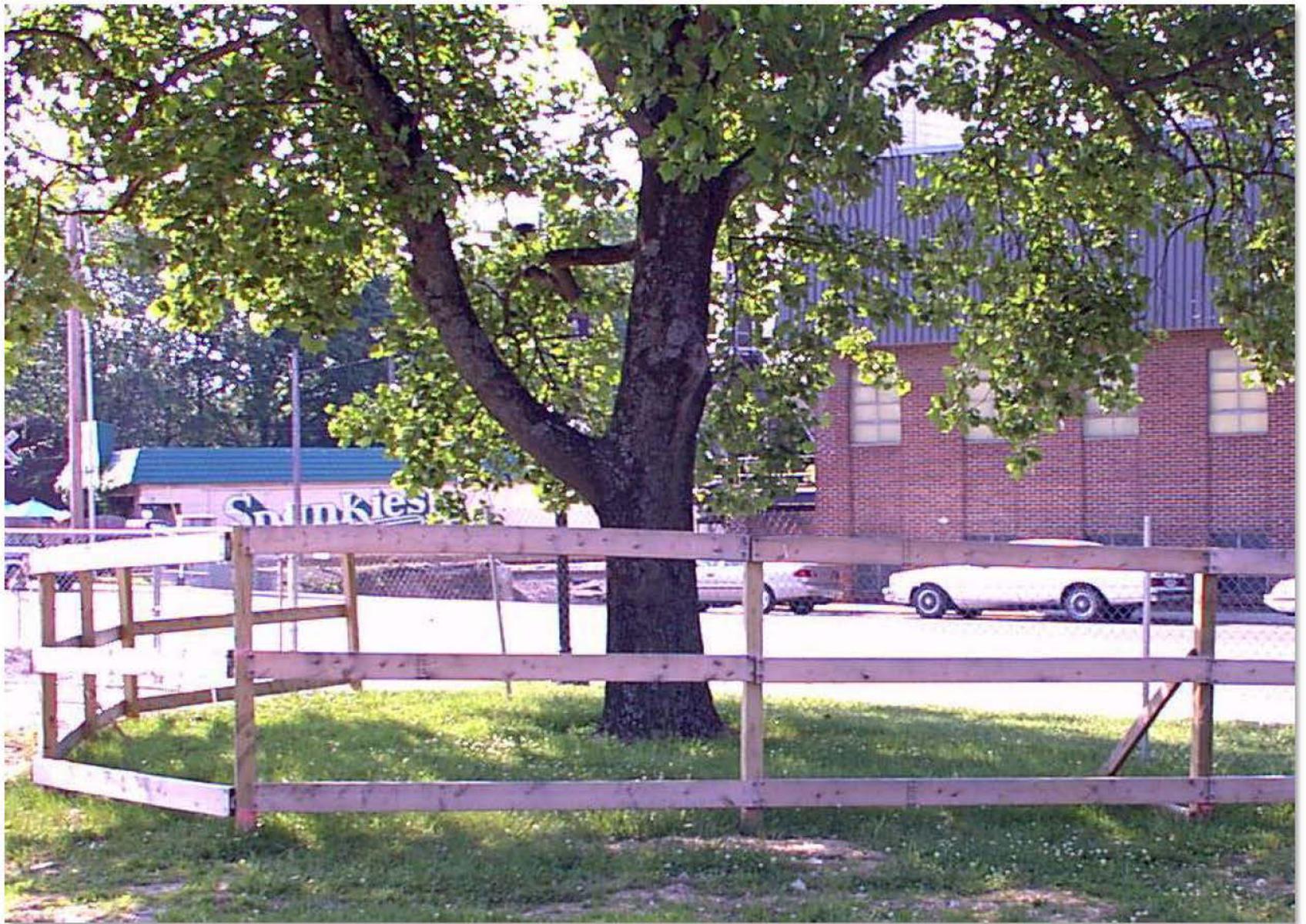


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Tensile yield: Average 2,000 lbs. per 4-foot width (ASTM D638)

Ultimate



Plastic Fencing

- f. Additional Trees - Additional trees may be left standing as protection between the trunks of the trees to be retained and the limits of clearing. However, in order for this alternative to be used, the trunks of the trees in the buffer must be no more than 6 feet apart to prevent passage of equipment and material through the buffer. These additional trees shall be reexamined prior to the completion of construction and either be given sufficient treatment to ensure survival or be removed.

- g. Trunk Armoring - As a last resort, a tree trunk can be armored with burlap wrapping and 2-inch studs wired vertically no more than 2 inches apart to a height of 5 feet encircling the trunk. If this alternative is used, the root zone within the drip line will still require protection. Nothing should ever be nailed to a tree.

Fencing and armoring devices shall be in place before any excavation or grading is begun, shall be kept in good repair for the duration of construction activities, and shall be the last items removed during the final cleanup after the completion of the project.

9. Raising the grade: When the ground level must be raised around an existing tree or tree group, the following considerations shall be made and steps taken to adequately care for the affected tree.
- a. A well may be created around the tree(s) slightly beyond the drip line to retain the natural soil in the area of the feeder roots (Plate 3.38-3).

TREE WELL





Trunk Armoring

Root Zone Impact



c. Trunk damage - Tree trunks are often nicked or scarred by trucks and construction equipment. Such superficial wounds provide access to insects and disease.

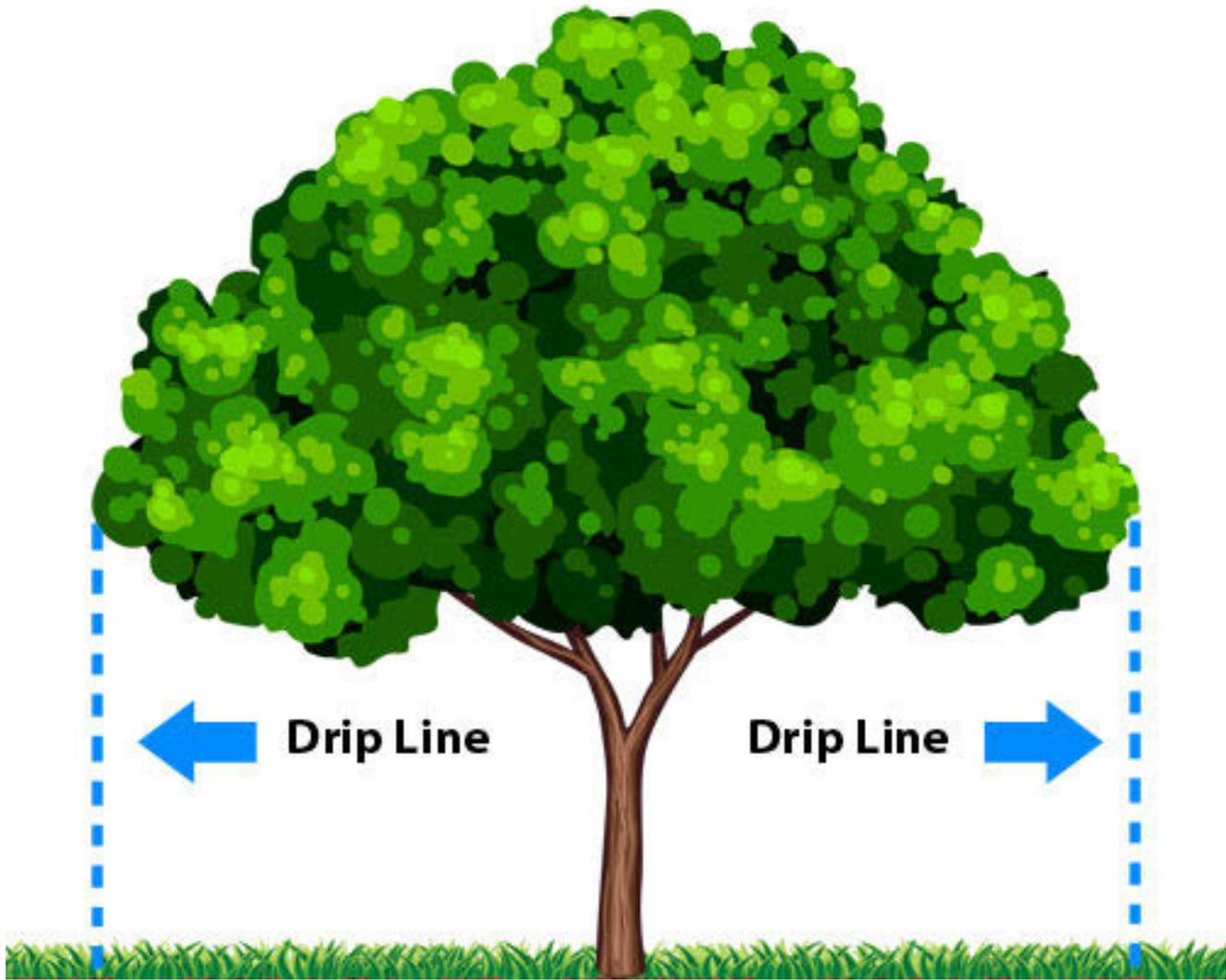
2. Root Zone Impacts: Disturbing and delicate relationship between soil, roots, and the rest of the tree can damage or kill a tree. The roots of an existing tree are established in an area where essential materials (water, oxygen, and nutrients) are present. The mass of the root system is the correct size to balance the intake of water from the soil with the transpiration of water from the leaves.
- a. Raising the grade as little as 6 inches can retard the normal exchange of air and gases. Roots may suffocate due to lack of oxygen, or be damaged by toxic gases and chemicals released by soil bacteria.
 - b. Raising the grade may also elevate the water table. This can cause drowning of the deeper roots.
 - c. Lowering the grade is not usually as damaging as raising it. However, even shallow cuts of 6 to 8 inches will remove most of the topsoil, removing some feeder roots and exposing the rest to drying and freezing.
 - d. Deep cuts may sever a large portion of the root system, depriving the tree of water and increasing the chance of wind-throw.
 - e. Lowering the grade may lower the water table, inducing drought. This is a problem in large roadway cuts or underdrain installations.
 - f. Trenching or excavating through a tree's root zone can eliminate as much as 40 percent of the root system. Trees suffering such damage usually die within 2 to 5 years.
 - g. Compaction of the soil within the drip line (even a few feet beyond the drip line) of a tree by equipment operation, materials storage, or paving can block off air and water from roots.

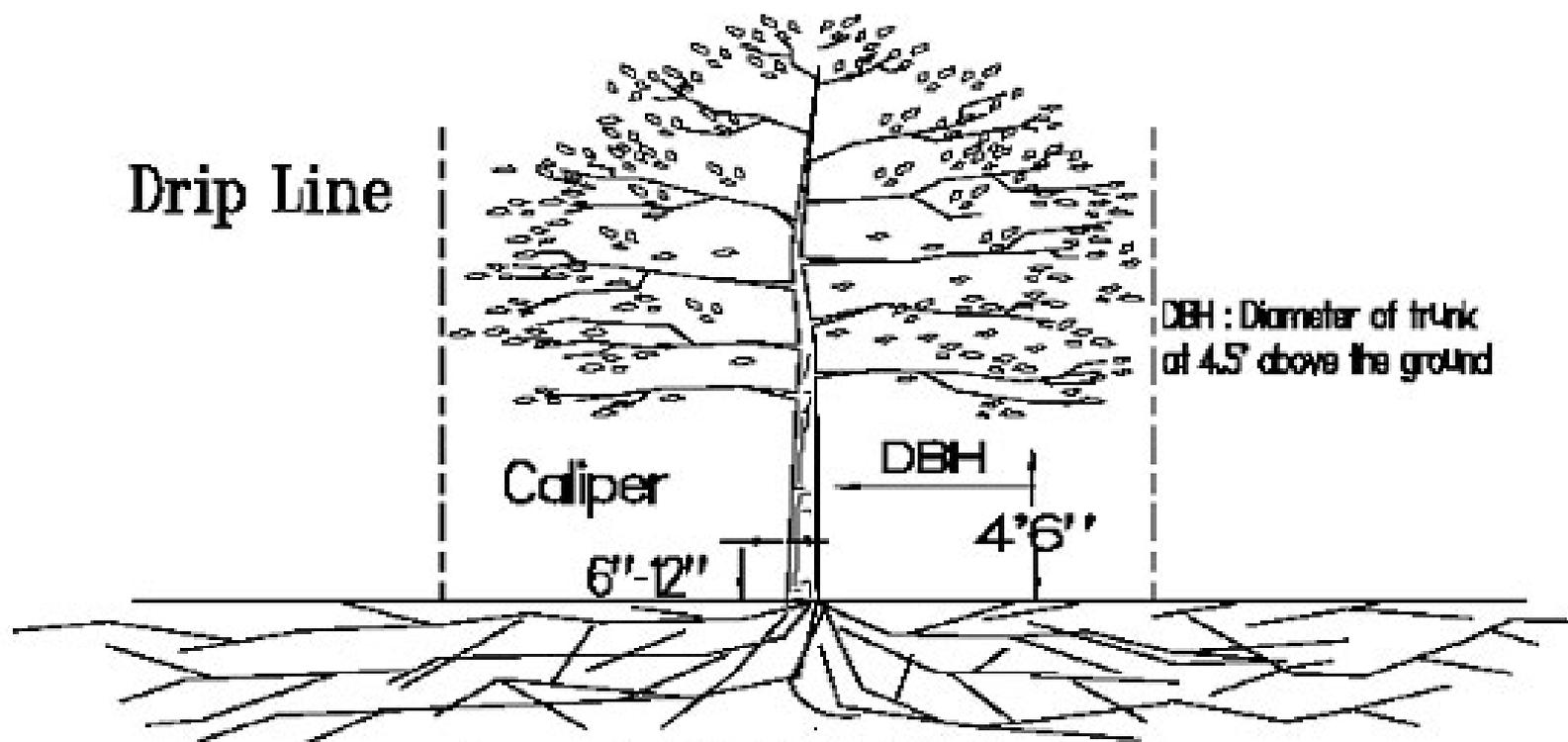
192

3.38

- h. Construction chemicals or refuse disposed of in the soil can change soil chemistry or be toxic to trees. Most damage to trees from construction activities is due to the invisible root zone stresses.







DBH : Diameter of trunk
at 4.5' above the ground

Caliper

6'-12''

DBH

4'6''

Critical Root Zone

Extends out from the trunk to the drip line,
or to a distance of 1.5' per inch of DBH,
whichever is greater

Full Root Zone

Extends out 2 to 3 times beyond the Critical Root Zone



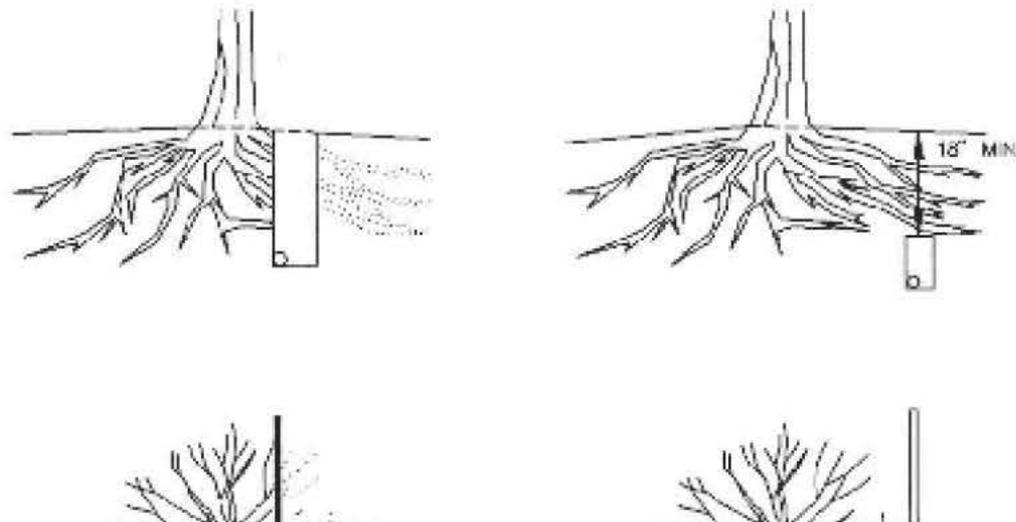


Good location to utilize “tunneling”!

11. Trenching and Tunnelling:

- a. Trenching shall be done as far away from the trunks of trees as possible, preferably outside the branches or crown spreads of trees, to reduce the amount of root area damaged, or killed by trenching activities.
- b. Wherever possible, trenches should avoid large roots or root concentrations. This can be accomplished by curving the trench or by tunnelling under large roots and areas of heavy root concentration.
- c. Tunnelling is more expensive initially, but it usually causes less soil disturbance and physiological impact on the root system (Plate 3.38-7). The extra cost may offset the potential cost of tree removal and replacement should the tree die.

TRENCHING VS. TUNNELING

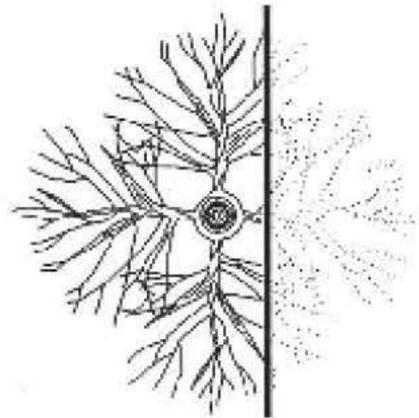
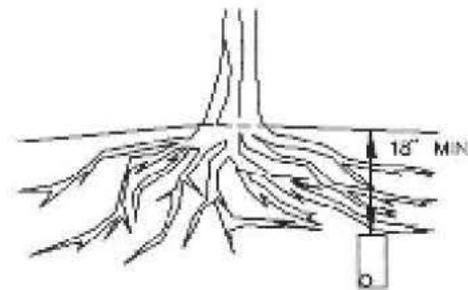
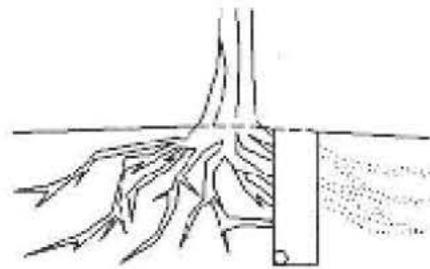


Tunnelling is almost always preferred over the trenching method. The tunnel should be 18 inches or greater below the ground surface and should not be located under the center of the tree (an off-center tunnel has the least impact on the roots).

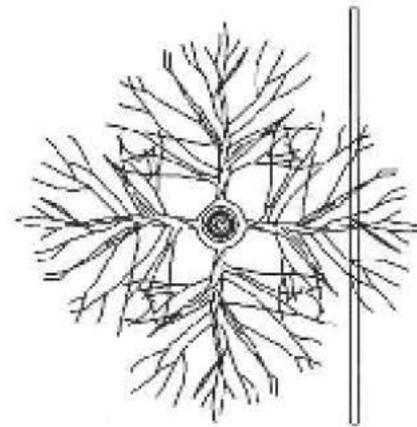
- d. Roots shall not be left exposed to the air. They shall be covered with soil as soon as possible or protected and kept moistened with wet burlap or peat moss until the trench or tunnel can be filled.
- e. The ends of damaged and cut roots shall be cut off smoothly and protected by painting promptly with a tree-wound dressing.
- f. Trenches and tunnels shall be filled as soon as possible. Air spaces in the soil shall be avoided by careful filling and tamping.
- g. Peat moss or other suitable material shall be added to the fill material as an aid to inducing and developing new root growth.
- h. The tree shall be mulched and fertilized to conserve moisture, stimulate new root growth, and enhance general tree vigor.
- i. If a large amount of the root system has been damaged and killed, the crown leaf surface shall be proportionately reduced to balance the reduced root system. This may be accomplished by pruning 20 to 30 percent of the crown foliage. If roots are cut during the winter, pruning shall be accomplished before the next growing season. If roots are cut during the growing season, pruning shall be done immediately.

12. Removal and Replacement of Damaged Trees: Should a tree intended and marked to be retained be damaged seriously enough that survival and normal growth are not possible, the tree shall be removed. If replacement is desirable and/or required, the replacement tree shall be of the same or similar species, 2-inch to 2½-inch (minimum) caliper balled and burlapped nursery stock. However, today, with the aid

TRENCHING VS. TUNNELING



DESTRUCTION OF FEEDER ROOTS
WILL PROBABLY KILL THE TREE



TUNNELING UNDER THE TREE WILL
PRESERVE IMPORTANT FEEDER ROOTS

Source: Tree Maintenance, Pirone, 1979.

Plate 3.38-7

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13. Clean-Up: Clean-up after a construction project can be a critical time for tree damage. Trees protected throughout the development operation are often destroyed by carelessness during the final clean-up and landscaping. Fences and barriers shall be removed last, after everything else is cleaned-up and carried away.
14. Maintenance: In spite of precautions, some damage to protected trees may occur. In such cases, the following maintenance guidelines should be followed:
 - a. Soil Aeration - If the soil has become compacted over the root zone of any tree, the ground shall be aerated by punching holes with an iron bar. The bar shall be driven 1-foot deep and then moved back and forth until the soil is

loosened. This procedure shall be repeated every 18 inches until all of the compacted soil beneath the crown of the tree has been loosened.

b. Repair of Damage

- 1) Any damage to the crown, trunk, or root system of any tree retained on the site shall be repaired immediately.
- 2) Whenever major root or bark damage occurs, remove some foliage to reduce the demand for water and nutrients.
- 3) Damaged roots shall immediately be cut off cleanly inside the exposed or damaged area. Cut surfaces shall be painted with approved tree paint, and moist peat moss, burlap, or top-soil shall be spread over the exposed area.
- 4) To treat bark damage, carefully cut away all loosened bark back into the undamaged area, taper the cut at the top and bottom, and provide drainage at the base of the wound (Plate 3.38-8).
- 5) All tree limbs damaged during construction or removed for any other reason shall be cut off above the collar at the preceding branch junction (Plate 3.38-8).
- 6) Care for serious injuries shall be prescribed by a forester or a tree specialist.

c. Fertilization: Broadleaf trees that have been stressed or damaged shall receive a heavy application of fertilizer to aid their recovery.

- 1) Trees shall be fertilized in the late fall (after October 1) or the early spring (from the time frost is out of the ground until May 1). Fall applications are preferred, as the nutrients will be made available over

- exposed area.
- 4) To treat bark damage, carefully cut away all loosened bark back into the undamaged area, taper the cut at the top and bottom, and provide drainage at the base of the wound (Plate 3.38-8).
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- 1) Trees shall be fertilized in the late fall (after October 1) or the early spring (from the time frost is out of the ground until May 1). Fall applications are preferred, as the nutrients will be made available over a longer period of time.
- 2) Fertilizer shall be applied to the soil over the feeder roots (see Plate 3.38-9). In no case should it be applied closer than 3 feet to the trunk.

The root system of conifers extends some distance beyond the drip line. Increase the area to be fertilized by one fourth the area of the crown.
- 3) Fertilizer shall be applied using approved fertilization methods and equipment.



Stormwater Regulations Primer

Noah Hill

Regulatory Programs

Regulation

Applicability threshold

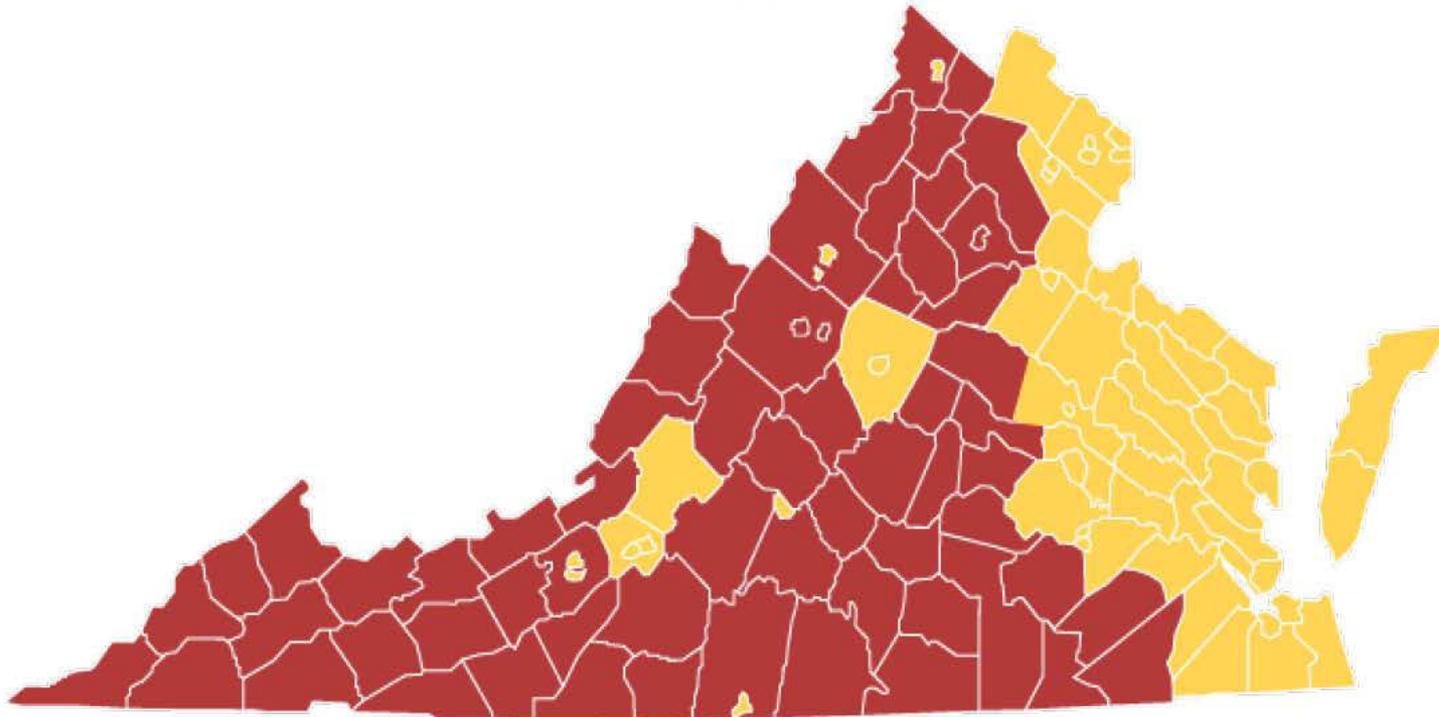
- Erosion & Sediment Control Act → 10,000 sq ft
- Chesapeake Bay Preservation Act → 2,500 sq ft
- VA SW Management Permit (VSMP) → 1 acre
 - Construction General Permit
- Municipal Separate Storm Sewer System (MS4)
 - Phase I Individual Permits
 - Phase II (Small) General Permit
- Chesapeake Bay Total Maximum Daily Load (TMDL) Watershed Implementation Plan (WIP)

Virginia Stormwater Management Program (VSMP)

- Currently State Run
- Compliance = Water Quality
 - Current Compliance @ 40%
 - Local vs. State confusion
- *Simplification*: Local Programs = Local Control = Improved Compliance
- *Consistency*: Facilitates uniform program oversight and enforcement.



Statewide Implementation



-  Chesapeake Bay Preservation Act localities and Municipal Separate Storm Sewer System (MS4) permitted localities
-  Likely that no stormwater program exists currently (but do have E&S)

The Key Differences in Application

Existing Rules

Impervious Surface
(IC) only

0.5 inches of *Runoff*
from the IC only

Average land condition/
technology based

10% reduction TP

Simple Method

Land Use(s)

Event

New Design Criteria

**Redevelopment
Criteria**

**Compliance
Methodology**

Modified Rules

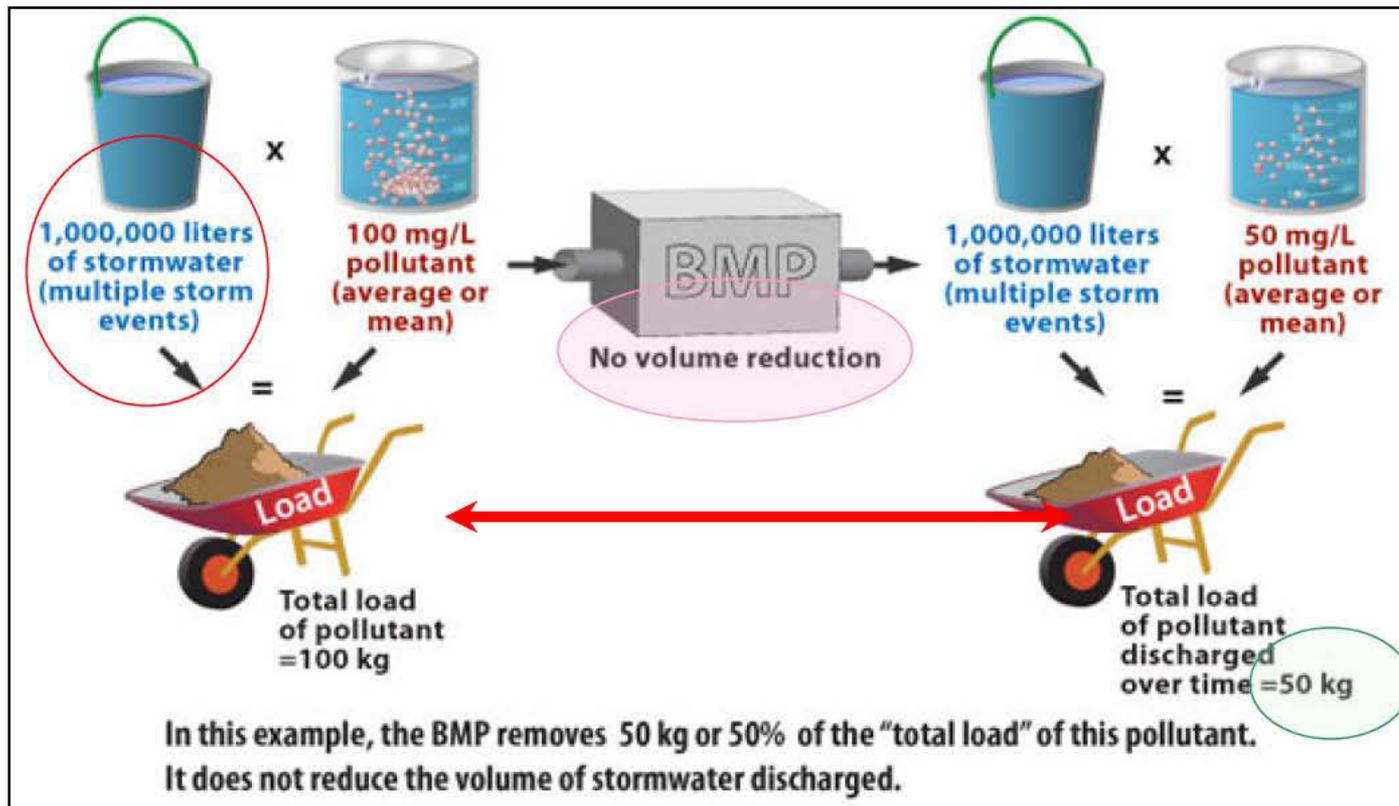
IC + Forest/Open Space
+ Managed Turf

1.0 inches of *Rainfall*
from the whole site

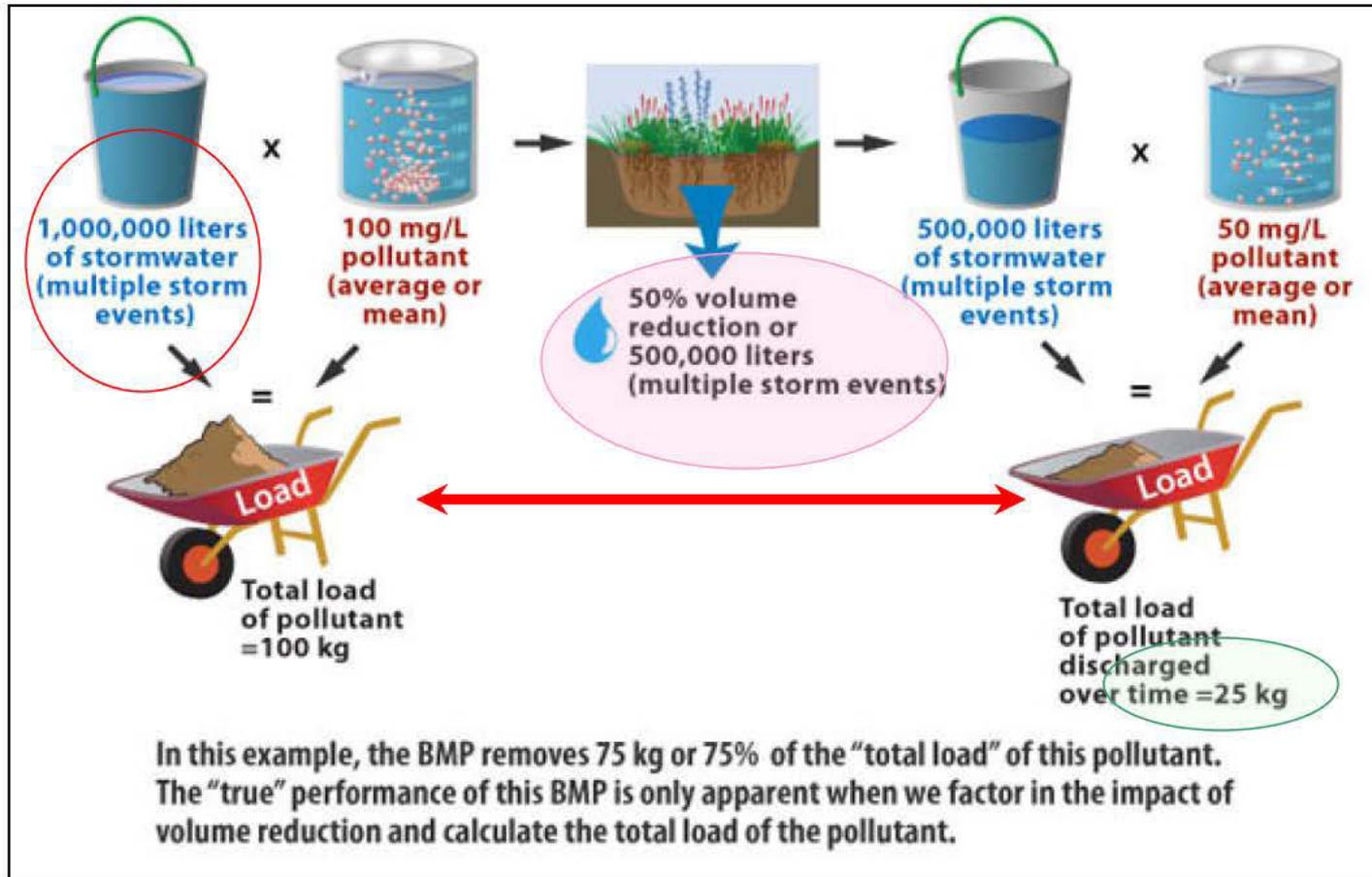
0.41 lbs./ac/yr TP

<1 acre = 10% red. TP,
>1 acre = 20% red. TP

Runoff Reduction Method



- “Traditional” BMP pollutant removal efficiencies do not take into account the removal that occurs when the runoff volume is reduced.
- Many BMPs, such as ponds and filters, do not reduce runoff volume at all.



- Using BMPs that also provide volume reduction provides greater overall pollutant (mass load) removal
- This reflects a "Mass Balance" Approach

Fees

Once local programs are approved and in operation, the following fees will apply:

		<u>Initial</u>	<u>Maintenance</u>
• 2,500 sqft < 1 acre	=	\$290	\$50
• Comm. POD < 1 acre	=	\$290	\$50
• ≥ 1 acre < 5 acres	=	\$2,700	\$400
• ≥ 5 acres < 10 acres	=	\$3,400	\$500
• ≥ 10 acres < 50 acres	=	\$4,500	\$650
• ≥ 50 acres < 100 acres	=	\$6,100	\$900
• ≥ 100 acres	=	\$9,600	\$1,400

Local governments can gain approval from the Board to have lower or higher fees; however, DCR's portion is based on 28% of the published initial fees.

VSMP Regulations Timeline

- Virginia Soil and Water Conservation Board adopted regulations May 24, 2011
- Regulations became effective September 13, 2011 and Published on DCR website



VSMP Construction General Permit

- Virginia Soil and Water Conservation Board approved on February 26, 2013
- 60 Comment Period ends June 7, 2013
- Become Effective July 1, 2014

VSMP Local Government Adoption Schedule

- **April 1, 2013** – Localities submit 12-month extension requests with draft stormwater programs demonstrating substantive progress
- **June 6, 2013** – VSWCB consideration of 12-month extension requests
- **June 13, 2013** – Final VSMP adoption date, *without* 12-month extension (21 months from the effective date of the stormwater management regulations)
- **December 15, 2013** – Localities submit *preliminary* local VSMP application packages for final review by DCR
- **April 1, 2014** – Final adopted VSMP ordinances submitted for review by DCR
- **June 2014** – Final date for Board approval of local VSMPs

One More Important Date

July 1, 2013

Stormwater, Erosion & Sediment Control and
Chesapeake Bay Act Programs

Transfer to

The Department of Environmental Quality

Questions?



Noah M. Hill
Regional Manager
VA Department of Conservation & Recreation
757-925-2392
Noah.hill@dcr.virginia.gov

askHRgreen.org

GREEN LEARNING

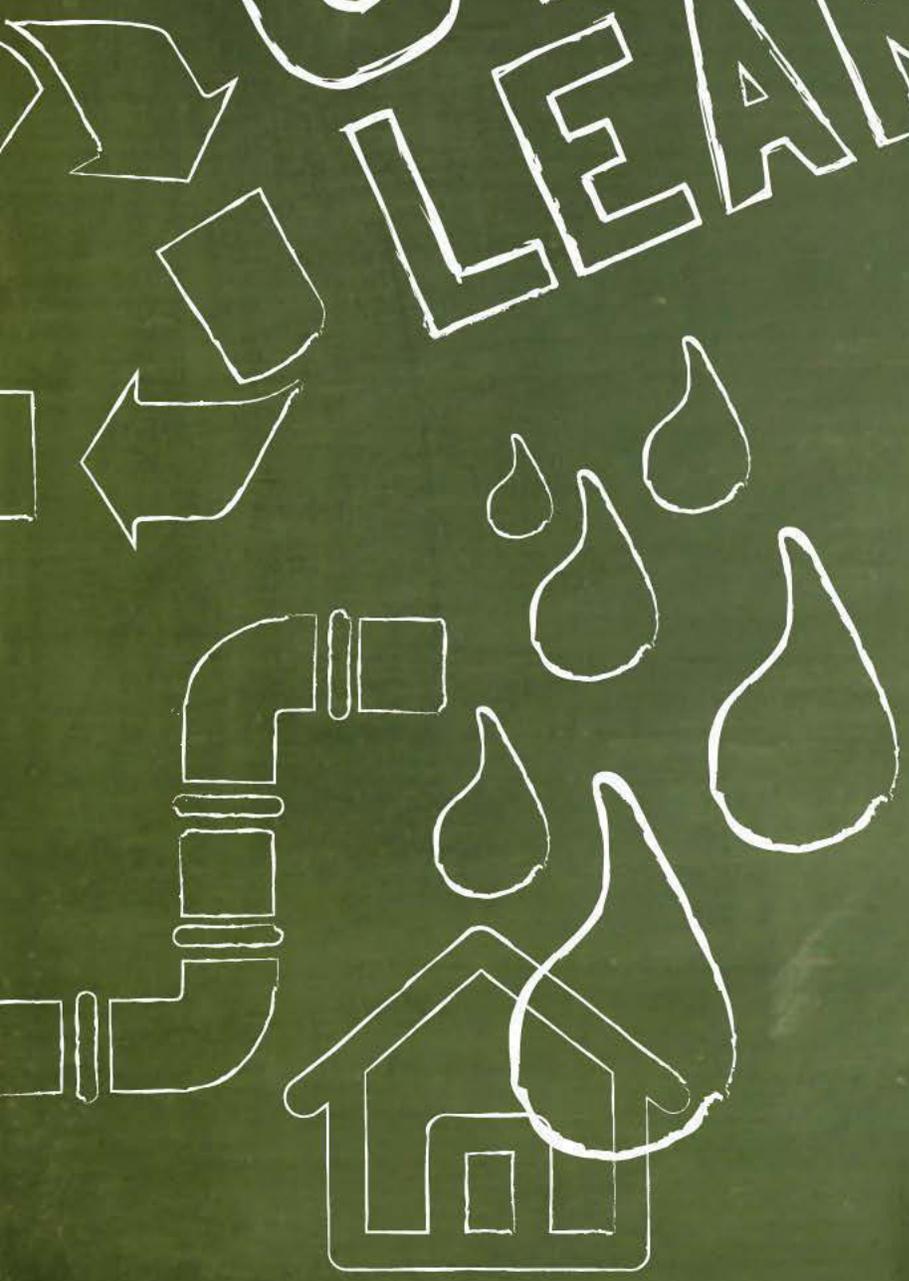


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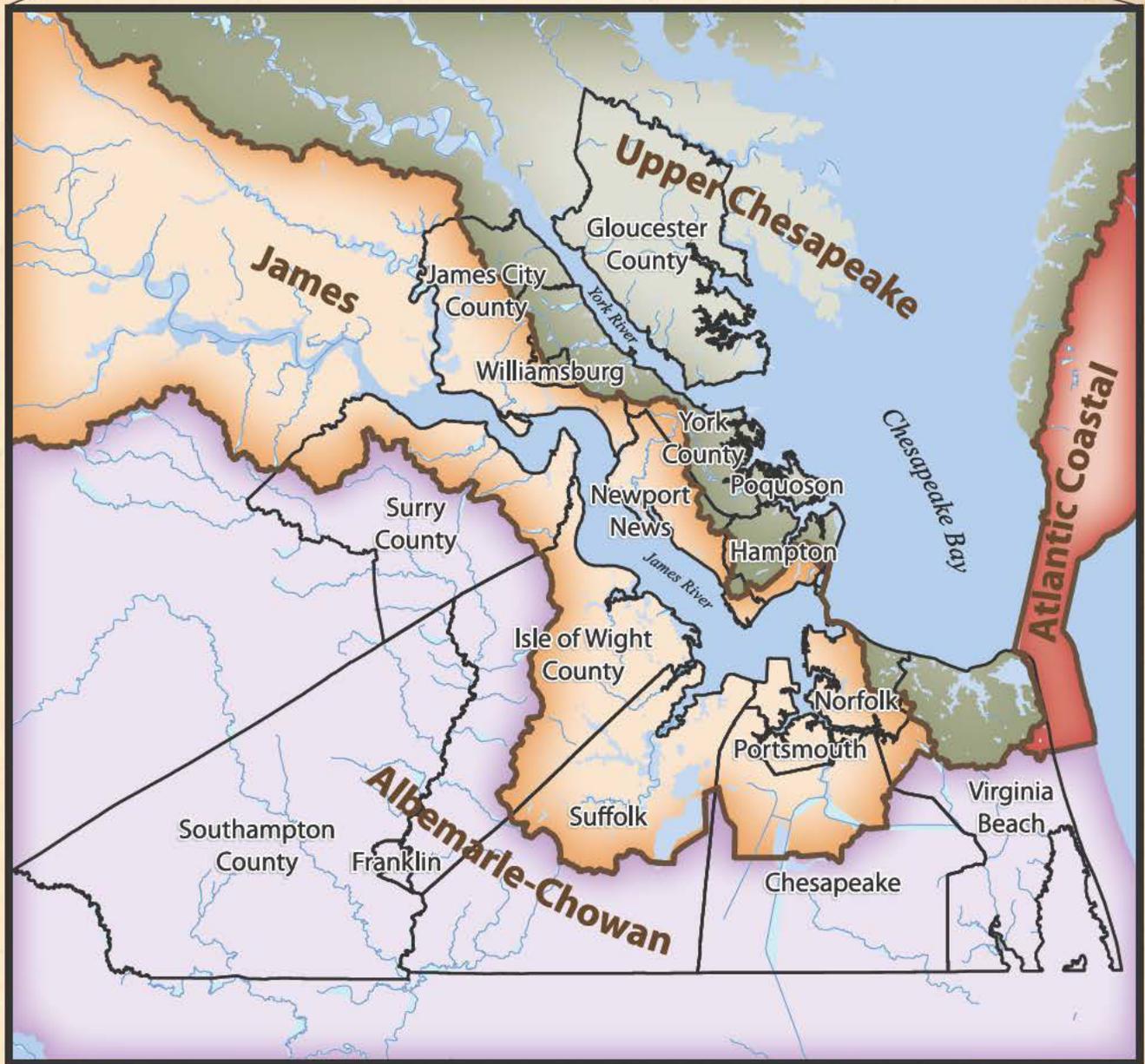
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MAJOR WATERSHEDS IN VIRGINIA



What is a WATERSHED?

MAJOR WATERSHEDS IN HAMPTON ROADS



MAP KEY

	Watershed Boundary	James	Major Watershed Name
	City or County Boundary	Hampton	City or County Name
	Rivers		

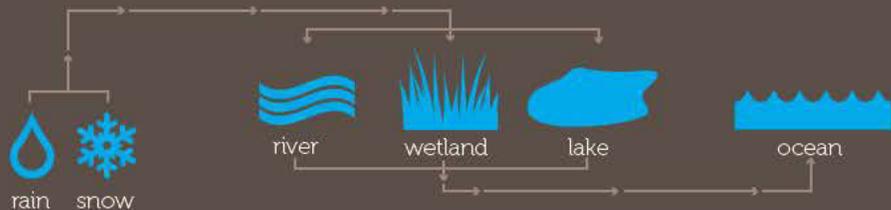
TO DO...

Locate your school on the Virginia watershed map and identify the watershed in which it is located.

Which two Hampton Roads watersheds are part of the Chesapeake Bay watershed?

What activities do you participate in at home or at school that could have a negative impact on the Chesapeake Bay?





When it rains or when snow melts, the precipitation flows across the ground's surface and begins to make its way to a nearby tributary, wetland, river or lake, and then on to a larger body of water, such as a bay or ocean. The land that the water flows across on this journey and the waterways that receive it are called a watershed.

THE CHESAPEAKE BAY WATERSHED



SPANS PORTIONS OF
SIX STATES
& COVERS A TOTAL OF
64,000
SQUARE MILES

AND POURS

BILLIONS
(THAT'S BILLION, WITH 9 ZEROES!)
OF GALLONS OF WATER
INTO THE BAY

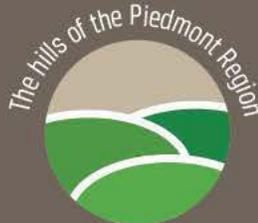
YOU'RE CLOSER THAN YOU THINK!

- 5 MIN WALK
- 10 MIN WALK
- 15 MIN WALK
- 20 MIN WALK



Even though you may not be able to see the Chesapeake Bay from your back yard, you're closer than you think! No matter where you live in the Chesapeake Bay watershed, it would take about 15 minutes to walk to a stream, river or body of water that flows into the Chesapeake Bay.

The watershed encompasses a diverse landscape



Is home to several thousand species of plants & animals



And over 15,000,000 people!



THE 411 ON TMDL

TMDL stands for Total Maximum Daily Load. It describes how much of a pollutant a body of water can receive while still meeting water quality standards. Think of it in terms of ice cream; you can only eat a certain amount in one day without overloading on calories. Too much of the same type of pollutant can have the same effect on a body of water, overloading its environment.

15 30,973

P

PHOSPHORUS

SOURCES INCLUDE:
Fertilizer, herbicides & wastewater

7 14,007

N

NITROGEN

SOURCES INCLUDE:
Fertilizer, septic systems & wastewater

S

SEDIMENT

SOURCES INCLUDE:
Erosion

It may surprise you to know that some naturally-occurring pollutants, such as phosphorus, nitrogen and sediment are necessary components of a healthy waterway. The trouble is that human activity, such as over-fertilizing your lawn or not picking up pet waste, greatly increases their concentration in waterways which harms aquatic life.

According to the Environmental Protection Agency (EPA), the Chesapeake Bay's water quality is poor. To help reverse this course, the EPA has set a TMDL for nitrogen, phosphorus and sediment. It is our responsibility as citizens to reduce the amount of these pollutants in our waterways.

THIS GUIDE IS PACKED WITH EASY THINGS TO DO AT HOME AND AT SCHOOL TO HELP KEEP POLLUTANTS OUT OF OUR WATERWAYS. A HEALTHY CHESAPEAKE BAY STARTS WITH YOU!

A
watershed

D
salinity

I
aquatic

L
ecosystem

C
bay

F
infiltration

J
turbidity

B
water quality

E
brackish

H
estuary

K
wetland

G
tributary

MATCH THE WORDS WITH THEIR DEFINITIONS

- The cloudiness of water
- Living in or growing on the water
- Process of water soaking into the ground
- A mixture of fresh and salt water
- An area of land that is permanently or seasonally saturated with water and contains vegetation that is adapted to its unique soil conditions
- Physical, chemical, and biological characteristics of water
- Rain that falls on this area all drains into the same body of water
- A community of living organisms and non-living elements interacting as a system
- The amount of dissolved salt in water or soil
- An inlet of water surrounded by land on three sides
- A stream or river that flows into a larger river, lake, or bay
- A partially enclosed body of water where fresh water from rivers and streams mixes with salt water from the ocean

Answers page 18

WATERSHED PUZZLER

STORMWATER POLLUTION

As rain falls from the sky,
it collects...



GUTTER RUNOFF

picks up leaves, sediment left behind
in gutters



LAWN RUNOFF

picks up soil, pet waste, fertilizer, trash



DRIVEWAY RUNOFF

picks up oil, gasoline, sediment, trash



ROAD RUNOFF

picks up oil, gasoline, sediment, trash, tar



STORM DRAIN

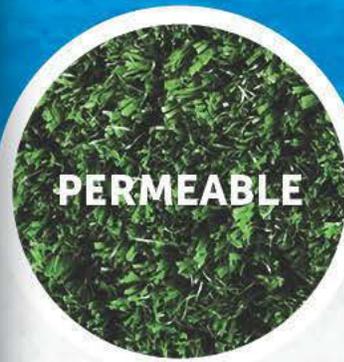
All water goes to a storm drain which leads to...



RIVER, LAKE OR OCEAN

By the time the rain makes it to the ocean, it has
picked up pollutants from hundreds of sources.

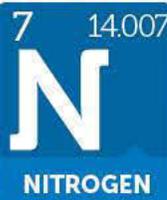
The way we use our watershed's lands affects the health of the watershed and the ecosystems within it. With the development of our communities over time, we have hardened much of the watershed's lands with driveways, rooftops, sidewalks, parking lots, and other hard surfaces. When it rains or when the snow melts, water flows over these impermeable surfaces instead of being soaked into the ground. As the water travels it picks up dirt, trash, oil, grease, fertilizers, and other pollutants – all of which get washed into the storm drain system and then directly into our waterways. Once in our waterways, the nitrogen, phosphorus, sediment, and trash threaten the waterways' health.



PERMEABLE

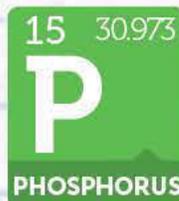


IMPERMEABLE



Nitrogen is a chemical element (N) found in all of nature. When there is too much nitrogen in a waterway, it fuels the growth of algal blooms. Algal blooms are dense clusters of algae that block sunlight from other organisms. When an alga from the bloom dies, the decay process consumes dissolved oxygen in the water, which is needed by fish, blue crabs, and other organisms.

» **Sources of nitrogen include fertilizers, household septic systems, and municipal and industrial wastewater.**



Phosphorus is a chemical element (P). Like nitrogen, when there is too much phosphorus in a waterway, it fuels the growth of algal blooms.

» **Sources of phosphorus include fertilizers, herbicides, and wastewater.**

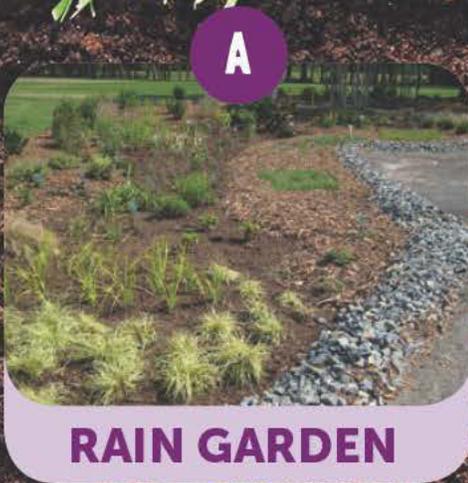


Stormwater, which may be carrying sediment from eroding land, picks up velocity as it travels over impervious surfaces. The speed of the water causes stream bank erosion, which deposits more sediment in the water. Too much sediment suspended in the water clouds the water (turbidity), harming fish, oysters, and aquatic grasses.

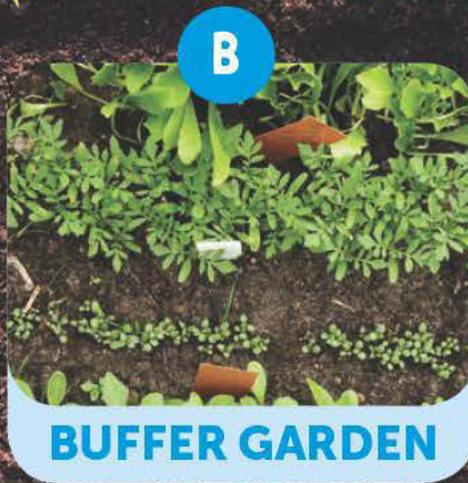
SLOW THE FLOW

Keeping pollutants off of the land is one way to help keep our waterways clean. Another way is to Slow the Flow of stormwater by using Low Impact

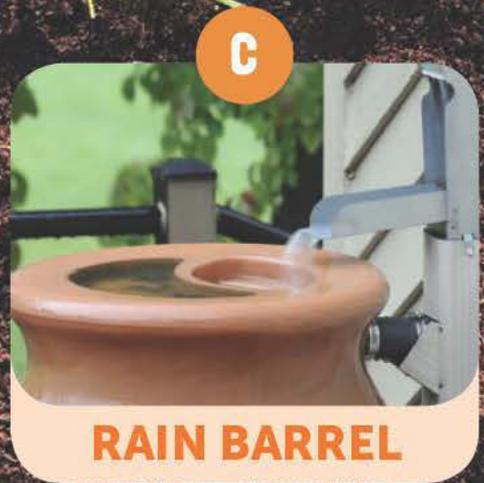
Development (LID) techniques. LID methods reduce the harm of stormwater by utilizing natural designs to keep stormwater on site. **See if you can match these simple, household Slow the Flow pictures with their descriptions.**



RAIN GARDEN



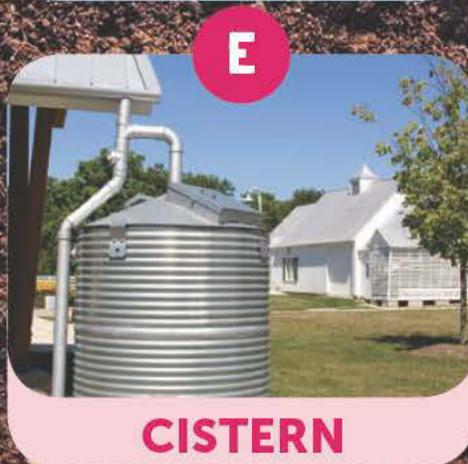
BUFFER GARDEN



RAIN BARREL



DIVERTER



CISTERN

Can you install any of these SLOW THE FLOW features at your home or school?

- 1** A small water catchment device that captures and stores rain water for later use. These containers can hold 30 - 100 gallons, depending on the size of the container. This natural rain water can later be used to water gardens or for other yard activities. It is not potable water.
- 2** A depressed garden that has porous soils and specialized, water loving plants. This type of garden holds stormwater and allows the water to infiltrate slowly into the ground instead of rushing into the stormwater system.
- 3** A flexible hose that attaches to guttering or a downspout to redirect stormwater to flow into gardens or landscaped areas instead of allowing water to move directly across a driveway or sidewalk.
- 4** A large scale water catchment device that can hold hundreds of gallons of rainwater which can be reused for flushing toilets and other non-potable household water uses, as well as watering large garden areas.
- 5** A naturally vegetated or planted area that separates a formal lawn area from a waterway. These can also be planted along curbed or ditched areas to slow storm water before it enters the stormwater catch basin or pipe.

Answers page 18

POINTING TO THE SOURCE OF POLLUTION



POINT SOURCE POLLUTION

comes from identifiable sources that can be controlled. Factories and wastewater treatment plants are two common types of point sources. The federal government regulates point source pollution. HRSD treats the wastewater generated in Hampton Roads so it can be safely discharged to area waterways. HRSD staff work tirelessly to meet the federal water quality regulations to keep our local waterways clean. *Hint: It is easy for you to point your finger at the source of point source pollution.*

The Atlantic Treatment Plant in Virginia Beach is one of nine award-winning HRSD treatment plants in Hampton Roads.

NONPOINT SOURCE POLLUTION

is pollution that travels over land as a result of runoff and whose source cannot be identified or controlled. Nonpoint source pollutants come from urban and rural areas, businesses, roads, parking lots, farms, and even forests. A few examples include roadside trash or animal droppings on the ground. When it rains, nonpoint source pollution is washed off the land and into our waterways. This is called stormwater runoff. It's difficult to point your finger to the source of nonpoint source pollution.

CHECK YOUR POLLUTION SOURCE I.Q.

Listed below are pollutants commonly found in the Chesapeake Bay. Mark a "P" on the line for point source pollution and "NP" for nonpoint source pollution.

- | | | | |
|-----------------------------|------------------------------------|------------------------------|-------------------------------|
| 1. <input type="checkbox"/> | Vehicle oil on parking lot | 8. <input type="checkbox"/> | Sediment on a parking lot |
| 2. <input type="checkbox"/> | Fertilizer on sidewalk | 9. <input type="checkbox"/> | Trash alongside the road |
| 3. <input type="checkbox"/> | Soap in the street from a carwash | 10. <input type="checkbox"/> | Cigarette butt on ground |
| 4. <input type="checkbox"/> | Wastewater treatment plant | 11. <input type="checkbox"/> | Leaves and branches on street |
| 5. <input type="checkbox"/> | Grass clippings in street | 12. <input type="checkbox"/> | Erosion |
| 6. <input type="checkbox"/> | Duck and geese feces on the ground | 13. <input type="checkbox"/> | Dog feces on the ground |
| 7. <input type="checkbox"/> | Emissions from a power plant | 14. <input type="checkbox"/> | Crop fertilizer |

Answers page 18

All About Water

QUENCH YOUR THIRST FOR INFO

Water is a valuable natural resource used for many purposes—for drinking, keeping clean, growing crops, swimming and recreation, generating power, and manufacturing goods.



In Hampton Roads, the water that flows through your taps comes from a variety of sources. Depending on where you live, your water may come from surface sources, such as lakes and rivers, or from groundwater. In some rural areas, people get their water from private wells that bring the water to their homes from aquifers, located under the ground. But in most parts of our region, water providers, such as your city or county water utility department, collect and treat water to make it clean and safe to drink. Then it's sent to people's homes through a system of underground pipes.

Water utilities can be privately owned or part of a department within your municipal government. The utilities charge customers for the services they provide, and the revenue pays for the electricity used to pump the water and the chemicals used to treat the water. It also is used to pay for the costs of managing the watershed, protecting water quality, and repairing or replacing the pipes, dams, treatment plants, and other infrastructure used to provide your water. If rates are too low to cover the cost of operations, water utilities sometimes have to postpone repairing or replacing leaky, worn out pipes.

A lot of water can be wasted through leaks. It doesn't matter if the leak occurs in a water main or in your home. Even if you get your water from a private well, wasted water means wasted money. People who use well water must pay for the energy to pump the water, and everyone pays for energy to heat water.

Wasting water can cause other problems:

It leaves less for others to use.

Wells can run dry and aquifers can be depleted, especially during droughts.

Septic systems can be overloaded by too much water.

Low river, stream, and reservoir levels hurt ecosystems and reduce recreational opportunities.

When water supplies get low, water utilities need to develop new water supply resources.

YOU CAN DO YOUR PART BY USING WATER WISELY.

CHECK FOR LEAKY FAUCETS AND TOILETS (FIXING LEAKS IS A BIG WATER SAVER). TURN OFF THE FAUCET WHILE YOU'RE BRUSHING YOUR TEETH. WASH ONLY FULL LOADS OF DISHES AND LAUNDRY. TAKE SHORTER SHOWERS OR USE LESS WATER TO FILL THE BATHTUB. CAN YOU THINK OF OTHER WAYS TO SAVE WATER?

hydroplane
hydration
hydrophobia
hydroelectric
hydrosphere
hydrotherapy
hydroponics
hydraulic
hydrant
hydrology

These English words are formed from the root word "hydra." Hydra is the Greek word for water. Try to guess the meanings of the words, then look up their definitions in the dictionary. Were you right?



Meet Your Local Water Provider

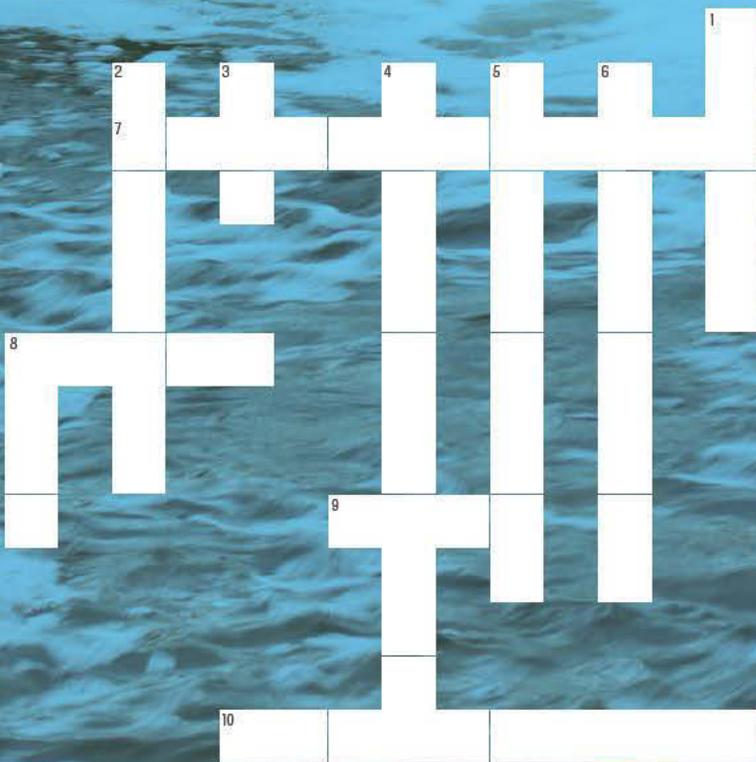
USE THE INTERNET TO FIND YOUR LOCAL WATER QUALITY REPORT TO LEARN ABOUT YOUR DRINKING WATER PROVIDER AND ANSWER THE FOLLOWING QUESTIONS:

- ❖ What is the name of your local drinking water provider?
- ❖ Do you get your water from this provider at home? At school?
- ❖ What role does a water utility play in providing for public health and safety?

- ❖ What is/are the source/sources of your drinking water? (For example, surface water or groundwater; if surface water, give the name of the river, lake, or stream.)

- ❖ What is desalination?

- ❖ What is the treatment process used by your water utility and what chemicals do they use to make the water clean and safe to drink?



ACROSS

- 7 You can help stop water shortages from spreading by practicing _____.
- 8 A _____ toilet can waste up to 20 gallons of water per day.
- 9 To save water, plant flowers and shrubs in the spring or in the _____ when the watering requirements are lower.
- 10 Install one of these at your downspout to collect stormwater that can be used to water flowers and wash your car. (2 words)

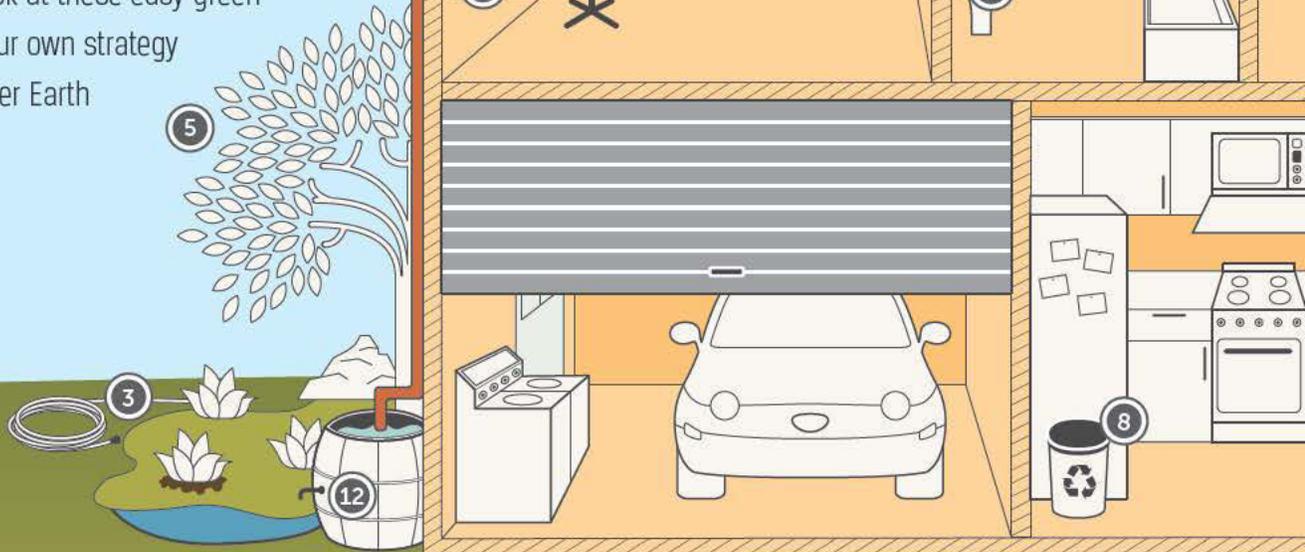
DOWN

- 1 Rain that falls on streets and carries pollutants such as fertilizers, oil, and bacteria into streams, rivers, and lakes is known as stormwater _____.
- 2 This type of precipitation is a result of atmospheric moisture mixing with sulfur and nitrogen oxides emitted from the burning of fossil fuels. (2 words)
- 3 Less than _____ percent of the Earth's water is drinkable.
- 4 Surface water (water in lakes, rivers, and streams) is naturally lost through evaporation and naturally replenished by _____.
- 5 The process by which water renews itself. (2 words)
- 6 This process removes undesirable particles from water during the treatment process.
- 8 These were hollowed out to make the first water pipes in the U.S.

Answers page 18

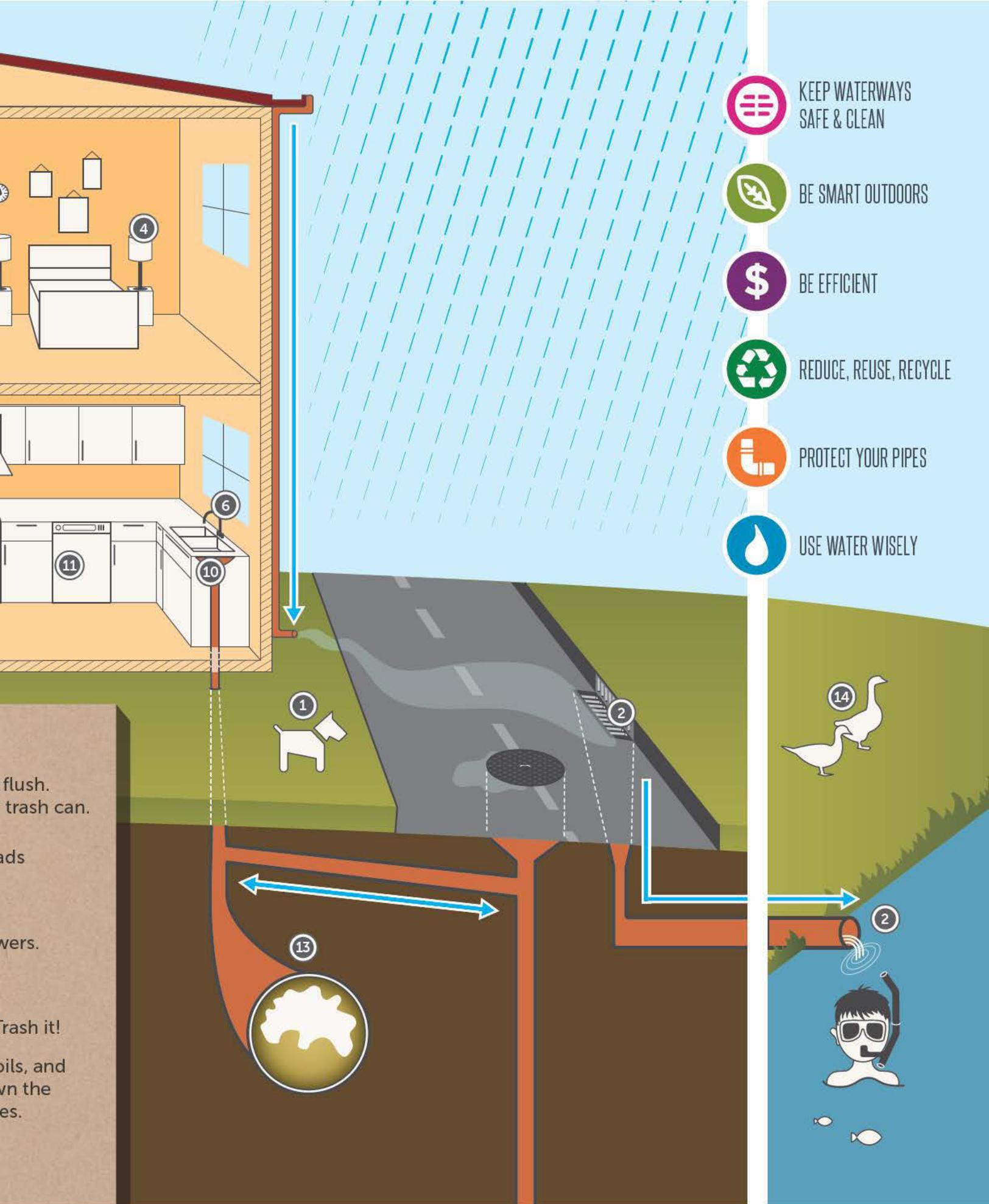
Green Living Starts Here

Sustainable living is neither time-consuming nor costly. There are simple steps you can take that are good for you, your home, your yard and your community. Take a look at these easy green tips, then map out your own strategy and get started. Mother Earth will thank you.



Fill the circles with the corresponding numbers in the diagram.

- | | | | | | |
|-----------------------|---|-----------------------|--|-----------------------|--|
| <input type="radio"/> | Turn off the faucet while brushing your teeth. | <input type="radio"/> | Switch to more efficient light bulbs. | <input type="radio"/> | Think before you flush. The toilet is not a trash can. |
| <input type="radio"/> | Only rain down the storm drain. | <input type="radio"/> | Unplug electronics when they are not in use. | <input type="radio"/> | Only wash full loads of dishes. |
| <input type="radio"/> | Reduce and recycle paper, junk mail, and telephone books. | <input type="radio"/> | Use a hose nozzle when watering your garden or washing your car. | <input type="radio"/> | Take shorter showers. |
| <input type="radio"/> | Recycle paper, plastic, glass and aluminum. | <input type="radio"/> | Drink tap water instead of bottled. | <input type="radio"/> | Pet Waste: Scoop it! Bag it! Flush it! |
| <input type="radio"/> | Catch the rain to water plants. | <input type="radio"/> | Don't feed ducks or geese. | <input type="radio"/> | Never pour fats, oils, or grease (FOG) down the drain, it clogs pipes. |
| <input type="radio"/> | Do not use the garbage disposal. | <input type="radio"/> | Choose native, drought-tolerant trees, shrubs, and plants. | | |



KEEP WATERWAYS SAFE & CLEAN



BE SMART OUTDOORS



BE EFFICIENT



REDUCE, REUSE, RECYCLE



PROTECT YOUR PIPES



USE WATER WISELY

flush.
trash can.

ads

vers.

Trash it!

bills, and
own the
es.

DO THE MATH

How Much Water Does Your Household Use?

This home water audit will give your family an idea of how much water your household uses daily. Your family will need to help you gather some of the answers for this audit. Answer only the questions that apply to your house.

This home water audit was adapted from St. Johns River Water Management District's Family Water Use Survey.

HOUSEHOLD INFORMATION

- TYPE OF DWELLING**
- Detached single family residence
 - Town house residence
 - Condominium residence
 - Apartment residence

Does your dwelling have an individual water meter?
 Yes No

_____ Number of adults living in home
 _____ Number of children living in home

 _____ Number of toilets
 _____ Number of showers

Dishwasher? Yes No
 Clothes washer? Yes No

WATER USE

- 1. SHOWERS:** How many showers does your family take a day? About how long is each one?

- 2. BATHS:** How many baths does your family take a day? A half-full tub is about 18 gallons, a full tub is about 36 gallons.

- 3. TOILETS:** How many times a day does your family flush the toilet? (The average is four flushes per person.)

- 4. TEETH:** Most family members brush their teeth at least twice a day for about two minutes each time. Leaving the faucet on while brushing your teeth wastes a lot of water. How often does you family brush?

- 5. HAND DISHWASHING:** How many times a day does your family wash dishes by hand? About how long does the water run each time?

- 6. DISHWASHER:** Answer this question only if you have a dishwasher. How many times a week does your family run the dishwasher?

- 7. LAUNDRY:** Answer only if you have a washing machine. How many loads of laundry does your family do each week?

$$\text{_____} \times \text{_____} = \text{_____}$$

Number of showers Number of minutes Total shower time per day

$$\text{_____} \times \text{_____} = \text{_____}$$

Number in family Number of baths Total of baths per day

$$\text{_____} \times \text{_____} = \text{_____}$$

Number in family Flushes per day Total flushes per day

$$\text{_____} \times \text{_____} = \text{_____}$$

Number in family Number of brushes per day Total number of brushes per day

$$\text{_____} \times \text{2 MINUTES EACH BRUSH} = \text{_____}$$

Total number of brushes per day Total minutes of brushes per day

$$\text{_____} \times \text{_____} = \text{_____}$$

Washes per day Minutes water runs Total washing time per day

$$\text{_____} \div \text{7 DAYS PER WEEK} = \text{_____}$$

Uses per week Average loads per day

$$\text{_____} \div \text{7 DAYS PER WEEK} = \text{_____}$$

Loads per week Average loads per day



8. OTHER INDOOR WATER USES: Your family also uses water indoors in other ways. List some of these ways.

9. LAWN WATERING: How many times a week does your family water the lawn? About how many minutes do you water each time?

$$\frac{\text{Watering days per week}}{\text{Watering minutes per day}} \times \text{Total minutes per week} = \text{Total minutes per week}$$

$$\frac{\text{Total watering minutes per week}}{7 \text{ DAYS PER WEEK}} = \text{Average watering time per day}$$

10. OTHER OUTDOOR WATER USES: Your family may use water outdoors in other ways. List some of the ways.

FIGURE

YOUR FAMILY'S TOTAL DAILY USE

Put your DO THE MATH answers in column C. Multiply columns B and C and put your answers in column D. This is the amount of water your family uses daily for each activity. Next, add column D to reveal the estimate of the total gallons of water your family uses daily.

A	B	C	D
Water Use Activity	Gallons per Minute or Use	Minutes or Uses per Day	Total Water Use Per Day
1. SHOWERS	5 gallons per minute	X	=
2. BATHS	36 gallons per use	X	=
3. TOILETS	5 gallons per flush	X	=
4. TEETH	3 gallons per minute	X	=
5. HAND DISHWASHING	3 gallons per minute	X	=
6. DISHWASHER	30 gallons per use	X	=
7. LAUNDRY	48 gallons per use	X	=
8. OTHER INDOOR USE	Put answer from above		=
9. LAWN WATERING	10 gallons per minute	X	=
10. OTHER OUTDOOR WATER USES	Put answer from above		=



TOTAL FAMILY USE PER DAY

GALLONS

MAKING THE RIGHT CHOICES

HOW MUCH WATER IS USED FOR EACH?

 = 1 GALLON DIRECT USE
the water you actually use

 = 1 GALLON VIRTUAL USE
the water that helped make the things you use

 = 100 GALLONS VIRTUAL USE



VS.

Shower 10 minutes
3.8 gallons/minutes

Low-flow shower 10 minutes
2.3 gallons/minute



VS.

Apple
18 gallons

Orange
13 gallons

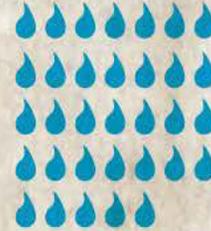


VS.

Soda 14 oz. bottle
33 gallons



Tap Water 16 oz. glass
.125 gallons

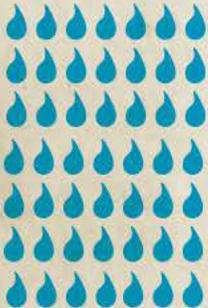


VS.



Bag of Chips
49 gallons

Slice of Bread
11 gallons



VS.



1 lb. of Beef
1,500 gallons

Cheese Pizza
79 gallons



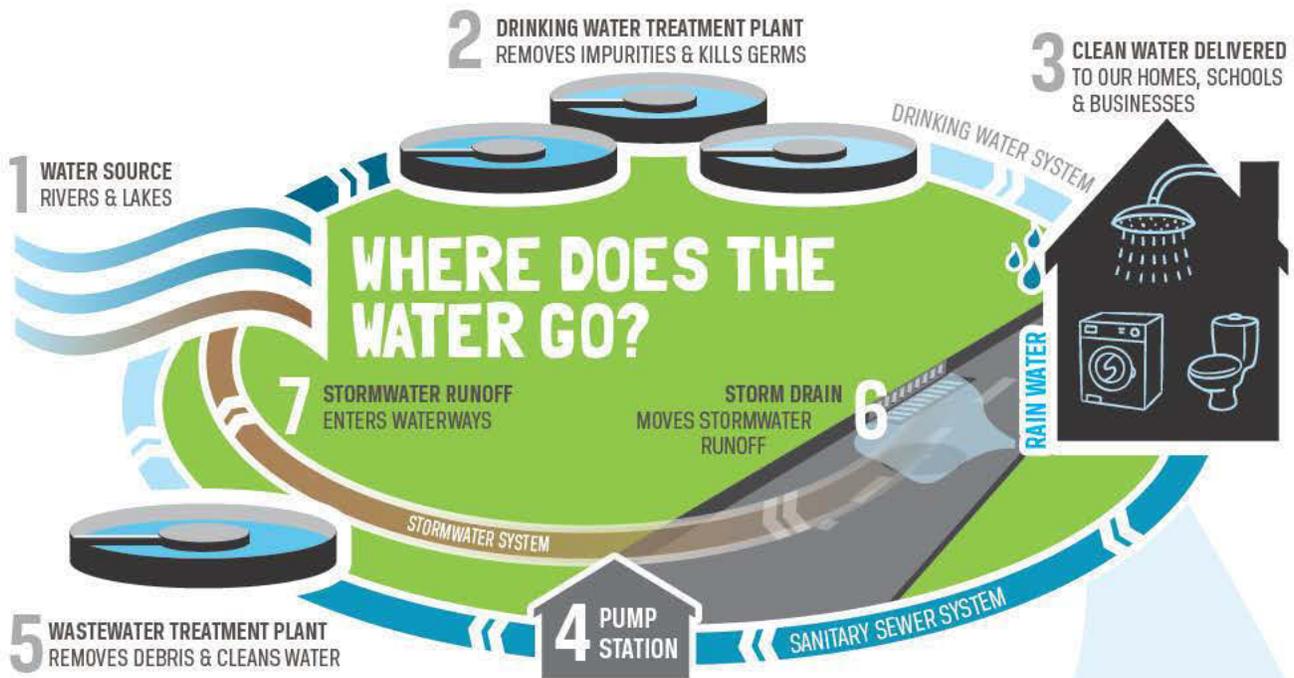
VS.



Hamburger
634 gallons

Salad
31 gallons





You've flushed a toilet, let the faucet flow and watched water rush down the street during a rainstorm. But do you really understand where the water goes? **In the Hampton Roads region, there are three very important pipe systems that are part of our regional infrastructure. The drinking water system brings clean water to our homes, while the sanitary sewer system and the stormwater system are two separate systems that take water away from our homes and streets.**

1 Most of the drinking water in Hampton Roads comes from rivers and lakes. **2** This surface water is pumped through huge pipes to a water treatment plant, where impurities are removed and germs are killed. Some people in our region use water that is pumped from deep underground. Unlike surface water, groundwater usually isn't treated to remove impurities, but it is disinfected to kill germs. **3** Once the water is clean and safe to drink, it is pumped through a network of pipes and storage facilities into our homes.

When water leaves our individual homes through sinks, showers, and toilets, it flows through a single small pipe which connects to a larger main pipe in the street. **4** The wastewater is carried through the sanitary sewer system by gravity to a pump station. **5** The pump station collects the wastewater and pushes it by force further down the pipes to the wastewater treatment plant. At the treatment plant, debris is removed and the water is cleaned to remove germs and bacteria before it is released back into our waterways.

6 Rainwater runoff from rooftops and gutters is directed to the stormwater system. The drain usually looks like a small opening in the curb or a grate in the pavement. **7** Unlike the sanitary sewer system, water that enters the stormwater system is never treated and flows directly to our local waterways. **This is why it is so important not to litter.** Cigarette butts, trash, dirt and grass clippings are all carried by the rain into the storm drain and out to rivers, lakes, or the ocean. This pollution is harmful to our waterways and local wildlife.

EACH SYSTEM HAS A SEPARATE AND SPECIFIC PURPOSE FROM THE OTHERS, AND IT IS IMPORTANT TO UNDERSTAND WHERE THE WATER GOES.

For the following questions, use the information to the left to explain how much water is used to make the items. Explain which requires more water. Then turn your explanation into a ratio.

Example: How much water is used to produce an apple versus an orange?

1 apple = 18 gallons of water & 1 orange = 13 gallons of water

It takes 18 gallons of water to produce an apple and 13 gallons of water to produce an orange. It takes more water to produce an apple than an orange. The ratio of water use is 18:13.

1 How much water is used to produce a hamburger and chips vs. a cheese pizza?

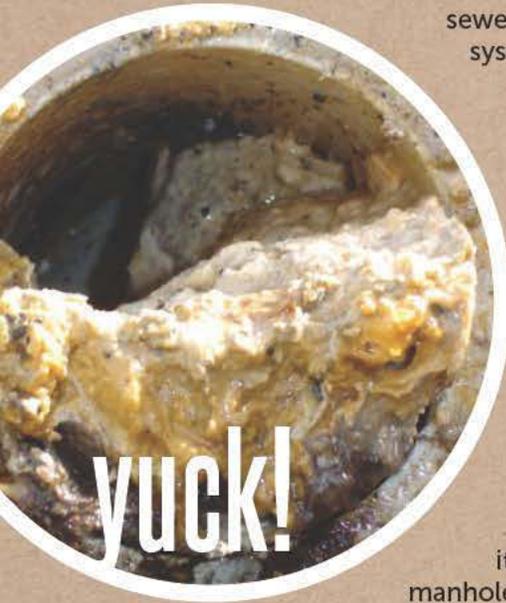
2 How much water is used to produce a 14 oz. bottle of soda vs. a 16 oz. glass of tap water?

3 Create your own question and test a classmate!

Fat-free Drains AS EASY AS 1, 2, 3



The sanitary sewer system and stormwater system are efficient ways to collect and contain two different types of water. Water in the sanitary sewer system is treated, while water in the stormwater system is not. However, sometimes a sanitary sewer overflow does occur, in which case untreated wastewater from the sanitary sewer system enters the stormwater system. These occurrences can be prevented, but it is important to understand the causes and consequences.



Grease is the most common cause of sanitary sewer overflows. When people cook and pour fats, oils, and grease (also known as FOG) down the drain, the FOG turns from a liquid to a solid as it cools, clogging the pipe. When the water can't make it past the greasy mess, the pipes back up. Sometimes it is so powerful it can push up a manhole and flow into the street. Once wastewater is on the street, it acts just like rainwater and flows to the storm drain.

Since stormwater never goes to a treatment plant, raw sewage from a sanitary sewer overflow can contaminate our waterways. Depending on the level of contamination, beaches may need to be closed to protect human health, or fish can die from ingesting the dirty water.

Here are three easy ways to keep your drains fat-free:

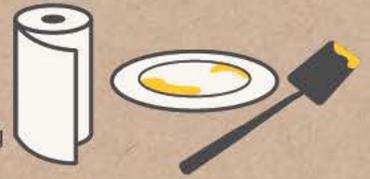
Can the Grease

1 Pour used cooking grease into an empty, heat-safe container, such as a soup can, and 2 store it in the freezer. Once solidified, 3 toss the can into the garbage.



Scrape the Plate

Wipe all pots, pans, dishes and cooking utensils with a paper towel prior to washing to absorb the grease.



Catch the Scraps

Eliminate using the garbage disposal. Catch food scraps in your sink with a basket or strainer and toss them into the trash.



Don't let your sanitary sewer system back up. Once it's in the stormwater system, it's too late!

Conservation Professionals

Meet **Daniel A. Baxter**, Business Recycling Coordinator, City of Newport News Public Works Resource Recovery Division

Tell us about your job.

My job involves promoting recycling, waste reduction, and resource management among local businesses; overseeing recycling and resource recovery programs for municipal buildings and schools; coordinating electronics recycling for municipal operations and schools; providing education and outreach to businesses and residents; and auditing the household hazardous waste, e-cycling, and recycling contractors with whom we work.

Why did you decide to go into this field?

I have been involved and interested in conservation since I was a child. After 20-plus years in the Navy, I returned to college and pursued degrees in environmental geology, oceanography, and land use management.

What do you enjoy most about your job?

I enjoy meeting new people and working with innovators to develop and evaluate new solutions to challenges.

What did you study in high school and college that helped prepare you for this line of work?

Math (especially applied statistics up to advanced trigonometry), science, geography, English, civics, and foreign languages.

What advice do you have for students about recycling?

Recycling is a multifaceted discipline. It is constantly changing to meet new challenges. So, I'd advise you to be willing to learn and work with others to develop new innovations in recycling that will make a difference.



resource Management Matters

Every day people make hundreds of choices regarding resource use: ride in a car or ride a bike; recycle or throw away your soda can; turn off the water or leave it running while you brush your teeth.

All of these decisions have costs and benefits. Renewable resources such as air, water, and trees are able to replenish themselves over time, yet it is important to balance their use with how quickly the resources can be replenished.

Nonrenewable resources such as coal, oil, natural gas, and nuclear power cannot be reproduced. When these are gone, the resources are gone for good.

TEST YOUR RECYCLING IQ

1. A soda can that is recycled today could be back in your house as a new can in just two months.
True or False
2. Aluminum can be recycled up to four times.
True or False
3. The average American generates four pounds of trash a day.
True or False
4. Glass can be recycled forever.
True or False
5. It takes 50 years for aluminum cans to decompose in a landfill.
True or False
6. Plastic bags and product wraps can be recycled at most grocery stores.
True or False
7. Electronics can be placed in the curbside recycling bin.
True or False
8. Recycling conserves resources and saves energy.
True or False

Answers page 18

TO RECYCLE, OR NOT TO RECYCLE?



Recycling plays an important role in responsible resource management.

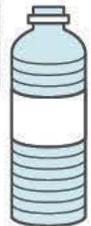
Pitch in to make a difference by always recycling the following items:

FOR THE RECYCLING BIN

→ Aluminum, steel and tin cans



→ Clean plastic bottles and jugs with neck or pour spouts



→ Glass bottles and jars

Mixed paper (office paper, paper bags, magazines, newspaper and inserts, telephone books, junk mail)

→



→ Empty food boxes and cardboard



FOR SPECIAL RECYCLING

→ Plastic bags – Recycled at most grocery stores. Visit abagslife.com to find a store near you.



→ Compact fluorescent light bulbs – Recycled at a household hazardous waste event or facility. askHRgreen.org/household-hazardous-waste



→ Electronics – Recycled at most electronic stores and at electronic recycling events. askHRgreen.org/electronics-recycling



→ Rechargeable batteries – Recycled at household hazardous waste events and most electronic stores.



askHRgreen.org/household-hazardous-waste

CLIP AND SAVE!

ANSWER GUIDE

page 4

1. J
2. I
3. F
4. E
5. K
6. B
7. A
8. L
9. D
10. C
11. G
12. H

page 6

1. C
2. A
3. D
4. E
5. B

page 7

1. NP
2. NP
3. NP
4. P
5. NP
6. NP
7. P
8. NP
9. NP
10. NP
11. NP
12. NP
13. NP
14. NP

page 9



page 15

1. It takes 683 gallons of water to produce a hamburger and chips and 79 gallons of water to produce a cheese pizza. It takes more water to produce a hamburger and chips than it does to produce a cheese pizza. *The ratio of water use is 683:79. The ratio of water use is 683/79. The ratio of water use is 683 to 79.*
2. It takes 33 gallons of water to produce a 14 oz. bottle of soda and .125 gallons of water to produce a 16 oz. glass of tap water. It takes more water to produce a 14 oz. bottle of soda than it does to produce a 16 oz. glass of tap water. *The ratio of water use is 264:1. The ratio of water use is 264/1. The ratio of water use is 264 to 1.*

page 17

1. True
2. False (Forever)
3. True
4. True
5. False (100 years)
6. True
7. False (take to special electronics collection)
8. True

page 10

- | | | |
|----|----|----|
| 16 | 4 | 15 |
| 2 | 7 | 11 |
| 9 | 3 | 17 |
| 8 | 6 | 1 |
| 12 | 14 | 13 |
| 10 | 5 | |



GLOSSARY

Acid rain: Rain or any other form of precipitation that is unusually acidic due to emissions of sulfur dioxide and nitrogen oxides.

Algal Bloom: A dense cluster of algae often caused by excess nitrogen and phosphorus. As it grows it blocks sunlight from reaching organisms that live beneath it and it consumes dissolved oxygen that is needed by fish and crabs.

Aquatic: Living or growing in water.

Aquifer: An underground body of porous rock, sand, or gravel through which water can easily move.

Bay: An inlet of water surrounded by land on three sides.

Brackish: A mixture of fresh and salt water.

Desalination: The process of removing salt from water so it can be used for drinking or irrigation.

Ecosystem: A community of living organisms and non-living elements interacting as a system.

Estuary: A partially enclosed body of water where fresh water from rivers and streams mixes with salt water from the ocean.

Herbicide: A substance for killing plants, especially weeds.

Impermeable: Not able to let water or liquid pass through.

Impervious: Not able to let anything through.

Infiltration: The process of water soaking into the ground.

Infrastructure: The system of public works such as roads, drinking water pipes, stormwater ditches, ponds and pipes, and wastewater pipes.

Municipal: Referring to a town, city or its local government.

Porous: Able to let water or liquid pass through.

Potable: Fit to drink; drinkable.

Revenue: The income of a government from taxation, user fees, customs, or other sources.

Runoff: The water that flows off from the land and into a waterway.

Salinity: The amount of dissolved salt in water or soil.

Septic system: A small scale treatment system that collects and treats wastewater. These systems require periodic pumping and maintenance.

Tributary: A stream or river that flows into a larger river, lake, or bay.

Turbidity: The cloudiness of water.

Velocity: The rate of speed with which something happens.

Wastewater: Water that has been used in washing, flushing, or manufacturing.

Watershed: Rain that falls on this area all drains into the same body of water.

Water main: A principal pipe that distributes drinking water.

Water quality: The physical, chemical, and biological characteristics of water.

Wetland: An area of land that is permanently or seasonally saturated with water and contains vegetation that is adapted to its unique soil conditions.



EDUCATORS, TAKE NOTE.

Did you know that askHRgreen.org offers environmental education mini-grants of up to \$500? Intended to provide funding for environmentally-themed projects, the mini-grants may be used to fund a portion of, or an entire project.

All Hampton Roads school teachers (K-12), youth leaders, or organizations working with youth are eligible to apply. Projects must be specifically tied to suggested environmental topics, which can be found at askhrgreen.org/hr-green-mini-grant-application-package, along with an online application and details.

There is no deadline for applications, which are accepted year round as long as funding is available.

PROTECTING THE ENVIRONMENT IS EVERYONE'S RESPONSIBILITY.

Every decision you make and every action you take makes a difference!

- Scoop, bag, and trash your dog's waste
- Recycle paper, plastic, glass, and aluminum
- Bring reusable bags to the grocery store
- Turn off the lights when leaving a room
- Choose tap water instead of bottled water
- Turn off the water while brushing your teeth
- Let only rain go down the storm drain
- Plant a tree
- Read more and watch less TV
- Pick up any trash you or others may have dropped

GOOD TO DO



askHRgreen.org

askHRgreen.org is your go-to resource for all things green in Hampton Roads — from recycling tips and pointers for keeping local waterways clean to water-saving ideas and simple steps to make local living easy on the environment.

askHRgreen.org is administered through the Hampton Roads Planning District Commission (HRPDC) and powered by the following members: 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; and HRSD.



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GREEN LIVING

SPRING 2013

YOUR GUIDE TO EVERYTHING GREEN IN HAMPTON ROADS

GOOD to KNOW



we mean business
ABOUT RECYCLING!



Home Sweet Fragile Home



meet the **GARDEN GURU**



follow the **WaterTrail**



kissing my garbage
disposal good-bye

askHRgreen.org

f / askHRgreen

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WIN THIS ESSENTIAL SPRING GOODIE BAG



GRILL YOUR TURE PRO

Is your lawn care company doing things the right way? If yes, your lawn is in good hands and your money is well spent. If no, your lawn suffers – and so do our waterways.

Good to Know

Excess lawn fertilizer ends up in our local waterways where it causes harm by speeding up the growth of algae blooms. These blooms cause our waterways to become discolored, smelly and undesirable for swimming and boating. Excess fertilizing also wastes your money!

Good to Do

Ask your lawn care provider these five questions from our friends at the Elizabeth River Project to ensure your yard isn't harming local waterways.

1 What kind of fertilizer do you apply?

What proportion of this contains slow-release nitrogen?

Ideally, at least 50% should be a slow-release type fertilizer. Organic fertilizers like compost and kelp are preferred. Fast-release fertilizers promote growth of grass blades at the expense of root development, which weakens your lawn. Plus, the nutrients leach away before they can be used, then wash into our waterways where they contribute to harmful algae blooms.

2 How do you control your rate of fertilizer application?

Your lawn care provider should use a formula to calculate the amount needed based on your yard's acreage and fertilizer application rates. If they don't, they may be over-fertilizing – which wastes money and harms our waterways.

3 How do your recommendations reflect the specific conditions of my lawn?

To avoid over-fertilizing and over-watering, your lawn care company should first conduct a soil test and diagnose the specific needs of your lawn before developing a plan.

4 Do I have warm or cool season grass? What are the differences in terms of water and fertilizer needs?

If your company can't tell you, they're probably not adjusting their fertilizing and watering plan to meet the specific needs of your yard.

5 What "green" practices do you follow when mowing?

They should leave grass clippings on the lawn to compost as natural fertilizer – and they get extra points if they use an electric mower. Gas mowers are a surprisingly large source of air and water pollution. It's also important to keep mower blades sharp.



This project received funding from the Environmental Protection Agency's Chesapeake Bay Program through the Department of Conservation and Recreation (DCR), via grant number BAY-2012-06-PT.

askHRgreen.org
for more questions to ask your lawn care company
– and lots of other great information

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is there any other Way to Live?

Welcome to the second annual edition of **Green Living**, your guide to everything green in Hampton Roads, brought to you by askHRgreen.org! Encouraging people to find their "inner green" is the premise behind askHRgreen.org, a region-wide public awareness campaign powered by the 16 cities and counties of Hampton Roads and administered through the Hampton Roads Planning District Commission. Since launching this initiative in 2011, we've been hard at work reaching out to Southeastern Virginia residents with simple steps they can take to make our region more sustainable. In this special section, we're digging deeper into green issues that impact the region. Explore our watershed and see why the time to improve our region's water quality is at hand; go beyond the big blue bin and examine the business of recycling; learn tips for keeping a "green" yard from a true garden guru; follow the path of water through our vast (and often forgotten) infrastructure; and learn why it's time to "break up" with a common household appliance. We hope you enjoy *Green Living*, learn something new and share it with friends.

All the Best—

Julia B. Hillegass

askHRgreen.org Team Leader

Public Information and Community Affairs Administrator,

Hampton Roads Planning District Commission

jhillegass@hrpdca.gov



GOODtoKNOW

Keep Hampton Roads Beautiful This Spring

Lend a hand in keeping our communities beautiful by volunteering for a Great American Cleanup™ project this spring. From school yard beautification to litter pickups and recycling events, there will be something for everyone. Visit askHRgreen.org to find a volunteer project in your community.



Dig in with Green Learning

Do you know where the water goes when it rains in Hampton Roads? Or the name of the watershed in which you reside? *Green Learning* is a free educational guide designed to teach the region's sixth grade students these important concepts and about how their actions affect the environment in positive and negative ways. Download this fun guide at www.askHRgreen.org/green-learning.

Put the Lid on Messy Sewer Backups

You can help keep your home's pipes free and clear of blockages if you simply "Can the Grease." Pour used cooking grease into an empty, heat-safe container, such as a soup can, and store it in the freezer. Once solidified, toss the can into the garbage. Email us at HRgreen@hrpdca.gov to request a FREE grease can lid to prevent spills.



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GOODtoKNOW



BE WATER-WISE AT HOME AND IN YOUR YARD

MAKE A PLAN

Group plants with similar watering needs together. Excess irrigation wastes valuable water and promotes disease and weed infestation.

PLANT MORE PLANTS

Choose plants native to our area. They require less water and fertilizer and have fewer pest problems than exotic or non-native plants.

MULCH, MULCH & MULCH

Reduce areas of thirsty turf grass by adding more mulched beds. Mulch not only helps plants retain moisture, but helps minimize weeds and keeps plants cool!

WATER WISELY

Water at the right time of day. Watering when the sun is low, winds are calm and temperatures are cooler minimizes evaporation by as much as 30 percent.

To learn more about tap water & wise water use, just askHRgreen.org



We Mean Business about Recycling!

You know recycling is good for the environment; it reduces energy consumption, decreases pollution and saves natural resources. But did you know recycling also is good for our economy? The recycling industry creates local jobs, saves localities money through reduced disposal fees, produces economic development opportunities and generates tax revenue.

When you recycle, you're supporting regional manufacturers that depend on recycled plastic, glass, metal and paper to make new consumer goods such as outdoor decking, park benches, glass containers and paper. The Southeast Recycling Development Council (SERDC) is a non-profit

organization represented by 11 southern states, including Virginia. In a 2010 study, the group determined that Virginia is home to more than 15 manufacturers that rely on the materials you put into the recycling bins. These companies generate more than \$3.6 billion in yearly sales and employ more than 3,700 Virginians directly in the manufacture of recycled content products.

And that's just a sliver of the state's whole recycling pie. The more cans, paper, plastics and glass that are put in the recycling bin instead of the trash, the more the region's economy will benefit.

"If Virginia recycled just 10 percent more materials each year, the potential economic impact would equate to 1,600 new jobs, an additional \$75 million in annual personal income and \$3 million in annual state tax revenue," said SERDC Executive Director Will Sagar.

Future growth in the recycling industry depends on supply assurance, and we all play a critical role. Remember, it's not just about putting things in the recycling bin; it's about putting the proper materials in the bin. Support our local economy by recycling smart!

TO RECYCLE, OR NOT TO RECYCLE?



Recycling plays an important role in responsible resource management. Pitch in to make a difference by always recycling the following items:

FOR THE RECYCLING BIN

- Aluminum, steel and tin cans
- Clean plastic bottles and jugs with neck or pour spouts
- Glass bottles and jars
- Mixed paper (office paper, paper bags, magazines, newspaper and inserts, telephone books, junk mail)
- Empty food boxes and cardboard



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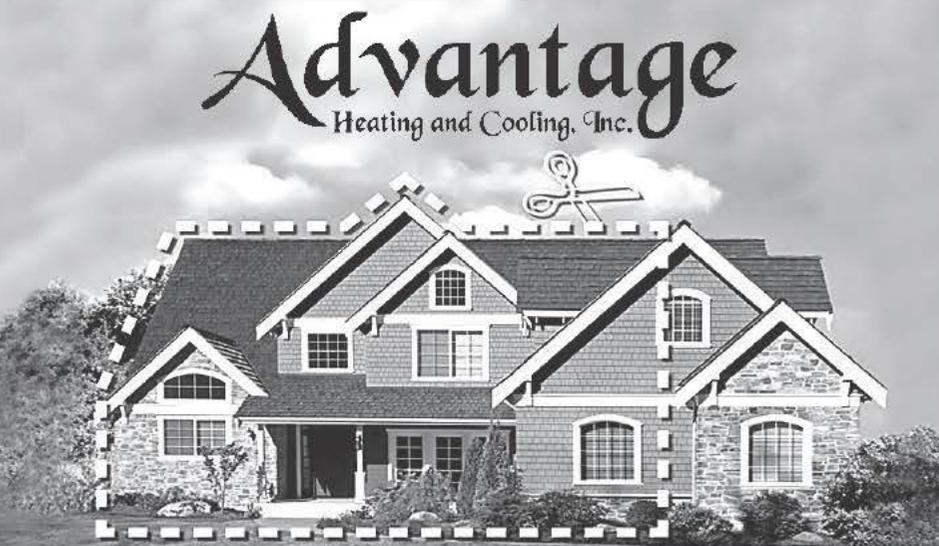
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WIT YOUR OLD ELECTRONICS



Proper electronics recycling is paramount. Electronics contain hazardous waste such as lead, mercury and cadmium. These can be released into the air, soil and water and cause health and environmental risks.

1. Identify working electronics
2. Take broken electronics to your local recycling program or electronics store with an electronics recycling program

GOOD to KNOW WIT YOUR USED PLASTIC BAGS

When plastic bags and film are recycled, the plastic is melted and then reshaped for a number of different reuses including lumber or little pellets which are then used for other plastic products.



1. Identify plastic bags and film
2. Recycle them
3. Recycle them at most grocery stores

Don't forget you can recycle plastic shopping bags, dry cleaning bags, newspaper bags, plastic wrap from toilet paper and paper towels, plastic bags from your vegetables and more!

WIT YOUR HOUSEHOLD HAZARDOUS WASTE

Household hazardous waste (HHW), such as paint, chemicals, CFL lightbulbs, pesticides, etc., cannot be poured down the drain, on the ground, into a storm drain or put out with the trash. Dispose of these according to their type.

1. Identify household hazardous waste
2. Store it in proper containers
3. Take unused HHW materials to a collection site or event!



To learn more about how, what and where to recycle, just askHRgreen.org  /askHRgreen  /HRgreen

transform your yard into an EcoAvenger!

Longer days and warmer temps mean more time in the garden. At last! Before digging in to the same-old/same-old lawn and garden routines, askHRgreen.org challenges you to transform your landscape into an eco-avenger by putting every flower, tree, shrub and blade of grass to work. After all, your yard is not only an expression of you and your family, it's also one of the greatest ways to protect the health of our environment by filtering out stormwater pollution before it enters our local waterways. Come on, show off your "green thumb" this spring by implementing a few (or all!) of the tips below. For more info, visit askHRgreen.org/your-yard.

1 Put your soil to the test.

Before making any lawn care decisions, test your soil to see what nutrients, if any, your lawn and garden are lacking. The results will include a nitrogen recommendation, which is typically higher

than most Hampton Roads lawns need. Gardeners here can often use much less nitrogen to get successful results. If you are mulching your grass clippings back onto your lawn, you shouldn't need to add nitrogen at all.

2 Know your grass.

Warm season grass (preferred for Hampton Roads), such as zoysia, St. Augustine, centipede or Bermuda, should be seeded and fertilized (if needed) in early spring. Cool season grass (not preferred for Hampton Roads), such as fescue, bluegrass or rye, should be seeded in the late summer and fertilized (if needed) in the fall.

3 Aerate your lawn.

Are you aware of the life that lives beneath your lawn? Aerating increases water and oxygen movement, improves rooting, enhances infiltration, increases the activity of soil microorganisms that decompose thatch and helps prevent fertilizer and pesticide run-off. Warm season grass should be aerated in June or July, and cool season grasses should be aerated in August or September.

4 Mow right.

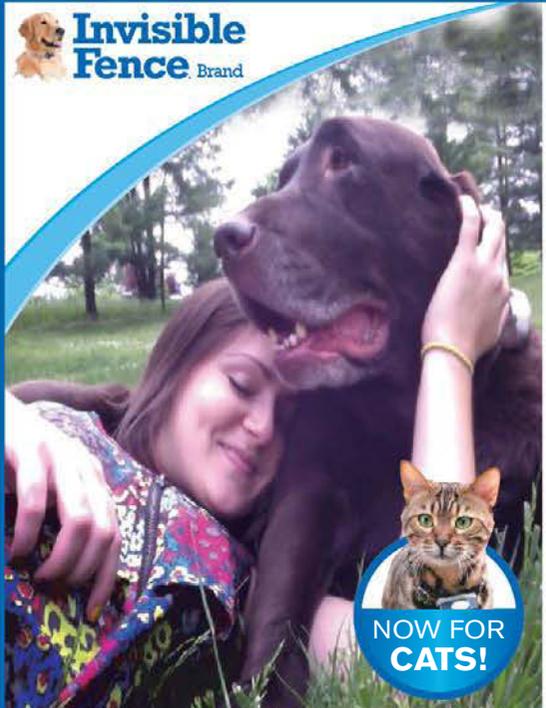
Only one-third of the height of your grass should be removed with each mowing, and always mow with a sharp blade. Leave grass clippings on the lawn to return nitrogen to the soil, naturally.

5 Use natural weed and pest management techniques.

Pull weeds by hand or spray with a vinegar and water solution. Choose repellent plants such as marigolds, which will ward off squash bug, thrips, tomato hornworm and whitefly.

6 Use compost.

Whether you produce your own or purchase compost, adding it to your soil will improve both soil structure and health. That's because compost contains humus, an organic material which assists the soil in holding nutrients, reduces the need for chemical fertilizers, helps prevent nitrogen from leaching into the groundwater and keeps soil erosion at bay.



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What do I do with my OLD ELECTRONICS?

Why shouldn't I pour KITCHEN GREASE down the sink?

WHAT DO I RECYCLE?

How much money can I save by DRINKING TAP WATER?

How can a SOIL TEST save me money?

Where does STORMWATER run off to, anyway?

What's better for FOOD SCRAPS: the garbage disposal or the trash?

to get answers to these important questions, AND MORE, just **askHRgreen.org**

Spring Cleaning

in the Kitchen

Families and friends love to gather in the kitchen. That's where we create delicious meals, chat about the day's events, grab a snack and tidy up before we call it a night. It's also one place where small changes can have a big impact on the environment and your wallet. This year, try incorporating some of these spring greening tips into your spring cleaning routine.



When cleaning up after a meal, remember to keep the fats, oils and grease out of the drain to avoid clogs that could result in a costly visit from the plumber.

- Locate an empty, heat-safe container, like a soup can. When the cooking oils have cooled, scrape these into your container, cover it securely, freeze it and throw the hardened oils away with the trash.
- Skip the garbage disposal and use a sink strainer to catch food scraps. Scrape your leftover food scraps into the trash or compost bin and wipe plates and cookware with an absorbent napkin or paper towel before washing by hand or loading into the dishwasher.
- Oil-based foods that should never go down the drain include lards/shortening, butter/margarine, dairy products, batter, icing, salad dressings and sauces.

Keeping the kitchen clean is a constant battle. Arm yourself with the tools needed to get the job done without paying a fortune for harsh chemicals.

- Baking soda and water will do the trick when it comes to cleaning your kitchen tile or countertops. Need a tougher abrasive? Sprinkle on kosher salt and scrub with a wet cloth or sponge.
- For stains, mildew or grease streaks, simply spray with lemon juice or vinegar, let it sit for a few minutes, then scrub with a brush.
- Save water and energy by only doing full loads in the dishwasher and washing machine. If you're in the market for new appliances, always look for the Energy Star and WaterSense labels.

Cleaning out the pantry can be a daunting task; once you've cleaned it out, remember these tips when it's time to fill'er up:

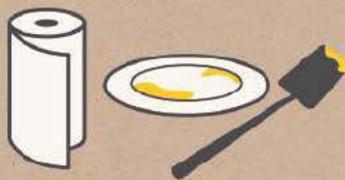
Can the Grease

1 Pour used cooking grease into an empty, heat-safe container, such as a soup can, and 2 store it in the freezer. Once solidified, 3 toss the can into the garbage.



Scrape the Plate

Wipe all pots, pans, dishes and cooking utensils with a paper towel prior to washing to absorb the grease.



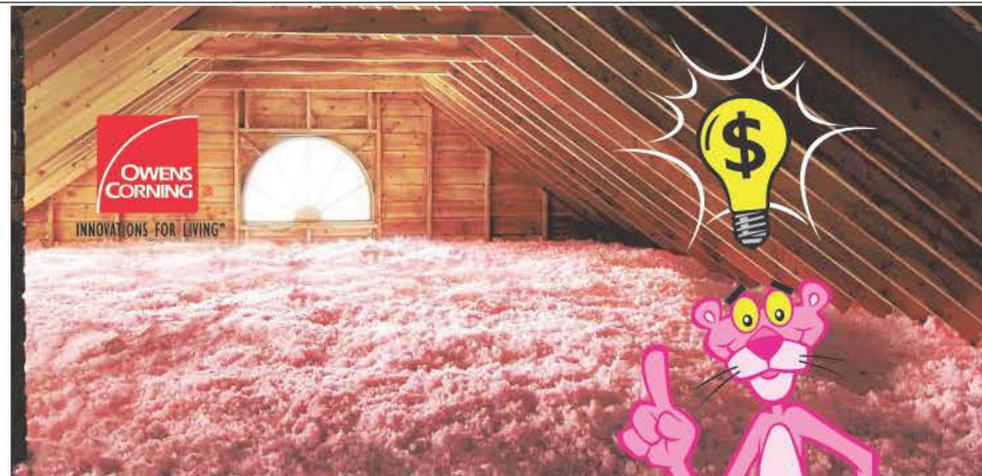
Catch the Scraps

Eliminate using the garbage disposal. Catch food scraps in your sink with a basket or strainer and toss them into the trash.



- Buying in bulk minimizes excess packaging and it's cost-effective too. Whenever possible, try to find items packaged in recycled/recyclable containers.
- You can help support our community by buying fresh from local farmers right here in Hampton Roads whenever possible.
- Quit the bottled water habit. In addition to reducing your carbon footprint, replacing expensive bottled water with clean, safe, tap water is good for your wallet, too!

For more information on ways to keep your kitchen and the rest of your home clean and green, visit askHRgreen.org.



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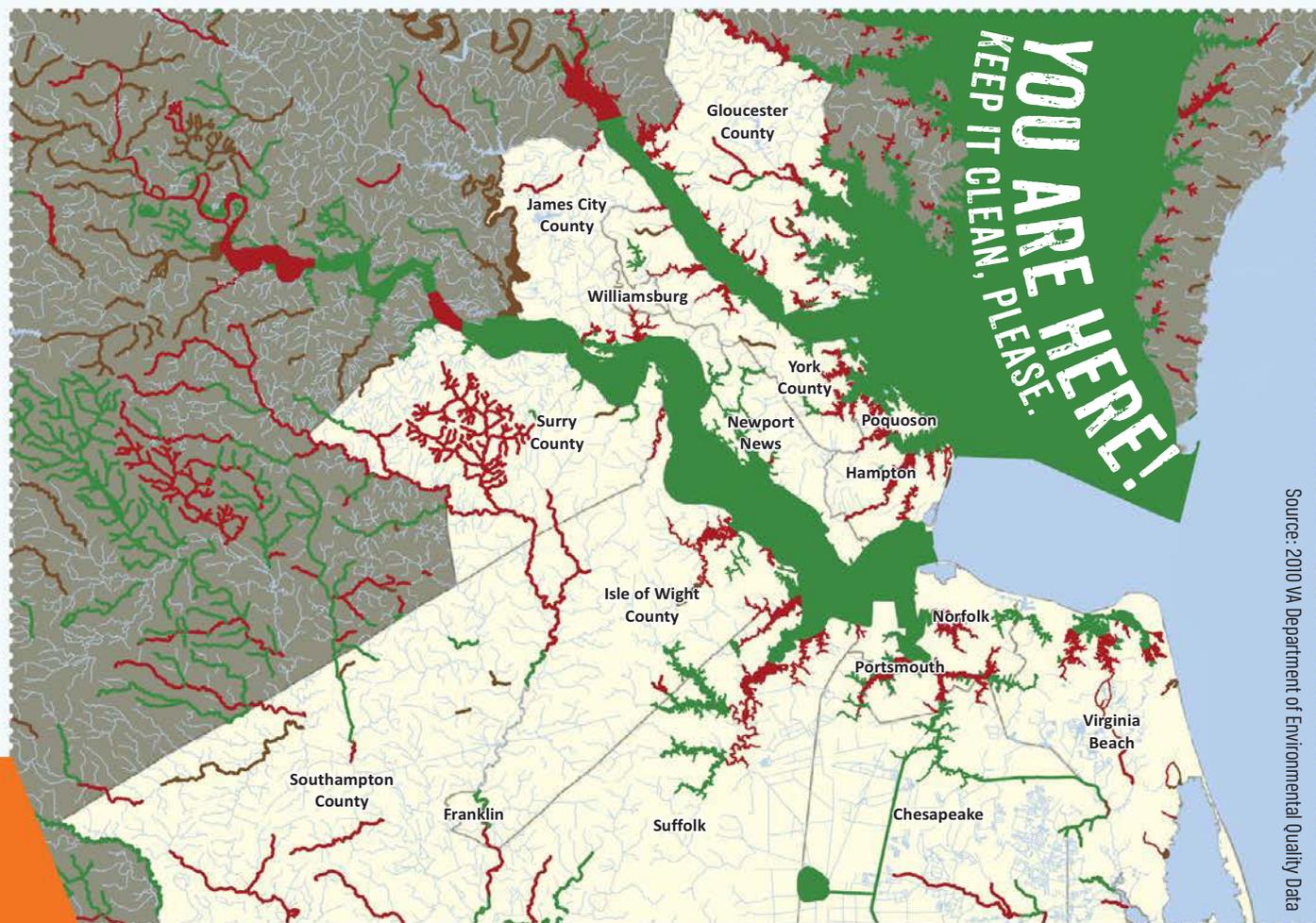


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HOME SWEET FRAGILE HOME

THE TIME TO CLEAN
UP OUR WATERWAYS
IS NOW!



Source: 2010 VA Department of Environmental Quality Data

- Nutrient Impairment
- Bacteria Impairment
- Nutrient and Bacteria Impairment
- Not Impaired for Nutrients or Bacteria

OUR IMPAIRED WATERWAYS

MAJOR OFFENDING POLLUTANTS

PHOSPHOROUS NITROGEN



AGRICULTURAL OPERATIONS

from fertilizer, feed lots, animal waste



WASTEWATER FACILITIES

from treatment and discharge



AIR POLLUTION

from power plants and vehicle exhaust



URBAN AND SUBURBAN RUNOFF

from roadways, development, residential/commercial lawn fertilizers



SEPTIC SYSTEMS

resulting from backups and failures

BACTERIA



SEWAGE DISCHARGE FROM BOATERS



PET & WILDLIFE WASTE



SEPTIC SYSTEMS



SANITARY SEWER OVERFLOWS

Hampton Roads is a region defined by water, from the creeks and tributaries that flow into the Chesapeake Bay, to the recreational and culinary options these watery trails provide. We're known for our beautiful beaches, on-water fun and fresh-caught seafood. But did you know that many of our region's waterways have swimming and shellfish harvesting restrictions because they contain unhealthy levels of bacteria? Or that these waterways, including the Chesapeake Bay, have insufficient levels of dissolved oxygen which cause harm to our aquatic life?

The situation is serious and the time to act is now. Localities are working hard to improve water quality by upgrading wastewater and stormwater infrastructure and installing natural systems to slow the flow of rainwater and filter out pollutants. HRSD (Hampton Roads Sanitation District) is doing its part by upgrading wastewater treatment plants to reduce the amount of nutrients in their discharges to our local waterways. **Are we residents, though, doing enough to protect our unique and vulnerable landscape?**

EVERY ACTION WE TAKE HAS AN IMPACT
ON OUR HOME SWEET HOME

GOOD to DO

STORMWATER POLLUTION

AS RAIN FALLS FROM THE SKY, IT COLLECTS...

AIR POLLUTION

from power plants and vehicle exhaust

GUTTER RUNOFF

picks up leaves, sediment left behind in gutters

LAWN RUNOFF

picks up soil, pet waste, fertilizer, trash

DRIVEWAY RUNOFF

picks up oil, gasoline, sediment, trash

ROAD RUNOFF

picks up oil, gasoline, sediment, trash, tar

STORM DRAIN

All water goes to a storm drain which leads to...

RIVER, LAKE OR OCEAN

By the time the rain makes it to the ocean, it has picked up pollutants from hundreds of sources.

GETTING OUR LOCAL WATERWAYS BACK ON TRACK

MANY HAMPTON ROADS WATERWAYS CONTAIN TOO MUCH SEDIMENT, NITROGEN, PHOSPHOROUS AND BACTERIA.

To combat this, the state has assigned **Total Maximum Daily Loads (TMDL)** to many of our waterways. A TMDL identifies how much pollutant a body of water can receive while still meeting water quality standards. You may have heard it called a "pollution diet."

In order to meet the TMDLs, state agencies are working with farmers and wastewater facilities to implement projects that reduce nutrient pollution; localities are undertaking capital improvement projects; and nonprofit river groups are working with private property owners to implement natural methods to manage rainfall.

Most of our waterways are part of the Chesapeake Bay Watershed. Therefore, our impaired waterways also are contributing to the poor health of the Chesapeake Bay, which has also been assigned a TMDL that every state within the watershed is working to achieve.

YOU'RE CLOSER THAN YOU THINK!

5 MIN WALK

10 MIN WALK

15 MIN WALK

20 MIN WALK



Even though you may not be able to see the Chesapeake Bay from your back yard, you're closer than you think! No matter where you live in the Chesapeake Bay watershed, it would take about 15 minutes to walk to a stream, river or body of water that flows into the Chesapeake Bay.

WHAT CAN YOU DO TO CLEAN UP OUR WATERWAYS?

WE'RE GLAD YOU ASKED!



SCOOP, BAG, AND TRASH DOG WASTE



SEED BARE SPOTS IN THE YARD



PUT CIGARETTE BUTTS IN THE TRASH



DON'T FEED THE WILDLIFE



TEST SOIL BEFORE FERTILIZING



PLANT MORE NATIVE PLANTS



KEEP GRASS AND YARD WASTE OUT OF THE STREET

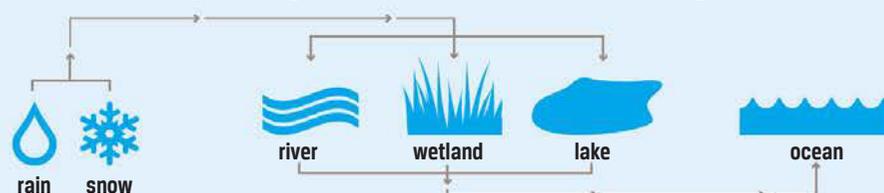


DON'T TREAT THE TOILET LIKE A WASTE BASKET



CAN COOKING GREASE, SCRAPE LEFTOVER FOOD INTO THE TRASH AND CATCH FOOD SCRAPS IN THE SINK

WHAT IS A WATERSHED?



When it rains or when snow melts, the precipitation flows across the ground's surface and begins to make its way to a nearby tributary, wetland, river or lake, and then on to a larger body of water, such as a bay or ocean. The land that the water flows across on this journey and the waterways that receive it are called a watershed.



theGardenGuru

Jim Orband, a retired Virginia Cooperative Extension Horticulturist, has earned numerous awards for community education, including the prestigious Virginia Tech Alumni Award for Extension Excellence. He was kind enough to come in from the garden when askHRgreen.org caught up with him this month.

With spring lawn care, where should I start?

First, assess your landscape and develop a plan to take care of specific situations that need help. For example, you might look at an area where the soil is bare. Something must be wrong, and it is preventing the establishment of a turf. So make a plan that might include: soil testing, soil amendments and studying different ground covers to stabilize the soil.

How do I know if I need to fertilize?

You'll know by testing your soil. Soil test kits can be obtained from your local Cooperative Extension Office. Complete the required information, collect the

soil sample as instructed, and mail with a check to the address on the box. Results provide recommendations for soil amendments to help you make the right decisions for your lawn.

Do you have any tips for selecting and arranging plants?

Begin by studying the area that you intend to plant. Observe the amount of sun the area receives at different times of day and whether the sun is filtered by trees or buildings. Monitor the area for wind conditions. Then observe if the soil drains well or if water pools and the area is soggy. These factors will help you select the right plants. There will be pretty

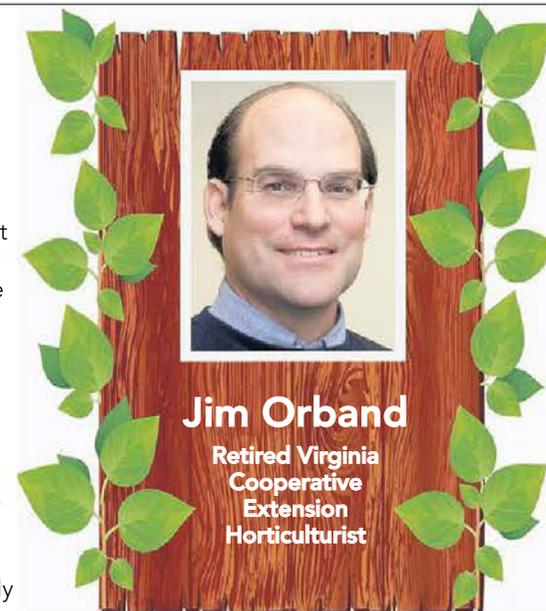
flowering plants at garden centers that will catch your eye. Stay the course and select plants that will adapt to the conditions you identified.

Are there any natural pest control techniques I can use?

One method is proper pruning because it allows light penetration and increases the air movement in the plant, making it difficult for insects and diseases to live. Another is to use predatory insects. Lady beetles, or lady bugs, eat aphids, scale insects, thrips, mealybugs and mites—pests all gardeners despise. When it's time to control an insect, identify it, then try to find an alternate control rather than a pesticide.

Why are soil splash marks on the outside of my house and garage?

These marks result from rain hitting a hard surface and causing the loose particles (sand, organic matter, etc) to bounce up and land on the building. This usually occurs in



Jim Orband

Retired Virginia
Cooperative
Extension
Horticulturist

places where the soil is bare. Using a ground cover will reduce this occurrence. Mulch is a short-lived solution and will become part of the problem in the future. Another option is to use large-sized stones or river rock in the drip area. The idea is to reduce the loose soil surfaces close to your home's exterior.

For more lawn and garden advice, visit www.askHRgreen.org/your-yard

GOOD to KNOW

EVERY ACTION WE TAKE HAS AN IMPACT ON OUR HOME SWEET FRAGILE HOME

E



T A E



E T



AN THAT MEANS



Flush anything other than toilet paper and human waste down the toilet

Sewer pipes to become blocked and raw sewage to back up in the street

Raw sewage entering local waterways via storm drains

We cannot swim at local beaches or eat local seafood



Rake or blow leaves into the street

Organic material to be carried to local waterways via a storm drain

Leaves and grass decomposing, which uses up dissolved oxygen needed by fish and crabs

A decline in the population of local fish and crabs



Over fertilize your lawn

Nitrogen and phosphorus to be carried to local waterways via a storm drain

Algae blooms growing quickly

Waterways become discolored, smell foul and are not desirable for swimming or boating. Underwater grasses cannot thrive.



Leave bare spots in your yard

Dirt to be carried to local waterways via a storm drain

Waterways becoming cloudy from excessive sediment

A decline in the population of fish, oysters and other aquatic life



To learn more about our impact on local waterways, just askHRgreen.org



Dear Garbage Disposal,

I thought we had something special. I thought we met each other's needs. I cooked for you; you cleaned for me. I peeled potatoes; you ate the peelings. We shared every meal.

Now, I can barely look at you. Those food scraps? They weren't disappearing; they're still here! And now I'm left with pipes full of memories of you, shreds from every breakfast, lunch and dinner. There they linger—built up from our years together, lining my pipe walls just waiting to block the flow of wastewater and backup into my sink.

We're through. No more leftovers for you! Not one green bean or black-eyed pea, not one chunk of a chicken tender or spoonful of saffron rice will ever cross your path again. Not on my watch. From now on, food scraps go where they belong—in the trash or compost bin. And meal prep and cleanup consists of washing only soap suds, not potato spuds, down the drain. I'm wiping the slate clean, and I'm wiping my dishes and scraping them into the trash before washing. And those stuck-on food scraps? I'd catch them with a sink strainer any day of the week before I'd ever let you claim another victim in your sticky web of ground-up grit and grime.

In the words of Taylor Swift, "We are never, ever getting back together."

Your Ex,
Katie

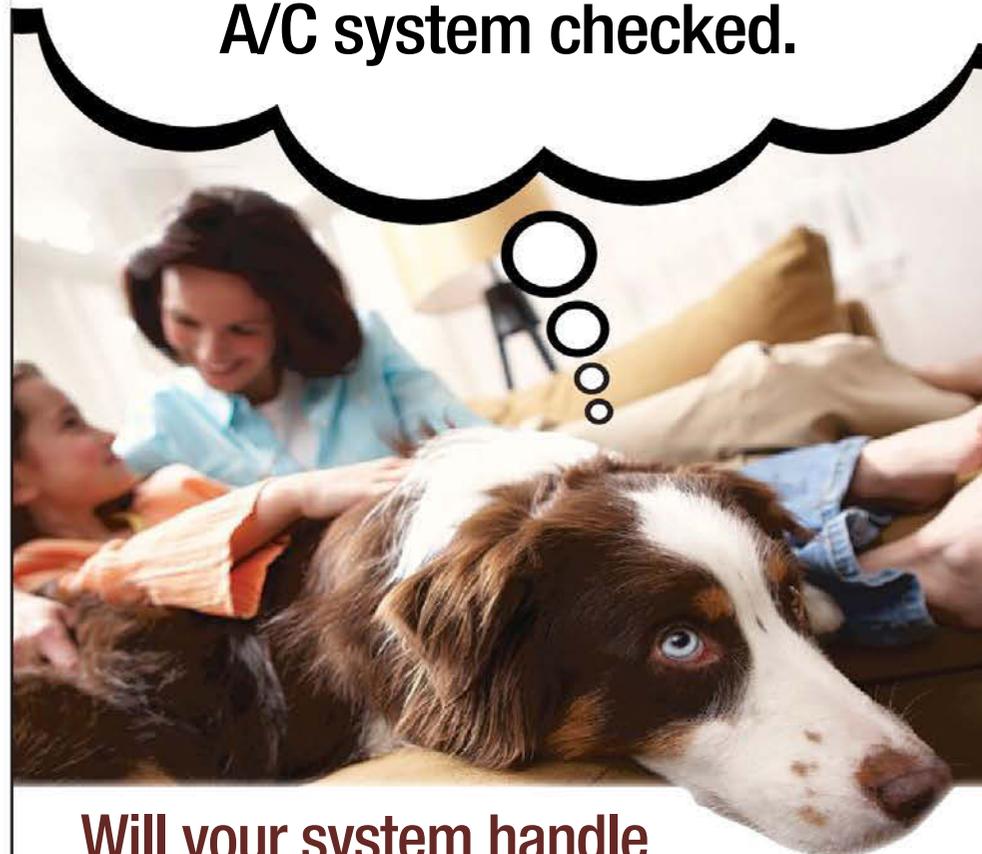


find your InnerGreen



1. Choose tap, not bottled water. Good for the landfill. Good for your wallet.
2. BYOB when you shop. That's bag, by the way.
3. Recycle, recycle, recycle.
4. Buy fresh, local produce. Local farmers will thank you.
5. Get involved. Join a community clean-up.
6. Cut the fat. Dispose of cooking fats, oils and grease in the trash.
7. Go native in your landscape. Native plants and trees, that is.
8. Reduce paper. Communicate electronically.
9. Speaking of electronics, please recycle them.
10. For your next party, get out the good dishes and cloth napkins, instead of paper. (Are we invited?)

I wonder if she remembered to call **SMI** to get the A/C system checked.



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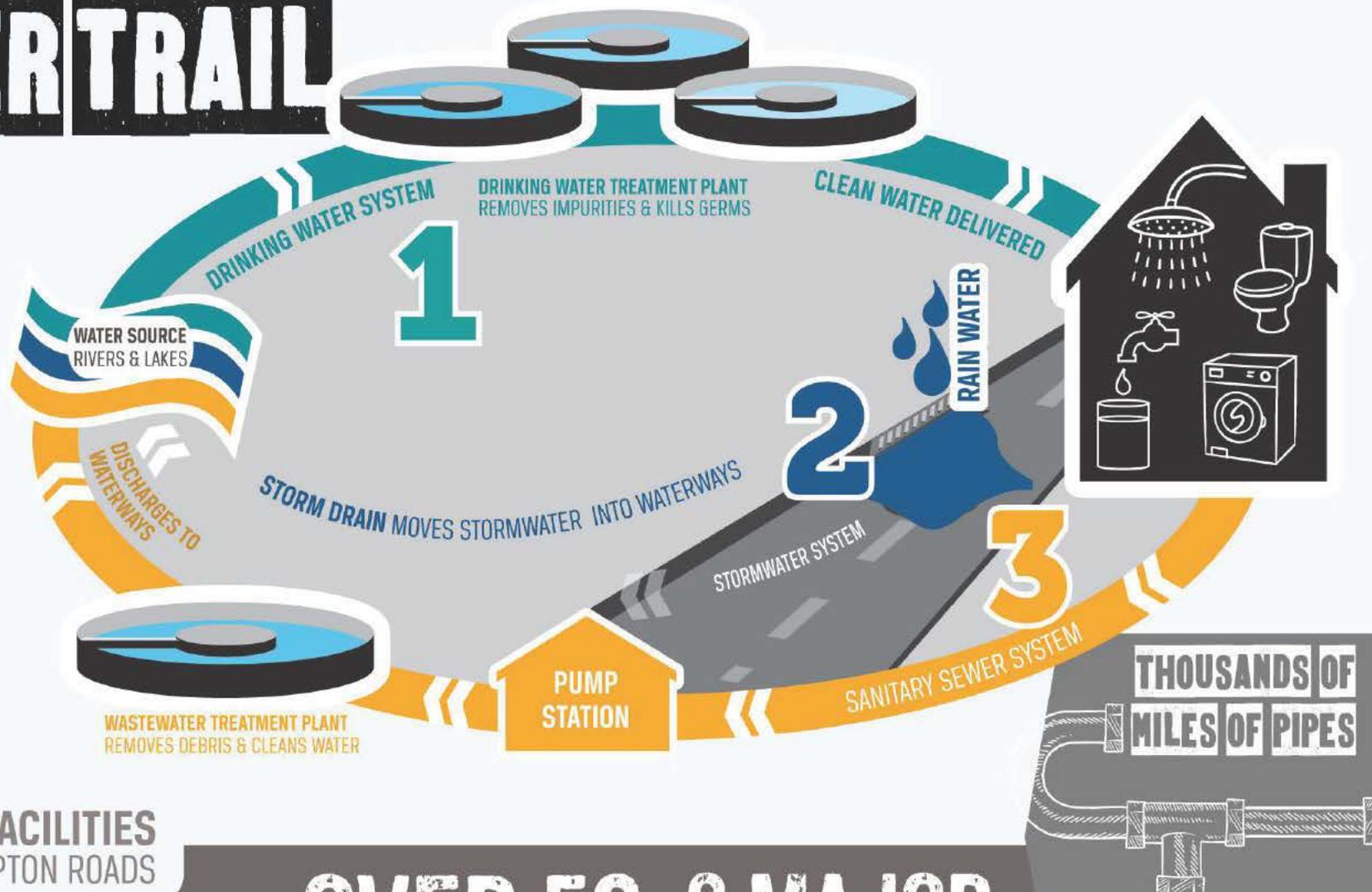
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FOLLOW THE WATER TRAIL

Over 1.5 million people in Hampton Roads are served by public water systems. Daily water use in our region is approximately 135 million gallons per day (MGD).

You've flushed a toilet, let the faucet flow and watched water rush down the street during a rainstorm. But do you really understand where our water comes from—and where it goes? In Hampton Roads, three very important water systems make up our regional infrastructure. Each system has a separate and specific purpose from the others.



OF FACILITIES IN HAMPTON ROADS

MORE THAN 1,400
SANITARY SEWER PUMPING STATIONS

OVER 50
WATER PUMPING STATIONS

9 MAJOR
WASTEWATER TREATMENT PLANTS
249 MILLION GALLONS PER DAY (MGD)

Hampton Roads has more than 6,500 miles of water distribution pipeline and over 5,800 miles of sanitary sewer lines.

OVERSEEING PROJECTS AND KEEPING IT CLEAN

Over the last decade, Hampton Roads communities constructed over 1,100 stormwater management projects.

These projects involve retrofitting areas, installing stormwater best management practices (for example: retention ponds) or restoration activities. This represents an investment of nearly \$200 million.

Projects of this scale and magnitude continue today.

On average, local governments clean more than 55,000 catch basins, service more than 700 miles of drainage facilities each year and sweep nearly 90,000 miles of streets. These activities prevent an estimated 40,000 tons of material from polluting the region's waterways annually.

COMPARATIVELY, WATER AND SEWER SERVICE IS A BARGAIN IN HAMPTON ROADS

5,000 GALLONS = \$75 PER MONTH | \$900 PER YEAR

2 SMARTPHONES WITH DATA PLANS = \$140 PER MONTH | \$1,680 PER YEAR

1 DRINKING WATER SYSTEM

BRINGS SAFE, CLEAN WATER TO OUR HOMES



HOW IT WORKS

Hampton Roads' raw water sources include aquifers, reservoirs, lakes and rivers. Most of our drinking water comes from surface water which is pumped to water treatment plants. During the treatment process, the water passes through screens, then chemicals are added to remove impurities. Next, the clarified water is disinfected to kill bacteria, viruses and other microorganisms, then filtered to remove any remaining particles. Finally, a secondary disinfectant is added to maintain disinfection throughout the pipe system. Once the water is cleaned and safe to drink, it is pumped through a network of pipes and storage facilities to homes and businesses.

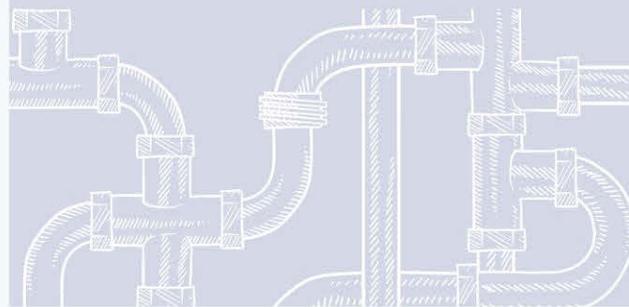
2 STORMWATER SYSTEM

TAKES RAIN WATER AWAY FROM HOMES AND STREETS THROUGH THE STORMWATER OPENINGS YOU SEE ON YOUR NEIGHBORHOOD CURB OR THE GRATES ON PUBLIC STREETS



HOW IT WORKS

Rainwater runoff from rooftops, gutters and lawns is directed into the stormwater system. The drain usually looks like a small opening in the curb or a grate in the pavement. Unlike the sanitary sewer system, stormwater is never treated and flows directly to our local waterways.



3 SANITARY SEWER SYSTEM

TAKES WATER AWAY FROM OUR HOMES WHEN WE FLUSH THE COMMODE, TAKE A SHOWER OR OTHERWISE RUN WATER DOWN OUR DRAINS. THIS WATER IS KNOWN AS WASTEWATER



HOW IT WORKS

Wastewater leaving our homes travels through miles and miles of pipes to nine treatment plants across the region. Because of the flat landscape, sewer pumping stations are used to push the wastewater to the treatment plants. At the treatment facility, debris is screened and settled out of the wastewater. Bacteria and other small organisms then consume the waste and help clean the water. Finally, it is disinfected before being released back into local waterways. Some treatment plants add an extra step to remove nutrients to help protect local waterways.



OUR AGING INFRASTRUCTURE

Driving along the region's roadways, it is easy to see the wear and tear that time and the elements place on our highway infrastructure. But underneath those same roads lie thousands of miles of pipeline that make up our drinking water, sanitary sewer and stormwater systems. Our community is literally built on top of this vast infrastructure. These systems, and the people who maintain them, work silently and reliably

to keep the water flowing. In fact, the systems work so well, we often take them for granted. Because this infrastructure is out of sight, we are less likely to appreciate the need for maintenance. But just like our road systems, their proper functioning is essential to ensuring a high quality of life here in Hampton Roads.

The U.S. Government Accountability Office has noted that water and wastewater utilities do not generate enough revenue from user rates to cover their full service cost. The result of this shortfall

is postponed maintenance and delayed replacement of our infrastructure. This is a reality in Hampton Roads and without action now, we risk increased service disruptions, water main breaks and sanitary sewer overflows. Beyond these inconveniences, deteriorating infrastructure poses a threat to the environment, our local economy and public health.

GOOD to DO

WHAT CAN YOU DO?

DON'T TAKE WATER FOR GRANTED.

Water is life. The water we use now is all we'll ever have, so we must use it wisely. You can conserve in small ways that make a big difference to preserve and protect our water resources.

SUPPORT AND INVEST IN INFRASTRUCTURE.

It is critical that we support the investment necessary to replace our aging infrastructure. Our quality of life and health cannot be sustained without continued and improved access to clean drinking water and sanitation services.

THINK BEFORE YOU FLUSH.

It's a toilet, not a trash can! Everything you send down the drain ends up at your local wastewater treatment plant.

STAY INFORMED ABOUT WATER-RELATED ISSUES.

Learn more about what happens to the water you drink and use. Start by reading and understanding your water and wastewater bill and your locality's annual water quality report.

Happy Birthday Nearly Two Years and Counting askHRgreen.org!



askHRgreen.org turns two this summer—and what a couple of fun years it has been. The go-to source for all things green in Hampton Roads, askHRgreen.org began as a region-wide public awareness and education campaign. What it is becoming is a local green movement that is gaining momentum among residents from Williamsburg to Virginia Beach, and from Isle of Wight County to Poquoson. Julia B. Hillegass is delighted. On behalf of the Hampton Roads Planning District Commission (HRPDC), she oversees askHRgreen.org, working with municipal representatives from all 16 Hampton Roads cities and counties, as well as HRSD. askHRgreen.org was top of mind when *Green Living* caught up with Julia this month.

askHRgreen.org will soon mark its second anniversary. Why was it developed?

We developed askHRgreen.org to help Hampton Roads residents find their inner green with just the click of a mouse. For years, the HRPDC facilitated a variety

of environmental education efforts to assist localities in notifying residents and meeting regulatory requirements. Developing consistent regional messaging has always afforded localities an economy of scale that they could not otherwise achieve. It was smarter to pool resources than to have a small, scattered approach.

Couple that with various emerging issues beginning to overlap, like sanitary sewer overflows and stormwater pollution, and we knew the time was right for the development of an umbrella brand to tie all of the messages together. Then, voila! askHRgreen.org was born.

How has it evolved?

We began with offering just the green basics. What we found was that people then craved more information. Once you show someone an easy, green alternative, they get hooked and want to add something else. Now we make the connections for people, by illustrating not just what they can do, but why they should care and how their actions impact the larger environment.

What site features do you believe aide residents the most?

Well, we're true to our name—if you have a question, you can literally askHRgreen.org! Questions are filtered using information on the site. If it is a question we haven't addressed, you can send us the question through the site, and someone from our staff will find an answer. Another great feature of our site is the event listings. All of our member localities and partners can post their environmental activities so that

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residents can find the green events closest to where they work, live and play.

Does askHRgreen.org provide exposure for other like-minded green groups?

Absolutely! We welcome calendar submissions for related events, blog comments, there's a form for watershed restoration groups to send us their info to share, and we welcome your comments. A conversation about keeping the environment clean is a good one to have!

Who handles the "Let's Talk Green" blog featured on the site?

Our blog content is written by a team of local government committee members, HRPDC staff, long-time partners and occasional guest bloggers. We strive to keep the content informative, yet entertaining, and we hope to elevate the green conversation in Hampton Roads.

In addition to the blog, where else can you find askHRgreen.org?

You can like us on Facebook, follow on Twitter, tune in to YouTube and pin us on Pinterest. We're very social.

Is there information to help educators?

Once you show someone an easy, green alternative, they get hooked and want to add something else.

There is a whole section of the website devoted to the classroom. Educators can download our *Green Learning* guide (written and provided for the region's sixth-grade students), various lesson plans and even apply for mini-grants to fund innovative environmental projects for their classes or environmental clubs.

Are there site features that Hampton Roads residents would be surprised to find?

In general, we're hearing that 1) residents are impressed with the variety of information that we are able to place literally at their fingertips and

2) the fact that it is so customized for Hampton Roads. In addition to news for residents and educators, we have great material specific to greening your business.

What's on tap for askHRgreen.org in its third year?

We hope to continue this *Green Living* series and develop another *Green Learning* classroom publication. We're looking for

creative ways to showcase our partners and develop more regional askHRgreen.org champions to help us spread the word. Our messaging is becoming more sophisticated in that we're helping people to make the connections between their actions, the environment and improving their lives. It's not enough to encourage action because it's the right thing to do; we need to tell a story, show people why they should care and why behavior change is important to the environment and their personal quality of life.



What is your favorite website page?

By far, my favorite page is our *Green Learning* guide. Although it is targeted to school-aged children, I think most adults will learn a thing or two as well! The photos and info-graphics tell a compelling story of how easy it is to make a positive impact on the environment. Traditional and non-traditional educators, and especially students, have given it rave reviews. It can easily be used to start a family discussion around the dinner table.

GOOD to KNOW

WHAT NOT TO FLUSH

**DISPOSABLE
"FLUSHABLE" WIPES**



Regardless of what the packaging may say, if it's not toilet paper it belongs in the trash, not down the drain where it clogs your pipes.

MEDICATIONS



Expired or unwanted medications should never be flushed or poured down the sink. Wastewater treatment plants are not designed to remove medications.

TRASH



The toilet is not a wastebasket. You'll save your pipes and lots of water by putting trash (paper towels, cotton swabs, feminine hygiene products, etc.) where it belongs.

PLEASE FLUSH RESPONSIBLY » ONLY YOUR PERSONAL CONTRIBUTIONS

To learn more about what not to flush, or proper disposal of medications, just askHRgreen.org /askHRgreen /HRgreen

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Pollution Prevention and Spill Response for Municipal Operations

Participant Expectations and Training Format

- Silence phones and electronic devices
- Breaks will be taken as needed
- Active participation is encouraged



Training Objectives

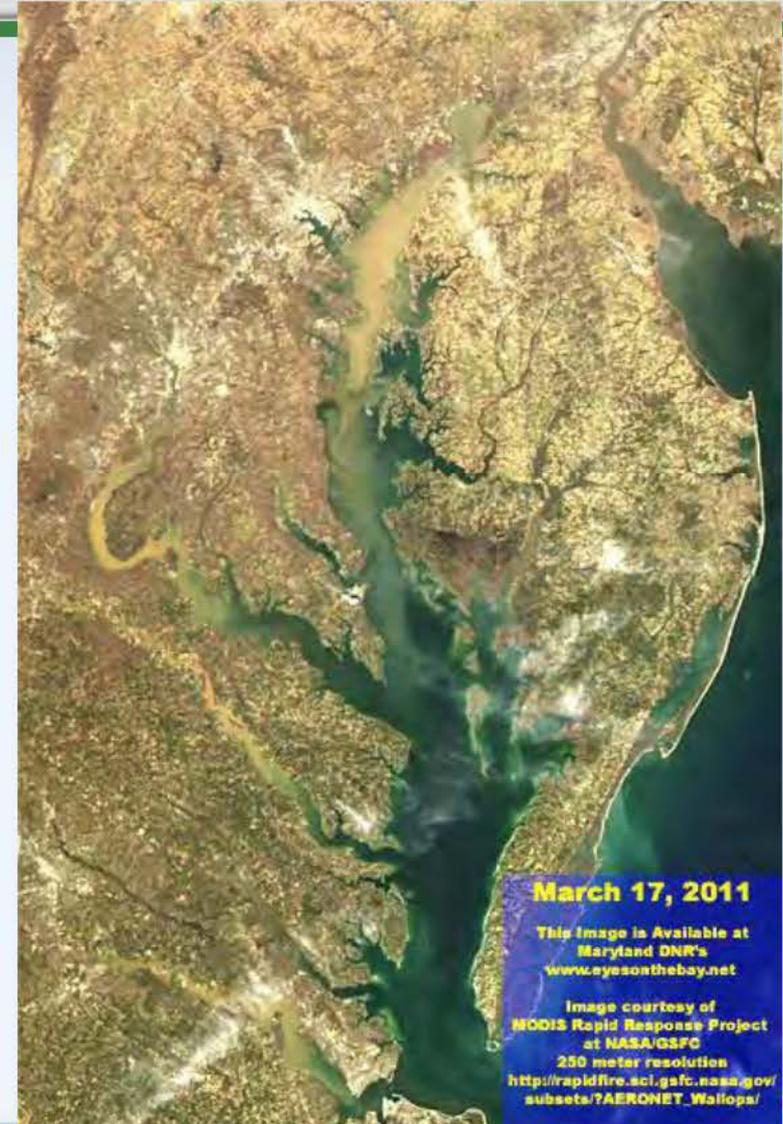
- **Pollution Prevention / Good Housekeeping Program**
 - Identify common pollutant sources from municipal operations
 - Identify and implement best management practices for preventing stormwater pollution
 - Monitor the effectiveness of the program
- **Spill Prevention and Response**
 - Spill Prevention, Control and Countermeasure (SPCC) Plans
 - Implement an effective spill prevention and control program
 - Understand spill hazards and safe response actions

Hampton Roads Water Resources

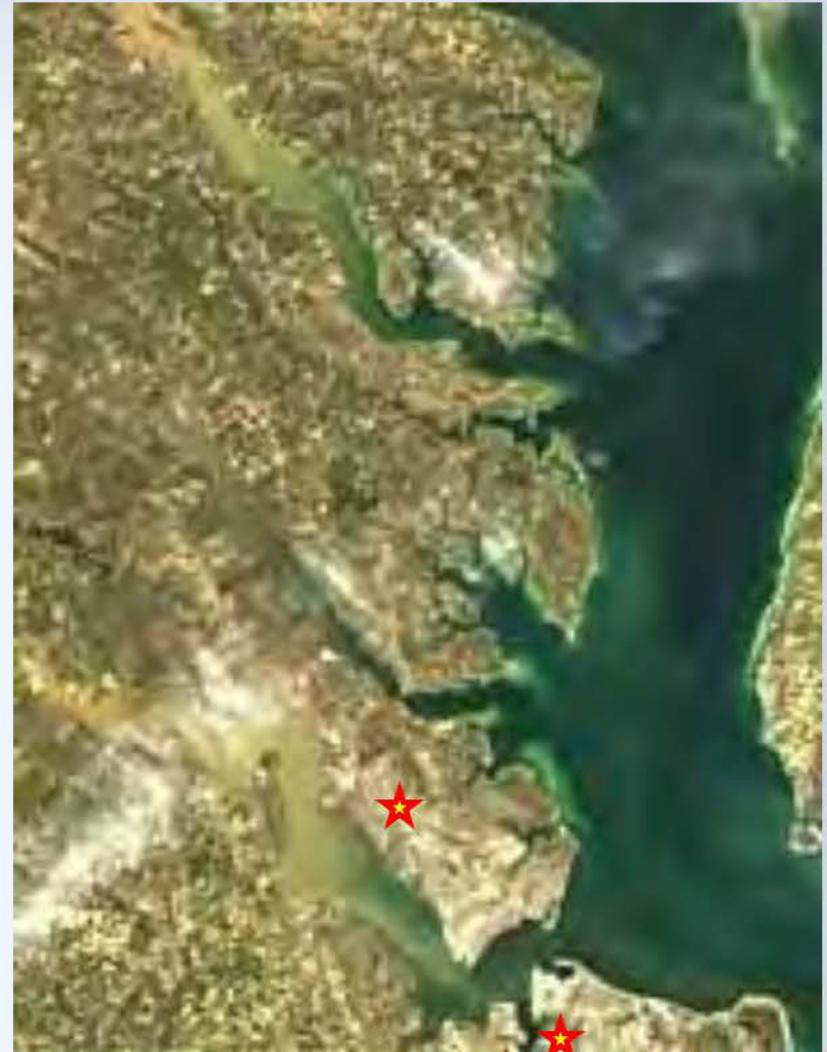
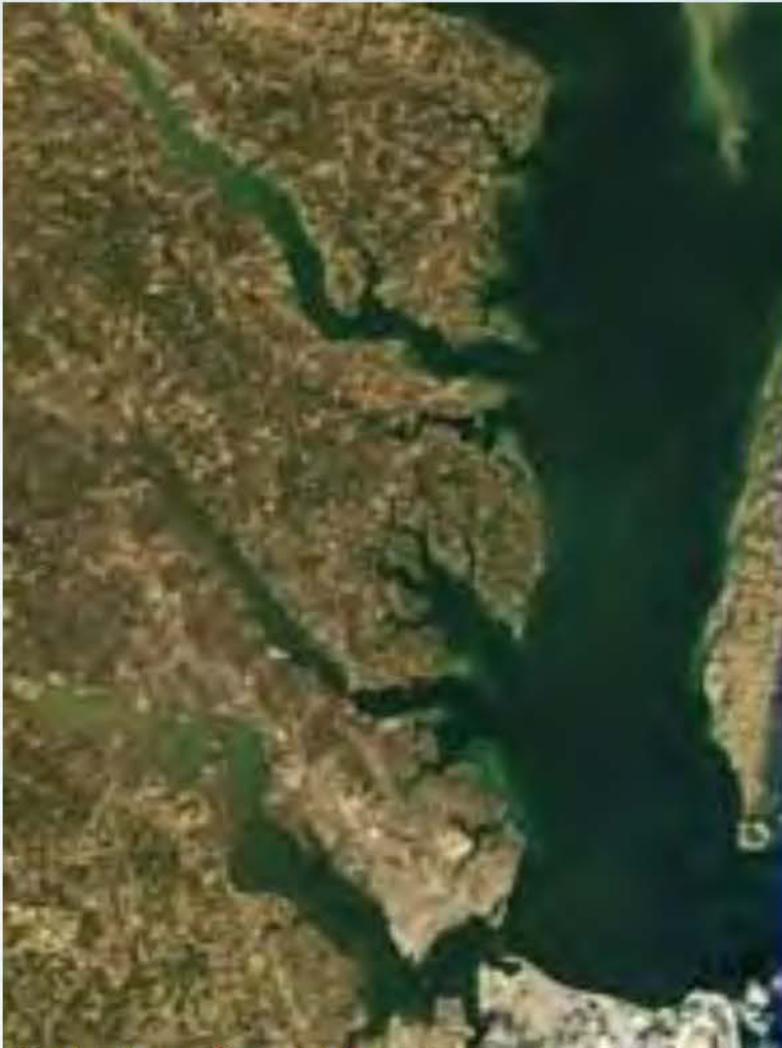


Hampton Roads Planning District Commission
723 Woodlake Drive
Chesapeake, VA 23320
757-420-8300

Pollution Effects on Local Water Resources



Pollution Effects on Local Water Resources



Laws and Regulations to Protect Water Resources

Laws

- **Federal - Clean Water Act**
- **Code of Virginia: Title 62.1 - Waters of the State, Ports and Harbors.**
 - **State Water Resources Law**
 - **State Water Control Law**
 - **Chesapeake Bay and Virginia Waters Clean-Up and Oversight Act**

Laws and Regulations to Protect Water Resources

Regulations

Title 4 – Conservation and Natural Resources

Agency 50 – Virginia Soil and Water Conservation Board

Chapter 60 – Virginia Stormwater Management Program (VSMP) Permit Regulations

Title 9 – Environment

Agency 25 – State Water Control Board

Chapter 31 – Virginia Pollutant Discharge Elimination System (VPDES) Permit Regulation

Virginia MS4 Permit Requirements

- **Minimum Measure #6: Pollution Prevention/Good Housekeeping for Municipal Operations**
- **MM 6a: Operations and Maintenance *Activities***
- **Develop and implement *written procedures* designed to minimize or prevent pollutant discharge from:**
 - daily operations such as road, street, and parking lot maintenance
 - equipment maintenance
 - the application, storage, transport, and disposal of pesticides, herbicides, and fertilizers

Virginia MS4 Permit Requirements

- At a minimum, the **written procedures** shall be designed to:
 - Prevent illicit discharges
 - Ensure the proper disposal of waste materials
 - Prevent the discharge of municipal vehicle wash water/wastewater into the MS4 without authorization under a separate VPDES permit
 - Require BMPs when discharging water pumped from utility construction and maintenance activities
 - Minimize the pollutants in stormwater runoff from bulk storage areas
 - Prevent pollutant discharge from leaking municipal automobiles and equipment
 - Ensure that the application of materials, including fertilizers and pesticides, is conducted in accordance with the manufacturer's recommendations

Virginia MS4 Permit Requirements

- **Minimum Measure #6b: Municipal *Facility* Pollution Prevention and Good Housekeeping**
 - composting facilities
 - equipment storage and maintenance facilities
 - materials storage yards
 - pesticide storage facilities
 - public works yards
 - recycling facilities
 - salt storage facilities
 - solid waste handling and transfer facilities
 - vehicle storage and maintenance yards

Virginia MS4 Permit Requirements

- Identify which of the municipal high-priority facilities have a high potential of chemicals or other materials to be discharged in stormwater.
- Develop and implement specific stormwater pollution prevention plans (SWPPPs) for all high-priority facilities identified as having a high potential for the discharge of chemicals and other materials in stormwater

Pollution Prevention and Good Housekeeping for Municipal Operations



Developing a P2/Good Housekeeping Program

- **Step 1: Identify the pollutant sources and pollutants**
- **Step 2: Identify best management practices to prevent the discharge of pollutants**
- **Step 3: Develop an implementation and monitoring plan**



Common Pollutant Source Areas and Activities

- Vehicle and equipment parking/storage
- Vehicle and equipment fueling
- Vehicle and equipment maintenance and repair
- Vehicle and equipment washing and steam cleaning
- Waste handling and disposal
- Buildings and grounds maintenance

Common Pollutant Source Areas and Activities

- **Outdoor Loading and Unloading of Materials**
- **Outdoor Container Storage of Liquids**
- **Outdoor Storage of Bulk Materials**
- **Outdoor Process Equipment**
- **Landscape Maintenance**

Pollutants from Municipal Operations

- Sediment
- Nutrients
- Metals
- Hydrocarbons
- Pesticides
- Trash
- Bacterial
- Oil & Grease
- Toxins
- Organics

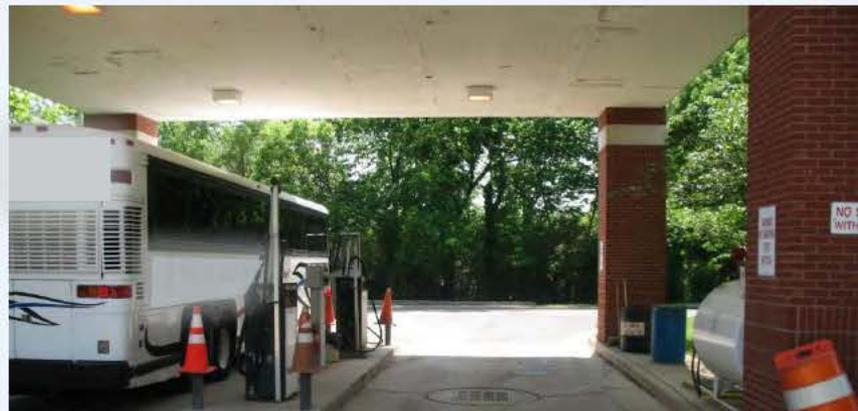
Step 1: Identify Pollutant Sources

- **Inspect all outdoor areas of your facility or area of operations**
- **Note hotspot activities – storage, loading/unloading , maintenance, fueling, waste handling, grounds maintenance, etc.**
- **Look for evidence of pollutants – sediment trails, oily deposits and stains, loose materials, dead vegetation, etc.**

Vehicle and equipment parking/storage



Vehicle and equipment fueling



Waste handling and disposal



Outdoor Container/Equipment Storage



Outdoor Material Storage



Bulk Material Storage



Bulk Material Storage



Step 2: Identify best management practices to prevent the discharge of pollutants

- **Identify existing BMPs**
- **Identify drivers for the existing BMPs**
 - Existing SWPPP
 - Standard Operating Procedure
 - Local ordinance
 - Departmental policy

Step 2: Identify best management practices to prevent the discharge of pollutants (cont.)

- **Identify new BMPs**
- **P2/Good Housekeeping BMPs should be focused on:**
 - **Behavioral/management changes**
 - **Non-structural practices**

Step 2: Identify best management practices to prevent the discharge of pollutants (cont.)

- **BMP categories to consider:**
 - **Source elimination**
 - **Source reduction/inventory control**
 - **Storage/work practices**
 - **Inspection and maintenance**
 - **Spill prevention and control**
 - **Training**

Vehicle and equipment parking/storage



Vehicle Fueling and Washing



Bulk Material Storage



Outdoor Material Storage



Outdoor Material Storage



Outdoor Container Storage



Outdoor Container Storage



Waste handling and disposal



Step 3: Develop an implementation and monitoring plan

• Implementation Plan

- Develop measurable goals and a schedule for implementing pollution prevention and good housekeeping BMPs
- The goals must have a yardstick for measuring effectiveness and progress towards achievement
 - Example: number of employees trained, number of inspections performed, frequency of sweeping reduced, etc.
- Include a recordkeeping system

Step 3: Develop an implementation and monitoring plan

- **Examples of measurable goals:**
 - **Provide containment for drum storage areas**
 - **Implement weekly exterior inspections**
 - **Remove/recycle scrap metal and equipment from boneyard**
 - **Provide spill kits and waste absorbent containers at fueling stations**
 - **Develop material inventories**
 - **Develop training program**

Step 3: Develop an implementation and monitoring plan

• Monitoring Plan

- Conduct annual inspections
 - Confirm that BMPs have been implemented
 - Look for evidence of effectiveness
- Conduct an annual implementation plan evaluation
 - Review routine inspection records; look for trends and improvements
 - Review training records
- Other methods to consider: surveys, storm water monitoring

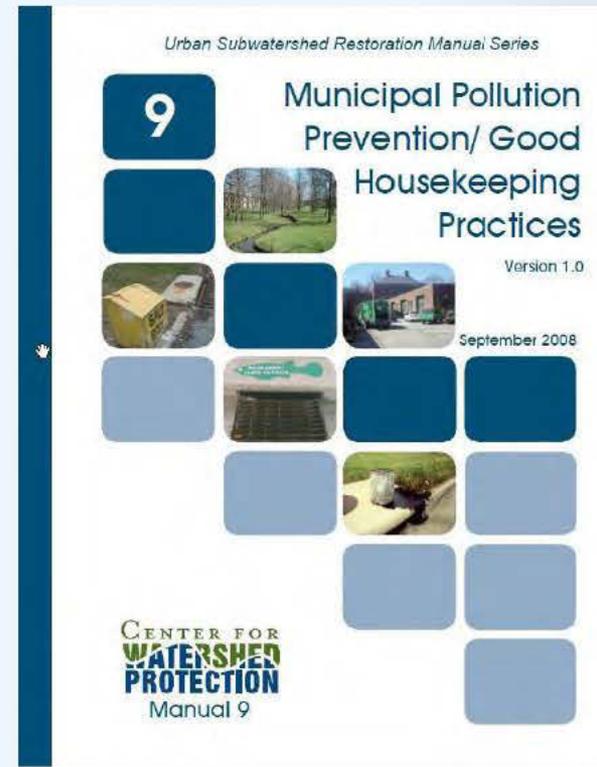
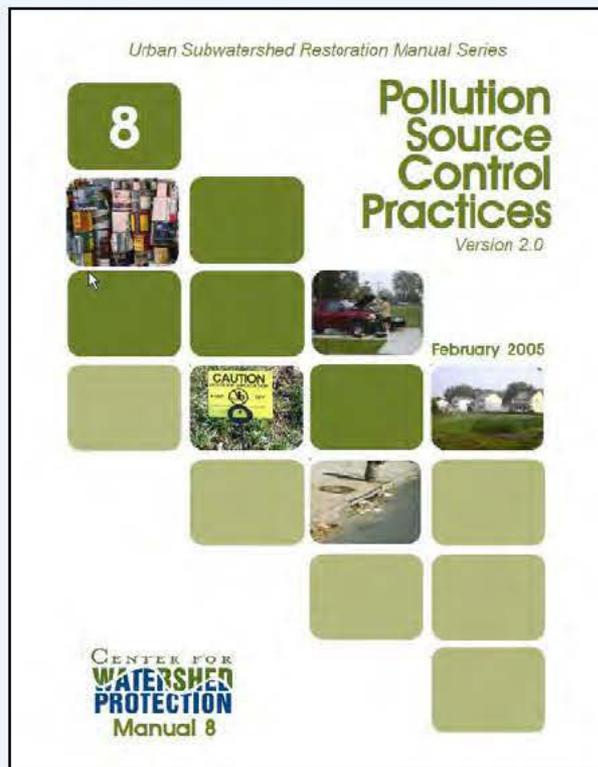
Additional Resources

- http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=min_measure&min_measure_id=6

The screenshot shows the EPA NPDES Menu of BMPs website. The header includes the EPA logo and the text "U.S. ENVIRONMENTAL PROTECTION AGENCY". The main title is "National Pollutant Discharge Elimination System (NPDES)". Below the title is a search bar with a "GO" button. A navigation menu on the left lists various topics, including "Menu of BMP's Home", "BMP Background", "Public Education & Outreach on Stormwater Impacts", "Public Involvement/Participation", "Illegal Discharge Detection & Elimination", "Construction Site Stormwater Runoff Control", "Post-Construction Stormwater Management in New Development & Redevelopment", "Pollution Prevention/Good Housekeeping for Municipal Operations", and "Stormwater Home". The main content area is titled "Pollution Prevention/Good Housekeeping for Municipal Operations". It contains a search bar with "Search BMPs" and "Filter by Minimum Measure" options. The text describes various activities that can pose a threat to water quality if not properly managed, such as winter road maintenance, minor road repairs, and other infrastructure work. It also mentions that municipalities should develop a training program for all municipal staff involved in activities that could discharge pollutants to the MS4. A key BMP and resource is highlighted: "The key BMP to addressing the good housekeeping minimum measure is the development of an employee training and education program. Common municipal activities and facilities which should be addressed in the training program are described in individual fact sheets in the next section below." A small image of a BMP sign is shown, which reads "BMP Wash Rack Drive to Sanitary Sewer".

Additional Resources

- http://www.cwp.org/documents/cat_view/68-urban-subwatershed-restoration-manual-series.html



Additional Resources

- http://www.epa.ohio.gov/Portals/41/storm_workshop/ppghptemplateblank.pdf
- http://www2.erie.gov/environment/sites/www2.erie.gov/environment/files/uploads/guidance_document.pdf

Spill Prevention and Response

Spill Prevention and Response

- Preventing spilled materials from contacting storm water and reaching waterways is an important component of any pollution prevention program
- Your facility may be subject to Spill Prevention Control and Countermeasure (SPCC) Plan requirements under federal regulations
- If your operations require the use and storage of oil products and other potentially hazardous materials, a spill response and control plan will help reduce the risk of spilled materials contaminating waterways

SPCC Plans

- **Required for facilities with aboveground oil storage capacity greater than 1,320 gallons or 42,000 gallons in underground storage tanks that are not regulated under another program**
- **Can reasonably expect a discharge to reach navigable waters of the US**

SPCC Plans

- **What is an SPCC Plan?**
 - Document that details the equipment, workforce, and procedures to prevent, control, and respond to a discharge of oil
- **Purpose of the SPCCP**
 - To prevent discharges of oil into U.S. waters
- **What is an “oil”?**
 - Any kind, in any form, including: heating oils, motor fuels, lubricating oils, cutting oils, quenching oils, hydraulic oils, transformer oils and cooking oils.

Spill Prevention and Response

- **Spill Prevention**

- **Practices that reduce the risk of materials being spilled**

- **Spill Response**

- **Preventing spilled materials from reaching waterways or impacting the environment**

Spill Prevention

- **Common spill prevention practices:**
 - **Inspection and regular maintenance of liquid containers and equipment**
 - **Best management practices: clearly-labeled containers, good housekeeping**
 - **Constant monitoring during liquid transfers/deliveries**
 - **Secondary containment**
 - **Routine inspections**
 - **Site security**
 - **Annual training**

Spill Response

- Your responsibilities for spill response may vary based on departmental/agency policies
- Your department/agency's policies may specify the size of the spill you can control or clean up
- Safety should be your first priority **ALWAYS**

Spill Response Safety

- **Think about the ways you could be exposed to hazards:**
 - **Inhaling vapors, gases, or dusts in air**
 - **Being splashed by materials while handling containers or waste materials**
 - **Walking through puddles of spilled materials**
 - **Touching wet or leaking containers or contaminated equipment**

Spill Response Safety

- Always wear your personal protective equipment (PPE) such as gloves, boots, and safety glasses
- Wear the correct PPE for the task
- Know the limitations of the PPE



Spill Response Planning

- Evaluate likely spill scenarios
 - Materials
 - Volume
- Use Material Safety Data Sheets (MSDS) to evaluate exposure hazards, appropriate PPE, and disposal requirements for clean up materials
- Make sure roles and responsibilities are clearly defined

ExxonMobil

Product Name: MOBIL 1 5W-30
Revision Date: 18 May 2009
Page 1 of 8

MATERIAL SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT
Product Name: MOBIL 1 5W-30
Product Description: Synthetic Base Stocks and Additives
Product Codes: 461119 00, 970056
Intended Use: Engine oil

COMPANY IDENTIFICATION
Supplier: EXXON MOBIL CORPORATION
3225 BALLOWES RD.
FAIRFAX, VA 22037 USA

24 Hour Health Emergency: 800-737-4411
Transportation Emergency Phone: 800-424-9300
ExxonMobil Transportation No.: 201-834-3296
MSDS Requests: 713-613-3861
Product Technical Information: 800-662-4525, 800-947-8147
MSDS Internet Address: <http://www.exxon.com>, <http://www.mobil.com>

SECTION 2 COMPOSITION / INFORMATION ON INGREDIENTS

No Reportable Hazardous Substance(s) or Complex Substance(s).

SECTION 3 HAZARDS IDENTIFICATION

This material is not considered to be hazardous according to regulatory guidelines (see (M)SDS Section 15).

POTENTIAL HEALTH EFFECTS
Excessive exposure may result in eye, skin, or respiratory irritation. Low order of toxicity. High-pressure injection under skin may cause serious damage.

NFPA Hazard ID: Health: 0 Flammability: 1 Reactivity: 0
HMS Hazard ID: Health: 0 Flammability: 1 Reactivity: 0

NOTE: This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

SECTION 4 FIRST AID MEASURES

INHALATION
Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use

Spill Response Planning

- Make sure roles and responsibilities are clearly defined
- Establish a notification chain-of-command
- Identify spill reporting requirements
- Provide adequate spill response materials
- Provide training and written response instructions



Spill Response Procedures

- **General Spill Response Procedures**

- Step 1: Approach The Scene**
- Step 2: Secure The Scene**
- Step 3: Identify The Hazards**
- Step 4: Assess The Situation**
- Step 5: Report The Spill**
- Step 6: Contain The Spill**
- Step 7: Cleanup The Spill**
- Step 8: Complete Spill Documentation**

Step 1: Approach the Scene

- Don't rush in!
- Always consider the safety of:
 - Yourself
 - Your coworkers
 - The public
- Do not take risks – act on the cautious side.
- Avoid exposure – Approach upwind, and stay clear of spills, vapors, fumes, and smoke
- If a person is injured, call 911 immediately

Step 2: Secure the Scene

- Isolate the spill
- Keep people away from the scene
 - Divert traffic and pedestrians
- If possible, stop the source of the spill
- Eliminate any ignition sources

Step 3: Identify the Hazards

- **Attempt to identify the spilled material**
 - **May be obvious**
 - **Characteristics (odor, color, sheen)**
 - **Labels/Markings**
 - **Container type**
 - **Activities in area**
 - **Placards**
 - **Hazard warnings**

Step 4: Assess the Situation

- Determine the appropriate first response actions and if additional response help is needed
- The response will be dictated by the size of the spill and the hazard
 - Is there a fire, a spill, or a leak?
 - Is there a potential for it to mix with something else?
- Observe your surroundings:
 - Who/what is at risk?
 - Is an evacuation necessary?
 - What resources are required and readily available to contain the spill?

Step 5: Report the Spill

- The Virginia Department of Environmental Quality must be notified within 24 hours of any petroleum spills that:
 - Cause a sheen on the water,
 - Are greater than 25 gallons, or
 - Cannot be cleaned up within 24 hours
- All spills contacting or occurring close to water or that pose a threat to human health or the environment must be reported to the National Response Center **immediately**
- Consult agency directives for local and municipal notification requirements

Step 6a: Contain the Spill

- Put on the appropriate PPE
- Place booms or available materials around the perimeter of the spill to keep it from spreading
- Apply absorbent materials starting from the downhill and outside edge of the spill

Step 6b: Keep the Spill from Entering Waterways

- Place booms in front of nearest storm drain inlet
- Put absorbent pads over any exposed ground drains
- You may need to construct a dike out of soil or other materials to prevent spill from reaching storm drains and waterways

Step 7a: Clean Up the Spill

- If you have the proper training, small spills of some hazardous materials can be cleaned up according the chemical label and your training
- For incidental spills that you can safely contain, clean up the spill and remove all used spill response materials
- Clean up and disposal responsibility may vary for emergency spills

Step 7b: Complete Spill Follow-up Actions

- Clean and decontaminate all reusable spill cleanup equipment
- Don't bring the contamination home
 - Remove contaminated clothing
 - Place in a bag to wash separately
 - Clean or remove boots
 - Wash your hands
- Be sure to restock your spill response materials and PPE as soon as possible

Step 8: Complete Spill Documentation

- Update facility spill records
- Write a Release Investigation Report if required by the VDEQ
 - VDEQ will send a letter outlining investigation requirements and deadlines when a suspected or confirmed release is reported

Hazard Identification

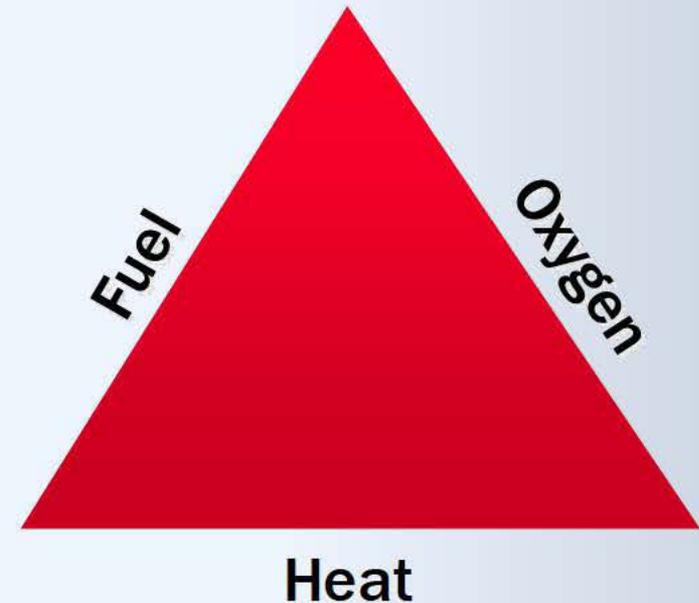
Types of Hazards

Type of Hazard	Examples	
Physical	Mechanical Electrical Noise	Radiation Confined Space Heat Stress
Chemical	Toxicity Flammability Explosivity	Corrosivity Reactivity
Biological	Bacteria Viruses Plants	

Common Hazards - Flammability

Flammability and volatility

- Fire triangle
 - Burning requires three components
- Flash point (FP)
 - Lowest temperature at which a substance will ignite
 - Low FP = high fire hazard



Common Hazards - Flammability

- **Flashpoint (FP) examples:**
 - Vegetable oil = 540° F
 - Mineral spirits = 170° F
 - Diesel fuel = 160° F
 - Benzene = 12° F
 - Gasoline = - 45° F
 - Kerosene = 100 to 150 °F



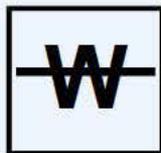
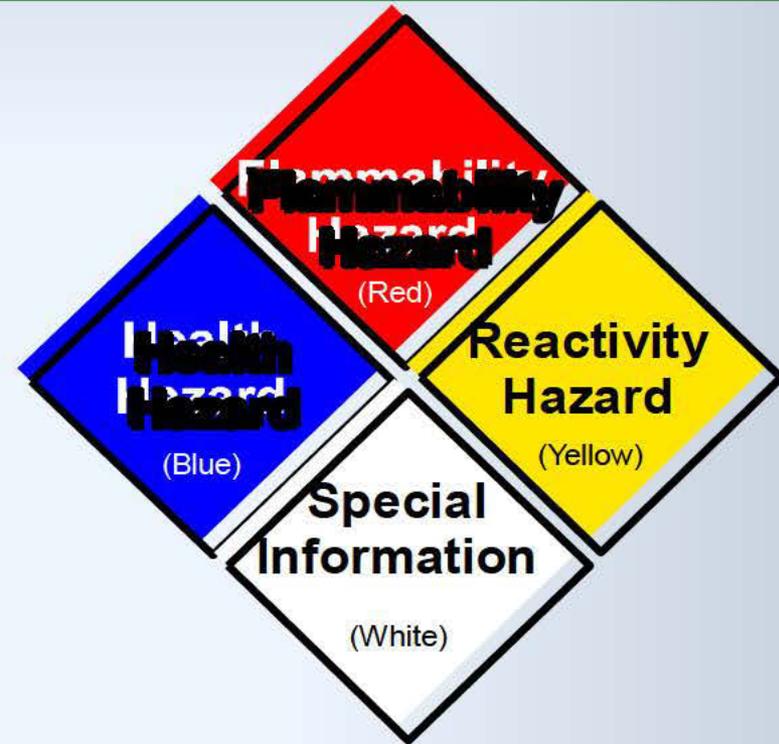
Common Hazards - Flammability

- **Safety Measures:**
 - **Wear appropriate PPE:**
 - Protective clothing
 - Leather boots/gloves
 - Eye protection
 - Extinguish all ignition sources
 - Do not use metal tools that could create a spark

NFPA Label

Hazard Information based upon:

- Color codes
- Numeric codes
 - 0 = Minimum
 - 1 = Light
 - 2 = Moderate
 - 3 = Serious
 - 4 = Severe
- Special Information



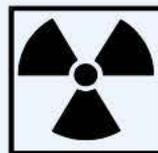
Do Not
Use Water



Biological
Hazard



Oxidizer



Radiation
Hazard



Toxic



Explosive

Department of Transportation (DOT) Label

Under 49 CFR 172, the U.S. Department of Transportation requires vehicles transporting designated hazardous materials to bear placards and labels



UN GHS Pictograms

Health Hazard



- Carcinogen
- Mutagenicity
- Reproductive Toxicity
- Respiratory Sensitizer
- Target Organ Toxicity
- Aspiration Toxicity

Flame



- Flammables
- Pyrophorics
- Self-Heating
- Emits Flammable Gas
- Self-Reactives
- Organic Peroxides

Exclamation Point



- Irritant (skin and eye)
- Skin Sensitizer
- Acute Toxicity
- Narcotic Effects
- Respiratory Tract Irritant
- Hazardous to Ozone Layer (Non-Mandatory)

UN GHS Pictograms

Gas Cylinder



- Gases under Pressure

Corrosion



- Skin Corrosion/Burns
- Eye Damage
- Corrosive to Metals

Exploding Bomb



- Explosives
- Self-Reactives
- Organic Peroxides

UN GHS Pictograms

Flame over Circle



- Oxidizers

Environment (non-mandatory)



- Aquatic Toxicity

Skull and Crossbones



- Acute Toxicity (fatal or toxic)

Material Safety Data Sheets (MSDS)

Material Safety Data Sheets contain reference information

- Material description
 - Common and alternative names
 - Appearance
 - Physical and chemical properties
- Hazards
- Handling and storage
- Spill cleanup
- First aid and firefighting measures
- Contact information

Personal Protective Equipment (PPE)

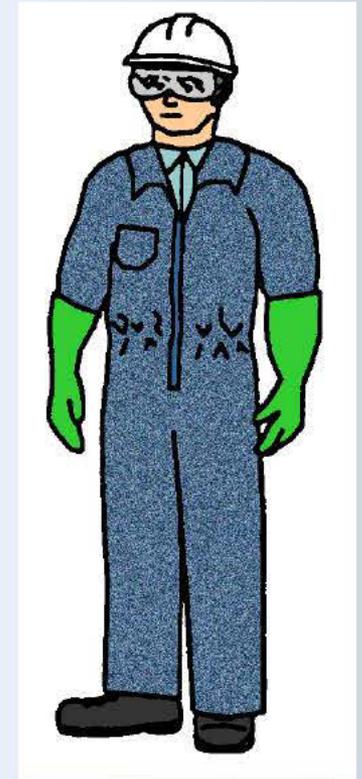
- The purpose of personal protective equipment (PPE) is to shield workers from chemical, physical, and biological hazards
- Should be used in conjunction with engineering controls and safe work practices
- Required as part of a defensive approach to leaks or spills involving hazardous materials

Selecting Personal Protective Equipment

- Identify the hazards or suspected hazards
- Determine potential exposure routes
- Evaluate performance of the PPE
- Remember: No single combination of PPE is capable of protecting against all hazards

Level D Protection

- Work uniform or coveralls (rubber apron, as needed)
- Chemical-resistant gloves
- Boots or shoes (rubber, as needed)
- Chemical splash face shield or goggles (as needed)
- Used when:
 - No known or suspected atmospheric hazards (air contaminants)
 - Minimal potential for inhalation, splashes or contact with chemicals



Avoid Additional Exposure to Hazardous Materials

- Avoid carrying hazmat contamination away from the spill scene
- Avoid continued contact with hazardous materials
- Avoid exposing family or others to hazardous materials
 - Separate contaminated clothing
 - Observe decontamination protocol

QUESTIONS?



Location	District	Duration	Time Period Start	Finish	Work Required	Status
Bruton HS	1	1 month	07/23/12	08/23/12	Repair Pipe failure by filling in erosion area and adding riprap to channel	Completed
247 East Queens - Queens Lake	1	1 week	08/29/12	09/05/12	Grade Swale	Completed
108 Larkin Run - Larkin Woods	4	1 day	09/10/12	09/10/12	Add coir Logs	Completed
138 Kitty Drive	4	2 days	09/11/12	09/12/12	Rework riprap to repair erosion	Completed
411 Albacore PS	4	1 day	09/13/12	09/13/12	Cut ditch	Completed
Harvest Lake - Coventry	2	1 day	09/20/12	09/20/12	Unstop outfall pipe	Completed
237 East Queens - Queens Lake	1	2 days	09/24/12	09/26/12	Replace Pipe outfall	Completed
123 Stone Lake Court - Woodlake	5	2 weeks	10/03/12	10/17/12	Pipe ditch that is eroding	Completed
100 Boca Raton - County Club	1	1 week	10/16/12	10/25/12	Repair leak from DI, remove bulkhead slope back with riprap	Completed

100 Blackberry Pond	2	3 days	08/22/12	05/13/13	Clear out inlet and outlet in County easement	Completed
209 Mill Crossing	5	1 day	01/03/13	01/03/13	Repair erosion	Complete
Bruton HS	1	2 days	02/11/13	02/12/13	Repair areas where settlement occurred	Complete
115 Dawson Crescent – Seaford		1 day	02/14/13	02/14/13	Add filler cloth, stone & top soil per homeowner	Complete
268 E Queens Drive - Queens Lake	1	1 week	02/19/13	02/25/13	Repair erosion	Complete
114 Fishermans Cove		2 days	02/21/13	02/22/13	replace drive way culvert	Complete
116 - 200 Old Wormley Creek Rd	3	3 weeks	02/28/13	05/07/13	Install ditch along property line to help drain from 109 Old Wormley Creek - easement obtained	Completed
118 Hollywood Blvd	4	2 days	03/04/13	03/14/13	Replace 12 in. RCP with 15 in. HDPE	Complete
118 Hollywood Blvd	4	2 days	03/04/13	03/14/13	Replace driveway culvert in easement	Completed
York HS - Cook Rd geothermal	3	1 week	03/07/13	04/16/13	Remove dirt from Cook Road BMP site and spread and grade over geothermal field for schools	Complete
Cook Rd. - York HS	3	5 weeks	03/07/13	04/16/13	Move dirt from proposed BMP at Cook Road area to York HS over geothermal site for school field relocation	Completed

110 Larkin Run Larkin Woods	4	2 days	03/13/13	03/14/13	Add 24 coco logs along stream (for Sutton)	Complete
Bruton HS Pump Station	1	1 day	04/17/13	04/17/13	Rework road to Pump Station	Completed
204 Tides Run Marlbank	3	1 day	04/30/13	04/30/13	Add riprap at outfall	Completed
Brandywine	4	2 days	05/09/13	05/11/13	Fill sinkholes around new paved swales	Completed
122 Pebble Beach Lane Country Club	1	2 days	05/20/13	05/21/13	Repair storm drain inlet	Completed
719 Colonial Avenue Queenswood	1	2 days	05/21/13	05/22/13	Repair erosion on outfall pipe	Completed
Coventry footbridge	2	1 day	05/28/13	05/28/13	Dig out outfall	Completed
Tabb High School BMP	5	2 weeks	06/10/13	06/24/13	Regrade BMP slopes	Complete
Tabb Mobile Homes	2	1 week	06/11/13	06/19/13	Cut and Clear easement	Completed
101 Jernigan Lane		2 days	06/24/13	06/25/13	Repair outfall pipe	Completed

TOTALS FOR FY13									
RED TEAM									
	FOOTAGE	DEBRIS	BRIQUETTES	DITCHES DONE	SER REQ				
JUL	57,107.00	POUNDS	780.00	UNITS	0.00		21	4	
AUG	33,442.00	POUNDS	3,760.00	UNITS	0.00		18	3	
SEP	32,202.00	POUNDS	4,740.00	UNITS	0.00		37	3	
OCT	53,727.00	POUNDS	1,280.00	UNITS	0.00		32	0	
NOV	23,965.00	POUNDS	1,680.00	UNITS	0.00		21	2	
DEC	18,717.00	POUNDS	8,210.00	UNITS	0.00		21	2	
JAN	54,388.00	POUNDS	9,580.00	UNITS	0.00		14	1	
FEB	22,826.00	POUNDS	13,026.00	UNITS	0.00		23	1	
MAR	66,485.00	POUNDS	30,409.00	UNITS	0.00		44	0	
APR	44,702.00	POUNDS	4,980.00	UNITS	200.00		34	2	
MAY	66,900.00	POUNDS	3,440.00	UNITS	0.00		35	1	
JUN	47,585.00	POUNDS	3,820.00	UNITS	0.00		0	3	
TOTAL	522,046.00	TOTAL	85,705.00	TOTAL	200.00	TOTAL	300.00	TOTAL	22.00
MILES	98.87	TONS	42.85						

BLUE TEAM									
	FOOTAGE	DEBRIS	BRIQUETTES	DITCHES DONE	SER REQ				
JUL	67,552.00	POUNDS	0.00	UNITS	0		21	2	
AUG	80,507.00	POUNDS	2,740.00	UNITS	0		48	4	
SEP	47,479.00	POUNDS	16,600.00	UNITS	25		37	4	
OCT	83,531.00	POUNDS	2,800.00	UNITS	0		34	2	
NOV	50,784.00	POUNDS	1,900.00	UNITS	0		38	2	
DEC	47,470.00	POUNDS	0.00	UNITS	0		0	1	
JAN	51,609.00	POUNDS	0.00	UNITS	0		34	3	
FEB	52,368.00	POUNDS	8,860.00	UNITS	0		31	6	
MAR	66,030.00	POUNDS	3,260.00	UNITS	0		32	0	
APR	80,220.00	POUNDS	360.00	UNITS	284		46	3	
MAY	80,220.00	POUNDS	2,400.00	UNITS	0		56	3	
JUN	58,473.00	POUNDS	7,820.00	UNITS	348		38	1	
TOTAL	766,243.00	TOTAL	46,740.00	TOTAL	657.00	TOTAL	415.00	TOTAL	31.00
MILES	145.12	TONS	23.37						

YELLOW TEAM									
	FOOTAGE	DEBRIS	BRIQUETTES	DITCHES DONE	SER REQ				
JUL	55,283.00	POUNDS	780.00	UNITS	0.00		21	4	
AUG	73,715.00	POUNDS	3,760.00	UNITS	0.00		18	3	
SEP	72,158.00	POUNDS	4,740.00	UNITS	0.00		37	3	
OCT	98,175.00	POUNDS	1,280.00	UNITS	0.00		32	0	
NOV	23,965.00	POUNDS	1,680.00	UNITS	0.00		21	2	
DEC	18,717.00	POUNDS	8,210.00	UNITS	0.00		21	2	
JAN	60,131.00	POUNDS	6,580.00	UNITS	0		27	1	
FEB	83,680.00	POUNDS	2,660.00	UNITS	0		42	1	
MAR	154,956.00	POUNDS	10,580.00	UNITS	0		76	0	
APR	189,710.00	POUNDS	1,420.00	UNITS	801		109	1	
MAY	93,809.00	POUNDS	1,920.00	UNITS	440		47	0	
JUN	67,244.00	POUNDS	5,400.00	UNITS	780		35	1	
TOTAL	991,543.00	TOTAL	49,010.00	TOTAL	2,021.00	TOTAL	486.00	TOTAL	18.00
MILES	187.79	TONS	24.51						

FISCAL YEAR TOTALS: RED, YELLOW, AND BLUE TEAMS									
	FOOTAGE	DEBRIS	BRIQUETTES	DITCHES DONE	SER REQ				
RED	522,046.00	POUNDS	85,705.00	UNITS	200.00		300.00	22.00	
BLUE	766,243.00	POUNDS	46,740.00	UNITS	657.00		415.00	31.00	
YELLOW	991,543.00	POUNDS	49,010.00	UNITS	2,021.00		486.00	18.00	
TOTAL	2,279,832.00	TOTAL	181,455.00	TOTAL	2,878.00	TOTAL	1,201.00	TOTAL	71.00
MILES	431.79	TONS	90.73						

1. Public Outreach and Education						
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents
1.1	Participate in regional committees: askHRgreen.org , RSMC, and SW Phase II Subcommittee					askHRgreen.org Annual Report, MOA, HRPDC Regional Cooperation in Stormwater Management
1.1a	<i>Regional Cooperation</i>	Renew MOA with the HRPDC to participate in the regional processes, including the Regional Stormwater Management Program, the Stormwater Phase II Subcommittee, and askHRgreen.org	Maintain valid MOA	HRPDC	Every 5 years.	
1.1b	askHRgreen.org	Participate in at least 50% of askHRgreen.org Stormwater Education Subcommittee meetings	Number of meetings attended/Number of meetings held	York County	Annually	
1.1c	<i>Stormwater Phase II Subcommittee</i>	Participate in at least 50% of monthly Stormwater Committee Meetings.	Number of meetings attended/Number of meetings held	York County	Annually	
1.2	Educate citizens on techniques to reduce impacts of stormwater pollution on public waterways with an emphasis on impaired waters.					
1.2a	<i>Distribute educational materials developed through askHRgreen.org</i>	Distribute materials developed through askHRgreen.org to target audience in locality.	Number of materials distributed	York County	Continuously	
1.2b	<i>Maintain and enhance askHRgreen.org website</i>	Increase website visits to industry standard by end of permit cycle??	click through rates as compared to industry standard	HRPDC	Permit Cycle	
1.2c	<i>Run regional media campaigns</i>	Participate in the askHRgreen.org regional media campaign which will make impressions with a stormwater message via print, television (local municipal access, cable and local affiliate), radio, and social media	Demographic, reach and frequency	askHRgreen.org Stormwater Education Subcommittee	PY 1	Copies of ads

1. Public Outreach and Education						
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents
1.2d	<i>Author Green Living Tab</i>	Contribute stormwater pollution prevention content for the askHRgreen.org Green Living Tab, which is distributed to readers in the spring by The Virginian Pilot and Daily Press and is available digitally	Numer of guides distributed and online readers	askHRgreen.org	PY 1	Green Living Tab
1.2e	<i>Promote "Scoop the Poop" campaign</i>	Make "Scoop the Poop" information and giveaways available where citizens receive animal licenses and at pet-related events as appropriate	Number of giveaways distributed	York County	PY 1	Rack cards, dog waste bag holders
1.2f	<i>Promote Lawn Care Campaign</i>	Run media campaigns and make lawn care best management practice guides available.	Demographic, reach and frequency	askHRgreen.org Stormwater Education Subcommittee	PY 1	
1.3	Illicit Discharge Elimination Education					
1.3a	<i>Educate homeowners on hazards and legal implications of illegal discharges and improper disposal of waste.</i>	Promote askHRgreen.org for list of locality contacts for citizens to report illicit discharges and to learn about proper disposal methods.	Number of visits to web page	askHRgreen.org Stormwater Education Subcommittee	post new info in PY1	askHRgreen.org website
1.4	Encourage involvement in local water quality improvement initiatives.			York County		
		Post volunteer opportunities on local website	Number and types of events	York County	Quarterly	City/Co. website
		Submit articles for askHRgreen.org blog for public participation in water quality improvement initiatives.	Number and types of events submitted	York County	Quarterly	askHRgreen.org website
		Post volunteer opportunities on askHRgreen.org/calendar	Number and types of events submitted	Locality/HRPDC	Quarterly	askHRgreen.org website
1.5	<i>Update public education outreach plan to meet expected requirements of permit effective on July 1, 2013</i>			HRPDC/askHRgreen.org/ Locality	End of PY1	Outreach plan
1.6	Evaluation and Assessment	Evaluate and assess progress towards meeting measurable goals.	In accordance with Section I E of 4VAC50-60-1200	York County	Annually	Annual report

2. Public Involvement/Participation						
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents
2.1	Provide Public Notice of Program Plan and Modifications	Promote the availability of the operator's MS4 Program Plan and any modifications for public review and comment in accordance with public law.	public notice of modifications.	York County	As necessary	Virginia Code reference, updated plan
2.2	Make Program Plan and other Stormwater Program Information Available to Public	Provide the program plan, stormwater annual reports, the stormwater permit, and the stormwater ordinances on the County website.	presence of materials on website	York County	Continuously	
2.3	Participate in local activities to improve water quality	York County Board of Supervisors disbanded Stormwater Advisory Committee due to completion of mission and lack of new membership. Continue education and volunteer efforts with programs such as medallion installations	Medallions installed	York County	As appropriate	Volunteer reports
2.4	Additional BMPs will be added as necessary to maintain compliance with the permit effective on July 1, 2013.					
2.5	Evaluation and Assessment	Evaluate and assess progress towards meeting measurable goals.	In accordance with Section I E of 4VAC50-60-1200	York County	Annually	Annual report

3. Illicit Discharge Detection and Elimination						
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents
3.1	Storm Sewer System Map	Maintain and update map. Map all known outfalls add new urbanized areas and newly discovered outfalls	compliance with proposed permit effective July 1, 2013.	York County	end of PY4	map
3.2	Illicit Discharge Detection & Elimination Ordinance	Continue implementing and enforcing the illicit discharge/stormwater ordinance.	number of investigations and actions taken	York County	annually	ordinance
3.3	Illicit Discharge Detection & Elimination Procedures	Continue implementing an illicit discharge detection and elimination program for the municipally-owned MS4 within the Urbanized Area.	protocol for responding and investigating IDDE	York County	PY1	Investigation forms
		Track illicit discharge detection and elimination activities.	number of investigations and actions taken	York County	ongoing	list of activities
		Update procedures as required by proposed permit effective July 1, 2013.		York County	end of PY1	
3.4	Prevent or minimize the discharge of hazardous substances and oil in the MS4 stormwater discharge.	Yard inspections; Develop/enhance reporting relationship with FD/Haz Mat Team; targeted education	number of responses/ number of inspections	York County	continuously	Inspection forms
3.5	Cooperation with adjacent MS4s	Identify and notify, in writing, any downstream regulated MS4 to which the small regulated MS4 is physically interconnected of the small regulated MS4's connection to that system.	Develop map, Regional Phase II Stormwater Subcommittee Meetings, letters	York County	PY1	letters; meeting attendance
3.6	Report all spills that reach state waters to DEQ and DCR					
3.6a	Report non sewer spills and releases from small MS4 operated properties that reach State waters to DEQ.	Report spills to The Department of Environmental Quality's Pollution Response Program (PREP).	Obtain PREP number.	York County	Report in accordance to Section III. G.	
3.6b	Report Sanitary Sewer Overflows through SSORS database.	Continue to utilize SSORS to report Sanitary Sewer Overflows	Number of overflows	York County	continuously	
3.7	Continue Sanitary Sewer System improvements in coordination with SSO consent order			York County	continuously	
3.8	Evaluation and Assessment	Evaluate and assess progress towards meeting measurable goals.	In accordance with Section I E of 4VAC50-60-1200	York County	Annually	Annual report

4. Construction Site Storm Water Runoff Control						
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents
4.1	Local Erosion and Sediment Control Ordinance	Continue to implement the site plan review, LID implementation where deemed appropriate, construction site BMP, and inspection provisions of the local Erosion and Sediment Control Ordinance.	# of inspections; # plan reviews, # enforcement actions	E&S Program Administrator	annually	spreadsheet or database summary.
		"At a minimum be consistent with the VA ESC Law and regulation"	Soil and Water Conservation Board finding of consistency	E&S Program Administrator	continuously	Letter from DCR
		Continue to receive and respond to information from citizens relating to the local erosion and sediment control program through personal visits, email, telephone, and the City/County web page.	# of calls/requests, #site visits	E&S Program Administrator	annually	Tracked in Hansen system
4.2	VSMP Permits	Continue to direct applicants, proposing to disturb an acre or more of land or part of a larger common plan of development or sale that would disturb one acre or more, or >= 2,500 sq. ft. in CBPA areas to VDCR to secure a VSMP Permit for Discharges of Stormwater from Construction Activities. Ensure permit has been obtained.	#of permit applications and permits issued.	E&S Program Administrator	continuously	
4.3	Training	Participate in the development of at least one regional contractor training session during the life of the permit.	Trainings Completed	HRPDC & Phase II SW Committee	One per permit cycle	training sessions and eval forms
		Ensure that plan reviewers, inspectors, and program administrators obtain the appropriate certifications as required under the Erosion and Sediment Control Law	certifications obtained	E&S Program Administrator	ongoing	
4.4	Tracking and Reporting	Continue to track and report the total number of permitted land disturbing activities as well as the total disturbed acreage.	number of permits & acres disturbed	E&S Program Administrator	annually	Annual Report
4.5	Update Program Plan	Update plan in accordance with proposed permit effective July 1, 2013.			as scheduled in permit	
4.6	Evaluation and Assessment	Evaluate and assess progress towards meeting measurable goals.	In accordance with Section I E of 4VAC50-60-1200	York County	annually	Annual report

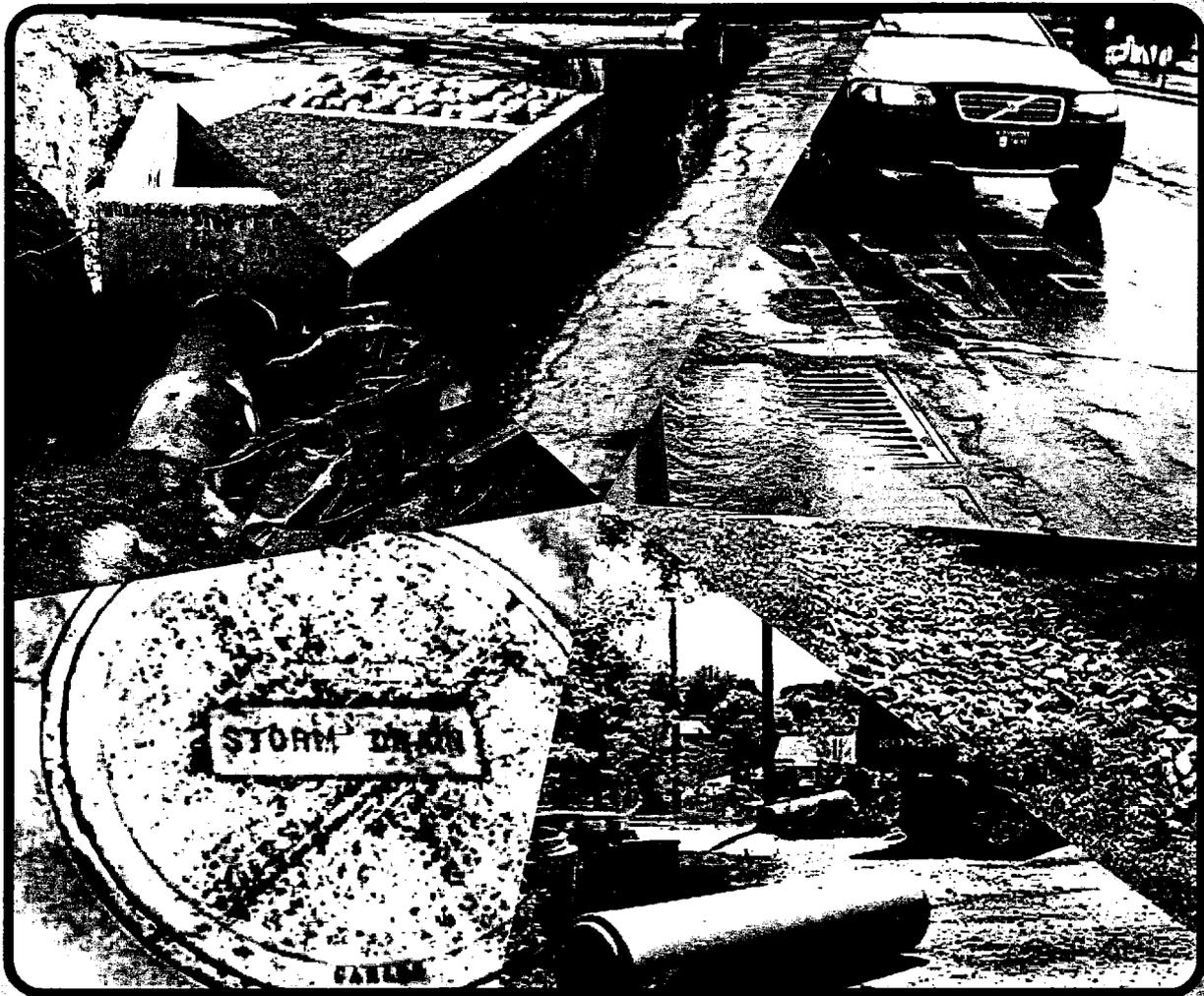
5. Post Construction Storm Water Management in New Development and Redevelopment						
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents
5.1	Stormwater Management Ordinance	Continue to implement the stormwater criteria of the Stormwater Management Ordinance for new development and redevelopment, and update ordinance to comply with Section II.5.a of the General Permit.	Ordinance updates	SW Program Administrator		Ordinance
5.2	BMP Maintenance Agreements	Require BMP maintenance agreements as directed by the Stormwater Management Ordinance.	# of agreements & inspection schedules	SW Program Administrator	Ongoing	Maint. Agreements
5.3	BMP Maintenance Program	Update mapping of locally owned structural stormwater controls with reference to HUC and any impaired waters in drainage area.	map	SW Program Administrator	As needed	map
		Develop schedules for regular inspection and maintenance of locally owned stormwater control structures in accordance with SWM regulations.	Inspections	SW Program Administrator	Annually	inspection forms Inspection tracking record
5.4	Site Inspection and Enforcement	Conduct site inspections	#Inspections & Reinspections; NOVs	SW Program Administrator	As designated	
5.5	BMP Tracking	Track all known permanent stormwater management facilities that discharge to the regulated small MS4 and submit the following information: (a) Type of structural stormwater management facility installed as defined in the Virginia Stormwater Management Handbook; (b) Geographic location (HUC); (c) Where applicable, the impaired surface water that the stormwater management facility is discharging into; (d) Number of acres treated.	#&type of BMP, location, watershed, acres treated, impaired waters	SW Program Administrator	Annually	PARS
5.6	Program Plan Updates	Update program plan according to proposed permit effective July 1, 2013.		York County	as defined in proposed permit.	
5.7	Evaluation and Assessment	Evaluate and assess progress towards meeting measurable goals.	In accordance with Section I E of 4VAC50-60-1200	York County	Annually	Annual report

5. Post Construction Storm Water Management in New Development and Redevelopment						
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents
5.1	Stormwater Management Ordinance	Continue to implement the stormwater criteria of the Stormwater Management Ordinance for new development and redevelopment, and update ordinance to comply with Section II.5.a of the General Permit.	Ordinance updates	SW Program Administrator		Ordinance
5.2	BMP Maintenance Agreements	Require BMP maintenance agreements as directed by the Stormwater Management Ordinance.	# of agreements & inspection schedules	SW Program Administrator	Ongoing	Maint. Agreements
5.3	BMP Maintenance Program	Update mapping of locally owned structural stormwater controls with reference to HUC and any impaired waters in drainage area.	map	SW Program Administrator	As needed	map
		Develop schedules for regular inspection and maintenance of locally owned stormwater control structures in accordance with SWM regulations.	Inspections	SW Program Administrator	Annually	inspection forms Inspection tracking record
5.4	Site Inspection and Enforcement	Conduct site inspections	#Inspections & Reinspections; NOVs	SW Program Administrator	As designated	
5.5	BMP Tracking	Track all known permanent stormwater management facilities that discharge to the regulated small MS4 and submit the following information: (a) Type of structural stormwater management facility installed as defined in the Virginia Stormwater Management Handbook; (b) Geographic location (HUC); (c) Where applicable, the impaired surface water that the stormwater management facility is discharging into; (d) Number of acres treated.	#&type of BMP, location, watershed, acres treated, impaired waters	SW Program Administrator	Annually	PARS
5.6	Program Plan Updates	Update program plan according to proposed permit effective July 1, 2013.		York County	as defined in proposed permit.	
5.7	Evaluation and Assessment	Evaluate and assess progress towards meeting measurable goals.	In accordance with Section I E of 4VAC50-60-1200	York County	Annually	Annual report

6. Pollution Prevention/Good Housekeeping for Municipal Operations						
BMP	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	Associated Documents
6.1	Employee Education & Training	Identify and prioritize pollution prevention education and training needs for municipal employees based on relative risk for stormwater pollution from municipal operations through the HRPDC Phase II Subcommittee.	Training Schedule	HRPDC & Localities	PY1	training schedule
		Distribute pollution prevention educational materials developed through the HRPDC/HR STORM to municipal employees engaging in operations with a high risk of discharging pollutants into the MS4.	# of items distributed	HRPDC & Localities	PY1	E-newsletter, training materials
6.2	Spill Prevention & Control Plans	Continue to implement and update plans describing spill prevention and control procedures for municipal facilities developed during past permit cycle.	SOP	York County	Continuously	SOP
		Determine any educational needs for employees and develop appropriate training and/or materials.	Training assessment	SW Ph II Subcommittee	1X per permit cycle	Training Schedule
6.3	Operations & Maintenance Program	Continue to implement O&M Program for municipally owned stormwater facilities to include activities, schedules, and inspection procedures that include provisions and controls to reduce pollutant discharges into the regulated small MS4 and receiving surface waters.	O&M Plan	York County	Continuously	O&M Plan
6.4	Program Plan Updates	update program plan as prescribed in proposed permit effective July 1, 2013.		York County	permit cycle	
6.5	Evaluation and Assessment	Evaluate and assess progress towards meeting measurable goals.	In accordance with Section I E of 4VAC50-60-1200	York County	Annually	Annual report

Hampton Roads Regional Stormwater Management Program

Memorandum of Agreement



**MEMORANDUM OF AGREEMENT
ESTABLISHING THE
HAMPTON ROADS REGIONAL STORMWATER MANAGEMENT PROGRAM**

WHEREAS, Section 15.2-4200 of the Code of Virginia enables local governments to establish Planning District Commissions; and

WHEREAS, the sixteen local governments that are signatories to this Agreement have acted, in accordance with Section 15.2-4200 of the Code of Virginia, to establish the Hampton Roads Planning District Commission; and

WHEREAS, the Hampton Roads Planning District Commission has been requested and has undertaken various studies to support local government stormwater management programs, including compliance with VSMP Permits; and

WHEREAS, the signatory local governments have requested the HRPDC to administer and coordinate a regional stormwater management program on their behalf; and

WHEREAS, pursuant to the Clean Water Act, the U .S. Environmental Protection Agency has promulgated implementing regulations, 40 Code of Federal Regulations Part 122, which established the National Pollutant Discharge Elimination System (NPDES) Permits for Municipal Separate Storm Sewer System Discharges; and

WHEREAS, pursuant to the Virginia Stormwater Management Act, 10.1-603.1, et. seq. of the Code of Virginia, 1950 As Amended, the Board of Soil and Water Conservation has promulgated implementing regulations 4 VAC 50-60, et. seq., which establish the Virginia Stormwater Management Permit Program (VSMP) requirements that localities obtain VSMP Permits for their Municipal Separate Storm Sewer System (MS4) discharges; and,

WHEREAS, the majority of the eighteen signatory local governments are required by their VSMP Permits to conduct certain activities, including reporting on their discharges, conducting public information and education programs, and certain other activities; and

WHEREAS, the Water Quality Monitoring and Reporting Act and implementing regulations promulgated by the State Water Control Board establish requirements for the preparation of Total Maximum Daily Load (TMDL) Implementation Plans, which apply to activities conducted by localities in general as well as activities conducted in implementing VSMP MS4 Permit requirements; and,

WHEREAS, the Chesapeake Bay Preservation Act and the Virginia Erosion and Sediment Control Law and implementing regulations also establish stormwater management requirements that govern one or more of the eighteen signatory local governments; and,

WHEREAS, fifteen Cities and Counties and the Hampton Roads Planning District Commission executed the Memorandum of Agreement Establishing the Hampton

Roads Regional Stormwater Management Program on September 5, 2003 and that Agreement expires on December 31, 2007.

NOW THEREFORE, the signatory parties enter into the following Agreement.

This Memorandum of Agreement, entered into this sixth day of March 2008, among and between eighteen cities and counties in Hampton Roads and the HRPDC, establishes and maintains the Hampton Roads Regional Stormwater Management Program.

BASIC PREMISES

All local governments in Hampton Roads operate stormwater management programs.

The Cities of Chesapeake, Hampton, Newport News, Norfolk, Portsmouth and Virginia Beach received VPDES Permits in 1996. Those permits, which were renewed in 2001, govern the discharges from their MS4 to waters of the State and impose certain operational and reporting requirements on those systems. In 2005, these permits were converted to VSMP Permits. These permits must be renewed on a five (5) year basis and the localities applied for renewed permits in 2005.

The Cities of Poquoson, Suffolk and Williamsburg and the Counties of Gloucester, Isle of Wight, James City, and York were all identified by the U. S. Environmental Protection Agency as requiring VPDES Permits under Phase II of the MS4 Regulations. Those localities that operate municipal separate storm sewer systems (MS4) obtained VPDES Permits in March 2003. Those permits also imposed certain operational and reporting requirements on those systems. In 2005, these permits were converted to VSMP Permits. These permits must be renewed on a five (5) year basis with the next renewal planned for 2007.

Although Gloucester County was initially identified by the U.S. Environmental Protection Agency as requiring a Phase II MS4 Permit, it was subsequently determined that permit coverage for Gloucester County was not required.

The City of Franklin, the Counties of Gloucester, Southampton and Surry and the Towns of Smithfield and Windsor are governed by stormwater management requirements established under the Virginia Stormwater Management Act and the Virginia Erosion and Sediment Control Law. The Chesapeake Bay Preservation Act also governs Gloucester and Surry Counties and the Towns of Smithfield and Windsor. The City of Franklin and Southampton County are the only Hampton Roads localities that are not required to develop stormwater management programs that meet the minimum requirements established in the Virginia Stormwater Management Act. The Virginia Stormwater Management Act imposes operational and reporting requirements on all localities that are required to implement stormwater management programs.

The aforementioned local governments are interested in managing stormwater in a manner which protects and does not degrade waters of the State and which meets locally established quality of life goals and objectives. The Clean Water Act and the VSMP permits require that stormwater quantity and quality be managed to the

maximum extent practicable.

In carrying out their stormwater management responsibilities, the aforementioned local governments have developed a consensus on regional goals to guide the operation of their stormwater management programs. Initially, approved by the Hampton Roads Planning District Commission at its Executive Committee Meeting of September 15, 1999, they are:

1. Manage stormwater quantity and quality to the Maximum Extent Practicable (MEP)
 - Implement Best Management Practices (BMP) and retrofit flood control projects to provide water quality benefits.
 - Support site planning and plan review activities.
 - Manage pesticide, herbicide and fertilizer applications.
2. Implement public information activities to increase citizen awareness and support for the program.
3. Meet the following needs of citizens:
 - Address flooding and drainage problems.
 - Maintain the stormwater infrastructure.
 - Protect waterways.
 - Provide the appropriate funding for the program.
4. Implement cost-effective and flexible program components.
5. Satisfy VSMP stormwater permit requirements:
 - Enhance erosion and sedimentation control.
 - Manage illicit discharges, spill response, and remediation.

This Agreement establishes the administrative framework, which will be used by the local governments in Hampton Roads to address certain stormwater management requirements under the above-cited state and federal laws and regulations.

Eighteen local governments in the Hampton Roads Region will be participants in and signatories to the Agreement.

HRPDC RESPONSIBILITIES

The Hampton Roads Planning District Commission will serve as the policy-making body of the Hampton Roads Regional Stormwater Management Program with the concurrence of the signatory local governments.

Under the terms of this Agreement, the HRPDC is responsible for the following:

Establish and provide appropriate technical and logistical support to the Regional Stormwater Management Committee (RSMC), which will be the technical decision-making body of the Hampton Roads Regional Stormwater Management Program. It will provide technical and policy advice to the HRPDC.

Provide the necessary administrative, technical and clerical resources to support all program activities directed by the RSMC in order to ensure that the permit-holding cities and counties meet applicable stormwater management requirements, including the agreed upon provisions of the VSMP Permits.

Prepare, in cooperation with the RSMC, an Annual Work Program and Budget for the Hampton Roads Regional Stormwater Management Program. The Annual Work Program will be incorporated into the HRPDC Unified Planning Work Program and the Annual Budget will be incorporated into the HRPDC Budget.

Assist the signatories in coordinating reporting on stormwater related activities to other state and federal agencies to ensure that program requirements are met in a cost-effective manner, which minimizes duplicative reporting and the administrative burden on the signatories. This assistance will include management of the Permit Administration and Review System (PARS), developed on a cooperative, regional basis. Development of the PARS is scheduled to be completed in 2008.

Conduct a regional stormwater education program. This will include public education activities and may include outreach to specific economic sectors and groups. The Public Information and Education Subcommittee (HR STORM) will be responsible for guiding the development of original materials, including publications, media advertising and promotional items. This may also include development of locality-specific materials or coordination of bulk purchases. The Public Information and Education Subcommittee will advise the RSMC on the educational and outreach components of the Hampton Roads Regional Stormwater Management Program.

Develop and conduct a regional training program for municipal employees, contractors, civic leaders and other interested parties. The training program will emphasize stormwater management, pollution prevention and permit issues.

Respond equitably and in a timely fashion to requests from all signatory local governments for technical assistance. The time frame for responses will be based on experience, the complexity of individual requests and the overall work load of program staff.

Provide other technical support, as requested, to the signatory local governments.

Develop and maintain staff capability to conduct more comprehensive activities, including stormwater discharge impact analyses and modeling in support of local programs.

Upon request from one or more participating localities, conduct technical studies to support compliance by the localities with VSMP Permit requirements and VSMP Program requirements.

Facilitate development of multi-jurisdictional management plans for shared watersheds. This may include conducting necessary technical analyses.

Take steps, in conjunction with the signatory local governments, to obtain financial support for program activities from outside sources, including state, federal and private grants.

Contract with and manage consultants, including both private firms and academic institutions, to support the regional program, including provision of requested services to local governments in excess of the common program elements.

Represent the Program at federal, state, regional and local governmental, civic, professional and political organizations, agencies and committees.

Provide technical and administrative support, as appropriate, to those localities that are required to develop stormwater management programs to meet VSMP requirements, but that are not required to obtain VSMP Permits for their stormwater discharges.

Prepare annual program reports, or components thereof, which comply with the provisions of the individual VSMP Permits and stormwater management programs of the signatory localities. The basis for this reporting will be the Permit Administration and Reporting System (PARS), being developed cooperatively by the signatory localities and the HRPDC. Where appropriate, the Regional Indicators of Stormwater Management Program Effectiveness, developed through the HRPDC in 2000 will also be used.

Facilitate public outreach in support of TMDL Studies being prepared through the Virginia Department of Environmental Quality and facilitate preparation of TMDL Implementation Plans for impaired waters in all localities in the Hampton Roads Region.

Prepare an Annual Report of activities undertaken through the Hampton Roads Stormwater Management program. This report will include summaries of related activities undertaken on a cooperative basis by the signatories.

Coordinate the compilation of regional data for the Annual Reports to the DCR.

Regional Phase II Program

The HRPDC will be responsible for undertaking certain activities to enable localities permitted under Phase II, and participating in the Regional Phase II Program, to comply with the terms of their MS4 Permits. These activities include:

Operate the regional stormwater management and pollution prevention training programs for local government employees. This program will be one element of the local programs to meet the Pollution Prevention/Good Housekeeping for Municipal

Operations Minimum Management Measure and the education component of the Illicit Discharge Detection and Elimination Management Measure.

Operate the stormwater public information and education program. This program will be one element of the local programs to meet the Public Education and Outreach Minimum Management Measure and the education component of the Illicit Discharge Detection and Elimination Management Measure.

Maintain a Best Management Practices (BMP) Tracking System. This system will serve as one element of the local programs to meet the Construction Site Stormwater Runoff Control and Post-Construction Stormwater Management in new Development and Redevelopment Minimum Management Measures. The BMP Tracking System is a component of the Permit Administration and Reporting System.

Maintain an Illicit Discharge Tracking System. This system will serve as one element of the local programs to meet the Illicit Discharge Detection and Elimination Minimum Management Measure. The Illicit Discharge Tracking System is a component of the Permit Administration and Reporting System.

Continue assisting the localities in the preparation of Annual Reports to DCR, using reporting protocols, developed through the Phase II Program and being developed through the Permit Administration and Reporting System. These reports are to be submitted annually to the Department of Conservation and Recreation to satisfy permit requirements.

Assist the localities with MS4 Permits issued under Phase II of the Program with ongoing program development and evaluation and preparation of applications for permit reissuance.

LOCAL GOVERNMENT RESPONSIBILITIES

Under the terms of the Agreement, the signatory local governments are responsible for the following:

Appoint a representative and alternates, as appropriate, to the Regional Stormwater Management Committee.

Appoint a representative and alternates, as appropriate, to the Public Information and Education Subcommittee (HR STORM).

Provide, in a timely fashion, all locally generated data required by their VSMP Permits and such other data as may be necessary to accomplish locally requested services. This may include data necessary to meet the Annual Reporting requirements of other programs.

Provide timely technical review of HRPDC analyses and conclusions.

Provide technical recommendations to local representatives on the HRPDC, the policy-making body of the Hampton Roads Regional Stormwater Management Program (HRPDC).

Participate in regional efforts to conduct public outreach and education activities in support of the state's TMDL Study process and efforts to develop TMDL Implementation Plans for impaired waters lying within the locality or within watersheds that include the locality.

Support HRPDC efforts to obtain additional funding to support the regional program.

Comply with all terms of their VSMP Permits and related program requirements.

In those cases where a locality is not required to obtain a VSMP Permit, comply with all minimum requirements of the Virginia Stormwater Management Program.

Provide annual funding to support the agreed-upon regional program.

ROLE OF THE REGIONAL STORMWATER MANAGEMENT COMMITTEE

The RSMC will consist of one voting representative of each signatory, appointed by the Chief Administrative Officer of the signatory local government. One or more alternates may be formally designated by the CAO. Generally, the voting representative of each locality will be the VSMP Permit or Program Administrator.

The term of membership on the RSMC will be at the pleasure of the Chief Administrative Officer.

The RSMC may elect a Chairman and Vice-Chairman from among its membership. The HRPDC staff will serve as Secretary for the RSMC.

Ex-officio members of the RSMC will include representatives of the Hampton Roads Sanitation District, U.S. Navy and the Virginia Departments of Environmental Quality, Conservation and Recreation, and Transportation. The RSMC may determine that representatives of other organizations should serve as ex officio members of the Committee.

Generally, the RSMC will operate on a consensus basis. All consideration of and recommendations concerning the Annual Work Program and Budget will require a majority vote of the RSMC membership. Each signatory is entitled to one (1) vote on the RSMC. Approval of the Annual Work Program and Budget may be accomplished through an electronic letter ballot. Following approval of an electronic letter ballot, the RSMC will ratify the letter ballot.

The RSMC will provide technical and policy recommendations to the HRPDC, which is the policy-making body of the Hampton Roads Regional Stormwater Management Program. It will provide day-to day technical guidance on behalf of the signatory local governments to the HRPDC staff.

Various subcommittees may be established by the RSMC to facilitate operation of the Hampton Roads Regional Stormwater Management Program. The Public Information

and Education Subcommittee (HR STORM) is a standing subcommittee of the RSMC. The Phase I Subcommittee and the Phase II Subcommittee are standing committees of the RSMC.

METHOD OF FINANCING

Program costs will be allocated on a pro-rata basis among the local governments. There will be a base buy-in per participating local government with the balance of annual costs allocated according to a formula reflecting the local share of regional population. Formula details will be developed by the RSMC and approved by the HRPDC with the concurrence of the signatory local governments. The most current estimate of population developed by the Weldon Cooper Center for Public Service/Virginia Employment Commission, will be used as the population base for allocating program costs. Local contributions may be adjusted on an annual basis to reflect program experience and projected program expenditures necessary to satisfy permit requirements and local needs.

Individual local governments may request specific services from the HRPDC, which are in excess of the program elements common to all participants. The cost of such services will be borne by the requesting locality or localities.

When appropriate, financial support from other entities, such as state and federal agencies, and the private sector, will be sought and obtained to support the activities of the Hampton Roads Regional Stormwater Management Program.

AVAILABILITY OF FUNDS

Performance by the HRPDC of its responsibilities under this Agreement is subject to the availability of funding from the signatory local governments. Failure of the local governments to provide the necessary funding to support these activities will constitute a Notice to Modify or Terminate the Agreement.

MODIFICATIONS

Modifications to this Memorandum of Agreement must be submitted in writing, recommended for approval by the Regional Stormwater Management Committee, approved by the Hampton Roads Planning District Commission, and accepted by all signatories.

DURATION AND TERMINATION

This Agreement will have a term of five and one-half years, extending from the date of full execution of the renewed Agreement by the signatories or January 1, 2008, whichever occurs last through June 30, 2013. To conform to local government charter and Virginia Code requirements, the funding provisions of this Agreement will be subject to annual appropriations.

No later than January 1, 2013, the signatories will institute a formal reevaluation of the Hampton Roads Regional Stormwater Management Program. This reevaluation will serve as the basis for appropriate modification of the Agreement and the Hampton Roads Regional Stormwater Management Program.

Any signatory may terminate its participation in the Hampton Roads Regional Stormwater Management Program by written Notice To Terminate to all other parties. Such termination will be effective with the start of the following Fiscal Year. Depending upon the terms of individual VSMP Permits, termination of participation in the Hampton Roads Regional Stormwater Management Program in the middle of a permit term may result in changes to permit conditions and require renegotiation of the individual locality's VSMP Permit from the state (Virginia Department of Conservation and Recreation).

OWNERSHIP OF PROPERTY

It is not the intent of the signatories that the Memorandum of Agreement will result in the purchase, ownership, leasing, holding or conveying of any real property.

INDEMNITY

It is the intent of the signatories that no signatory will be held liable for any damage or associated penalties caused by or associated with the failure of any other signatory to discharge its duties or to exercise due diligence in discharging its duties under this Agreement, and that no signatory, by entering this Agreement, waives any defenses or immunities available to it at law, including, but not limited to, those set forth in Section 15.2-970 of the Code of Virginia.

It is the intent of the signatories that no signatory will be held liable for any damage or associated penalties caused by or associated with the failure of any other signatory to comply with the terms and conditions of the signatory's VSMP Permit.

LIST OF SIGNATORIES

Signature pages will be signed in counterparts.

CITY OF CHESAPEAKE

CITY OF FRANKLIN

GLOUCESTER COUNTY

CITY OF HAMPTON

ISLE OF WIGHT COUNTY

JAMES CITY COUNTY

CITY OF NEWPORT NEWS

CITY OF NORFOLK

CITY OF POQUOSON

CITY OF PORTSMOUTH

SOUTHAMPTON COUNTY

CITY OF SUFFOLK

SURRY COUNTY

CITY OF VIRGINIA BEACH

CITY OF WILLIAMSBURG

YORK COUNTY

TOWN OF SMITHFIELD

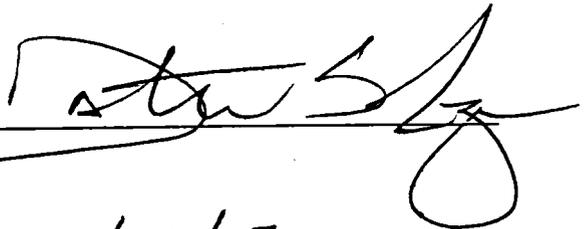
TOWM OF WINDSOR

HAMPTON ROADS PLANNING DISTRICT COMMISSION

This listing of participants will be followed by individual signature pages

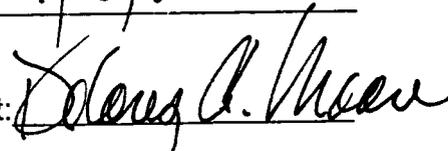
IN WITNESS THEREOF, the Chief Administrative Officer of the local governments and the Executive Director of the Hampton Roads Planning District Commission hereby execute this Agreement.

CITY OF CHESAPEAKE

By: 

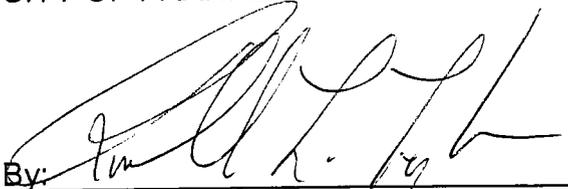
Date: 12/20/07

Date: 1/8/08

Attest: 

IN WITNESS THEREOF, the Chief Administrative Officer of the local governments and the Executive Director of the Hampton Roads Planning District Commission hereby execute this Agreement.

CITY OF FRANKLIN

By: 

Date: 12-7-07

Date: 12/7/07

Attest: Eric M. Turner

IN WITNESS THEREOF, the Chief Administrative Officer of the local governments and the Executive Director of the Hampton Roads Planning District Commission hereby execute this Agreement.

GLOUCESTER COUNTY

By: W. J. St

Date: 11/30/07

Date: _____

Attest: _____

IN WITNESS THEREOF, the Chief Administrative Officer of the local governments and the Executive Director of the Hampton Roads Planning District Commission hereby execute this Agreement.

CITY OF HAMPTON

By: 

Date: 12/20/07

Date: 12/27/07

Attest: 

IN WITNESS THEREOF, the Chief Administrative Officer of the local governments and the Executive Director of the Hampton Roads Planning District Commission hereby execute this Agreement.

ISLE OF WIGHT COUNTY

By: W. Douglas Cash

Date: December 17, 2007

Date: 12/17/07

Attest: Carey Mills Storm

Approved as to form:

A. Paul Burton

A. Paul Burton
Interim County Attorney

IN WITNESS THEREOF, the Chief Administrative Officer of the local governments and the Executive Director of the Hampton Roads Planning District Commission hereby execute this Agreement.

JAMES CITY COUNTY

By: Sanford Blumme

Date: 12/6/07

Date: 12/6/07

Attest: Michelle Salmeron

RECEIVED
DEC 14 2007
HRPDC

IN WITNESS THEREOF, the Chief Administrative Officer of the local governments and the Executive Director of the Hampton Roads Planning District Commission hereby execute this Agreement.

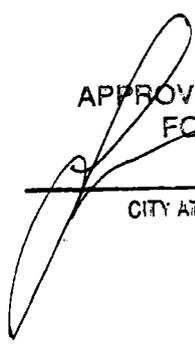
CITY OF NEWPORT NEWS

By: 

Date: 01/2/08

Date: 1-16-2008

Attest: Mabel U. Washington

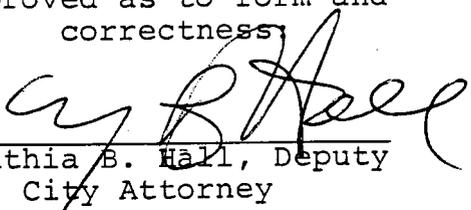

APPROVED AS TO
FORM

CITY ATTORNEY

IN WITNESS THEREOF, the Chief Administrative Officer of the local governments and the Executive Director of the Hampton Roads Planning District Commission hereby execute this Agreement.

CITY OF NORFOLK

Approved as to form and
correctness


Cynthia B. Hall, Deputy
City Attorney

Date: 3-6-08

Attest: 

By: 

Date: 12/31/07

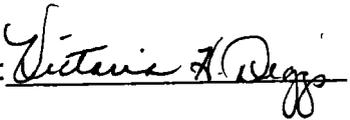
IN WITNESS THEREOF, the Chief Administrative Officer of the local governments and the Executive Director of the Hampton Roads Planning District Commission hereby execute this Agreement.

CITY OF POQUOSON

By: 

Date: 11/28/07

Date: 11/28/07

Attest: 

IN WITNESS THEREOF, the Chief Administrative Officer of the local governments and the Executive Director of the Hampton Roads Planning District Commission hereby execute this Agreement.

CITY OF PORTSMOUTH

By: 

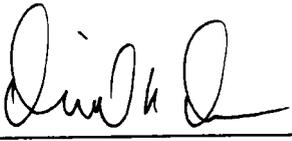
Date: 11-29-07

Date: _____

Attest: _____

IN WITNESS THEREOF, the Chief Administrative Officer of the local governments and the Executive Director of the Hampton Roads Planning District Commission hereby execute this Agreement.

SOUTHAMPTON COUNTY

By: 

Date: DECEMBER 18, 2007

Date: December 18, 2007

Attest: 

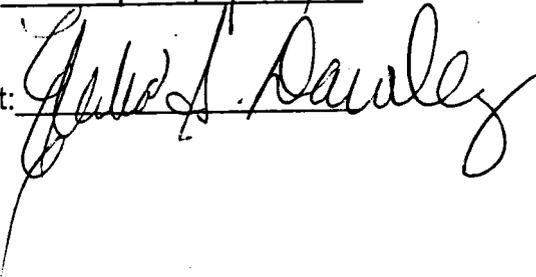
IN WITNESS THEREOF, the Chief Administrative Officer of the local governments and the Executive Director of the Hampton Roads Planning District Commission hereby execute this Agreement.

CITY OF SUFFOLK

By: 

Date: 12/19/07

Date: 12/21/07

Attest: 

IN WITNESS THEROF, the Chief Administrative Officer of the local governments and the Executive Director of the Hampton Roads Planning District Commission hereby execute this Agreement.

SURRY COUNTY

By: 

Date: 2-20-08

Date: 2/20/08

Attest: 

IN WITNESS THEREOF, the Chief Administrative Officer of the local governments and the Executive Director of the Hampton Roads Planning District Commission hereby execute this Agreement.

CITY OF VIRGINIA BEACH

By: James K. [Signature]

Date: 11/28/07

Date: _____

Attest: _____

IN WITNESS THEREOF, the Chief Administrative Officer of the local governments and the Executive Director of the Hampton Roads Planning District Commission hereby execute this Agreement.

CITY OF WILLIAMSBURG

By: 
Jackson C. Tuttle

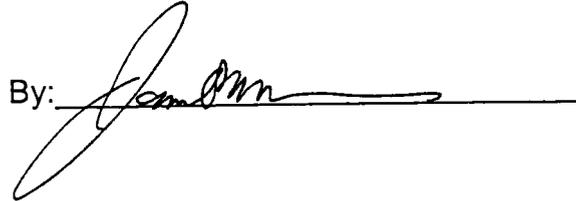
Date: December 14, 2007

Attest: 

Date: December 14, 2007

IN WITNESS THEREOF, the Chief Administrative Officer of the local governments and the Executive Director of the Hampton Roads Planning District Commission hereby execute this Agreement.

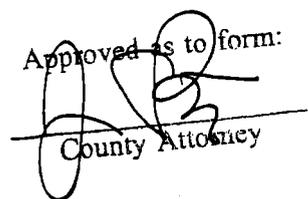
YORK COUNTY

By: _____

Date: 12-28-07

Date: 12-28-07

Attest: _____

Approved as to form:
_____
County Attorney

IN WITNESS THEREOF, the Chief Administrative Officer of the local governments and the Executive Director of the Hampton Roads Planning District Commission hereby execute this Agreement.

TOWN OF SMITHFIELD

By: 
PETER M. STEPHENSON
TOWN MANAGER

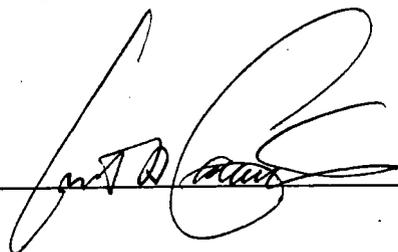
Date: DECEMBER 4, 2007

Date: 12/4/07

Attest: Sharon L. Thomas

IN WITNESS THEREOF, the Chief Administrative Officer of the local governments and the Executive Director of the Hampton Roads Planning District Commission hereby execute this Agreement.

TOWN OF WINDSOR

By:  _____

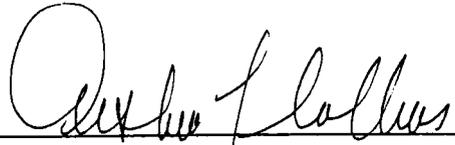
Date: 11/27/07 _____

Date: 11/27/07 _____

Attest: Jerry B. Whitehead

IN WITNESS THEREOF, the Chief Administrative Officer of the local governments and the Executive Director of the Hampton Roads Planning District Commission hereby execute this Agreement.

HAMPTON ROADS PLANNING
DISTRICT COMMISSION

By: 

Date: 3/6/08

Date: _____

Attest: _____

Regional Cooperation In Stormwater Management

Fiscal Year 2012-2013
A Status Report



HAMPTON ROADS PLANNING DISTRICT COMMISSION

DWIGHT L. FARMER

EXECUTIVE DIRECTOR/SECRETARY

CHESAPEAKE

AMAR DWARKANATH

JAMES E. BAKER

SCOTT MATHESON

DEBBIE RITTER

* ELLA P. WARD

FRANKLIN

* R. RANDY MARTIN

BARRY CHEATHAM

GLOUCESTER COUNTY

* BRENDA G. GARTON

CARTER BORDEN

HAMPTON

MARY BUNTING

WILL J. MOFFETT

* CHRISTOPHER STUART

ISLE OF WIGHT COUNTY

* W. DOUGLAS CASKEY

DELORES DARDEN

JAMES CITY COUNTY

* MARY K. JONES

ROBERT C. MIDDAUGH

NEWPORT NEWS

JAMES M. BOUREY

* MCKINLEY L. PRICE

SHARON P. SCOTT

NORFOLK

ANTHONY L. BURFOOT

* PAUL D. FRAIM

THOMAS R. SMIGIEL

MARCUS JONES

ANGELIA WILLIAMS

POQUOSON

W. EUGENE HUNT, JR.

* J. RANDALL WHEELER

PORTSMOUTH

JOHN L. ROWE, JR.

* KENNETH I. WRIGHT

SOUTHAMPTON COUNTY

* MICHAEL W. JOHNSON

BARRY PORTER

SUFFOLK

* SELENA CUFFEE-GLENN

LINDA T. JOHNSON

SURRY COUNTY

* TYRONE W. FRANKLIN

JOHN M. SEWARD

VIRGINIA BEACH

ROBERT M. DYER

BARBARA M. HENLEY

* LOUIS R. JONES

JOHN MOSS

AMELIA ROSS-HAMMOND

JAMES K. SPORE

JOHN E. UHRIN

WILLIAMSBURG

CLYDE A. HAULMAN

* JACKSON C. TUTTLE

YORK COUNTY

* JAMES O. McREYNOLDS

THOMAS G. SHEPPERD, JR.

*EXECUTIVE COMMITTEE MEMBER

PROJECT STAFF

RANDY R. KEATON

WHITNEY KATCHMARK

JENNIFER TRIBO

MICHAEL LONG

CHRISTOPHER VAIGNEUR

JENNIFER COLEMAN

HRPDC DEPUTY EXECUTIVE DIRECTOR

PRINCIPAL WAER RESOURCES ENGINEER

SENIOR WATER RESOURCES PLANNER

GENERAL SERVICES MANAGER

ASSISTANT GENERAL SERVICES MANAGER

ADMINISTRATIVE ASSISTANT

REGIONAL COOPERATION IN STORMWATER MANAGEMENT

FISCAL YEAR 2012-2013

A STATUS REPORT

This report was included in the HRPDC Work Program for FY 2013-2014, approved by the Commission at its Executive Committee Meeting on April 18, 2013

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

September 2013

REPORT DOCUMENTATION

TITLE:
**Regional Cooperation in Stormwater
Management Fiscal Year 2012-2013:
A Status Report**

REPORT DATE
September 2013

GRANT/SPONSORING AGENCY
LOCAL FUNDS

AUTHORS:
Jennifer L. Tribo
Whitney S. Katchmark

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

ABSTRACT

This document describes cooperative activities related to stormwater management undertaken by Hampton Roads local governments during Fiscal Year 2012-2013. Activities described include the regional information exchange process, public information and education, legislative and regulatory issues, cooperative regional studies and related programs. This document is used by the region's twelve localities with stormwater permits to assist them in meeting their permit requirements.

ACKNOWLEDGMENTS

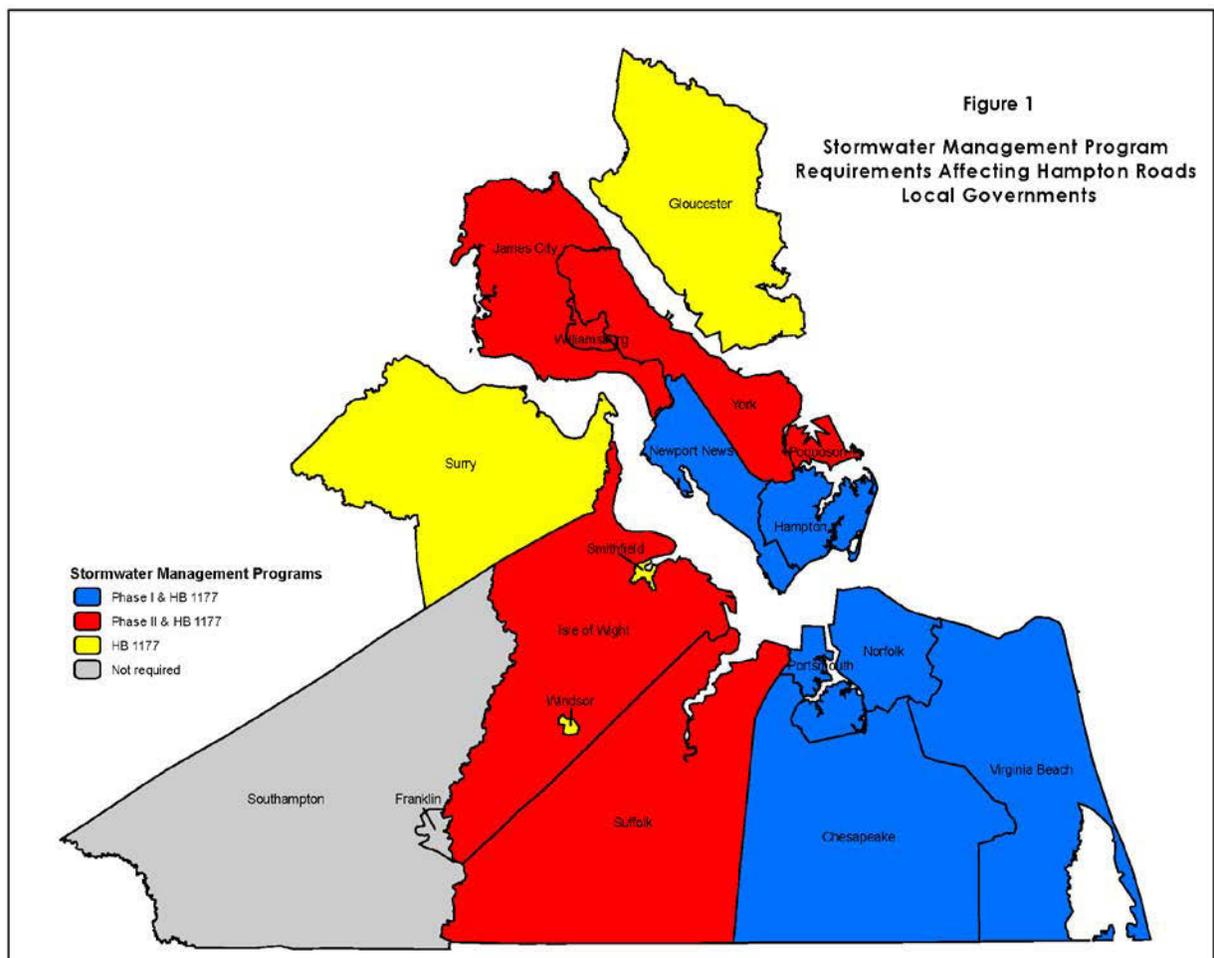
The Hampton Roads Planning District Commission, in cooperation with the regional Stormwater Technical Workgroup, prepared this report.

Preparation of this report was included in the HRPDC Unified Planning Work Program for FY 2013-2014, approved by the Commission at its Executive Committee Meeting of April 18, 2013.

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

INTRODUCTION

Working through the Hampton Roads Planning District Commission, the region's sixteen member cities and counties (Figure 1) cooperated on a variety of stormwater management activities during Fiscal Year 2012-2013. This cooperative effort has been underway as a formal adjunct to the Virginia Pollutant Discharge Elimination System Permits (VPDES) for Municipal Separate Storm Sewer Systems (MS4) held by the Cities of Chesapeake, Hampton, Newport News, Norfolk, Portsmouth and Virginia Beach since Fiscal Year 1995-1996. The Cities of Suffolk, Poquoson, Williamsburg, and James City County, Isle of Wight County, and York County joined in 2002 to coordinate Phase II MS4 permit applications. Cooperative activities documented in this report represent a continuation of an ongoing effort, which has involved concerted activity since 1992.



REGIONAL STORMWATER MANAGEMENT PROGRAM GOALS

The HRPDC and local stormwater staffs undertook a comprehensive effort in FY 1998-1999, called the Regional Loading Study. The project included developing a set of regional stormwater management goals to guide the regional program. The goals were presented to

and adopted by the HRPDC at its Executive Committee Meeting in September 1999. They were reaffirmed in the January 2003 approval of the “Memorandum of Agreement (MOA) Establishing the Hampton Roads Regional Stormwater Management Program” and the renewal of the MOA in 2008 and 2013. The adopted Regional Stormwater Management Program Goals, which guide the regional program, are:

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

THE REGIONAL PROGRAM

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

Phase I Localities

The efforts of the Phase I localities this year have focused on tracking regulatory changes to the Construction General Permit and preparing for local program changes required by revisions of the Virginia Stormwater Management Regulations. Localities have continued to follow the Phase I MS4 permit renewal process in Virginia. The Department of Environmental Quality (DEQ) has reissued the Arlington County permit and set a schedule to reissue all the Phase I MS4 permits by the end of FY14. HRPDC staff worked with the localities to review the draft

permits. The Phase I localities have also monitored and commented on the Phase II MS4 General Permit reissued in July 2013, since the permit requirements will likely be proposed in the Phase I MS4 permits.

Phase II Localities

In addition to participating in Regional efforts related to the Chesapeake Bay TMDL and the revision of the Virginia Stormwater Management Regulations, the Phase II localities cooperated to evaluate proposed changes to the Phase II General Permit. The Phase II General Permit was reissued on July 1, 2013. Local staff served on the State's Regional Advisory Panel for the Phase II General Permit to represent the concerns of the stormwater staffs in the region and track proposed changes to the permit.

INFORMATION EXCHANGE

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

Monthly Meetings

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

Increasingly, the region's localities are affected by and involved in the state's TMDL (Total Maximum Daily Load) Studies and Implementation Plan processes for the Chesapeake Bay and locally impaired waterbodies. Issues associated with these programs are also addressed during the monthly meetings. In FY13, the Stormwater Technical Workgroup discussed and provided input to DEQ on the PCB TMDL for the Lower James and Elizabeth River and the bacteria TMDL for the Back and Poquoson Rivers.

State and Federal Agency Program Briefings

Representatives of state and federal agencies frequently brief the Committee on developing issues, regulatory guidance and technical programs. During the year, the Committee was briefed by representatives of the Virginia DCR on state initiatives related to the Virginia Stormwater Management Regulations, by DEQ staff on the development of TMDLs for local waters, and by the Virginia Institute of Marine Science on oyster restoration.

Watershed Roundtables

The Watershed Roundtable approach is Virginia's program to encourage collaboration and information sharing between the public and private sector on nonpoint source pollution management. HRPDC leads the Lower James River (Hampton Roads) Watershed Roundtable and participates in the York River Watershed Council, the Middle James River Roundtable, and the Albemarle-Chowan Roundtable. Members of the Stormwater Technical Workgroup participate in the Hampton Roads Roundtables, along with representatives from other local government departments, regional and state agencies, Soil and Water Conservation Districts and private organizations.

PUBLIC EDUCATION

askHRgreen.org

To support development and operation of the stormwater education program, the HR STORM committee consisting of local stormwater education/public information staff was established in 1997. Beginning in FY11, the HRPDC environmental education programs were combined into a single public awareness program and central resource for environmental education in Hampton Roads known as askHRgreen.org. In June 2011, the askHRgreen.org website launched. The website contains information on earth-friendly landscaping ideas and pointers for keeping local waterways clean, recycling tips, and simple steps to make local living easy on the environment. It also includes a blog written by a team of local experts who work in the region's municipal utility and environmental divisions.

The stormwater subcommittee continues to meet on a monthly basis to discuss education priorities for stormwater. The activities conducted through the askHRgreen.org campaign for the year are summarized in the askHRgreen.org Annual Report.

TRAINING

Since 2004, the HRPDC staff has worked with the six Phase II communities to develop and conduct training programs for local government staff. This year a training event was conducted to review lessons learned from audits in the region including general pollution prevention and good housekeeping at municipal facilities. HRPDC also conducted Erosion and Sediment Control training for contractors to highlight common issues flagged by local government inspectors. HRPDC coordinated with DCR to host training linked to new local program requirements and certifications. HRPDC hosted several webinars on stormwater BMP design and maintenance and emerging policy approaches like green infrastructure. These webinars allow localities to save money by registering once as a group and local staff have an opportunity to discuss the webinar's recommendations and their applicability to the region.

Training Topic	Last offered	Previous dates
Fleet Maintenance	March 2005	
Landscaping	March 2006	
IDDE	Oct 2009	Feb 2008, May 2007
General Pollution	May 2013	March 2004, Feb 2009
Parks & Open Space Mgt.	March 2011	
LID Practices	June 2010	
Erosion & Sediment	May 2013	

LEGISLATIVE & REGULATORY MONITORING

This element of the program involves monitoring state and federal legislative and regulatory activities that may impact local stormwater management programs. Based on this monitoring, the HRPDC staff develops briefing materials for use by the localities, including consideration by the governing bodies. As appropriate, the HRPDC staff in cooperation with the Committee develops consensus positions for consideration by the Commission and local governments. The level of effort devoted to this element has increased significantly over the past six years. During 2012-2013, the regional emphasis was continued participation in the evolving regulatory stormwater program of the Department of Conservation and Recreation and the revisions to the General Permit which covers the Phase II MS4 localities.

Virginia Stormwater Regulations

Revisions to the Stormwater Regulations were approved by the Soil and Water Conservation Board in May 2011 and will be implemented by localities by July 1, 2014. In FY13, HRPDC and local government staff continued to serve on DCR's Stormwater Local Government Advisory Committee. The committee provided input to DCR on implementation of Local Stormwater Programs and need for guidance on creating TMDL Action Plans for the MS4 permits. Other challenges include management of grandfathered permits and defining the permit process for "common plans of development".

The region is also currently represented on the DCR Stormwater BMP Clearinghouse Committee which reviews protocols for proprietary BMP pollutant removal efficiencies. Regional input has been focused on defining the proposed role of the Clearinghouse in approving non-proprietary BMP pollutant removal efficiencies.

HRPDC and local staff have also participated in the regulatory advisory panels for the Phase II General Permit, Construction General Permit, and Nutrient Trading. In each case, the panel representative from the region provided updates to the Stormwater Technical Workgroup or Joint Environmental Committee, collected input, and made recommendations to the panel. In several cases, the Commission submitted comments to the state to endorse revisions to the final proposed regulations.

Chesapeake Bay TMDL and Virginia Phase II Implementation Plan

The Environmental Protection Agency established a Total Maximum Daily Load for the Chesapeake Bay on December 29, 2010. In November 2010, Virginia submitted its Phase I Watershed Implementation Plan (WIP) that outlined the statewide strategies that would be implemented by each source sector. The Phase II WIP outlined the management actions that will be implemented by local governments. Virginia submitted its final Phase II WIP to EPA on March 30, 2012.

Virginia asked localities to submit input for the Phase II WIP including resource needs. As part of the regional input, the “Hampton Roads Regional Planning Framework, Scenario, and Strategies” report was submitted to the state. In FY13, several issues identified in the report were addressed by the Chesapeake Bay Program. HRPDC and local staff participated in workgroups and expert panels to support research on these alternate BMPs and incorporation of local land use data into the Bay model. HRPDC staff have reached out to DCR and DEQ to develop consistent processes for tracking BMPs and calculating their effectiveness to comply with both Virginia Stormwater Regulations and Chesapeake Bay TMDL implementation.

REGIONAL STUDIES

Bacteria Source Tracking

The HRPDC led a regional effort to develop a bacterial identification methodology for the Hampton Roads Region. Proven genetic techniques are being used to differentiate bacteria sources, so that TMDL plans can be designed to address the cause of the bacterial impairment. During FY2013, the study was completed and findings were reviewed with the Stormwater Technical Workgroup and DEQ staff.

Stormwater Program Matrix

A comprehensive stormwater program matrix, including Phase I and Phase II communities, was developed in FY 2000 which addresses both utility and programmatic issues. HRPDC staff coordinates with local government stormwater program staff to update the information in the matrix annually.

Land and Water Quality Protection Study

In FY13, HRPDC worked on the first and second phase of the Land & Water Quality Protection study. During the first phase of the project, HRPDC staff analyzed the local consequences of the new water quality requirements for urban and transitional communities and identified available tools to enable localities to meet these requirements while avoiding negative impacts on natural resources. The second phase of the project will focus on working closely with two pilot localities to identify the most appropriate tools and test their application. The project will result in a coastal plain BMP guidance document, recommendations for changes to plans and ordinances in the pilot localities, and a modeling effort to evaluate the water quality impacts of various growth scenarios.

TECHNICAL ASSISTANCE

The HRPDC continues to serve as a clearinghouse for technical assistance to the localities, as well as a point of contact in arranging short-term assistance from one locality to another. The HRPDC Committee process also provides a forum, allowing state regulatory agency staff to meet with the region's localities to discuss evolving stormwater management regulations. In addition, the HRPDC staff provides technical information and advice to all of the participating localities on a wide variety of issues upon request. In FY13, technical assistance to localities was focused on disseminating information related to the Chesapeake Bay TMDL, Virginia's new stormwater regulations, and evaluating the real world challenges of interpreting and implementing the future local stormwater programs.

MEMORANDUM OF AGREEMENT

The Regional Stormwater Management Program was established in 1996 as a formal program of the Hampton Roads Planning District Commission with support and participation from the sixteen member local governments. A Memorandum of Agreement (MOA) was created that outlines the basic regulatory and programmatic premises for the cooperative program, incorporating the Regional Program Goals, described earlier in this report. The MOA establishes a division of program responsibilities among the HRPDC and the participating localities, addresses questions of legal liability for program implementation, and includes other general provisions. The MOA is reauthorized by the signatories every five years and was renewed in 2013.

PERMIT ADMINISTRATION AND REPORTING SYSTEM (PARS)

In an effort to streamline reporting and capture data more effectively for local governments, the twelve permitted localities have pooled resources to develop the Permit Administration and Reporting System, or PARS. The region contracted with URS Corporation to develop a web-based data tracking and reporting system. The system is being utilized by local governments to catalog development sites and their associated best management practices (BMPs). The system also enables localities to capture inspection information, catalog stormwater outfalls, document illicit discharge investigations and record public education information. Users can query a variety of reports to satisfy the reporting requirements of their stormwater permits. In FY12, the Stormwater Technical Workgroup reviewed the potential for PARS to track and report the implementation of Chesapeake Bay TMDL strategies. The Chesapeake Bay Program and DEQ continue to refine the data reporting requirements for BMPs so the evaluation of PARS will continue in FY14.

RELATED PROGRAMS AND PROJECTS

In various combinations, the twelve (12) MS4 communities, as well as their non-permitted counterpart communities, participate in a wide variety of related programs. These programs are noted here because of their relationship with stormwater management.

Chesapeake Bay Program

Over the past several years, the Hampton Roads Region has devoted considerable attention to the ongoing Chesapeake Bay Program (CBP). To facilitate local government participation in Chesapeake Bay Program activities, HRPDC and locality staff have participated in the deliberations of many CBP committees and work groups dealing with urban stormwater, land development, watershed planning, land use development, modeling and local government's role in the Bay Program. Since the development of the Chesapeake Bay TMDL in December 2010, the HRPDC staff have continued to follow the activities of the CBP primarily through participation in the Urban Stormwater Workgroup. In FY 2013, local government stormwater staff served on the Streetsweeping and IDDE panels that develop Bay Program efficiencies for new stormwater best management practices. HRPDC staff co-chaired the Bay Program's Land Use Workgroup.

Chesapeake Bay Preservation Act Program

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

Water Quality Management Planning

The state is developing a substantial number of TMDL (Total Maximum Daily Load) Studies and subsequent development of TMDL Implementation Plans. This work follows from the classification of the waters by the state as meeting or failing to meet water quality standards. Water bodies that fail to meet water quality standards are classified as "impaired," triggering the requirement to prepare the TMDL study. The HRPDC staff has coordinated regional involvement in the "impaired waters" listing process. This has entailed providing opportunities through the Joint Environmental Committee for education of local government staff on the TMDL process, development of technical comments on the "impaired waters" list and response to the development of TMDLs themselves.

This year the Stormwater Technical Workgroup has provided input on the PCB TMDL for the Lower James and Elizabeth River and the bacteria TMDL for the Back and Poquoson Rivers. To assist the region's localities in addressing this requirement and ensuring that Implementation Plans are feasible, the HRPDC staff is working with DEQ to devise a cooperative regional partnership to coordinate the TMDL study process with the localities and to develop the required Implementation Plans.

Sanitary Sewer Overflows

In late 2004, the HRPDC staff began implementing an electronic reporting and record keeping system known as the Sanitary Sewer Overflow Reporting System (SSORS). SSORS enables localities to communicate information about sanitary sewer overflows across departmental lines, allowing for easier reporting. The regional fats, oils and grease abatement program (HR FOG) was created to help wastewater utilities by decreasing overflows due to FOG blockages.

However, the FOG education program also benefits the stormwater program because of the potential for FOG to cause illicit discharges to the stormwater system.

CONCLUSION

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

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

askHRgreen.org



chesapeake franklin gloucester hampton isle of wight james city newport news norfolk
poquoson portsmouth southampton suffolk surry virginia beach williamsburg york hrsd

Annual Report & Fiscal Year 2013

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FACILITIES SUPERINTENDENT

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ABSTRACT

This report provides a summary of the second year of the askHRgreen.org public outreach and education initiative. The report contains seven major sections. The first section provides background about askHRgreen.org. The second section describes campaign research. The third section provides an overview of campaign results for fiscal year 2012-2013. The fourth through seventh sections provide an overview of the individual initiatives and results from each of the four askHRgreen.org subcommittees: Stormwater Education, Recycling & Beautification, Water Awareness, and Fats, Oils and Grease Education.

ACKNOWLEDGEMENTS

This report was prepared by the Hampton Roads Planning District Commission (HRPDC) staff in cooperation with the member localities. Preparation of this report was included in the HRPDC Unified Planning Work Program for Fiscal Year 2012-2013, approved by the Commission at its Quarterly Meeting of April 19, 2012.



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about askHRgreen.org

askHRgreen.org was developed to help Hampton Roads residents find their inner green with just the click of a mouse. For years, the HRPDC facilitated a variety of environmental education efforts to assist localities in notifying residents and meeting regulatory requirements. Developing consistent regional messaging has always afforded localities an economy of scale that they could not otherwise achieve. Couple that with various emerging issues beginning to overlap, like sanitary sewer overflows and storm-water pollution, and we knew the time was right for the development of an umbrella brand to tie all of the messages together. askHRgreen.org began with offering just the green basics. What we found was that people then craved more information. Once you show someone an easy, green alternative, they get hooked and want to add something else. Now we make the connections for people by illustrating not just what they can do, but why they should care and how their actions impact the larger environment. askHRgreen.org is powered by the 16 cities and counties of Hampton Roads, HRSD, and the Hampton Roads Planning District Commission.

You can “like” askHRgreen.org on Facebook at [Facebook.com/askHRgreen](https://www.facebook.com/askHRgreen), “tweet” and “retweet” at [Twitter.com/HRgreen](https://twitter.com/HRgreen), “tune in” at [YouTube.com/HRGreenVA](https://www.youtube.com/HRGreenVA), and read and comment on the blog, askhrgreen.org/blog.



Dear friends and members,

askHRgreen.org turned two this year – and what a couple of fun years it has been! What began as a region-wide public awareness and education campaign is quickly becoming a local green movement among residents from Williamsburg to Virginia Beach, and from Isle of Wight County to Poquoson. This year’s success would not have been possible without the dedication and involvement of our committee members from 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; and HRSD – thank you!

Julia

Julia Hillegass

*Public Information & Community Affairs Administrator
Hampton Roads Planning District Commission*



askHRgreen.org campaign research

In the fall of 2012, EAB Research conducted a second online survey (the first survey was conducted in fall 2010) to measure how the askHRgreen.org campaign was performing. Four-hundred residents of the region's 16 cities and counties participated in the study.

Overall, the 2012 survey revealed that the askHRgreen.org campaign has proven effective in educating and modifying the behavior of its target audiences. In addition, those who are aware of askHRgreen.org are more likely to seek information, have more knowledge and report positive behaviors. Highlights of the survey found that:

- 12% of those surveyed have heard about askHRgreen.org.
- Online was reported to be the largest source for awareness.
- 33% of "askHRgreen.org aware" respondents have visited the website.
- Overall self-perceived knowledge of local environmental issues has increased. The largest increases are among:
 - single females, under \$75,000 income
 - those aware of askHRgreen.org
- People aware of askHRgreen.org are the most frequent information seekers.

Since the 2010 benchmark study, there have been significant increases in the general use of and frequency of reusable bags as opposed to store-provided bags. Pouring fats, oils and grease down the drain or in the yard decreased 12 points from the 2010 survey, and the perceived harm rose 12 points - showing improvement in both the behavior of the action and the understanding that it is harmful.

While there were improvements in certain environmental areas, the findings revealed a "disconnect" between some behaviors and the personal impact of those actions, especially with regard to the effects of over fertilizing lawns and leaving pet waste on the ground.

- 65% of those surveyed understood that over fertilizing lawns leads to excesses of nitrogen and phosphorus in area waterways. Yet, only 7 percent of these respondents knew that this action results in discolored and foul-smelling waterways that are not desirable for swimming and boating.
- 23% of respondents who are using fertilizer are applying it 3 or more times a year.
- 55% of the people surveyed knew that leaving pet waste on the ground leads to bacteria being carried to local waterways through the storm drain. Of this total, 62% knew this would lead to contaminated waterways. Of the 62%, only 20% knew that contaminated waterways meant you couldn't swim at the beach or eat local seafood.

Over the next year, the askHRgreen.org team will use the survey results to make adjustments to the overall campaign to focus more on showing the connection between negative environmental behaviors and the resulting consequences, in addition to driving more people to the website.



highlights  **2012-2013**

942 Facebook Likes

**32,697 Website Visitors from
July 2012 – June 2013**

**Over 65 Million Opportunities
to See or Hear askHRgreen.org
in the Media**

**30,000 Green Learning Guides
Distributed to Sixth Graders**

**185,349 Green Living Inserts
Distributed through
The Virginian-Pilot & Daily Press**

**\$12,175 Environmental Education
Mini-grants Awarded to
31 Schools/Groups in 10 Localities**

fy 2012-2013 campaign schedule & results



Ten environmentally-themed media campaigns ran throughout FY13 for a total of 17 weeks of exposure.

Campaign	Media	jul	aug	sep	oct	nov	dec	jan	feb	mar	apr	may	jun
Garbage Disposal	R-O-FB												
Tap vs. Bottled Water	R-P-O-FB												
Fertilizer Use	R-O-FB												
Green Learning Guide	P-O												
askHRgreen.org Media	B-FB												
Thanksgiving	R-O-FB												
Electronics Recycling Events	R-FB												
Fix-a-Leak Week	R-O-FB												
Fertilizer/Outdoor Watering	R-P-O-FB												
Drinking Water Week	R-O-FB												
Green Living Newspaper Insert	P-O												
askHRgreen.org E-Newsletter													
Public Relations													
Research													
askHRgreen.org Maintenance & Updates													

Media Key: R = Radio P = Print O = Online FB = Facebook

Total Advertising Weeks		17
Impressions		
Billboard		9.8 million
Newspaper		511,992
Radio*		2.8 million
askHRgreen.org website		72,270
Online Newspaper (The Virginian-Pilot & Daily Press)		3.7 million
Facebook		26.2 million
Media Added Value		18 million
Public Relations		4.6 million
Total Media Budget		\$144,614
Total Public Relations & Creative Budget		\$73,500
Value		
Media Added Value		\$149,114
Public Relations		\$368,604
Total Exposure Value		\$755,832
Totals		
Impressions		65.7 million
Cost per Thousand Impressions		\$3.32
Return on Investment		3.5 : 1

askHRgreen.org Website Statistics	
Visits	32,697
Unique Visitors	25,092
Average Page Views	2.21
Average Time on Site	2:11
Bounce Rate	61%

askHRgreen.org E-Newsletter Statistics	
Subscribers (as of June 2013)	1,869
Total Emails Sent	19
Open Rate	13.9%
CTR (Click Through Rate)	2.0%
Bounce Rate	15.2%

*Radio projections of audience levels are based on data provided by Arbitron Research that projects the impressions within a target audience and the number of times the audience is exposed to the message.

billboards & facebook

The askHRgreen.org campaign ran billboard ads across Hampton Roads for four paid weeks. The campaign achieved full market coverage with a total of 62 billboards: 52 on the southside and 10 on the peninsula. As an added bonus, many of the billboards remained in place for eight additional weeks. To increase exposure, a Facebook ad campaign ran simultaneously.

askHRgreen.org Billboard & Facebook Campaign	
Paid Media (4 weeks)	
Billboards	
Impressions	9.8 million
Facebook	
Impressions	10.3 million
Clicks	1,656
CTR (ClickThrough Rate)	0.016%
Unpaid Media	
Billboards	
Added Value Impressions	18 million
Added Value	\$76,203
Overall Campaign	
Total Impressions	38 million
Total Budget	\$50,000
Total Exposure Value	\$126,203
Return on Investment	2.5 : 1
Cost per Thousand Impressions	\$1.31



green learning

In fall 2012, askHRgreen.org distributed over 21,000 Green Learning Guides to all sixth graders in Hampton Roads public schools. Written according to Virginia SOL guidelines by a team of experts who work in the region's public works and public utilities departments, Green Learning connects students to their environment by combining educational information with colorful maps, bold graphics, puzzles and fun activities. Green Learning allows students to explore watersheds and what it means to live in the Chesapeake Bay watershed; learn how to prevent stormwater pollution and identify ways to help keep waterways clean; and analyze daily water use to learn ways they can conserve resources to become environmental stewards at home and at school. The Green Learning Guide, and accompanying teacher's guide, can be downloaded online at askHRgreen.org/Green-Learning



"Thank you for producing this valuable information for our students."

Katrice Krebs

Great Bridge Middle School
Chesapeake, VA

"Incorporating green learning with science SOLs is great and I think both the teacher's guide and educational guide along with the activities is an awesome way to assist students in better understanding and retaining the information."

Patricia Bell

Northside Middle School
Norfolk, VA

green living

This was the second year for the *Green Living* newspaper insert. The insert was created in partnership with *The Virginian-Pilot* and included ads from local businesses in the green sector and contained over seven full pages of editorial content plus four half-page ads. The editorial content was packed with articles to get citizens thinking about how the actions they take (fertilizing lawns, raking leaves into the street, recycling, even flushing the toilet) impact the environment here in Hampton Roads. In addition, readers could:

- Explore our Hampton Roads watershed and see why the time to improve our region’s water quality is at hand.
- Go beyond the big blue bin and examine the business of recycling.
- Learn tips for keeping a “green” yard from a true garden guru, Jim Orband.
- Follow the path of water through our vast (and often forgotten) infrastructure.
- Learn why it’s time to “break up” with a common household appliance.



The insert was included in the April 17, 2013 edition of both *The Virginian-Pilot* and the *Daily Press*. In addition, members of askHRgreen.org received 10,000 overprints to distribute as needed.

Green Living 16-page Insert	
Total Circulation (Virginian-Pilot & Daily Press)	185,349
Total Readership	501,993
Online Impressions	80,002
Overprints	10,000
Total Impressions	581,995
Total Budget	\$14,862
Total Open Rate Value (based on rate card)	\$27,456
Public Relations Value	\$293,439
Total Insert Value	\$322,918
Return on Investment	22 : 1

“let’s talk green...” blog

The askHRgreen.org website features a blog written by committee members and guest bloggers covering everything from easy green tips to implement around the house to community events and local volunteer opportunities. The blog is interactive as readers are able to respond to posts with questions and comments. In FY13, askHRgreen.org bloggers published over 100 interesting posts through the “let’s talk green” blog.

askHRgreen.org e-newsletter

The askHRgreen.org e-newsletter is shared via email to media contacts and an ever-growing list of citizens whose email addresses have been collected at events and through online promotions. In FY13, 19 e-newsletters covering seasonal “green” tips, events and askHRgreen.org campaign updates were sent to 1,869 subscribers. Looking ahead to FY14, the recipient list is already up to over 2,754 subscribers.



social media

In FY13, social media was a key source for public outreach. Facebook, Twitter, YouTube, and Pinterest were all used to share information, promote the blog and upcoming events, and hold contests.



media ambassadors

This year, askHRgreen.org hosted a two-part media ambassador training for eleven team members. The training included an in-depth review of campaign messaging and the role of an ambassador, tips on how to prepare for an interview, and mock interviews with WVEC-TV Anchor LaSalle Blanks. Below is the list of askHRgreen.org media ambassadors who received the training and are now well-prepared to handle any future media inquiries:

- Chris Ausink, Hampton
- Donna Corbus, Portsmouth
- Katie Cullipher, HRPDC
- Lisa Hardy, HRPDC
- Laurie Halperin, York
- Deidre Harmon, Norfolk
- Julia Hillegass, HRPDC
- Elizabeth Vaughn, Chesapeake
- Brianna Venner, Hampton
- Lori Woolman, Newport News
- Tiffany Wright, Virginia Beach

regional events

The askHRgreen.org campaign's education and outreach efforts include representation at various regional public events throughout the year (Earth Day celebrations, fairs, home & garden shows, community days, etc.). Committee members volunteer to staff either the askHRgreen.org mobile education trailer or a table display at these events and hand out educational materials and promotional items to those in attendance. In FY13, committee members represented askHRgreen.org at 28 community events.



2012-2013 Regional Events		
7/7	VMI Community Health Day	Norfolk
7/20	Latin Fiesta	Virginia Beach
8/4	Beacon Light Civic League Berkley Reunion	Norfolk
9/8 - 9/9	Hampton Bay Days	Hampton
9/13 - 9/16	Isle of Wight County Fair	Windsor
9/23	Go Green Expo - NN Master Gardeners	Newport News
9/28 - 9/29	Hampton Roads Sustainable Living Expo	Virginia Beach
10/4 - 10/7	Peanut Festival	Suffolk
10/13	Lynnhaven River Now Annual Fall Fest	Virginia Beach
10/18	Greenbrier Intermediate Event	Chesapeake
10/20	Williamsburg Farmer's Market	Williamsburg
2/8 - 2/10	PHBA Hampton Roads Home & Garden Show	Hampton
2/16 - 2/17	Sustainable Living Fair	Norfolk
3/1 - 3/3	TBA Mid-Atlantic Home & Garden Show	Virginia Beach
3/9	Trash Bash 2.0	Virginia Beach
3/9	SEVA CA Day	Virginia Beach
3/23	Community Day @ Mack Benn Elementary	Suffolk
4/13	Williamsburg Farmer's Market	Williamsburg
4/20	Earth Day Celebration	Newport News
4/22	NASA Earth Day Event	Hampton
4/23	"Big Blue Goes Green" - ODU event	Norfolk
4/27	RiverFest	Norfolk
5/18	Hampton Environmental Summit	Hampton
5/18	Hampton Master Gardeners	Portsmouth
5/23	Sensible Seafood Festival	Virginia Beach
6/6	NASA Safety & Health Expo	Hampton
6/26	Environmental Fair at Busch Gardens Brewery	Williamsburg
6/29	Olden Days	Smithfield

mini-grant program

askHRgreen.org offers grants of up to \$500 for environmentally-themed projects in schools and with youth groups. To be eligible, the project must be in-line with one or more of the askHRgreen.org messages (waste reduction, water conservation, recycling, watershed education, soil erosion, etc.). In FY13, a total of \$12,175* was awarded to 31 schools/groups in 10 localities.

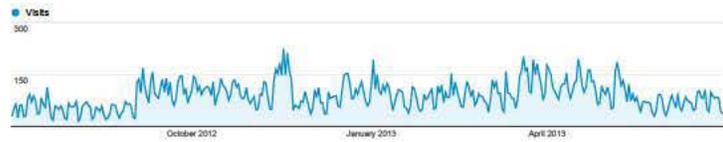


2012-2013 Environmental Education Mini-Grants

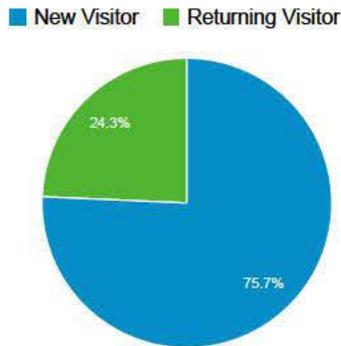
Western Branch Middle Oyster & Trout Restoration	Corporate Landing Middle School	Chesapeake	\$500
Monarch Butterfly Conservation	Ware Academy	Gloucester	\$234
Going Green	Forrest Elementary School	Hampton	\$240
Rain Barrels for Vegetable Garden	Spratley Gifted Center	Hampton	\$160
Recycling and the 3Rs	Spratley Gifted Center	Hampton	\$280
Graph How Much We Reduce	Point Option Nontraditional High School	Newport News	\$425
Oysters Saving Our Bay	Trinity Lutheran School	Newport News	\$500
South Ave Beautification	NN Green Foundation	Newport News	\$500
United Campus Ministries Beautification	United Campus Ministries - CNU	Newport News	\$500
Green Team Waterwise Gardening	Sewells Point Elementary School	Norfolk	\$500
Oyster Restoration	Norfolk Christian Lower Schools	Norfolk	\$220
Value in Vermicomposting	Oceanair Elementary School	Norfolk	\$420
Watershed Impact on Sea Turtle Survival	Azalea Gardens Middle School	Norfolk	\$275
We Care About the Earth Buttons	James Monroe Elementary School	Norfolk	\$500
Wetland Restoration Project	Booker T. Washington High School	Norfolk	\$550
Worm Watchers	Norview Middle School	Norfolk	\$420
Do the Rot Thing	Westhaven Elementary School	Portsmouth	\$420
I Speak for the Trees	The Elizabeth River Project	Portsmouth	\$500
Planting Seeds for a Healthy Watershed	Parkview Elementary	Portsmouth	\$500
Water Monitoring, Testing & Oil Spill Cleanup Methods	Smithfield Packing Company Inc. Environmental & Wastewater Division	Smithfield	\$200
Environmental Showcase	John F. Kennedy Middle School	Suffolk	\$225
Battery Recycling: Glenwood Gators Get a Charge From Helping Mother Earth	Glenwood Elementary School	Virginia Beach	\$310
Operation Oysters	Strawbridge Elementary School	Virginia Beach	\$370
Oyster Reef Restoration	Norfolk Christian Schools	Virginia Beach	\$110
Oyster Restoration	Va. Beach Middle School Environmental Club	Virginia Beach	\$450
Oysters RULE	Trantwood Elementary School	Virginia Beach	\$500
Pearls of Educational Wisdom	Linkhorn Park Elementary School	Virginia Beach	\$465
Rain Barrel for the Teaching Gardens	Bettie F. Williams Elementary School	Virginia Beach	\$95
Water Quality in the Watershed	Corporate Landing Middle School	Virginia Beach	\$420
Worms Love Our Leftovers	Bullfrogs and Butterflies	Virginia Beach	\$500
Monarch Butterfly Garden Coventry Elementary	Coventry Elementary School	Yorktown	\$437
Monarch Initiative	Youth Environmental Programs VCE-York/Poquoson	Yorktown	\$500

*Recycling & Beautification Subcommittee awarded \$4,699 • Stormwater Education Subcommittee awarded \$5,879 • Water Awareness Subcommittee awarded \$1,597

askHRgreen.org results



	2011-2012	2012-2013
Visits	27,424	32,697
Unique Visitors	19,920	25,092
Pageviews	67,047	72,270
Pages per Visit	2.44	2.21
Average Visit Duration	2 mins, 22 secs	2 mins, 11 secs
Bounce Rate	61.24%	61.27%
% New Visits	72.49%	75.65%



Top Ten Website Traffic Sources:

- Google organic
- Direct
- Pilotonline.com
- Facebook
- e-Newsletters
- VBgov.com
- Google.com
- DailyPress.com
- Bing organic
- Pinterest.com

in the news...

- askHRgreen.org was all over the media in FY13. In total, we...
- Issued 15 news releases.
 - Facilitated 16 print and online articles.
 - Participated in 15 television interviews.
 - Achieved a total publicity value of \$368,604.





recycling & beautification subcommittee

The Recycling and Beautification Subcommittee is a coalition of local government staff members working together to share ideas and pool resources for various education programs tailored to beautification, litter prevention and recycling education.

Focal Area: Electronics Recycling

Target Audience: Adults; Age 18+

The proper management and handling of unwanted electronics continued as a campaign message again in FY13. Two electronics recycling events (one on the southside, one on the peninsula) were held in conjunction with Keep America Beautiful's "America Recycles Day." The Peninsula event was held at The Home Depot in Newport News on Monday, November 12. The Southside event was held on Saturday, November 17 in Virginia Beach. The Arc of the Virginia Peninsula and Synergy Recycling donated their time to provide free electronic recycling, and Stealth Shredding donated its time to provide free document shredding services. Special effort was given again this year to reach out to small businesses.

askHRgreen.org

**INVITES YOU TO GIVE YOUR
UNWANTED ELECTRONICS
A PROPER SEND-OFF!**



MARK YOUR CALENDAR FOR THESE FREE ELECTRONICS RECYCLING EVENTS:

Virginia Beach Collection Site Results

- 250 vehicles
- 15,000 pounds of electronics
- 8,000 pounds of paper

Newport News Collection Site Results

- 156 vehicles
- 12,773 pounds of electronics
- 4,000 pounds of paper

This year Cox Conserves partnered with our electronics recycling efforts by providing a \$20,000 media schedule at no charge. As a result, Cox aired 1,105 30-second TV spots over nine weeks to promote responsible electronics recycling in Hampton Roads.

Electronics Recycling Events Media & Public Relations	
Paid Media (0.5 weeks)	
Radio	
Impressions	103,311
Reach	30.3%
Frequency	4.4
Facebook	
Impressions	1,269,593
Clicks	257
CTR (Clickthrough Rate)	0.020%
Unpaid Media	
Added Value	NA
Added Value Impressions	NA
Articles and Interviews	5
Public Relations Impressions	222,968
Public Relations Value (unpaid coverage)	\$1,905
Overall Campaign	
Total Impressions	1,622,872
Total Budget	\$2,500
Total Exposure Value	\$4,405
Return on Investment	1.76 : 1
Cost per Thousand Impressions	\$1.54

Focal Area: Christmas Tree Recycling

Target Audience: Entire Hampton Roads Community

The majority of localities in Hampton Roads provide Christmas tree pickup and recycling. In FY13, askHRgreen.org helped to get the word out about each locality's

service by issuing a news release, featuring the information prominently on the website, and promoting it via Facebook. The information was well received by the media as it was featured in both *The Virginian-Pilot* and *AltDaily* and broadcast on the WVEC-TV 13 News 12 p.m. newscast and WAVY-TV 10 News 6 p.m. newscast, for a total public relations exposure value of \$7,590.



Focal Area: Great American Cleanup™

Target Audience: Entire Hampton Roads Community

askHRgreen.org supported and promoted the Great American Cleanup efforts taking place across Hampton Roads from April through June 2013 by issuing news releases, featuring the information prominently on the website and events calendar, promoting the local events via Facebook, and taking part in television interviews on Suffolk TV-8's "On the Scene" program, Norfolk TV-48's "Norfolk Perspectives," and WVEC-TV 13's "Dialogue" for a total public relations exposure value of \$3,000.





stormwater education subcommittee

The Stormwater Education Subcommittee is a cooperative partnership of the region's sixteen member cities and counties. This cooperative effort has been underway since 1997 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). Local government staff members work together to share ideas and pool resources for various education programs tailored to stormwater pollution prevention.

Focal Area: Pet Waste

Target Audience: Women; Age 18-49; Not College Graduates

In an effort to educate Hampton Roads' dog owners on the importance of picking up after their pets, a rack card was developed and produced in FY13. The "Poop! Bag it! Trash it!" rack cards, along with dog waste bag holders, were distributed at various community events in FY13, particularly those that were identified as dog-friendly. They were also delivered to animal shelters and veterinarian offices for distribution.



Focal Area: Lawn Care**Target Audience:** Men; Age 35-64; College Graduates; All Household Income Ranges

Based on the target audience information from the fall 2010 survey, the subcommittee ran the "Fall Yard Challenge" radio and online campaign from October 1-14, 2012. The promotions reminded people to "know their grass and test their soil before fertilizing, and that stormwater runoff washes fertilizer chemicals into waterways, killing aquatic life.

**Fall Fertilizer Media & Public Relations****Paid Media (2 weeks)**

Radio	
Impressions	372,240
Reach	34.6%
Frequency	3.7

Online Newspaper (The Virginian-Pilot & Daily Press)

Impressions	564,482
Clicks	1,145
CTR (Clickthrough Rate)	0.20%

Facebook

Impressions	2,512,365
Clicks	456
CTR (Clickthrough Rate)	0.018%

Unpaid Media

Added Value	\$9,180
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Overall Campaign

Total Impressions	3,452,192
Total Budget	\$12,000
Total Exposure Value	\$21,180
Return on Investment	1.77 : 1
Cost per Thousand Impressions	\$3.48

Focal Area: Lawn Care**Target Audience:** Adults; Age 25-54

The Stormwater Education Subcommittee also partnered with the Water Awareness Subcommittee in the spring of FY13 to promote green landscaping practices and smart outdoor watering tips. This joint media campaign combined radio and online ads that ran for two weeks from March 25 through April 7, 2013. The campaign combined a 60-second radio spot with Facebook ads and banner placements on pilotonline.com and dailypress.com.

**Spring Landscaping Media & Public Relations****Paid Media (2 weeks)**

Radio	
Impressions	645,000
Reach	26.2%
Frequency	4.1

Online Newspaper (The Virginian-Pilot & Daily Press)

Impressions	702,708
Clicks	1,513
CTR (Clickthrough Rate)	0.22%

Facebook

Impressions	2,081,357
Clicks	447
CTR (Clickthrough Rate)	0.02%

Unpaid Media

Added Value	\$8,196
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Overall Campaign

Total Impressions	3,438,661
Total Budget	\$15,001
Total Exposure Value	\$23,197
Return on Investment	1.55 : 1
Cost per Thousand Impressions	\$4.36



Focal Area: Only Rain Down the Storm Drain

Target Audience: *Entire Hampton Roads Community*

There are thousands of storm drains across Hampton Roads that all lead directly to our waterways. To help remind people that “only rain belongs down the drain,” the subcommittee has been recruiting schools and volunteer groups of all ages to mark storm drains with medallions that say “No Dumping: Leads To Waterway.” The program includes medallions, adhesive, a lesson plan and PowerPoint presentation about stormwater and how individual actions affect our local waterways. Each group is required to work with their locality’s committee member to select the storm drains for marking. This also allows the locality to record where the medallions have been placed. This fiscal year, 460 medallions (23 boxes of 20) were distributed as follows:

- **Newport News: 7 boxes (140 medallions)**
- **Norfolk: 5 boxes (100 medallions)**
- **Portsmouth: 9 boxes (180 medallions)**
- **York County: 2 boxes (40 medallions)**





water awareness subcommittee

The Water Awareness Subcommittee is an education committee comprised of local government staff members who are committed to promoting and educating citizens about the value of tap water and the importance of being good water stewards. This cooperative effort to promote conservation assists localities in meeting requirements of various water supply and ground water permits.

Focal Area: Water Efficiency

Target Audience: Adults; Age 18-49; Household Income < \$75,000

The Water Awareness Subcommittee continues to promote wise water use in a variety of ways. Members participate in numerous regional community events throughout the year to promote conservation by talking to the public and distributing promotional items such as rain gauges and 5-minute shower timers as well as educational “Water, Use It Wisely” brochures and Water Wise Landscaping Guides.

In FY13, the subcommittee sponsored a media campaign combining radio and online ads that ran during the fifth annual National Fix a Leak Week, March 18-24, 2013. The campaign combined a 60-second radio spot with Facebook ads and banner placements on pilotonline.com and dailypress.com. In response to a news release issued by askHRgreen.org, the Fix a Leak Week campaign was also featured in a special interview segment on WAVY TV/Fox 43’s The Hampton Roads Show on March 20, 2013.



Fix a Leak Week Media & Public Relations**Paid Media (1 week)**

Radio	
Impressions	225,850
Reach	15.4%
Frequency	2.1
Online Newspaper (The Virginian-Pilot & Daily Press)	
Impressions	354,986
Clicks	651
CTR (Clickthrough Rate)	0.18%
Facebook	
Impressions	1,273,742
Clicks	255
CTR (Clickthrough Rate)	0.02%
Unpaid Media	
Added Value	\$2,959
Overall Campaign	
Total Impressions	1,856,668
Total Budget	\$7,760
Total Exposure Value	\$10,719
Return on Investment	1.38 : 1
Cost per Thousand Impressions	\$4.18

FY13 to promote green landscaping practices and smart outdoor watering tips. This joint media campaign combined radio and online ads that ran for two weeks from March 25 through April 7, 2013. The campaign combined a 60-second radio spot with Facebook ads and banner placements on pilotonline.com and dailypress.com.

Spring Landscaping Media & Public Relations**Paid Media (2 weeks)**

Radio	
Impressions	645,000
Reach	26.2%
Frequency	4.1
Online Newspaper (The Virginian-Pilot & Daily Press)	
Impressions	702,708
Clicks	1,513
CTR (Clickthrough Rate)	0.22%
Facebook	
Impressions	2,081,357
Clicks	447
CTR (Clickthrough Rate)	0.02%
Unpaid Media	
Added Value	\$8,196
Overall Campaign	
Total Impressions	3,438,661
Total Budget	\$15,001
Total Exposure Value	\$23,197
Return on Investment	1.55 : 1
Cost per Thousand Impressions	\$4.36



Focal Area: Value of Tap Water

Target Audience: Adults; Age 25-54

Focal Area: Value of Tap Water

Target Audience: Women; Age 25-49

The Water Awareness Subcommittee also partnered with the Stormwater Education Subcommittee in the spring of

In FY13, the Water Awareness Subcommittee continued promoting the “value of tap water” message to the residents of Hampton Roads. The message was two-fold: educating people on the benefits of choosing tap water over bottled water and the importance of maintaining the public water infrastructure that cleans and delivers our most precious resource. The subcommittee sponsored two media campaigns to promote both messages. The Tap vs. Bottled Water promotion ran for two weeks from September 17-30, 2012 and combined a 60-second radio spot with Facebook

ads and banner placements on pilotonline.com and dailypress.com.

Tap vs. Bottled Water Media & Public Relations	
Paid Media (2 weeks)	
Radio	
Impressions	397,500
Reach	47.8%
Frequency	3.1
Online Newspaper (The Virginian-Pilot & Daily Press)	
Impressions	624,106
Clicks	846
CTR (Clickthrough Rate)	0.14%
Facebook	
Impressions	2,735,137
Clicks	521
CTR (Clickthrough Rate)	0.019%
Unpaid Media	
Added Value	\$10,612
Overall Campaign	
Total Impressions	3,759,380
Total Budget	\$14,736
Total Exposure Value	\$25,348
Return on Investment	1.72 : 1
Cost per Thousand Impressions	\$3.92

Value of Water/Infrastructure Media & Public Relations	
Paid Media (1 week)	
Radio	
Impressions	240,770
Reach	16.8%
Frequency	2.3
Online Newspaper (The Virginian-Pilot & Daily Press)	
Impressions	360,006
Clicks	623
CTR (Clickthrough Rate)	0.17%
Facebook	
Impressions	1,626,624
Clicks	312
CTR (Clickthrough Rate)	0.019%
Unpaid Media	
Added Value	\$3,135
Overall Campaign	
Total Impressions	2,229,248
Total Budget	\$7,500
Total Exposure Value	\$10,635
Return on Investment	1.42 : 1
Cost per Thousand Impressions	\$3.36

Focal Area: Value of Tap Water

Target Audience: Adults; Age 25-54;
Household Income < \$75,000

The Value of Water/Infrastructure Sustainability promotion ran during Drinking Water Week from May 6-12, 2013 combining a 60-second radio spot with Facebook ads and banner placements on pilotonline.com and dailypress.com

IS WHAT YOU SEE WHAT YOU GET?

WATER GET THE FULL PICTURE!

Learn about our aging water infrastructure and what it takes to maintain it askHRgreen.org



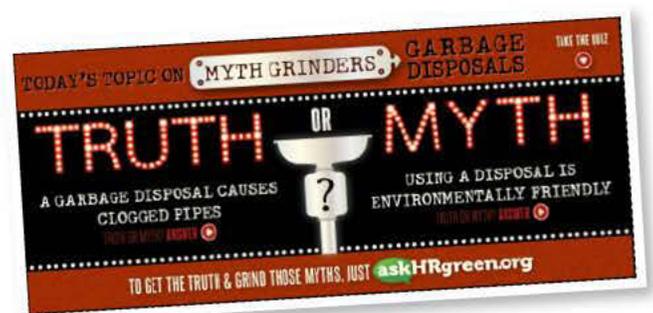
fats, oils and grease (fog) education subcommittee

The Fats, Oils and Grease Education Subcommittee is a coalition of local government staff members and HRSD working together to share ideas and pool resources for various education programs tailored to prevent sanitary sewer overflows and backups caused by 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.

Focal Area: Garbage Disposal Use

Target Audience: Women; Age 35-64

In FY13, the FOG Education Subcommittee continued to discourage the use of garbage disposals and encourage best management practices for cleaning up in the kitchen. The "Myth Grinders" radio and online campaign was developed to help break the myth that garbage disposals are a kitchen necessity and educate residents about the harm they cause to sanitary sewer pipes. The Myth Busters promotion ran for two weeks from September 3-16, 2012 and combined a 60-second radio spot with Facebook ads and banner placements on pilotonline.com and dailypress.com.



Garbage Disposal Media & Public Relations**Paid Media (2 weeks)**

Radio	
Impressions	367,600
Reach	36.5%
Frequency	3.1
Online Newspaper (The Virginian-Pilot & Daily Press)	
Impressions	663,868
Clicks	1,357
CTR (Clickthrough Rate)	0.20%
Facebook	
Impressions	2,923,228
Clicks	624
CTR (Clickthrough Rate)	0.02%
Unpaid Media	
Added Value	\$12,601
Overall Campaign	
Total Impressions	3,957,723
Total Budget	\$12,752
Total Exposure Value	\$25,353
Return on Investment	1.99 : 1
Cost per Thousand Impressions	\$3.22

FOG Thanksgiving Media & Public Relations**Paid Media (1 week)**

Radio	
Impressions	426,790
Reach	25.5%
Frequency	4.8
Online Newspaper (The Virginian-Pilot & Daily Press)	
Impressions	331,058
Clicks	831
CTR (Clickthrough Rate)	0.25%
Facebook	
Impressions	1,456,396
Clicks	271
CTR (Clickthrough Rate)	0.02%
Unpaid Media	
Added Value	\$7,340
Overall Campaign	
Total Impressions	2,214,244
Total Budget	\$7,501
Total Exposure Value	\$14,841
Return on Investment	1.98 : 1
Cost per Thousand Impressions	\$3.39

Focal Area: Fats, Oils and Grease Disposal

Target Audience: Women; Age 35-64

The FOG Education Subcommittee sponsored a radio and online campaign in November to highlight best management practices for cleaning up in the kitchen. The Thanksgiving-themed promotion used humor to educate the public about the fats, oils and grease associated with holiday cooking and the harmful blockages and backups that can result from improper disposal. The campaign aired from November 17-21, 2012 and combined a 60-second radio spot with Facebook ads and banner placements on pilotonline.com and dailypress.com.

Focal Area: FOG Regional Training Program

Target Audience: Food Service Establishment Employees and Grease Haulers

In FY13, the FOG Education Subcommittee launched www.HRFOG.com, a new online tool for regional FOG training and certification. The website was designed to help localities inform and train individuals working in the food service industry on proper maintenance of grease control devices and the harmful effects of FOG on the region's sanitary sewer systems. Certification is required by FOG ordinances in some Hampton Roads localities and the new site offers two programs at no cost: one for food service establishment employees and another for grease haulers.

In addition to the free certification programs, the website also provides a wealth of training materials and resources from detailed presentations and step-by-step instructional guides, to posters and educational brochures that can be downloaded and printed.





impression

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.

added value

Earned but unpaid advertising value.

exposure value

The combination of advertising cost and public relations value.

ctr (clickthrough rate)

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.

unique visitors

A measure of the amount of unique people who visit a site, or click on a link in a given amount of time. While a single person could tally multiple page views by reloading a page, it will still count as a single unique visitor.

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.

frequency

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



Item Three of the Registration Statement - 2008

Names of the receiving waters into which the small MS4 discharges

<u>HUC</u>	<u>Body of Water</u>
YO65	Skimino Creek
YO66	Carter Creek
YO67	Queens Creek
YO68	King Creek
YO69	York River
JL 28	Chickahominy River – Yarmouth Creek
JL 31	Powhatan Creek
JL34	College Creek
JL35	James River – Skiffes Creek
JL38	Warwick River
CB22	NW Branch/Back River (Brick Kiln Creek)
CB21	Lower Chesapeake/Poquoson River

Impaired Waters – Approved

- CB22 NW Branch/Back River (Brick Kiln Creek) (enterococci, and Fecal Coliform)
- CB21 Lower Chesapeake/Poquoson River (enterococci, and Fecal Coliform)

Impaired Waters – Proposed

- YO67 Queens Creek
- YO68 King Creek – Felgates Creek
- JL38 Warwick River- Baptist Run

York County WLA's as of July 9, 2008*

HUC Code	Waterbody	Allocation	Pollutant	Unit
JL38	Baptist Run	8.79E+06	E coli	cfu/day
JL38	Warwick and James	1.75E+07	fecal coliform	cfu/day
JL35	James River -Opposite Ft. Eustis & Skiffes Crk.	1.95E+07	fecal coliform	cfu/day
YO67	Queen Creek	5.72E+11	fecal coliform	MPN/day
YO68	King Creek	4.37E+10	fecal coliform	MPN/day
YO68	Felgates Creek	3.70E+10	fecal coliform	MPN/day
	*Does not include WLA's for waters within the Back and Poquoson River watersheds. The WLA for these Watersheds are attached separately but are not separated by locality			

These waste loads are not part of this permit at this time. The TMDL's were not approved prior to the issuance of this permit.

Trib Subbasin	County	WLA	Parameter	%IMP
Poquoson TMDL				
Chisman Creek	York	3.71E+10	Fecal	
UC Patricks Creek	York	5.75E+07	Fecal	
Patricks Creek	York	2.13E+09	Fecal	
Poquoson River	Newport News	9.11E+09	Fecal	8
	York	5.69E+09		5
Lambs Creek	Poquoson	2.51E+09	Fecal	5
	York	1.00E+09		2
Roberts Creek	Poquoson	1.73E+09	Fecal	
Whitehouse Creek	Poquoson	8.54E+09	Fecal	
Back Creek	York	2.26E+10	Fecal	
Upper Poquoson River	York	4.17E+11	Enterococci	
Back River TMDL				
	York	3.93E+08	Fecal	2
Topping Creek	Poquoson	1.18E+09		6
Cedar Creek	Poquoson	7.20E+08	Fecal	6
	York	2.40E+08		2
NW Back River	Poquoson	1.45E+09	Fecal	6
	York	2.18E+09		9
	Newport News	5.81E+09		24
	Hampton	2.66E+09		11
Tabbs Creek	Hampton	4.85E+09	Fecal	
SW Back River	Newport News	1.86E+11	Fecal	33
	Hampton	1.64E+11		29
Inlet 1	Hampton	8.89E+08	Fecal	
Harris River	Hampton	3.44E+10	Fecal	
Inlet 2	Hampton	3.49E+08	Fecal	
Wallace Creek	Hampton	2.42E+09	Fecal	
Front Cove	Poquoson	1.76E+09	Fecal	
Long & Grunland Creeks	Hampton	8.06E+09	Fecal	
Brick Kiln Creek & NW Back R	Hampton	7.39E+10	Enterococci	11
	Poquoson	4.03E+10		6
	Newport News	1.61E+11		24
	York	6.05E+10		9
New Market Creek 1 & 2 & SW Back River	Hampton	5.67E+10	Enterococci	

Areas in teal are the WLA that were split

Land Cover Data used = NLCD 2001

% Impervious used to split WLA per City

Simple Method Calculation of Pollutant Loads

Precipitation	(in)	Bacteria Concentration	colonies/100ml	Acres of Landuse	3,281.90
Winter (October - March)	20.5	Winter	1000	Impervious Fraction	0.19
Summer (April - September)	24.25	Summer	21000	Runoff Coeficient	0.22
Annual	44.75				

Annual Runoff	(in)	Annual Load	Billions of Colonies
Winter	4.09	Winter	13815
Summer	4.83	Summer	343183
Annual	8.92	Total	356998

Volume of SW Discharge	acre-ft	Daily Load	Fecal Coliform
Annual	2439.883	Average	9.78E+11
$R=(P)(Pj)(Rv/12)(A)$			

These Numbers are based on assumptions of average rainfall and bacteria concentrations based on winter and summer
 There is no credit for SWMFs in the watersheds.
 Better methods may be developed in the future to obtain more accurate results.

Simple Method Calculation of Pollutant Loads

Precipitation	(in)	Bacteria Concentration	colonies/100ml	Acres of Landuse	17,247.05
Winter (October - March)	20.5	Winter	1000	Impervious Fraction	0.09
Summer (April - September)	24.25	Summer	21000	Runoff Coeficient	0.13
Annual	44.75				

Annual Runoff	(in)	Annual Load	Billions of Colonies
Winter	2.41	Winter	42888
Summer	2.86	Summer	1065411
Annual	5.27	Total	1108300

Volume of SW Discharge	acre-ft	Daily Load	Fecal Coliform
Annual	7574.621	Average	3.04E+12
$R=(P)(Pj)(Rv/12)(A)$			

These Numbers are based on assumptions of average rainfall and bacteria concentrations based on winter and summer. There is no credit for SWMFs in the watersheds. Better methods may be developed in the future to obtain more accurate results.

SEPTIC TANK PUMP-OUTS/INSPECTIONS REPORTED FY2013

<u>AP #</u>		<u>ADDRESS</u>		<u>DATE</u>	<u>COMMENTS</u>
200000192	116	KING RICHARD	CT	04/02/2013	pumped 3/15/13 per atlantics list
200000212	109	HOLCOMB	DR	11/13/2012	pumped 11/9/12 per woods receipt
200000237	157	DENNIS	DR	08/10/2012	pumped 5/3/12 per parsleys list
200000239	147	WEST QUEENS	DR	09/25/2012	PUMPED PER LIST 8/31/12
200000241	152	WEST QUEENS	DR	05/01/2013	pumped 4/17/13 per woods list
200000243	156	WEST QUEENS	DR	06/06/2013	pumped 5/7/13 per zieglers list
200000247	165	DENNIS	DR	05/06/2013	pumped per zeiglers list 4/15/13
200000254	163	WEST QUEENS	DR	03/03/2013	pumped per Parsleys statement 8/21/12
200000276	104	N WILL SCARLET	LN	08/06/2012	
200000285	133	LITTLE JOHN	RD	08/30/2012	
200000315	110	WILL SCARLET	LN	05/01/2013	pumped 4/10/13 per woods list
200000330	277	NOTTINGHAM	RD	12/04/2012	pumped 11/13/12 per parsleys list
200000333	107	WILLOUGHBY	DR	06/17/2013	pumped 6/17 per atlantics list
200000353	273	EAST QUEENS	DR	05/01/2013	pumped per atlantics list 4/4/2013
200000361	277	EAST QUEENS	DR	02/13/2013	pumped 4/13/12 per atlantic sys list
200000414	104	NATIONAL	LN	05/01/2013	pumped 4/10/13 per woods list
200000420	119	NATIONAL	LN	08/11/2012	pumped 7/20/12 per woods list
200000426	113	NATIONAL	LN	03/06/2013	pumped per parsleys 2/25/13
200000429	126	NATIONAL	LN	05/01/2013	pumped 4/10/13 per woods list
200000466	118	BOWSTRING	DR	09/10/2012	
200000532	297	EAST QUEENS	DR	07/12/2012	pumped by parsleys per list
200000539	298	EAST QUEENS	DR	11/08/2012	
200000558	214	WEST QUEENS	DR	12/04/2012	pumped 11/21/12 per parsleys list
200000572	121	HOLCOMB	DR	02/13/2013	pumped 5/1/12 per atlantic systems list
200000576	130	HOLCOMB	DR	02/13/2013	pumped 6/1/2012 per atlantic systems list
200000578	166	DENNIS	DR	02/07/2013	pumped 12/20/12 per Atlantics list
200000581	174	DENNIS	DR	07/20/2012	inspected June 29, 2012 per letter from Virginia Pump and Haul. Md
200000609	188	WEST QUEENS	DR	12/04/2012	pumped 11/7/12 per parsleys list
200000614	196	WEST QUEENS	DR	06/03/2013	pumped 5/13/13 per hogges list
200000663	223	WEST QUEENS	DR	02/07/2013	pumped per atlantics list 1/14/2013
200000665	105	HORSESHOE	DR	02/13/2013	
200000680	250	EAST QUEENS	DR	06/03/2013	pumped 6/3/2013
200000693	1677	PENNIMAN	RD	02/06/2013	pumped per parsleys list 1/16/2013
200000694	1595	PENNIMAN	RD	05/29/2013	inspected 5/16/13 per woods
200000697	121	SHERWOOD	DR	04/22/2013	pumped 3/28/13 per woods list
200000721	106	CHARLES RIV LNDG	RD	06/03/2013	pumped per atlantic sys list 5/22/13
200100090	6308	OLD MOORETOWN	RD	04/08/2013	pumped 3/14/2013 per parsleys list
200100110	204	PRINCESS	LN	09/19/2012	pumped 9/19/12 per atlantic systems receipt
200100129	5590	MOORETOWN	RD	08/09/2012	8/9/12 per Lisa JCSA - connected to Their sewer
200100130	5588	MOORETOWN	RD	08/16/2012	pumped 4/13/10 per atlantic sys receipt owner sent receipt for a at same time. receipts dont say whether it is a or not so used this one for this address
200100130	5588	MOORETOWN	RD	02/13/2013	pumped per atlantic sys receipt 3/5/12
200100132	5588 A	MOORETOWN	RD	08/16/2012	pumped 3/5/12 per atlantic sys receipt
200100135	5476	MOORETOWN	RD	05/06/2013	pumped 4/1/13 per Parsleys List
200100138	6086	MOORETOWN	RD	02/13/2013	pumped 1/30/2012 per atlantic systems list

<u>AP #</u>		<u>ADDRESS</u>		<u>DATE</u>	<u>COMMENTS</u>
200100139	6088	MOORETOWN	RD	04/02/2013	pumped 3/18/2013 per atlantic sys report
200100140	6090	MOORETOWN	RD	09/24/2012	pumped per parsleys receipt 9/10/12
200100142	6096	MOORETOWN	RD	10/08/2012	pumped 10/2/12 per atlantic systems
200100149	6052	MOORETOWN	RD	09/07/2012	inspected 9/5/12per parsleys receipt
200100152	6058	MOORETOWN	RD	09/07/2012	inspected 9/5/2012 per parsleys receipt
200100166	409	OAKTREE	RD	09/03/2012	pumped 8/28/12 per parsleys list
200100172	394	FENTON MILL	RD	02/07/2013	pumped 8/13/12 per atlantic sys receipt
200100174	382	FENTON MILL	RD	08/16/2012	pumped 3/01/2012 per atlantic sys recpt
200100175	374	FENTON MILL	RD	08/10/2012	pumped 5/6/12 per parsleys list
200100178	102	QUAKER MTNG HOUSE	RD	08/10/2012	pumped 4/6/12 per parsleys list
200100182	338	FENTON MILL	RD	07/05/2012	inspected 6/25/12 per atlantic systems letter
200100187	100	CHATEAU	DR	11/01/2012	pumped 10/9/12 per parsleys list
200100190	115	QUAKER MTNG HOUSE	RD	11/01/2012	pumped 10/25/12 per parsleys list
200100191	101	CHATEAU	DR	10/03/2012	pumped 9/28/12 per parsleys list
200100192	117	QUAKER MTNG HOUSE	RD	02/07/2013	pumped per atlantics list 11/16/12
200100194	103	KINGSGATE	RD	03/03/2013	pumped 11/18/2010 per parsleys receipt
200100196	101	KINGSGATE	RD	08/27/2012	pumped 8/23/2012 per millers receipt
200100204	164	LONDONDERRY	LN	08/29/2012	inspected and pumped per letter from woods march 18, 2009
200100210	155	QUAKER MTNG HOUSE	RD	08/22/2012	pumped 6/8/12 per woods receipt
200100211	153	QUAKER MTNG HOUSE	RD	08/23/2012	per atlantic systems receipt pumped 8/21/12
200100216	226	CHERWELL	CT	02/13/2013	pumped per atlantics list 1/18/12
200100219	434	FENTON MILL	RD	02/27/2013	pumped 2/20/13 per parsleys receipt
200100223	438	FENTON MILL	RD	06/06/2013	pumped may 3 per zeiglers list
200100224	442	FENTON MILL	RD	08/15/2012	pumped 8/14/12 per parsleys receipt
200100225	115	ANNS	CT	10/11/2012	pumped 10/4/12 per parsleys recpt
200100228	104	ANNS	CT	10/24/2012	pumped 10/24/12 per parsleys list
200100228	104	ANNS	CT	08/10/2012	pumped 4/30/12 per parsleys list
200100228	104	ANNS	CT	03/06/2013	pumped per parsleys list 2/18/2013
200100230	106	PENN	DR	08/17/2012	pumped per parsleys receipt 8/14/12
200100234	112	A PENN	DR	08/17/2012	tank pumped 8/10/12 per parsleys reciept
200100241	116	PENN	DR	02/12/2013	pumped 2/12/13 per atlantic sys email
200100247	114	PENN	DR	08/31/2012	pumped 8/17/12 per atlantic sys receipt
200100260	126	QUAKER MTNG HOUSE	RD	09/24/2012	pumped 9/18/12 per Jerrys septic list
200100264	130	QUAKER MTNG HOUSE	RD	02/12/2013	pumped 3/8/12 per atlantic systems receipt
200100278	220	CHERWELL	CT	10/05/2012	pumped 9/10/12 per zieglers list
200100282	216	CHERWELL	CT	08/10/2012	pumped 4/13/12 per parsleys list
200100284	209	CHERWELL	CT	09/08/2012	pumped 9/7/12 per atlantic systems receipt.
200100293	101	TUDOR	DR	08/21/2012	pumped 8/15/12 per atlantic systems receipt
200100302	122	WESTMINSTER	PL	04/08/2013	pumped 3/8/2013 per parsleys list
200100306	206	CHERWELL	CT	10/15/2012	pumped 10/2/12 per atlantic systems receipt
200100307	204	CHERWELL	CT	09/24/2012	PUMPED 9/26/12 PER ATLANTIC SYSTEMS RECEIPT
200100310	142	DEVONSHIRE	DR	03/06/2013	pumped 2/4/13 per parsleys list
200100318	137	DEVONSHIRE	DR	04/08/2013	pumped 3/15/13 per parsleys list
200100319	103	WESTMINSTER	PL	09/19/2012	pumped 9/12/2012 per woods receipt
200100322	107	WESTMINSTER	PL	05/06/2013	pumped per woods receipt 4/4/2013
200100326	315	WALLER MILL	RD	08/01/2012	pumped 7/23/12 per zeiglers receipt
200100327	103	PLANTATION	DR	08/01/2012	pumped 7/27/12 by ziegler per receipt

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200100336	117	PLANTATION	DR	04/05/2013	pumped 4/3/13 per Atlantics receipt
200100337	112	PLANTATION	DR	05/01/2013	pumped 4/3/2013 per atlantic sys report
200100343	100	PLANTATION	DR	09/25/2012	TANK PUMPED 8/28/12 PER LIST FROM HEALTH DEPARTMENT --VIRGINIA PUMP AMD HAUL?
200100343	100	PLANTATION	DR	05/06/2013	pumped 4/30/13 per zeiglers list pumped 5/24/13 also
200100351	513	WALLER MILL	RD	10/02/2012	was NOT pumped house in NOT HABITABLE!!!!!!
200100358	423	AIRPORT	RD	11/13/2012	pumped 11/23/12 per atlantic sys receipt
200100363	412	WILKINSON	DR	06/08/2013	pumped 6/5/13 per atlantic Sys receipt
200100363	412	WILKINSON	DR	08/25/2012	pumped by atlantic sys 3/10/08 per receipt
200100373	331	WILKINSON	DR	02/06/2013	pumped 1/30/2013 per parsleys list
200100381	202	SCHENCK	DR	02/06/2013	pumped 1/21/13 per parsleys list
200100388	325	WILKINSON	DR	02/15/2013	pumped 8/31/12 per woods receipt
200100393	329	HUDSON	DR	03/08/2013	pumped per millers receipt 2/21/13
200100396	321	WILKINSON	DR	03/06/2013	pumped per atlantic sys receipt 3/5/13
200100397	104	SCHENCK	DR	02/07/2013	pumped 10/9/12 per atlantics list
200100397	104	SCHENCK	DR	05/01/2013	pumped 4/5/13 per atlantics list
200100398	315	WILKINSON	DR	09/06/2012	pumped 8/30/12 per atlantic sys receipt
200100404	103	SCHENCK	DR	06/11/2013	pumped 5/11/13 per woods list
200100404	103	SCHENCK	DR	05/13/2013	pumped 3/8/13, 3/29/13 and 5/4/13 per woods list and 12/4/12 and 11/15/12 per Advance septic systems
200100407	371	EAST ROCHAMBEAU	DR	02/18/2013	pumped 2/16/13 per woods receipt
200100408	318	WILKINSON	DR	08/10/2012	pumped 6/8/2012 per parsley list
200100415	308	ROY	LN	02/20/2013	pumped 2/14/13 per parsleys receipt
200100421	129	BARLOW	RD	02/08/2013	pumped 9/14/2012 per atlantics list
200100429	233	BARLOW	RD	08/15/2012	pumped 8/6/12 per atlantics receipt
200100441	116	RED DIRT	RD	02/04/2013	connecting to sewer red dirt road project
200100441	116	RED DIRT	RD	04/02/2013	pumped per atlantic sys list 3/29/13
200100443	112	RED DIRT	RD	02/04/2013	closing part of red dirt Road sewer project md
200100449	111	RED DIRT	RD	08/09/2012	connrcting to sewer fall 2012
200100450	113	RED DIRT	RD	02/04/2013	closed connecting to sewer red drit road project md
200100452	105	OAKTREE	RD	04/02/2013	pumped 3/29/13 per atlantic sys list
200100457	395	EAST ROCHAMBEAU	DR	05/06/2013	pumped 4/10/13 per parsleys list
200100459	143	FENTON MILL	RD	04/08/2013	pumped 3/1/13 per parsleys list
200100462	137	FENTON MILL	RD	02/13/2013	pumped 3/9/12 per atlantic systems list. Confirmed with Keisha a tank was pumped here and at 139
200100464	140	FENTON MILL	RD	03/04/2013	pumped per atlantic sys receipt 2/22/13
200100465	138	FENTON MILL	RD	03/04/2013	pumped per atlantic sys receipt 2/22/13
200100470	118	FENTON MILL	RD	02/08/2013	pumped per atlantic sys 9/19/12
200100474	173	BARLOW	RD	10/05/2012	pumped 10/5/12 per parsleys receipt
200100482	165	LONDONDERRY	LN	08/09/2012	pumped 12/8/2011 per woods receipt
200100483	105	CHERWELL	CT	05/06/2013	pumped per parsleys list 4/10/13
200100488	149	LONDONDERRY	LN	08/12/2012	pumped 11/16/09 per atlantic receipt
200100490	147	LONDONDERRY	LN	08/10/2012	pumped 7/31/12 per parsleys list
200100497	135	LONDONDERRY	LN	10/09/2012	pumped 10/4/12 per parsleys recpt
200100505	322	BARLOW	RD	09/14/2012	pumped per receipt atlantic systems 8/21/12
200100507	310	BARLOW	RD	12/04/2012	per parsleys list pumped 11/2/12
200100507	310	BARLOW	RD	02/06/2013	pumped 1/15/2013 per parsleys list
200100509	322	A BARLOW	RD	08/24/2012	pumped 8/22/12 per atlantics receipt
200100510	304	BARLOW	RD	02/07/2013	pumped per atlantics list 10/9/12

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200100531	117	SKIMINO	RD	08/10/2012	pumped 8/10/12 per parsleys receipt
200100532	121	SKIMINO	RD	08/09/2012	pumped 12/20/11 per atlantic sys receipt
200100536	104	OLIVERS	WAY	08/31/2012	puumped 8/31/12 per woods receipt
200100545	106	WESTMINSTER	PL	09/21/2012	pumped 9/21/12 per woods receipt
200100548	108	WESTMINSTER	PL	02/19/2013	pumped 2/19/13 per parsleys receipt
200100558	114	DEVONSHIRE	DR	08/13/2012	pumped 3/3/2011 per Va Pump & Motor list faxed 8/13/12
200100575	234	BARLOW	RD	09/21/2012	new tank installed summer of 2011. Electrical inspection was completed June 2011.
200100579	204	BARLOW	RD	10/03/2012	pumped per recpt atlantic systems 8/21/12
200100580	216	CARTERS NECK	RD	09/14/2012	pumped per atlantic sys recpt 9/11/12
200100580	216	CARTERS NECK	RD	04/02/2013	pumped per atlantic sys list 3/16/2013
200100582	308	CARTERS NECK	RD	09/14/2012	pumped 9/11/12 per atlantic sys recpt
200100584	177	BARLOW	RD	10/05/2012	pumped 10/5/12 per parsleys receipt
200100591	152	SKIMINO	RD	06/04/2013	pumped 5/15/13 per parsleys list
200100592	154	SKIMINO	RD	03/06/2013	pumped 2/4/13 per parsleys list
200100594	156	SKIMINO	RD	10/04/2012	pumped 10/1/12 per atlantic sys recpt
200100596	100	WILSON	DR	08/14/2012	pumped per zeigler receipt 1/16/09
200100600	171	SKIMINO	RD	06/03/2013	pumped 5/14/13 per atlantics list
200100602	172	SKIMINO	RD	01/30/2013	pumped 1/28/13 per atlantic systems receipt
200100605	173	SKIMINO	RD	06/04/2013	pumped 5/4/13 per parsleys list
200100612	190	SKIMINO	RD	02/26/2013	pumped per atlantic sys list 2/28/12
200100614	194	SKIMINO	RD	06/03/2013	pumped 5/3/13 per atlantic sys list
200100632	222	SKIMINO	RD	02/07/2013	pumped 8/20/12 per stlantics list
200100635	231	SKIMINO	RD	10/01/2012	pumped 9/19/12 per pars;eys recpt
200100637	103	FOREST	LN	08/10/2012	pumped 7/23/12 per parsleys list and owners sent receipts for 2012 pumping and one 12/17/2008.
200100642	106	SKIMINO	RD	08/13/2012	pumped 12/8/2011 per atlantic systems receipt
200100654	132	SKIMINO	RD	09/03/2012	pumped 8/31/12 per parsleys list
200100655	134	SKIMINO	RD	02/13/2013	pumped 3/12/12 per atlantic sys list
200100656	105	WILSON	DR	04/02/2013	pumped 3/20/13 per atlantic sys list
200100658	107	WILSON	DR	08/14/2012	pumped 11/28/2011 per atlantic sys receipt
200100662	331	CARTERS NECK	RD	02/11/2013	pumped 1/11/2012 per atlantic sys
200100666	205	CARTERS NECK	RD	09/12/2012	pumped 1/10/12 per jeryys septic recpt
200100676	117	WILSON	DR	02/26/2013	pumped per atlantic sys list 2/21/2012
200100681	107	DEER PATH	RD	08/13/2012	pumped 8/13/12 per atlantic sys recpt
200100689	108	DEER PATH	RD	08/17/2012	pumped 8/14/12 per atlantic sys receipt
200100695	807	CARTERS NECK	RD	08/10/2012	pumped 6/6/2012 per parsleys list
200100697	112	FOREST	LN	05/01/2013	pumped 4/15/13 per atlantics list
200100706	116	SHADY BLUFF	PT	02/07/2013	pumped per atlantics list 9/17/12
200100706	116	SHADY BLUFF	PT	06/03/2013	pumped 5/23/13 per atlantic systems list
200300189	208	VINE	DR	09/20/2012	pumped 8/3/12 per woods list
200300257	2300	HAMPTON	HWY	07/21/2012	pumped 6/15/12 per woods list
200300257	2300	HAMPTON	HWY	06/11/2013	pumped 5/13/13 per woods list
200300290	211	BEECHWOOD	LN	12/10/2012	pumped 11/29/2012 per va pump and haul list
200300296	114	RUSSELL	LN	08/13/2012	pumped 8/6/12 per woods receipt
200300352	602	CHEADLE LOOP	RD	07/21/2012	pumped 6/9/12 per woods list
200300354	102	CHEADLE POINT	RD	04/02/2013	pumped 3/21/13 per zeiglers list
200300368	309	BEECHWOOD	LN	12/10/2012	pumped 11/29/12 per va pump and haul list

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200300369	209	BEECHWOOD	LN	03/01/2013	pumped feb 2013 per woods list
200300371	110	BEECHWOOD	LN	07/24/2012	pumped 6/18/12 per woods list
200300372	102	BAYBERRY	LN	02/09/2013	pumped 1/12/13 per woods list
200300373	204	BEECHWOOD	LN	01/11/2013	
200300387	3025	HAMPTON	HWY	11/08/2012	pumped 10/8/12 per VA pump and haul list
200300394	507	MANSION	RD	07/21/2012	pumped 6/5/2012
200300394	507	MANSION	RD	10/24/2012	pumped 9/6/12 per woods list
200300402	112	SINCLAIR	LN	05/01/2013	pumped 4/16/13 per woods list
200300405	108	SINCLAIR	LN	06/11/2013	pumped per woods list 5/19/13
200300439	112	DEALBA	LN	09/20/2012	pumped 8/17/12 per woods list
200500340	1115	SPRINGFIELD	RD	05/01/2013	pumped 4/24/13 per atlantic sys list
200500344	505	HORNSBYVILLE	RD	02/09/2013	pumped per woods list 1/7/13
200500378	107	SECOND	ST	12/09/2012	pumped 11/16/12 per woods list
200500382	405	ORIANA	RD	01/06/2013	pumped 12/7/12 per woods list
200500405	701	LAKESIDE	DR	05/07/2013	pumped 4/10/13 per list
200500422	801	GOOSLEY	RD	08/11/2012	pumped july 3, 2012 per woods list
200500426	101	GILES	LN	05/01/2013	pumped 4/4/13 per woods list
200500436	218	OLD WORMLEY CREEK	RD	09/20/2012	PUMPED 8/21/2012 PER WOODS LIST
200500440	109	NORTH BEACH	RD	04/22/2013	pumped 3/22/13 per woods list
200500445	601	HORNSBYVILLE	RD	05/01/2013	pumped per woods list 4/30/13
200500445	601	HORNSBYVILLE	RD	03/01/2013	pumped per woods list 2/15/13
200500445	601	HORNSBYVILLE	RD	11/04/2012	pumped 10/31/12 per woods list
200500445	601	HORNSBYVILLE	RD	02/09/2013	pumped 1/7/13 per woods list
200500466	1685	PENNIMAN	RD	02/07/2013	pumped 9/28/12 per atlantics list
200500479	202	TERREBONNE	RD	02/09/2013	pumped 1/12/13 per woods list
200500481	917	HORNSBYVILLE	RD	06/06/2013	pumped 5/10/18 per zieglers list
200500482	101	PIONEER	LN	11/08/2012	pumped 10/17/12per va pump and hul list
200500497	1109	HORNSBYVILLE	RD	07/21/2012	pumped 6/19/12 per woods list
200500497	1109	HORNSBYVILLE	RD	11/04/2012	pumped 10/18/12 per woods list
200500535	206	JEFFERSON	LN	06/11/2013	pumped 5/31/13
200500550	1217	WOLF TRAP	RD	11/04/2012	pumped 10/16/12 per woods list
200500556	509	OLD YORK-HAMPTON	HWY	05/01/2013	pumped per woods list 4/25/13
200500561	209	OAK POINT	DR	08/14/2012	pumped 8/8/12 per hogges receipt
200500575	105	BASTA	DR	03/01/2013	pumped 2/8/13 per woods list
200500620	310	WOLF TRAP	RD	09/17/2012	pumped 9/7/12 per atlantic sys receipt
200500635	109	WHITES	RD	09/26/2012	PUMPED BY WOOD SEPTIC PER RECEIPT DATE 9/21/2012
200500640	105	PIONEER	LN	02/09/2013	pumped per woods list 1/28/13
200500644	800 A	GOOSLEY	RD	03/01/2013	pumped 2/2/13 per woods list
200500649	206	FAULKNER	RD	04/22/2013	pumped per woods list 3/28/13
200500655	526	CARTERS NECK	RD	08/10/2012	pumped 7/19/12 per parsleys list
200500664	504	BROKENBRIDGE	RD	04/09/2013	pumped 3/15/13 per va pump & haul list
200500683	1215	ORIANA	RD	05/01/2013	pumped 4/22/13 per woods list
200500696	105	WHEELLEY	CIR	12/09/2012	pumped 11/5/12 per woods list
200500720	200	SOUTH MAPLE	RD	03/07/2013	pumped 2/13/13 per Virginis Pump & Haul list
200500728	200	TERREBONNE	RD	09/20/2012	pumped 8/17/2012 per woods list
200500733	405	FAULKNER	RD	10/24/2012	pumped 9/26/12 per woods list
200500752	1116	HORNSBYVILLE	RD	02/09/2013	pumped per woods list 1/19/13
200500769	108	NORTH BEACH	RD	06/10/2013	pumped 5/24/13 per va pump and haul list
200500781	304	FAULKNER	RD	05/06/2013	pumped 19 April per zeigles list
200500782	1217	HORNSBYVILLE	RD	04/02/2013	pumped 3/4/13 per zeiglers
200500795	104	WHEELLEY	CIR	02/09/2013	pumped per woods list 1/28/13
200500800	408	DARE	RD	10/24/2012	pumped 9/13/12 per woods list

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200500832	202	KENTUCKY	DR	09/20/2012	PUMPED 8/20/12 PER WOODS LIST
200500840	1301	HORNSBYVILLE	RD	02/09/2013	pumped per woods list 1/19/13
200500863	200	JEFFERSON	LN	10/24/2012	pumped 9/17/12 per woods list
200500874	202	FAULKNER	RD	10/24/2012	pumped 9/5/12 per woods septic list
200500885	108	ELM	DR	06/11/2013	pumped per woods list 5/31/13
200500912	220	BARLOW	RD	04/08/2013	pumped 3/12/13 per parsleys list
200500916	105	CARVER	PL	05/06/2013	pumped per zeiglers list
200500922	824	GOOSLEY	RD	04/02/2013	pumped per atlantics list 3/8/13
200500926	212	TERREBONNE	RD	09/25/2012	pumped 8/13/12 per list
200501051	7505	GEO WASH MEM	HWY	10/05/2012	pumped per zeiglers list 9/18/12
200501051	7505	GEO WASH MEM	HWY	11/06/2012	pumped per zeiglers list 29 Oct 2012
200600318	582	ALLENS MILL	RD	09/10/2012	pumped per atlantic sys receipt 9/6/12
200600596	600	OLD DOMINION	RD	04/15/2013	pumped 3/12/13 per hogges list
200600766	245	EAST QUEENS	DR	02/13/2013	pumped 3/12/12 per atlantic sys list
200600794	110	CARRS HILL	RD	12/06/2012	pumped 11/26/12 per zeiglers list
200600796	305	SKIMINO LANDING	DR	04/08/2013	pumped per parsleys list 3/20/2013
200600925	512	ALLENS MILL	RD	10/24/2012	pumped 9/13/12 per woods list
200600929	2103	WATERVIEW	RD	09/20/2012	PUMPED PER WOODS LIST 8/24/12
200600930	1601	BALLARD	ST	04/02/2013	pumped 3/22/13/per zeiglers list
200600942	100	BASTA	DR	02/09/2013	pumped 1/7/13 per woods list
200600955	1403	GEO WASH MEM	HWY	05/16/2013	pumped 4/16/13 per list faxed by health department not sure of provider maybe Hogg??
200600975	210	BURTS	RD	08/11/2012	pumped per woods list 7/26/12
200600977	529	ALLENS MILL	RD	07/21/2012	pumped 6/16/12 per woods list
200600985	528	ALLENS MILL	RD	09/20/2012	pumped 8/17/12PER WOODS LIST
200601006	311	DARBY	RD	10/24/2012	pumped 9/13/12 per woods list
200601013	915	OLD YORK-HAMPTON	HWY	05/01/2013	pumped 4/23/13 per woods list
200601021	106	PAMELA	PL	08/11/2012	pumped per woods list 7/26/12
200601207	7536	GEO WASH MEM	HWY	04/09/2013	pumped 3/20/13 per va pump & haul list
200700004	409	OLD YORK-HAMPTON	HWY	11/04/2012	pumped 10/31/12 per woods list
200700077	229	HAMPTON	HWY	06/11/2013	pumped 5/9/13 pe woods list
200700196	2105	HAMPTON	HWY	04/22/2013	pumped 3/14/13 per woods list
200700835	108	GOODWIN NECK	RD	12/09/2012	pumped per woods list 11/16/12
200701265	112	CHISMAN	LNDC	05/01/2013	pumped 4/11/13 per woods list
200800020	539	ALLENS MILL	RD	08/11/2012	pumped 7/23/12 per woods list
200800126	2201	GOODWIN NECK	RD	05/06/2013	pumped per zeiglers list 4/12/13
200800133	531	ALLENS MILL	RD	07/21/2012	pumped 6/16/12 per woods list
200800227	534	ALLENS MILL	RD	11/04/2012	pumped 10/15/12 per woods list
200800232	300	BACK FORTY	LOOF	02/07/2013	pumped per atlantic sys list 12/6/12
200800233	301	BACK FORTY	LOOF	12/10/2012	pumped 12/8/12 per woods receipt
200800234	302	BACK FORTY	LOOF	12/10/2012	pumped 12/8/12 per woods receipt
200800235	305	BACK FORTY	LOOF	12/10/2012	inspected 12/8/2012 by woods in excellent condition
200800236	307	BACK FORTY	LOOF	12/10/2012	pumped 12/8/12 per woods receipt
200800237	308	BACK FORTY	LOOF	12/10/2012	tank pumped 12/8/12 per receipt
200800248	1101	BAY TREE BEACH	RD	04/22/2013	pumped 3/1/13 per Woods List
200800253	215	CARTERS NECK	RD	05/06/2013	pumped 4/20/13 per Parsleys list
200800277	1017	HORNSBYVILLE	RD	08/11/2012	pumoed 7/25/12 per woods list
200800303	1731	PENNIMAN	RD	06/03/2013	pumped per atlantic sys list 5/16/13
200800304	100	PHEASANT SPRINGS	RD	02/07/2013	pumped 11/7/12 per atlantics list
200800320	101	SHADY BLUFF	PT	02/07/2013	pumped per Atlantic Systems list 7/16/12
200800326	105	SKIMINO LANDING	DR	08/10/2012	pumped 5/22/12 per parselys list
200800338	300	SKIMINO LANDING	DR	02/06/2013	pumped 1/28/13 per parsleys list
200800444	207	SHADY BLUFF	PT	01/01/2013	pumped 12/5/12 per parsleys list

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200900063	106	SHADY BLUFF	PT	02/07/2013	pumped 7/6/12 per atlantics list
200900072	2117	HAMPTON	HWY	05/01/2013	pumped 4/22/13 per woods list
200900131	7907 A	GEO WASH MEM	HWY	06/11/2013	pumped per woods list 5/7/13
200900470	401	OLD YORK-HAMPTON	HWY	12/09/2012	pumped 11/8/12 per woods list
200900474	511	OLD YORK-HAMPTON	HWY	03/07/2013	pumped 2/26/13 per virginia pump & haul list
200900486	139	FENTON MILL	RD	02/18/2013	per keisha at atlantic systems this tank was pumped and the one at 137. 135 does not have a house on it per our GIS mapping. Pumped 3/9/12 per list
200900492	106	LOBLOLLY	CT	10/24/2012	pumped 9/20/12 per woods list
200900501	114	DOGWOOD	CT	03/07/2013	pumped 2/22/2013 per virginia pump & Haul list
201000012	205	PHEASANT SPRINGS	RD	07/03/2012	pumped per parsleys list 6/1/2012
201000016	101	BACK FORTY	LOOF	12/10/2012	pumped 12/8/12 per woods receipt
201000025	112	SHADY BLUFF	PT	02/07/2013	pumped 9/17/12 per atlantics list
201000027	228	OAKTREE	RD	03/08/2013	pumped per zigers list 2/22/13
201000046	5682	MOORETOWN	RD	04/02/2013	pumped per atlantic sys list 3/12/2013
201000061	448	FENTON MILL	RD	10/03/2012	pumped 9/11/12 per parsleys list
201000110	1440	GOVERNMENT	RD	02/07/2013	pumped per atlantics list 10/11/12
201100238	122	GREENE	DR	05/06/2013	pumped 4/30/13 per zeiglers list
201100238	122	GREENE	DR	10/05/2012	pumped 9/7/12 per zeiglers list
201100238	122	GREENE	DR	04/02/2013	pumped 3/22/13 per zeiglers list was also pumped 4/11/13 md
201100238	122	GREENE	DR	02/08/2013	pumped 1/21/13 per zieglers list
201100280	519 A	SPARRER	RD	04/02/2013	pumped per zeiglers list 3/11/13
201200061	7830	GEO WASH MEM	HWY	02/09/2013	pumped per woods list 1/19/13
201200163	406	BYPASS	RD	08/10/2012	pumped 4/30/12 per parsleys list
201200170	500	COOK	RD	08/31/2012	pumped 7/3/2012 per zeiglers list
201200171	1807	GEO WASH MEM	HWY	08/31/2012	pumped per list 7/19/2012
201200261	66	THOMAS	DR	03/06/2013	pumped 2/15/13 per parsleys list
201200263	70	THOMAS	DR	08/31/2012	pumped 5/25/12
201200265	73	THOMAS	DR	09/12/2012	pumped 5/11/12 per virginia pump and hall recpt
201200266	76	THOMAS	DR	09/12/2012	pumped per virginia pump & Hall recpt 5/11/12
201200269	9	MAGRUDER	PARK	08/03/2012	pumped 7/5/12 per parsleys list
201200377	308	DARBY	RD	12/10/2012	pumped 11/12/2012 pre va pump and haul list
201300012	602	ALLENS MILL	RD	01/06/2013	tank pumped per woods list 12/18/12
201300013	598	ALLENS MILL	RD	01/06/2013	pumped 12/18/12 per woods list
201300027	816	LIGHTFOOT	RD	02/06/2013	
201300049	135	FENTON MILL	RD	02/13/2013	pumped 3/9/12 per atlantic sys list
201300052	1453	PENNIMAN	RD	02/13/2013	pumped 1/6/12 per atlantic systems list
201300055	112	SLEEPY HOLLOW	LN	03/01/2013	pumped 2/22/13 per woods list
201300072	223	OLD TAYLOR	RD	03/01/2013	pumped 2/25/13 per atlantic sys list

Total # of Pump-outs/Inspections Reported:

324

Total # of Systems Pumped-out /Inspected:

303

Impaired Waters

Permittee	HUC Watershed	Watershed Name	LandUse	Area - Ac.	PerImperv
York	CB21	Poquoson River	Conservation	4599.97	1
York	CB21	Poquoson River	Agricultural	297.85	1
York	CB21	Poquoson River	Commercial	416.15	52
York	CB21	Poquoson River	General Industrial	786.27	16
York	CB21	Poquoson River	Limited Industrial	209.55	31
York	CB21	Poquoson River	Multi-Family Residential	247.82	41
York	CB21	Poquoson River	Public/Semi-Public	559.81	20
York	CB21	Poquoson River	Single-Family Residential	5955.79	14
York	CB21	Poquoson River	Vacant	4166.46	1
York	CB21	Poquoson River	Tourist Commercial	7.38	58
			Total	17,247.05	
York	CB22	Northwest Branch - Back River/Brick Kiln Creek	Conservation	619.10	1
York	CB22	Northwest Branch - Back River/Brick Kiln Creek	Agricultural	6.87	12
York	CB22	Northwest Branch - Back River/Brick Kiln Creek	Commercial	128.91	65
York	CB22	Northwest Branch - Back River/Brick Kiln Creek	General Industrial	6.46	28
York	CB22	Northwest Branch - Back River/Brick Kiln Creek	Limited Industrial	55.90	61
York	CB22	Northwest Branch - Back River/Brick Kiln Creek	Multi-Family Residential	243.45	39
York	CB22	Northwest Branch - Back River/Brick Kiln Creek	Military	396.80	23
York	CB22	Northwest Branch - Back River/Brick Kiln Creek	Public/Semi-Public	107.28	29
York	CB22	Northwest Branch - Back River/Brick Kiln Creek	Single-Family Residential	1315.22	21
York	CB22	Northwest Branch - Back River/Brick Kiln Creek	Vacant	399.79	1
York	CB22	Northwest Branch - Back River/Brick Kiln Creek	Tourist Commercial	2.12	56
			Total	3,281.90	
York	JL38	Warwick River	Conservation	5119.21	1
York	JL38	Warwick River	Commercial	6.91	27
York	JL38	Warwick River	General Industrial	2.85	9
York	JL38	Warwick River	Multi-Family Residential	23.24	28
York	JL38	Warwick River	Military	174.08	10
York	JL38	Warwick River	Public/Semi-Public	62.52	20
York	JL38	Warwick River	Single-Family Residential	261.73	14
York	JL38	Warwick River	Vacant	367.68	1
			Total	6,018.21	
			TOTAL	26,547.17	

Inspection Request Line: 890-3910Building Regulation Office: 890-3522
Utilities Division,
(757)890-3752**Service Request Summary****Report Date** 09/04/2013 02:52 PM**Submitted By**

Page 1

Search Criteria**Search Style** Match **Sort By** Serv # Ascend **Service Req Status** ALL**Problem** IDDC **Show Linked****Problem** 07/01/2012 00:00 **To** 06/30/2013 23:59**Service Request Summary**

Service # 80448	Problem IDDC	Link # 1	Priority 1	A/P Attached N	Problem Date 01/03/2013 12:01
Address 121 MOBJACK LOOP			Taken By AGUILARL	Project	Scheduled Date
Cross Street			Responsibility U	Source	Start Date
Cross Street					Inspection Date
Name RICK			Map #	Resolve Code RC	Resolve Date 01/03/2013 13:30
Location					

Service # 80877	Problem IDDC	Link # 1	Priority 1	A/P Attached N	Problem Date 01/28/2013 11:51
Address 632 HAMPTON HWY			Taken By MMCEL	Project	Scheduled Date
Cross Street			Responsibility U	Source	Start Date
Cross Street					Inspection Date
Name ASHE			Map #	Resolve Code RC	Resolve Date 01/28/2013 13:00
Location					

Service # 81081	Problem IDDC	Link # 1	Priority 1	A/P Attached N	Problem Date 02/08/2013 10:06
Address 114 BEECHWOOD LN			Taken By PLEVEL	Project	Scheduled Date
Cross Street			Responsibility U	Source CUST	Start Date
Cross Street					Inspection Date
Name HOWELL			Map #	Resolve Code NTFY	Resolve Date 02/12/2013 11:57
Location RAW SEWAGE GOING INTO STORM DRAINS NEAR DAIRY QUEEN OFF 134					

Service # 81386	Problem IDDC	Link # 1	Priority 1	A/P Attached N	Problem Date 02/25/2013 13:12
Address 132 YORKSHIRE DR			Taken By MAPPLE	Project	Scheduled Date
Cross Street			Responsibility U	Source CUST	Start Date
Cross Street					Inspection Date
Name HARRIS			Map #	Resolve Code RC	Resolve Date 02/25/2013 14:15
Location CULVERT BEHIND HOUSE					

Service # 81453	Problem IDDC	Link # 1	Priority 1	A/P Attached N	Problem Date 02/14/2013 14:00
Address 104 MASTIN AVE			Taken By MCCOY	Project	Scheduled Date
Cross Street			Responsibility U	Source	Start Date
Cross Street					Inspection Date
Name			Map #	Resolve Code RC	Resolve Date 02/14/2013 16:00
Location YC DRAINAGE EASEMENT ADJACENT TO HOUSE					

Building Regulation Office: 890-3522
 Utilities Division,
 (757)890-3752

Report Date 09/04/2013 02:52 PM

Submitted By

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Service Request Summary

Service # 81501	Problem IDDC	Link # 1	Priority 1	A/P Attached N	Problem Date 03/01/2013 11:49
Address			Taken By VG	Project	Scheduled Date
Cross Street			Responsibility U	Source	Start Date
Cross Street					Inspection Date
Name CARROLL			Map #	Resolve Code FI	Resolve Date 03/01/2013 12:45
Location DUNMOORE - COUNTRY LANE					

Service # 81556	Problem IDDC	Link # 1	Priority 1	A/P Attached N	Problem Date 02/14/2013 12:30
Address 104 MASTIN AVE			Taken By MCCOY	Project	Scheduled Date
Cross Street			Responsibility U	Source	Start Date
Cross Street					Inspection Date
Name YC EDS			Map #	Resolve Code RC	Resolve Date 02/14/2013 14:00
Location DRAINAGE EASTMENT DIRECTLY ADJACENT TO PROPERTY					

Service # 81560	Problem IDDC	Link # 1	Priority 1	A/P Attached N	Problem Date 02/28/2013 14:00
Address 200 ROYAL COLVEN DR			Taken By MCCOY	Project	Scheduled Date
Cross Street			Responsibility U	Source	Start Date
Cross Street					Inspection Date
Name YC EDS			Map #	Resolve Code RES	Resolve Date 03/01/2013 08:00
Location IDDC ORIGINATED @ 1211 CALTHROP NECK RD					

Service # 81578	Problem IDDC	Link # 1	Priority 1	A/P Attached N	Problem Date 03/05/2013 08:42
Address 112 PORT COVE			Taken By MMCEL	Project	Scheduled Date
Cross Street			Responsibility U	Source CUST	Start Date
Cross Street					Inspection Date
Name MARGOLIN			Map #	Resolve Code RES	Resolve Date 03/05/2013 14:39
Location					

Service # 81579	Problem IDDC	Link # 1	Priority 1	A/P Attached N	Problem Date 02/28/2013 14:00
Address 1211 CALTHROP NECK RD			Taken By MCCOY	Project	Scheduled Date 02/28/2013 15:00
Cross Street			Responsibility U	Source	Start Date 02/28/2013 14:30
Cross Street					Inspection Date 02/28/2013 15:00
Name YC EDS			Map #	Resolve Code NTFY	Resolve Date 03/01/2013 08:00
Location NEW HOME DEVELOPMENT, SWALE					

Building Regulation Office: 890-3522
 Utilities Division,
 (757)890-3752

Report Date 09/04/2013 02:52 PM

Submitted By

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Service Request Summary

Service # 81714	Problem IDDC	Link # 1	Priority 1	A/P Attached N	Problem Date 03/11/2013 14:42
Address 212 PAGELAND DR			Taken By DNLP	Project	Scheduled Date 03/12/2013 12:00
Cross Street			Responsibility U	Source	Start Date 03/12/2013 11:30
Cross Street					Inspection Date 03/12/2013 12:00
Name UNKNOWN			Map #	Resolve Code RES	Resolve Date 03/12/2013 13:50
Location					

Service # 81872	Problem IDDC	Link # 1	Priority 1	A/P Attached N	Problem Date 03/13/2013 00:00
Address 605 CHEADLE LOOP RD			Taken By MCCOY	Project	Scheduled Date 03/15/2013 13:00
Cross Street			Responsibility U	Source CUST	Start Date 03/13/2013 11:00
Cross Street					Inspection Date 03/15/2013 13:00
Name HUNTER			Map #	Resolve Code NTFY	Resolve Date 03/19/2013 11:00
Location DRAINAGE DITCH IN FRONT OF PROPERTY PARALLEL TO CHEADLE LOOP ROAD AND DRAINAGE DITCH RUNNING BEHIND 605 AND 503 CHEADLE LOOP					

Service # 82191	Problem IDDC	Link # 1	Priority 1	A/P Attached N	Problem Date 04/01/2013 09:45
Address 8500 GEO WASH MEM HWY			Taken By CBNT	Project	Scheduled Date 04/01/2013 09:45
Cross Street			Responsibility U	Source	Start Date 04/01/2013 10:00
Cross Street					Inspection Date 04/01/2013 10:30
Name YORK COUNTY EDS			Map #	Resolve Code FI	Resolve Date 04/01/2013 10:30
Location YC DRAINAGE EASEMENT AT YORKTOWN LIBRARY. INTERSECTION OF RT 17 AND BATTLE ROAD					

Service # 82380	Problem IDDC	Link # 1	Priority 1	A/P Attached N	Problem Date 04/09/2013 14:00
Address 114 WINSOME HAVEN DR			Taken By 0077	Project	Scheduled Date
Cross Street			Responsibility U	Source CUST	Start Date
Cross Street					Inspection Date
Name Y			Map #	Resolve Code NTFY	Resolve Date 04/10/2013 11:00
Location YORK COUNTY DRAINAGE EASEMENT BEHIND HOMEOWNERS FENCE					

Service # 84000	Problem IDDC	Link # 1	Priority 1	A/P Attached N	Problem Date 05/20/2013 11:30
Address 113 CLEARWATER CT			Taken By MCCOY	Project	Scheduled Date
Cross Street			Responsibility U	Source CUST	Start Date 05/20/2013 12:00
Cross Street					Inspection Date
Name			Map #	Resolve Code NTFY	Resolve Date 05/22/2013 09:00
Location CURB DROP INLET IN FRONT OF 113 CLEARWATER COURT					

SSORS Database - SPILL REPORT

Jurisdiction: All

Created on 9/6/2013 9:09:26 AM
Date Range, Reported between 07/01/2012 AND 06/30/2013

SSORS ID:	103537	Reported:	10/17/12 3:54 PM	Amount Spilled:	50 Gallons
DEQ IR #:	SSORS#2013-T-103537	Reported by:	Administrator York	Amount Recovered:	25 Gallons
Asset ID:		Last Edited:	10/18/12 3:30 PM	Reaching State Waters:	25 Gallons
Reporting Jurisdiction:	York	Last Edited by:	Sylvia Kruth	Spill Date:	10/17/12 2:00 PM
Spilled-In Jurisdiction:	York	Phoned In:		Date Under Control:	10/17/12 2:30 PM
Responsible Party:	York County	Final Submittal:	10/17/12 3:54 PM	Spill Duration:	0 hour(s) 30 minute(s)
Site Name:	Red Dirt Road			SSO Classification:	Third Party Action

Cordinates:**Description Of Incident**

Contractor connecting a home up to a grinder pump, left the valve open on the grinder pump valve clean-out assembly

Possible Receptors

Waller Mill Reservoir

Description of Materials

Sanitary Sewer

Corrective Action

Used vactor to clean up spill and limed the affected area

DEQ Comments (Reviewed 10/18/2012 3:30:25 PM by Sylvia Kruth)

None.

Attachments

None.

SSORS ID:	103563	Reported:	10/30/12 11:10 AM	Amount Spilled:	6000 Gallons
DEQ IR #:	SSORS#2013-T-103563	Reported by:	Administrator York	Amount Recovered:	0 Gallons
Asset ID:		Last Edited:	10/31/12 2:38 PM	Reaching State Waters:	6000 Gallons
Reporting Jurisdiction:	York	Last Edited by:	Sylvia Kruth	Spill Date:	10/29/12 11:00 AM
Spilled-In Jurisdiction:	York	Phoned In:		Date Under Control:	10/29/12 3:00 PM
Responsible Party:	York County	Final Submittal:	10/30/12 11:10 AM	Spill Duration:	4 hour(s) 0 minute(s)
Site Name:	Lackey PS #45			SSO Classification:	Capacity-Weather Related

Cordinates:**Description Of Incident**

Hurricane Sandy, Excessive I & I , Set up pump and haul operation starting at 9am and continued til 11pm

Possible Receptors

Harwood Mills Reservoir Watershed

Description of Materials

Sanitary Sewer

Corrective Action

Set-up a pump and haul operation

DEQ Comments (Reviewed 10/31/2012 2:38:00 PM by Sylvia Kruth)

None.

Attachments

None.

SSORS ID:	103564	Reported:	10/30/12 11:16 AM	Amount Spilled:	15000 Gallons
DEQ IR #:	SSORS#2013-T-103564	Reported by:	Administrator York	Amount Recovered:	0 Gallons
Asset ID:		Last Edited:	10/31/12 2:38 PM	Reaching State Waters:	15000 Gallons
Reporting Jurisdiction:	York	Last Edited by:	Sylvia Kruth	Spill Date:	10/29/12 4:00 PM
Spilled-In Jurisdiction:	York	Phoned In:		Date Under Control:	10/30/12 2:00 AM

SSORS Database - SPILL REPORT

Jurisdiction: All

Created on 9/6/2013 9:09:26 AM
Date Range, Reported between 07/01/2012 AND 06/30/2013**Responsible Party:** York County
Site Name: Kings Villa PS#19**Final Submittal:** 10/30/12 11:16 AM**Spill Duration:** 10 hour(s) 0 minute(s)**SSO Classification:** Capacity-Weather Related**Cordinates:****Description Of Incident**

Hurricane Sandy excessive I & I, set up a pump and haul operation at 3pm (10/29) and continued til 4am (10/30)

Possible Receptors

Poquoson River

Description of Materials

Sanitary Sewer

Corrective Action

Set up a pump and haul operation that ran from 3pm on 10/29 til 4am on 10/30, 13 hours. The rehabilitation of this station, new pumps, controls, etc. is currently under construction.

DEQ Comments (Reviewed 10/31/2012 2:38:56 PM by Sylvia Kruth)

None.

Attachments

None.

SSORS ID:	103597	Reported:	11/06/12 9:01 AM	Amount Spilled:	300 Gallons
DEQ IR #:	SSORS#2013-T-103597	Reported by:	Administrator York	Amount Recovered:	200 Gallons
Asset ID:		Last Edited	11/07/12 1:32 PM	Reaching State Waters:	100 Gallons
Reporting Jurisdiction:	York	Last Edited by:	Sylvia Kruth	Spill Date:	11/05/12 9:30 AM
Spilled-In Jurisdiction:	York	Phoned In:		Date Under Control:	11/05/12 11:30 AM
Responsible Party:	York County	Final Submittal:	11/06/12 9:01 AM	Spill Duration:	2 hour(s) 0 minute(s)
Site Name:	Calthrop Neck			SSO Classification:	Infrastructure

Cordinates:**Description Of Incident**

Vacuum Valve in pot failed, homeowner called Utilities Emergency # and vacuum crew responded. Used "on-call" contractor to suck out the vacuum pot and our crews replaced the vacuum valve.

Possible Receptors

Poquoson River

Description of Materials

Sanitary Sewer

Corrective Action

Crews installed a new valve and controller in vaccum pot

DEQ Comments (Reviewed 11/7/2012 1:32:28 PM by Sylvia Kruth)

None.

Attachments

None.

SSORS ID:	103618	Reported:	12/06/12 3:16 PM	Amount Spilled:	750 Gallons
DEQ IR #:	SSORS#2013-T-103618	Reported by:	Administrator York	Amount Recovered:	0 Gallons
Asset ID:		Last Edited	12/06/12 3:34 PM	Reaching State Waters:	750 Gallons
Reporting Jurisdiction:	York	Last Edited by:	Sylvia Kruth	Spill Date:	12/05/12 11:00 AM
Spilled-In Jurisdiction:	York	Phoned In:		Date Under Control:	12/06/12 1:00 PM
Responsible Party:	York County	Final Submittal:	12/06/12 3:16 PM	Spill Duration:	26 hour(s) 0 minute(s)
Site Name:	Crestwood LS #55			SSO Classification:	Infrastructure

Cordinates:**Description Of Incident**

SSORS Database - SPILL REPORT

Jurisdiction: All

Created on 9/6/2013 9:09:26 AM
Date Range, Reported between 07/01/2012 AND 06/30/2013

Forcemain crew discovered saturated area as part of a routine inspection and called the Construction Section for assistance. The discharge pumps were shut down and a pump and haul operation was set up. An emergency Ms. Utility Ticket was called an once cleared excavation commenced. The section of failed pipe was located near the forcemain air blow off assembly and repaired.

Possible Receptors

Patricks Creek, Poquoson River

Description of Materials

Sanitary Sewer

Corrective Action

The failed section (we fitting) of the forcemain was replaced.

DEQ Comments

(Reviewed 12/6/2012 3:34:36 PM by Sylvia Kruth)

None.

Attachments

None.

SSORS ID:	103621	Reported:	12/14/12 2:48 PM	Amount Spilled:	20 Gallons
DEQ IR #:	SSORS#2013-T-103621	Reported by:	Administrator York	Amount Recovered:	0 Gallons
Asset ID:		Last Edited	12/17/12 9:07 AM	Reaching State Waters:	20 Gallons
Reporting Jurisdiction:	York	Last Edited by:	Sylvia Kruth	Spill Date:	12/14/12 11:06 AM
Spilled-In Jurisdiction:	York	Phoned In:		Date Under Control:	12/14/12 11:59 AM
Responsible Party:	York County	Final Submittal:	12/14/12 2:48 PM	Spill Duration:	0 hour(s) 53 minute(s)
Site Name:	Anchor Lane			SSO Classification:	Infrastructure

Cordinates:**Description Of Incident**

Homeowner called in a sewer back-up at 217 Anchor Lane. Vacuum crew responded and reconnected funco fitting on vacuum valve.

Possible Receptors

Hodges Cove, Poquoson River

Description of Materials

Sanitary Sewer

Corrective Action

Loose furnco fitting was fixed

DEQ Comments

(Reviewed 12/17/2012 9:07:52 AM by Sylvia Kruth)

None.

Attachments

None.

SSORS ID:	103666	Reported:	02/11/13 3:01 PM	Amount Spilled:	100 Gallons
DEQ IR #:	SSORS#2013-T-103666	Reported by:	Administrator York	Amount Recovered:	75 Gallons
Asset ID:		Last Edited	02/11/13 3:27 PM	Reaching State Waters:	25 Gallons
Reporting Jurisdiction:	York	Last Edited by:	Camilla Fletcher	Spill Date:	02/10/13 1:00 PM
Spilled-In Jurisdiction:	York	Phoned In:		Date Under Control:	02/10/13 3:00 PM
Responsible Party:	York County	Final Submittal:	02/11/13 3:01 PM	Spill Duration:	2 hour(s) 0 minute(s)
Site Name:	Dawson Drive			SSO Classification:	Infrastructure

Cordinates:**Description Of Incident**

Vacuum Valve Controller stuck in the closed position, Homeowner called Utilities emergency number and "on-call" vacuum mechanic responded.

Possible Receptors

Goose Creek, Chisman Creek

Description of Materials

SSORS Database - SPILL REPORT

Jurisdiction: All

Created on 9/6/2013 9:09:26 AM
Date Range, Reported between 07/01/2012 AND 06/30/2013

Sanitary Sewer

Corrective Action

Installed a new vacuum controller

DEQ Comments (Reviewed 2/11/2013 3:27:23 PM by Camilla Fletcher)

None.

Attachments

None.

SSORS ID:	103676	Reported:	02/27/13 3:53 PM	Amount Spilled:	50 Gallons
DEQ IR #:	SSORS#2013-T-103676	Reported by:	Administrator York	Amount Recovered:	5 Gallons
Asset ID:		Last Edited	02/27/13 4:19 PM	Reaching State Waters:	45 Gallons
Reporting Jurisdiction:	York	Last Edited by:	Camilla Fletcher	Spill Date:	02/26/13 2:30 PM
Spilled-In Jurisdiction:	York	Phoned In:		Date Under Control:	02/26/13 4:15 PM
Responsible Party:	York County	Final Submittal:	02/27/13 3:53 PM	Spill Duration:	1 hour(s) 45 minute(s)
Site Name:	Piankatank Turn			SSO Classification:	Maintenance-Debris

Cordinates:**Description Of Incident**

Home owner called Utilities Emergency number and reported a sewer back-up. Crews responded and a plumber had opened the sanitary sewer clean-out at the property line. Crews used Jet Rodder/Vacuum Truck to clear blockage in main line to restore normal flow.

Possible Receptors

Moore's Creek, Poquoson River

Description of Materials

Sanitary Sewer

Corrective Action

CCTV Inspection Scheduled for main line

DEQ Comments (Reviewed 2/27/2013 4:19:37 PM by Camilla Fletcher)

None.

Attachments

None.

SSORS ID:	103689	Reported:	03/14/13 2:53 PM	Amount Spilled:	5000 Gallons
DEQ IR #:	SSORS#2013-T-103689	Reported by:	Administrator York	Amount Recovered:	4100 Gallons
Asset ID:		Last Edited	03/14/13 3:21 PM	Reaching State Waters:	900 Gallons
Reporting Jurisdiction:	York	Last Edited by:	Camilla Fletcher	Spill Date:	03/13/13 1:00 PM
Spilled-In Jurisdiction:	York	Phoned In:		Date Under Control:	03/13/13 4:00 PM
Responsible Party:	York County	Final Submittal:	03/14/13 2:53 PM	Spill Duration:	3 hour(s) 0 minute(s)
Site Name:	Route 17			SSO Classification:	Infrastructure

Cordinates:**Description Of Incident**

Utility Operations notified of a SSO along side of Route 17, near Coxton's Body Shop. Construction group responded, and found that the 3" low pressure force main was leaking. Crew called Ms Utility, dug up area to expose force main and repaired pipe.

Possible Receptors

Kiln Creek

Description of Materials

Sanitary Sewer

Corrective Action

Construction crew made necessary repairs to force main.

DEQ Comments (Reviewed 3/14/2013 3:21:50 PM by Camilla Fletcher)

SSORS Database - SPILL REPORT

Jurisdiction: All

Created on 9/6/2013 9:09:27 AM
Date Range, Reported between 07/01/2012 AND 06/30/2013

None.

Attachments

None.

SSORS ID:	103699	Reported:	04/04/13 2:23 PM	Amount Spilled:	750 Gallons
DEQ IR #:	SSORS#2013-T-103699	Reported by:	Administrator York	Amount Recovered:	200 Gallons
Asset ID:		Last Edited:	04/04/13 2:30 PM	Reaching State Waters:	550 Gallons
Reporting Jurisdiction:	York	Last Edited by:	Camilla Fletcher	Spill Date:	04/03/13 11:30 AM
Spilled-In Jurisdiction:	York	Phoned In:		Date Under Control:	04/03/13 1:30 PM
Responsible Party:	York County	Final Submittal:	04/04/13 2:23 PM	Spill Duration:	2 hour(s) 0 minute(s)
Site Name:	Antique Mall			SSO Classification:	Damage By Others

Cordinates:**Description Of Incident**

Grounds maintenance for the Antique Mall damaged the low pressure air release valve on force main. Owner/operator of the Antique Mall called Utilities Emergency number and a repair crew was dispatched. Crews repaired air release valve and used Vactor to clean area.

Possible Receptors

Ground water

Description of Materials

Sanitary Sewer

Corrective Action

During the repairs the crew lowered the air release valve and installed a cast iron clean-out casting on top

DEQ Comments (Reviewed 4/4/2013 2:30:13 PM by Camilla Fletcher)

None.

Attachments

None.

SSORS ID:	103747	Reported:	05/24/13 3:19 PM	Amount Spilled:	20000 Gallons
DEQ IR #:	SSORS#2013-T-103747	Reported by:	Administrator York	Amount Recovered:	0 Gallons
Asset ID:		Last Edited:	06/10/13 1:03 PM	Reaching State Waters:	5000 Gallons
Reporting Jurisdiction:	York	Last Edited by:	Administrator York	Spill Date:	05/23/13 7:30 PM
Spilled-In Jurisdiction:	York	Phoned In:		Date Under Control:	05/23/13 11:30 PM
Responsible Party:	York County	Final Submittal:	06/10/13 1:03 PM	Spill Duration:	4 hour(s) 0 minute(s)
Site Name:	Rolling Hills manhole 2301301			SSO Classification:	Capacity-Weather Related

Cordinates: 37.2524926675403, -76.6437578201294

Description Of Incident

Overflowing manhole due to HRSD Rolling Hills pump station issue and heavy rain.

Possible Receptors

Kings Creek

Description of Materials

Sanitary Sewer

Corrective Action

Coordination with HRSD
-----May 24, 2013 03:19 PM-----

DEQ Comments (Reviewed 5/24/2013 3:24:42 PM by Camilla Fletcher)

None.

Attachments

None.

SSORS Database - SPILL REPORT

Jurisdiction: All

Created on 9/6/2013 9:09:27 AM
Date Range, Reported between 07/01/2012 AND 06/30/2013

SSORS ID:	103751	Reported:	05/31/13 3:24 PM	Amount Spilled:	30 Gallons
DEQ IR #:	SSORS#2013-T-103751	Reported by:	Administrator York	Amount Recovered:	20 Gallons
Asset ID:	DRVP012S (VACUUM POT)	Last Edited:	06/10/13 1:02 PM	Reaching State Waters:	10 Gallons
Reporting Jurisdiction:	York	Last Edited by:	Administrator York	Spill Date:	05/31/13 9:00 AM
Spilled-In Jurisdiction:	York	Phoned In:		Date Under Control:	05/31/13 10:00 AM
Responsible Party:	YORK COUNTY	Final Submittal:	06/10/13 1:02 PM	Spill Duration:	1 hour(s) 0 minute(s)
Site Name:	403 SHIP POINT RD			SSO Classification:	Other
Cordinates:	37.1724613140819, -76.4167463779449				

Description Of Incident

SEWER SPILLED FROM VACUUM POT DUE TO PROBLEM WITH VALVE/CONTROLLER IN VACUUM POT.

Possible Receptors

BOATHOUSE CREEK/CHISMAN CREEK

Description of Materials

SANITARY SEWER

Corrective ActionREPLACED VALVE AND CONTROLLER IN VACUUM POT.
VACUUMED UP SPILLED SEWER.
LIMED THE AREA.

-----May 31, 2013 03:24 PM-----

DEQ Comments

(Reviewed 5/31/2013 3:26:40 PM by Camilla Fletcher)

None.

Attachments

None.

SSORS ID:	103771	Reported:	06/10/13 1:10 PM	Amount Spilled:	1000 Gallons
DEQ IR #:	SSORS#2013-T-103771	Reported by:	Administrator York	Amount Recovered:	0 Gallons
Asset ID:		Last Edited:	06/10/13 1:11 PM	Reaching State Waters:	1000 Gallons
Reporting Jurisdiction:	York	Last Edited by:	Administrator York	Spill Date:	06/07/13 7:00 PM
Spilled-In Jurisdiction:	York	Phoned In:		Date Under Control:	06/07/13 10:30 PM
Responsible Party:	York County	Final Submittal:	06/10/13 1:11 PM	Spill Duration:	3 hour(s) 30 minute(s)
Site Name:	Pinetree PS			SSO Classification:	Capacity-Weather Related

Cordinates:**Description Of Incident**

Tropical Storm event, excessive rain overwhelmed the system. SCADA alarms, wet well flood notifications were sent. Crews responded but did not have access to station due to flooding across the road.

Possible Receptors

Queens Lake, Queens Creek

Description of Materials

Sanitary Sewer

Corrective Action

Pinetree is a SSES Basin and a proposed rehabilitation area

-----June 10, 2013 01:10 PM-----

DEQ Comments

(Reviewed 6/10/2013 1:11:11 PM by Camilla Fletcher)

None.

Attachments

None.

SSORS ID:	103772	Reported:	06/10/13 1:17 PM	Amount Spilled:	800 Gallons
DEQ IR #:	SSORS#2013-T-103772	Reported by:	Administrator York	Amount Recovered:	0 Gallons

SSORS Database - SPILL REPORT

Jurisdiction: All

Created on 9/6/2013 9:09:27 AM
Date Range, Reported between 07/01/2012 AND 06/30/2013

Asset ID:		Last Edited	06/11/13 7:03 AM	Reaching State Waters:	800 Gallons
Reporting Jurisdiction:	York	Last Edited by:	Camilla Fletcher	Spill Date:	06/07/13 7:30 PM
Spilled-In Jurisdiction:	York	Phoned In:		Date Under Control:	06/07/13 10:00 PM
Responsible Party:	York County	Final Submittal:	06/10/13 1:17 PM	Spill Duration:	2 hour(s) 30 minute(s)
Site Name:	George Washington Inn			SSO Classification:	Capacity-Weather Related

Cordinates:**Description Of Incident**

Tropical Storm, excessive rain overwhelmed system. Hotel Parking lot flooded, runoff flooding station.

Possible Receptors

Queens Lake, Queens Creek

Description of Materials

Sanitary Sewer

Corrective ActionGW Inn is a SSES basin and a proposed rehabilitation area
-----June 10, 2013 01:17 PM-----**DEQ Comments** (Reviewed 6/11/2013 7:03:47 AM by Camilla Fletcher)

None.

Attachments

None.

SSORS ID:	103773	Reported:	06/10/13 1:23 PM	Amount Spilled:	5000 Gallons
DEQ IR #:	SSORS#2013-T-103773	Reported by:	Administrator York	Amount Recovered:	0 Gallons
Asset ID:		Last Edited	06/11/13 7:04 AM	Reaching State Waters:	5000 Gallons
Reporting Jurisdiction:	York	Last Edited by:	Camilla Fletcher	Spill Date:	06/07/13 6:30 PM
Spilled-In Jurisdiction:	York	Phoned In:		Date Under Control:	06/08/13 2:00 AM
Responsible Party:	York County	Final Submittal:	06/10/13 1:23 PM	Spill Duration:	7 hour(s) 30 minute(s)
Site Name:	Bruton HS			SSO Classification:	Capacity-Weather Related

Cordinates:**Description Of Incident**

Tropical Storm, excessive rain overwhelmed Camp Peary collection system. Crews contacted operations at Camp Peary to reduce flows, but flows still exceeded our pumping capacity.

Possible Receptors

Waller Mill Reservoir

Description of Materials

Sanitary Sewer

Corrective ActionNone, Federal Facility "Camp Peary" that pumps directly to the Bruton HS PS.
-----June 10, 2013 01:23 PM-----**DEQ Comments** (Reviewed 6/11/2013 7:04:08 AM by Camilla Fletcher)

None.

Attachments

None.

SSORS ID:	103774	Reported:	06/10/13 1:27 PM	Amount Spilled:	750 Gallons
DEQ IR #:	SSORS#2013-T-103774	Reported by:	Administrator York	Amount Recovered:	0 Gallons
Asset ID:		Last Edited	06/11/13 7:04 AM	Reaching State Waters:	750 Gallons
Reporting Jurisdiction:	York	Last Edited by:	Camilla Fletcher	Spill Date:	06/07/13 2:00 PM
Spilled-In Jurisdiction:	York	Phoned In:		Date Under Control:	06/07/13 4:30 PM

SSORS Database - SPILL REPORT

Jurisdiction: All

Created on 9/6/2013 9:09:27 AM
Date Range, Reported between 07/01/2012 AND 06/30/2013

Responsible Party:	York County	Final Submittal:	06/10/13 1:27 PM	Spill Duration:	2 hour(s) 30 minute(s)
Site Name:	Lackey PS			SSO Classification:	Capacity-Weather Related

Cordinates:**Description Of Incident**

Tropical Storm, excessive rain overwhelmed system.

Possible Receptors

NNWW Watershed, Lee Hall Reservoir

Description of Materials

Sanitary Sewer

Corrective ActionLackey is a SSES Basin and a proposed rehabilitation area
----June 10, 2013 01:27 PM----**DEQ Comments** (Reviewed 6/11/2013 7:04:24 AM by Camilla Fletcher)

None.

Attachments

None.

SSORS ID:	103775	Reported:	06/10/13 1:32 PM	Amount Spilled:	5000 Gallons
DEQ IR #:	SSORS#2013-T-103775	Reported by:	Administrator York	Amount Recovered:	0 Gallons
Asset ID:		Last Edited	06/11/13 7:04 AM	Reaching State Waters:	5000 Gallons
Reporting Jurisdiction:	York	Last Edited by:	Camilla Fletcher	Spill Date:	06/07/13 8:04 PM
Spilled-In Jurisdiction:	York	Phoned In:		Date Under Control:	06/07/13 9:35 PM
Responsible Party:	York County	Final Submittal:	06/10/13 1:32 PM	Spill Duration:	1 hour(s) 31 minute(s)
Site Name:	Rolling Hills MH 2301301			SSO Classification:	Capacity-Weather Related

Cordinates:**Description Of Incident**

Tropical Storm, excessive rain overwhelmed system. HRSD text overflow alarm and when text when overflow event ended.

Possible Receptors

Whitakers Mill, Jones Pond

Description of Materials

Sanitary Sewer

Corrective ActionArea a SSES basin and proposed rehabilitation area
----June 10, 2013 01:32 PM----**DEQ Comments** (Reviewed 6/11/2013 7:04:39 AM by Camilla Fletcher)

None.

Attachments

None.

SSORS ID:	103787	Reported:	06/25/13 9:16 PM	Amount Spilled:	500 Gallons
DEQ IR #:	SSORS#2013-T-103787	Reported by:	Administrator York	Amount Recovered:	0 Gallons
Asset ID:		Last Edited	06/27/13 7:02 AM	Reaching State Waters:	500 Gallons
Reporting Jurisdiction:	York	Last Edited by:	Camilla Fletcher	Spill Date:	06/07/13 9:00 PM
Spilled-In Jurisdiction:	York	Phoned In:		Date Under Control:	06/07/13 11:00 PM
Responsible Party:	Great Wolf Lodge	Final Submittal:		Spill Duration:	2 hour(s) 0 minute(s)
Site Name:	Great Wolf Lodge			SSO Classification:	Capacity-Weather Related

SSORS Database - SPILL REPORT

Jurisdiction: All

Created on 9/6/2013 9:09:27 AM
Date Range, Reported between 07/01/2012 AND 06/30/2013

Cordinates:

Description Of Incident

Wet Weather Event, private station could not get into force main

Possible Receptors

Waller Mill Reservoir

Description of Materials

Sanitary Sewer

Corrective Action

County staff meeting with the Great Wolf Lodge operations to go over station operations and wet weather emergency operations
-----June 25, 2013 09:16 PM-----

DEQ Comments

(Reviewed 6/27/2013 7:02:47 AM by Camilla Fletcher)

None.

Attachments

None.

NEW SEWER CONNECTIONS FY2013

<u>STNO</u>	<u>STS</u>	<u>STNAME</u>	<u>SUFFIX</u>	<u>PRCLID</u>	<u>COMPDTM</u>
401		ALEXIA	LN	O12C-0006-0314	07/13/2012
403		ALEXIA	LN	O12C-0008-0341	07/13/2012
405		ALEXIA	LN	O12C-0009-0363	07/13/2012
407		ALEXIA	LN	O12C-0010-0385	07/13/2012
409		ALEXIA	LN	O12C-0011-0412	07/13/2012
411		ALEXIA	LN	O12C-0014-0454	08/09/2012
413		ALEXIA	LN	O12C-0015-0481	08/09/2012
415		ALEXIA	LN	O12C-0016-0503	08/09/2012
417		ALEXIA	LN	O12C-0017-0525	08/09/2012
419		ALEXIA	LN	O12C-0019-0552	08/09/2012
501		ALEXIA	LN	O12C-0021-0594	10/12/2012
503		ALEXIA	LN	O12C-0022-0621	10/12/2012
505		ALEXIA	LN	O12C-0023-0643	10/12/2012
507		ALEXIA	LN	O12C-0024-0665	10/12/2012
509		ALEXIA	LN	O12C-0025-0692	10/12/2012
100		ANCHOR	DR	V07A-1024-3186	04/19/2013
201		ANGUS	LN	C18C-1715-2131	01/14/2013
101		BARNCORD	WAY	VILLASATYORKTOWNTMP	04/04/2013
101		BARNCORD	WAY	Q09A-1772-3002	04/04/2013
103		BARNCORD	WAY	VILLASATYORKTOWNTMP	04/04/2013
103		BARNCORD	WAY	Q09A-1832-3030	04/04/2013
113		BATTLE	RD	Q09D-3894-0486	05/31/2013
102		BAYBERRY	LN	V02A-0082-3911	01/14/2013
104		BAYBERRY	LN	U02B-4983-3922	04/23/2013
105		BAYBERRY	LN	V02A-0015-3676	04/24/2013
106		BAYBERRY	LN	U02B-4883-3929	03/15/2013
108		BAYBERRY	LN	U02B-4784-3938	01/11/2013
110		BAYBERRY	LN	U02B-4692-3937	01/07/2013
114		BAYBERRY	LN	U02B-4502-3953	01/30/2013
115		BAYBERRY	LN	U02B-4501-3614	05/15/2013
116		BAYBERRY	LN	U02B-4405-3967	04/18/2013
110		BEECHWOOD	LN	V02A-0072-2733	02/19/2013
114		BEECHWOOD	LN	V02A-0103-2818	02/15/2013
114	H	BEECHWOOD	LN	V02A-0103-2818	06/18/2013
204		BEECHWOOD	LN	V02A-0206-3071	01/08/2013
208		BEECHWOOD	LN	V02A-0249-3179	04/22/2013
209		BEECHWOOD	LN	V02A-0040-3194	04/12/2013
211		BEECHWOOD	LN	U02B-4881-3194	11/30/2012
215		BEECHWOOD	LN	U02B-4791-3385	12/05/2012
300		BEECHWOOD	LN	V02A-0242-3418	02/07/2013
303		BEECHWOOD	LN	U02B-4791-3385	12/04/2012
304		BEECHWOOD	LN	V02A-0237-3513	12/17/2012
309		BEECHWOOD	LN	V02A-0021-3542	12/05/2012
3711		BIG BETHEL	RD	U03C-0938-1516	09/12/2012
118		BOWSTRING	DR	G15C-2319-1980	09/06/2012
320		BROWNS	LN	M11D-3329-2075	07/24/2012
111		BRYON	RD	P08B-4793-3523	05/01/2013
217	A	BULIFANTS	BLVD	C19C-1453-0545	07/20/2012
806		CALTHROP NECK	RD	U04B-4204-4411	11/07/2012
1211		CALTHROP NECK	RD	U05D-3658-1381	04/01/2013
1801		CALTHROP NECK	RD	U05B-4139-3509	08/14/2012
104		CANNON	RD	Q09A-2038-3746	11/05/2012
105		CANNON	RD	Q09A-2166-3483	08/15/2012
106		CANNON	RD	Q09A-2088-3881	11/26/2012
107		CANNON	RD	Q09A-2252-3574	11/05/2012
109		CANNON	RD	Q09A-2317-3662	11/05/2012
115		CANNON	RD	Q09B-2510-3944	08/30/2012
117		CANNON	RD	Q09B-2605-4034	08/20/2012
100	A	CAROUSEL	CT	H14D-4970-1708	04/17/2013
100	A	CAROUSEL	CT	H14D-4970-1708	05/30/2013

<u>STNO</u>	<u>STS</u>	<u>STNAME</u>	<u>SUFFIX</u>	<u>PRCLID</u>	<u>COMPDTM</u>
102	A	CAROUSEL	CT	H14D-4970-1708	04/17/2013
102	A	CAROUSEL	CT	H14D-4970-1708	06/24/2013
104	A	CAROUSEL	CT	H14D-4970-1708	06/24/2013
104	A	CAROUSEL	CT	H14D-4970-1708	04/17/2013
106	A	CAROUSEL	CT	H14D-4970-1708	04/17/2013
106	A	CAROUSEL	CT	H14D-4970-1708	06/24/2013
300		CHAPTICO	RUN	V03C-0517-1277	01/03/2013
205		CHEESEMAN	RD	G13D-3732-2410	09/21/2012
207		CHEESEMAN	RD	G13D-3718-2339	07/19/2012
209		CHEESEMAN	RD	G13D-3709-2273	08/14/2012
302		CHEESEMAN	RD	G13D-3517-2099	08/24/2012
303		CHEESEMAN	RD	G13D-3678-2073	09/21/2012
305		CHEESEMAN	RD	G13D-3677-2004	10/09/2012
307		CHEESEMAN	RD	G13D-3683-1936	08/16/2012
309		CHEESEMAN	RD	G13D-3689-1868	07/18/2012
311		CHEESEMAN	RD	G13D-3674-1797	08/20/2012
315		CHEESEMAN	RD	G13D-3577-1690	08/14/2012
317		CHEESEMAN	RD	G13D-3507-1666	07/17/2012
102		CHENNAULT	CIR	M11B-4572-2521	12/28/2012
118		COLLINGTON	RUN	T04C-2360-0446	04/09/2013
402		COOK	RD	Q09A-1925-3322	08/30/2012
500		COOK	RD	Q09A-1620-4454	07/02/2012
608		COOK	RD	Q09A-1410-4439	08/13/2012
108		DAISY	LN	T02B-3432-4700	03/05/2013
312		DANDY LOOP	RD	U10D-2742-0846	08/14/2012
316		DANDY LOOP	RD	U10D-2931-0936	11/15/2012
316		DANDY LOOP	RD	U10D-2931-0936	11/15/2012
216		DARBY	RD	S04C-1826-1881	10/16/2012
303		DARBY	RD	S04C-1360-1929	09/24/2012
308		DARBY	RD	S04C-1644-2070	11/09/2012
311		DARBY	RD	S04C-0992-2093	01/24/2013
316		DARBY	RD	S04C-1604-2266	10/18/2012
317		DARBY	RD	S04C-0657-2153	12/20/2012
318		DARBY	RD	S04C-1512-2339	05/14/2013
408		DARBY	RD	S04A-1452-2613	09/11/2012
415		DARBY	RD	S04A-0559-2551	09/12/2012
517		DARBY	RD	S04A-0780-3332	11/06/2012
1110		DARE	RD	U07D-2645-0244	04/05/2013
1110		DARE	RD	U06B-2636-4409	04/05/2013
110		DILLARD	LN	S04A-1770-2614	09/11/2012
116		DILLARD	LN	S04A-1643-2585	12/19/2012
117		DILLARD	LN	S04C-1625-2429	09/11/2012
102		DOGWOOD	CT	Q09B-4472-4028	07/20/2012
106		DOGWOOD	CT	Q09B-4528-4234	11/05/2012
107		DOGWOOD	CT	Q09B-4802-4338	08/24/2012
108		DOGWOOD	CT	Q09B-4472-4368	08/03/2012
109		DOGWOOD	CT	Q09B-4771-4503	02/01/2013
111		DOGWOOD	CT	Q09B-4710-4648	07/30/2012
113		DOGWOOD	CT	Q09B-4573-4751	07/20/2012
200		DOGWOOD	CT	Q09B-4070-4791	08/01/2012
202		DOGWOOD	CT	Q09B-3981-4907	11/29/2012
203		DOGWOOD	CT	Q10D-4263-0085	07/12/2012
205		DOGWOOD	CT	Q10D-4256-0265	07/06/2012
207		DOGWOOD	CT	Q10D-4143-0420	07/20/2012
102		DOGWOOD	DR	V02A-0247-3275	12/20/2012
104		DOGWOOD	DR	V02A-0382-3232	03/04/2013
105		DOGWOOD	DR	V02A-0373-3574	02/11/2013
107		DOGWOOD	DR	V02A-0465-3603	02/04/2013
109		DOGWOOD	DR	V02A-0567-3562	02/12/2013
112	A	DOGWOOD	DR	V02A-0582-3240	03/05/2013
114		DUHANEY	PARK	I12C-0061-1057	05/15/2013
116		DUHANEY	PARK	I12C-0061-1057	05/15/2013
118		DUHANEY	PARK	I12C-0061-1057	05/15/2013
120		DUHANEY	PARK	I12C-0061-1057	10/31/2012

<u>STNO</u>	<u>STS</u>	<u>STNAME</u>	<u>SUFFIX</u>	<u>PRCLID</u>	<u>COMPDTM</u>
122		DUHANEY	PARK	I12C-0061-1057	10/31/2012
124		DUHANEY	PARK	I12C-0061-1057	10/31/2012
447		EAST ROCHAMBEAU	DR	D19C-1003-1957	09/26/2012
447		EAST ROCHAMBEAU	DR	D19C-1003-1957	09/26/2012
601		EAST ROCHAMBEAU	DR	C20C-1236-0152	07/12/2012
601		EAST ROCHAMBEAU	DR	C20C-1236-0152	09/21/2012
300		ELLA TAYLOR	RD	S05D-4341-1147	04/23/2013
106		EMMA ROSE	CT	G13B-3418-3587	11/02/2012
108		EMMA ROSE	CT	G13B-3448-3627	09/19/2012
110		EMMA ROSE	CT	G13B-3478-3666	09/19/2012
112		EMMA ROSE	CT	G13B-3508-3706	11/02/2012
114		EMMA ROSE	CT	G13B-3539-3745	01/22/2013
116		EMMA ROSE	CT	G13B-3569-3785	08/10/2012
118		EMMA ROSE	CT	G13B-3599-3824	07/03/2012
120		EMMA ROSE	CT	G13B-3628-3863	10/11/2012
122		EMMA ROSE	CT	G13B-3652-3902	07/03/2012
212		FALCON	RD	Q09A-2112-4220	07/12/2012
216		FALCON	RD	Q09A-2236-4271	07/06/2012
101		FIRBY	RD	S04C-2029-1696	12/12/2012
108		FIRBY	RD	S04C-2231-1839	04/04/2013
109		FIRBY	RD	S04C-1993-1814	06/06/2013
112		FIRBY	RD	S04C-2388-1898	05/01/2013
113		FIRBY	RD	S04C-1996-1933	12/21/2012
114		FIRBY	RD	S04C-2223-1979	11/13/2012
117		FIRBY	RD	S04C-1970-2038	11/14/2012
118		FIRBY	RD	S04C-2295-2090	11/13/2012
202		FIRBY	RD	S04C-2293-2201	11/29/2012
203		FIRBY	RD	S04C-1986-2166	11/27/2012
205		FIRBY	RD	S04C-1826-2056	04/11/2013
206		FIRBY	RD	S04C-2275-2289	11/27/2012
207		FIRBY	RD	S04C-1785-2174	11/29/2012
210		FIRBY	RD	S04C-2285-2412	08/23/2012
211		FIRBY	RD	S04C-1892-2358	11/16/2012
216		FIRBY	RD	S04A-2275-2547	11/13/2012
220		FIRBY	RD	S04A-2212-2636	11/21/2012
221		FIRBY	RD	S04A-1970-2589	01/09/2013
223		FIRBY	RD	S04A-1941-2636	09/11/2012
301		FIRBY	RD	S04A-1941-2693	10/12/2012
305		FIRBY	RD	S04A-1876-2782	12/20/2012
306		FIRBY	RD	S04A-2175-2852	08/14/2012
308		FIRBY	RD	S04A-2253-2944	08/24/2012
311		FIRBY	RD	S04A-1970-2897	09/10/2012
312		FIRBY	RD	S04A-2263-3028	08/24/2012
314		FIRBY	RD	S04A-2273-3114	08/15/2012
318		FIRBY	RD	S04A-2196-3177	10/15/2012
321		FIRBY	RD	S04A-1853-3144	11/21/2012
400		FLEMING	WAY	Q09D-4208-0194	04/25/2013
402		FLEMING	WAY	Q09D-4189-0218	04/25/2013
406		FLEMING	WAY	Q09D-4153-0262	04/16/2013
408		FLEMING	WAY	Q09D-4132-0288	04/16/2013
300		GARMAN	LOOP	VILLASATYORKTOWNTMP	04/04/2013
300		GARMAN	LOOP	Q09A-1755-3036	04/04/2013
302		GARMAN	LOOP	VILLASATYORKTOWNTMP	04/04/2013
302		GARMAN	LOOP	Q09A-1814-3066	04/04/2013
304		GARMAN	LOOP	VILLASATYORKTOWNTMP	10/11/2012
304		GARMAN	LOOP	VILLASATYORKTOWNTMP	10/17/2012
304		GARMAN	LOOP	Q09A-1713-3111	10/11/2012
304		GARMAN	LOOP	Q09A-1713-3111	10/17/2012
306		GARMAN	LOOP	VILLASATYORKTOWNTMP	10/11/2012
306		GARMAN	LOOP	VILLASATYORKTOWNTMP	10/17/2012
306		GARMAN	LOOP	Q09A-1772-3139	10/11/2012
306		GARMAN	LOOP	Q09A-1772-3139	10/17/2012
308		GARMAN	LOOP	VILLASATYORKTOWNTMP	10/17/2012
308		GARMAN	LOOP	VILLASATYORKTOWNTMP	10/11/2012

<u>STNO</u>	<u>STS</u>	<u>STNAME</u>	<u>SUFFIX</u>	<u>PRCLID</u>	<u>COMPDTM</u>
308		GARMAN	LOOP	Q09A-1695-3145	10/11/2012
308		GARMAN	LOOP	Q09A-1695-3145	10/17/2012
310		GARMAN	LOOP	VILLASATYORKTOWNTMP	10/17/2012
310		GARMAN	LOOP	VILLASATYORKTOWNTMP	10/11/2012
310		GARMAN	LOOP	Q09A-1754-3175	10/17/2012
310		GARMAN	LOOP	Q09A-1754-3175	10/11/2012
314		GARMAN	LOOP	VILLASATYORKTOWNTMP	10/10/2012
314		GARMAN	LOOP	VILLASATYORKTOWNTMP	10/17/2012
314		GARMAN	LOOP	Q09A-1660-3219	10/10/2012
314		GARMAN	LOOP	Q09A-1660-3219	10/17/2012
316		GARMAN	LOOP	VILLASATYORKTOWNTMP	10/17/2012
316		GARMAN	LOOP	VILLASATYORKTOWNTMP	10/10/2012
316		GARMAN	LOOP	Q09A-1719-3249	10/17/2012
316		GARMAN	LOOP	Q09A-1719-3249	10/10/2012
318		GARMAN	LOOP	VILLASATYORKTOWNTMP	10/17/2012
318		GARMAN	LOOP	VILLASATYORKTOWNTMP	10/10/2012
318		GARMAN	LOOP	Q09A-1642-3255	10/17/2012
318		GARMAN	LOOP	Q09A-1642-3255	10/10/2012
320		GARMAN	LOOP	VILLASATYORKTOWNTMP	10/17/2012
320		GARMAN	LOOP	VILLASATYORKTOWNTMP	10/10/2012
320		GARMAN	LOOP	Q09A-1700-3285	10/17/2012
320		GARMAN	LOOP	Q09A-1700-3285	10/10/2012
203		GLEBE SPRING	LN	T04B-3347-3104	09/13/2012
303		GLEBE SPRING	LN	T04B-3312-3648	02/05/2013
111		GOODWIN NECK	RD	R07B-3105-3325	03/05/2013
111		GOODWIN NECK	RD	R07B-3105-3325	03/08/2013
111		GOODWIN NECK	RD	R07B-3083-3195	03/05/2013
111		GOODWIN NECK	RD	R07B-3083-3195	03/08/2013
171		GOODWIN NECK	RD	R08D-4755-0470	11/20/2012
177		GOODWIN NECK	RD	R08D-4755-0470	06/13/2013
177		GOODWIN NECK	RD	R08D-4849-0573	06/13/2013
309		GRAFTON DISTRICT	RD	Q09C-0969-0806	01/07/2013
309		GRAFTON DISTRICT	RD	Q09C-0969-0806	01/07/2013
113		GREENE	DR	R08C-0016-0649	04/04/2013
2605		HAMPTON	HWY	U02B-3595-3169	01/15/2013
2613		HAMPTON	HWY	U02B-3704-3136	05/03/2013
2629		HAMPTON	HWY	U02B-3884-3024	03/28/2013
2637		HAMPTON	HWY	U02B-3963-3005	03/11/2013
2705		HAMPTON	HWY	U02B-4197-2913	11/20/2012
2809		HAMPTON	HWY	U02B-4767-2682	06/28/2013
2823		HAMPTON	HWY	U02B-4993-2643	12/17/2012
2829		HAMPTON	HWY	V02A-0054-2574	12/17/2012
2837		HAMPTON	HWY	V02A-0230-2788	12/17/2012
2960	A	HAMPTON	HWY	V02C-0343-2021	05/10/2013
2960	B	HAMPTON	HWY	V02C-0343-2021	05/10/2013
2960	C	HAMPTON	HWY	V02C-0343-2021	05/10/2013
2960	D	HAMPTON	HWY	V02C-0343-2021	05/10/2013
2960	E	HAMPTON	HWY	V02C-0343-2021	05/10/2013
2960	F	HAMPTON	HWY	V02C-0343-2021	05/10/2013
2960	G	HAMPTON	HWY	V02C-0343-2021	04/10/2013
3025		HAMPTON	HWY	V02A-0975-2529	12/20/2012
3100		HAMPTON	HWY	V02C-0915-1419	04/04/2013
3100		HAMPTON	HWY	V02C-0915-1419	04/08/2013
3505	3	HAMPTON	HWY	V02D-3472-1301	04/12/2013
307		HARRIS GROVE	LN	Q09C-0857-2228	04/11/2013
1217		HORNSBYVILLE	RD	S09C-0023-2285	10/18/2012
204		JENNIFER	DR	T04B-4792-3120	05/13/2013
136		KITTY	DR	T05C-0738-0899	06/10/2013
106		LAFAYETTE	RD	Q11C-2355-0984	05/30/2013
210		LATTA	LN	U02C-0196-2132	05/03/2013
101		LAYDON	WAY	Q08B-3987-4937	03/12/2013
103		LAYDON	WAY	Q08B-4002-4918	03/12/2013
105		LAYDON	WAY	Q08B-4015-4903	03/12/2013
107		LAYDON	WAY	Q08B-4028-4887	03/12/2013

<u>STNO</u>	<u>STS</u>	<u>STNAME</u>	<u>SUFFIX</u>	<u>PRCLID</u>	<u>COMPDTM</u>
109		LAYDON	WAY	Q08B-4040-4872	03/12/2013
111		LAYDON	WAY	Q08B-4053-4857	03/12/2013
113		LAYDON	WAY	Q08B-4067-4839	03/12/2013
118		LEWIS	DR	T09D-2866-0040	08/01/2012
129		LEWIS	DR	T08A-2462-4480	08/01/2012
206		LINFOOT	CT	G13D-3233-1452	08/24/2012
208		LINFOOT	CT	G13D-3242-1386	07/17/2012
210		LINFOOT	CT	G13D-3249-1321	09/21/2012
133		LITTLE JOHN	RD	G15A-2485-3186	08/29/2012
102		LOBLOLLY	CT	Q09B-4853-3915	07/20/2012
104		LOBLOLLY	CT	Q09B-4957-4093	10/18/2012
105		LOBLOLLY	CT	R09A-0154-3672	07/02/2012
106		LOBLOLLY	CT	R09A-0110-3937	09/11/2012
113		LOBLOLLY	DR	Q09B-4105-3313	07/13/2012
118		LOBLOLLY	DR	Q09B-4117-3720	07/09/2012
119		LOBLOLLY	DR	Q09B-3903-3534	08/24/2012
121		LOBLOLLY	DR	Q09B-3813-3632	07/27/2012
123		LOBLOLLY	DR	Q09B-3697-3749	10/15/2012
124		LOBLOLLY	DR	Q09B-3836-4027	11/29/2012
125		LOBLOLLY	DR	Q09B-3584-3866	08/20/2012
127		LOBLOLLY	DR	Q09B-3465-3969	07/12/2012
101		LONG GREEN	BLVD	T03C-2218-0939	06/17/2013
101		LONG GREEN	BLVD	T03C-2218-0939	06/26/2013
304		MANSION	RD	NEW	02/21/2013
304		MANSION	RD	V03D-3233-0532	02/21/2013
503		MARKS POND	WAY	C20B-3655-4409	06/06/2013
605		MARKS POND	WAY	C20B-3394-4422	08/16/2012
105		MARL RAVINE	RD	Q09B-4601-3838	09/19/2012
106		MARL RAVINE	RD	Q09B-4384-3734	09/19/2012
204		MARL RAVINE	RD	Q09B-4104-4040	07/27/2012
205		MARL RAVINE	RD	Q09B-4294-4220	07/05/2012
207		MARL RAVINE	RD	Q09B-4207-4315	07/02/2012
208		MARL RAVINE	RD	Q09B-3928-4231	07/18/2012
209		MARL RAVINE	RD	Q09B-4119-4411	07/24/2012
300		MARL RAVINE	RD	Q09B-3747-4427	08/16/2012
306		MARL RAVINE	RD	Q09B-3495-4732	07/18/2012
307		MARL RAVINE	RD	Q09B-3681-4924	08/01/2012
308		MARL RAVINE	RD	Q09B-3276-4915	07/18/2012
103		MAYS	LNDG	M11D-2917-0123	05/31/2013
105		MAYS	LNDG	M11D-2998-0055	04/19/2013
107		MAYS	LNDG	M11D-3105-0027	05/31/2013
110		MAYS	LNDG	M10B-3056-4853	04/19/2013
1325		MOORE HOUSE	RD	Q11D-3960-1104	05/16/2013
207		NELSON	ST	P11B-3059-4776	08/24/2012
207		NELSON	ST	P11B-3035-4742	08/24/2012
102		NEVADA	CIR	D20A-0066-2893	07/20/2012
107		OAKTREE	RD	D19C-1779-0819	11/26/2012
115		OAKTREE	RD	D19C-1237-1214	11/26/2012
213		OAKTREE	RD	D19C-0687-2046	01/24/2013
213		OAKTREE	RD	D19C-0687-2046	01/22/2013
228		OAKTREE	RD	D19A-0488-2515	02/20/2013
608		OLD DOMINION	RD	P08B-4695-2986	05/23/2013
1620		OLD WILLIAMSBURG	RD	M11B-4112-3486	12/04/2012
326		OLD YORK-HAMPTON	HWY	R08C-1858-0993	12/12/2012
1823		OLD YORK-HAMPTON	HWY	Q09B-3774-3207	07/02/2012
1901		OLD YORK-HAMPTON	HWY	Q09B-3654-3336	07/02/2012
1919		OLD YORK-HAMPTON	HWY	Q09B-3106-3280	09/05/2012
2100		OLD YORK-HAMPTON	HWY	Q09B-3047-4169	07/20/2012
2105		OLD YORK-HAMPTON	HWY	Q09B-2621-3870	07/03/2012
2112		OLD YORK-HAMPTON	HWY	Q09B-2755-4301	07/06/2012
2204		OLD YORK-HAMPTON	HWY	Q09A-2459-4571	09/19/2012
2208		OLD YORK-HAMPTON	HWY	Q09A-2366-4636	07/27/2012
2303		OLD YORK-HAMPTON	HWY	Q09A-1773-4491	07/02/2012
100		PARRISH CHURCH	LN	T04D-3443-2242	11/21/2012

<u>STNO</u>	<u>STS</u>	<u>STNAME</u>	<u>SUFFIX</u>	<u>PRCLID</u>	<u>COMPDTM</u>
304		PATRICKS CREEK	RD	T06D-3454-2475	01/09/2013
101		PAWPAW	PL	NEW	02/21/2013
101		PAWPAW	PL	V03D-3468-0174	02/21/2013
100		PERLIE	CT	S06B-4412-3488	05/03/2013
103		PERLIE	CT	S06B-4122-3599	11/26/2012
109		PERLIE	CT	S06B-4137-3946	06/26/2013
300	10	PRESSON	RD	V08C-1559-2417	08/31/2012
300	7	PRESSON	RD	V08C-1559-2417	08/31/2012
300	8	PRESSON	RD	V08C-1559-2417	08/31/2012
301		PRESSON	RD	V08C-1703-2092	10/12/2012
301		PRESSON	RD	V08C-1703-2092	09/14/2012
108		RED DIRT	RD	D19C-1332-0803	11/26/2012
118		RED DIRT	RD	D19C-1074-0361	04/08/2013
118		RED DIRT	RD	D19C-1074-0361	04/04/2013
100		RIVA	CT	O12C-0130-0492	06/04/2013
101		RIVA	CT	O12C-0144-0621	01/22/2013
102		RIVA	CT	O12C-0154-0480	06/04/2013
103		RIVA	CT	O12C-0169-0612	01/22/2013
104		RIVA	CT	O12C-0174-0471	06/04/2013
105		RIVA	CT	O12C-0190-0603	01/22/2013
106		RIVA	CT	O12C-0194-0461	06/04/2013
107		RIVA	CT	O12C-0209-0593	01/22/2013
108		RIVA	CT	O12C-0215-0453	06/04/2013
109		RIVA	CT	O12C-0234-0581	01/22/2013
110		RIVA	CT	O12C-0239-0442	06/04/2013
111		RIVA	CT	O12C-0272-0563	03/25/2013
113		RIVA	CT	O12C-0296-0551	03/25/2013
115		RIVA	CT	O12C-0316-0542	03/25/2013
117		RIVA	CT	O12C-0336-0532	03/25/2013
119		RIVA	CT	O12C-0356-0523	03/25/2013
121		RIVA	CT	O12C-0380-0511	03/25/2013
112		RUSSELL	LN	U02A-0997-2506	12/11/2012
103		SALLY	WAY	T07D-4460-0161	03/15/2013
205		SCHEMBRI	DR	R03B-4234-2809	08/16/2012
104		SHARPS	LN	G13D-2858-1653	11/29/2012
716		SHIP POINT	RD	V07A-1312-2806	06/07/2013
716		SHIP POINT	RD	V07A-1312-2806	12/12/2012
300		SHIRLEY	RD	U09B-3228-3963	07/23/2012
112		SLEEPY HOLLOW	LN	S08C-0699-0357	03/15/2013
300		SMOOTS	LN	V08A-0404-3444	12/11/2012
303		SMOOTS	LN	V08A-0762-3401	07/18/2012
304		SONSHINE	WAY	M10B-2734-4679	12/12/2012
519	A	SPARRER	RD	U08B-2910-3085	03/13/2013
207		TABB	LN	T03A-1964-4370	10/22/2012
1625		VICTORY	BLVD	U03B-4662-4923	09/14/2012
1625		VICTORY	BLVD	U03B-4662-4923	09/14/2012
400		WALLER MILL	RD	D16D-3093-0535	12/14/2012
304		WEST WOODLAND	DR	T05D-3589-2360	01/09/2013
412		WILDEY	RD	V08D-2633-2385	10/11/2012
414	66	WOLF TRAP	RD	S07C-2237-1174	10/25/2012
110		ZANCA	TURN	V03B-2998-2968	09/04/2012



Supervisor: Connie Bennett
Division Chief

York County Environmental & Development Services

Inspector: Brandi McCoy

Date: 1/31/2013

Facility: YC EDS Stormwater Maintenance

Municipal Facility Stormwater Assessment Checklist					
Checklist A - General Housekeeping /Records Management					
Item	Evaluation Criterion	Yes	No	N/A	Comments
1	Are site plans for the facility on file with the Stormwater Division?	✓			
2	Is the facility located in the MS4?	✓			
3	Is the site part of a stormwater master-planned development?		✓		
4	Is there one or more stormwater BMP structures located at the facility?	✓			Install rain garden @ EDS parking area.
5	Is there a Storm Water Pollution Prevention Plan (SWPPP) located at the facility?			✓	
6	Is there a Nutrient Management Plan for this facility?			✓	
7	Is the facility generally well kept, without excessive clutter or debris?	✓			
8	Is the impervious surface primarily asphalt or concrete?	✓			Asphalt
9	Is the impervious surface primarily packed gravel or stone?		✓		Gravel in washing areas only.
10	Are yard drains / curb inlets free of debris & silt?	✓			
11	Do yard drains / curb inlets have stormwater medallions on them?		✓		Have materials, will label them.
12	Have staff at the facility received training regarding proper housekeeping practices?	✓			O & M manual
13	Have staff at the facility been advised not to put material down storm drains?	✓			
14	Does the parking area receive periodic sweeping?	✓			

Facility: YC EDS Stormwater Maintenance

Date: 1/31/2013

Municipal Facility Stormwater Assessment Checklist					
Checklist A - General Housekeeping /Records Management					
Item	Evaluation Criterion	Yes	No	N/A	Comments
15	Is all trash in a receptacle and are trash receptacles covered?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
16	Have staff at the facility received training regarding spill prevention and cleanup?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	a. Are stored products and materials labeled properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	b. Is there an adequate supply of absorbant material ready and available?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	c. Is there a suitable waste container for spent or contaminated absorbent material?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17	Does the facility serve as a maintenance or operation facility? (If yes attach Checklist B)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
18	Are drums of material stored at the facility? (If yes attach Checklist C)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
19	Are vehicles fueled at the facility? (If yes attach Checklist D)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
20	Are vehicles washed at the facility? (If yes attach Checklist E)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Other comments or concerns:

- Good Housekeeping, some empty containers, bins, need to be removed if they serve no purpose, or properly store the items to reduce clutter on-site.



York County Environmental & Development Services

Inspector: Branou McCoy

Facility: YC EDS Stormwater Maintenance

Date: 1/31/2013

Municipal Facility Stormwater Assessment Checklist					
Checklist B - Maintenance and Operations Facilities					
Item	Evaluation Criterion	Yes	No	N/A	Comments
1	Is the ground stabilized to prevent sediment runoff into the storm drain system?	✓			
2	After visual inspection, are all pervious areas free from stains spills and leaks?	✓			
3	Are loading and unloading areas clean and free from litter?	✓			Grass areas have some items needing for removal.
4	Vehicle Parking and Maintenance Areas				
a.	Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	✓			
b.	Are drip pans placed under equipment and vehicles (where appropriate)?			✓	vehicle maintenance
c.	Are oil/gas filters punctured and allowed to drain 24 hours before disposal or recycling with solid waste?			✓	
d.	Are batteries stored indoors in containers appriate to contain possible leakage?			✓	
e.	Are parts washed in designated service bays and with designated solvent wash tanks? Do parts drip and dry in a containment area or basin?			✓	
f.	Are drained fluids removed promptly to designated storage containers as quickly as is practical?			✓	
5	Storage Areas				
a.	Are salt piles bermed and covered or located in a structure?			✓	
b.	Are street sweepings, soil piles, landscape waste and other piles of material bermed to prohibit runoff from entering the storm water system?			✓	
c.	Are street sweepings, soil piles, landscape waste and other piles of waste material limited to being stored for short periods of time before disposal?			✓	



York County Environmental & Development Services

Inspector: Brandi McLaugh

Facility: YC EDS Stormwater maintenance

Date: 1/31/2013

Municipal Facility Stormwater Assessment Checklist					
Checklist E - Vehicle Washing Facilities					
Item	Evaluation Criterion	Yes	No	N/A	Comments
1	Are washing operations performed in a designated wash rack?	✓			
	a. Are all wash waters directed to a sanitary sewer?		✓		
	b. If wash water is not directed to sanitary sewer, is it prohibited from entering storm sewer system?	✓			on gravel to allow infiltration.
2	Are vehicles inspected for leaks prior to washing?	✓			
3	Are detergents used phosphate free?	✓			
4	Are sediments from vehicle washing swept up and disposed of rather than washed down into the drain?	✓			
5	Are sumps maintained properly to avoid overflowing or spilling?			✓	



Supervisor/Division Chief:
Brian Woodward

York County Environmental & Development Services

Inspector: Brandi McKay

Facility: YC EDS Utilities Maintenance

Date: 1/31/2013

Municipal Facility Stormwater Assessment Checklist					
Checklist A - General Housekeeping /Records Management					
Item	Evaluation Criterion	Yes	No	N/A	Comments
1	Are site plans for the facility on file with the Stormwater Division?	✓			
2	Is the facility located in the MS4?	✓			
3	Is the site part of a stormwater master-planned development?		✓		
4	Is there one or more stormwater BMP structures located at the facility?	✓			
5	Is there a Storm Water Pollution Prevention Plan (SWPPP) located at the facility?			✓	
6	Is there a Nutrient Management Plan for this facility?			✓	General Services Only
7	Is the facility generally well kept, without excessive clutter or debris?	✓			
8	Is the impervious surface primarily asphalt or concrete?	✓			
9	Is the impervious surface primarily packed gravel or stone?		✓		
10	Are yard drains / curb inlets free of debris & silt?	✓			
11	Do yard drains / curb inlets have stormwater medallions on them?		✓		Will label drains.
12	Have staff at the facility received training regarding proper housekeeping practices?	✓			HRPDC
13	Have staff at the facility been advised not to put material down storm drains?	✓			
14	Does the parking area receive periodic sweeping?	✓			

Facility: YC EDS Utilities Maintenance

Date: 1/31/2013

Municipal Facility Stormwater Assessment Checklist					
Checklist A - General Housekeeping /Records Management					
Item	Evaluation Criterion	Yes	No	N/A	Comments
15	Is all trash in a receptacle and are trash receptacles covered?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
16	Have staff at the facility received training regarding spill prevention and cleanup?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	a. Are stored products and materials labeled properly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Black drum, unlabeled, behind utilities building need disposal
	b. Is there an adequate supply of absorbant material ready and available?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	c. Is there a suitable waste container for spent or contaminated absorbent material?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17	Does the facility serve as a maintenance or operation facility? (If yes attach Checklist B)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
18	Are drums of material stored at the facility? (If yes attach Checklist C)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
19	Are vehicles fueled at the facility? (If yes attach Checklist D)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
20	Are vehicles washed at the facility? (If yes attach Checklist E)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Other comments or concerns: Great Housekeeping, minor issues noted, will be corrected ASAP & properly:

- Black drum w/ unlabeled material will be properly handled & disposed of. The liquid inside is known;

- 2 bypass pumps need canopy cover; reduce contact w/ stormwater in case of leakage.



York County Environmental & Development Services

Inspector: Beauclay Mcclay

Facility: YC EPS utilities maintenance

Date: 1/31/2013

Municipal Facility Stormwater Assessment Checklist Checklist B - Maintenance and Operations Facilities					
Item	Evaluation Criterion	Yes	No	N/A	Comments
1	Is the ground stabilized to prevent sediment runoff into the storm drain system?	✓			
2	After visual inspection, are all pervious areas free from stains spills and leaks?	✓			
3	Are loading and unloading areas clean and free from litter?		✓		clean up recycling bins & containers from grass,
4	Vehicle Parking and Maintenance Areas				
a.	Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	✓			small maintenance activities most maintenance @ vehicle maintenance facility
b.	Are drip pans placed under equipment and vehicles (where appropriate)?			✓	
c.	Are oil/gas filters punctured and allowed to drain 24 hours before disposal or recycling with solid waste?			✓	↑
d.	Are batteries stored indoors in containers appropriate to contain possible leakage?			✓	vehicle maintenance
e.	Are parts washed in designated service bays and with designated solvent wash tanks? Do parts drip and dry in a containment area or basin?			✓	↓
f.	Are drained fluids removed promptly to designated storage containers as quickly as is practical?			✓	
5	Storage Areas	✓			(2) bypass pumps need canopy cover.
a.	Are salt piles bermed and covered or located in a structure?			✓	No salt on site.
b.	Are street sweepings, soil piles, landscape waste and other piles of material bermed to prohibit runoff from entering the storm water system?	✓			
c.	Are street sweepings, soil piles, landscape waste and other piles of waste material limited to being stored for short periods of time before disposal?	✓			- unused & open asphalt bag needs proper disposal.



York County Environmental & Development Services

Inspector: Beanni Mcloy

Facility: YC EPS Utilities maintenance

Date: 1/31/2013

Municipal Facility Stormwater Assessment Checklist					
Checklist C - Liquid and Drum Storage					
Item	Evaluation Criterion	Yes	No	N/A	Comments
1	Are all containers properly labelled, with labels facing out so that they can be read?		✓		unlabeled black drum w/ hazardous material.
2	Are all liquids in their original containers? Are replacement containers suitable for the material being stored?				
a.	Are all containers in servicable condition (no rust, blisters, cracks etc)?	✓			
3	Are all containers properly closed and securely fastened?	✓			
4	Are appropriate MSDS sheets maintained and stored in proximity to the container storage?	✓			
5	Are all containers stored indoors or in a covered area?		✓		
a.	For containers stored outside, are containers stored on pallets to avoid contact with runoff?	✓			
b.	For containers stored outside, are containers covered with tarps to avoid contact with rain?		✓		
6	Have storm drains down slope of the stored material been identified?	✓			
a.	Are there spill response measures, such as berms or a sump, available to contain a spill and prevent it from entering the storm system?				
b.	Are rags or absorbant material, with an appropriate disposal recepticle, available to handle small spills?	✓			
c.	Is an emegency response contact information posted nearby for larger spills or breaches?	✓			
d.	Is absorbant material from small spills swept or vacuumed up instead or washed down the storm drain?	✓			
7	Are drums of hazardous or liquid waste material stored at the facility?	✓			(1) Black drum, will be appropriately handled.

Facility: NYC EDS Utilities Maintenance

Date: 1/31/2013

Municipal Facility Stormwater Assessment Checklist					
Checklist C - Liquid and Drum Storage					
Item	Evaluation Criterion	Yes	No	N/A	Comments
a.	Are waste containers clearly identified as being hazardous or liquid waste and labeled as to their contents?		✓		Dispose ASAP
b.	Are waste containers properly closed, secured and stored in secondary containment?	✓			properly closed, secured
c.	Are procedures in place to prevent mixing of different types of waste materials?	✓			
d.	Are waste drums collected by a proper waste collection and disposal firm?	✓			



York County Environmental & Development Services

Inspector: Branon Mcclay

Facility: VC EDS Utilities Maintenance

Date: 1/31/2013

Municipal Facility Stormwater Assessment Checklist					
Checklist E - Vehicle Washing Facilities					
Item	Evaluation Criterion	Yes	No	N/A	Comments
1	Are washing operations performed in a designated wash rack?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	a. Are all wash waters directed to a sanitary sewer?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OR in gravel areas to allow infiltration
	b. If wash water is not directed to sanitary sewer, is it prohibited from entering storm sewer system?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2	Are vehicles inspected for leaks prior to washing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3	Are detergents used phosphate free?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	& biodegradable
4	Are sediments from vehicle washing swept up and disposed of rather than washed down into the drain?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5	Are sumps maintained properly to avoid overflowing or spilling?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Supervisor: Darryl Ballard



York County Environmental & Development Services

Inspector: Brandi Mcloy

Date: 02/10/13

Facility: Williamsburg Satellite Shop

Municipal Facility Stormwater Assessment Checklist					
Checklist A - General Housekeeping /Records Management					
Item	Evaluation Criterion	Yes	No	N/A	Comments
1	Are site plans for the facility on file with the Stormwater Division?	✓			
2	Is the facility located in the MS4?	✓			
3	Is the site part of a stormwater master-planned development?		✓		
4	Is there one or more stormwater BMP structures located at the facility?		✓		
5	Is there a Storm Water Pollution Prevention Plan (SWPPP) located at the facility?			✓	
6	Is there a Nutrient Management Plan for this facility?			✓	
7	Is the facility generally well kept, without excessive clutter or debris?	✓			Excellent housekeeping.
8	Is the impervious surface primarily asphalt or concrete?	✓			Asphalt
9	Is the impervious surface primarily packed gravel or stone?			✓	
10	Are yard drains / curb inlets free of debris & silt?	✓			Swept every Friday
11	Do yard drains / curb inlets have stormwater medallions on them?		✓		
12	Have staff at the facility received training regarding proper housekeeping practices?	✓			O&M manual
13	Have staff at the facility been advised not to put material down storm drains?	✓			
14	Does the parking area receive periodic sweeping?	✓			Friday's.

Facility: Williamsburg Utilities Satellite Shop

Date: 02/01/13

Municipal Facility Stormwater Assessment Checklist					
Checklist A - General Housekeeping /Records Management					
Item	Evaluation Criterion	Yes	No	N/A	Comments
15	Is all trash in a receptacle and are trash receptacles covered?	✓			
16	Have staff at the facility received training regarding spill prevention and cleanup?	✓			O&M manual
	a. Are stored products and materials labeled properly?			✓	no chemicals onsite, only water stored.
	b. Is there an adequate supply of absorbant material ready and available?	✓			
	c. Is there a suitable waste container for spent or contaminated absorbent material?	✓			
17	Does the facility serve as a maintenance or operation facility? (If yes attach Checklist B)	✓			
18	Are drums of material stored at the facility? (If yes attach Checklist C)		✓		
19	Are vehicles fueled at the facility? (If yes attach Checklist D)		✓		
20	Are vehicles washed at the facility? (If yes attach Checklist E)	✓			

Other comments or concerns:

(sand & gravel)
 • if sediment gains access to SW system, the pipes are vacuumed before it leaves the site & gets downstream.
 • All vehicles have MSDS on hand if transporting any material of concern.



York County Environmental & Development Services

Inspector: Branan Mcloy

Facility: Williamsburg Utilities Satellite Shop

Date: 02/01/13

Municipal Facility Stormwater Assessment Checklist					
Checklist B - Maintenance and Operations Facilities					
Item	Evaluation Criterion	Yes	No	N/A	Comments
1	Is the ground stabilized to prevent sediment runoff into the storm drain system?	✓			
2	After visual inspection, are all pervious areas free from stains spills and leaks?	✓			
3	Are loading and unloading areas clean and free from litter?	✓			old man hole covers in waste pile, accumulate & then disposal of
4	Vehicle Parking and Maintenance Areas				
a.	Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	✓			
b.	Are drip pans placed under equipment and vehicles (where appropriate)?	✓			
c.	Are oil/gas filters punctured and allowed to drain 24 hours before disposal or recycling with solid waste?				
d.	Are batteries stored indoors in containers appropriate to contain possible leakage?				
e.	Are parts washed in designated service bays and with designated solvent wash tanks? Do parts drip and dry in a containment area or basin?	✓			
f.	Are drained fluids removed promptly to designated storage containers as quickly as is practical?	✓			
5	Storage Areas			✓	NO SALT on site
a.	Are salt piles bermed and covered or located in a structure?				
b.	Are street sweepings, soil piles, landscape waste and other piles of material bermed to prohibit runoff from entering the storm water system?	✓			Every Fri, and when necessary sediments used for county operations, located in 3-sided berm.
c.	Are street sweepings, soil piles, landscape waste and other piles of waste material limited to being stored for short periods of time before disposal?	✓			- Looking into options of getting a tarp or permanent cover for add'l. SW protection.



York County Environmental & Development Services

Inspector: Branch McCoy

Date: 02/10/13

Facility: Williamsburg Utilities Satellite Shop

Municipal Facility Stormwater Assessment Checklist					
Checklist E - Vehicle Washing Facilities					
Item	Evaluation Criterion	Yes	No	N/A	Comments
1	Are washing operations performed in a designated wash rack?	✓			
	a. Are all wash waters directed to a sanitary sewer?	✓			
	b. If wash water is not directed to sanitary sewer, is it prohibited from entering storm sewer system?			✓	
2	Are vehicles inspected for leaks prior to washing?	✓			
3	Are detergents used phosphate free?	✓			
4	Are sediments from vehicle washing swept up and disposed of rather than washed down into the drain?	✓			
5	Are sumps maintained properly to avoid overflowing or spilling?	✓			vacuumed monthly



Supervisor / Division Chief: Frank Heaspen

Weather: overcast / showers

York County Environmental & Development Services

Inspector: Branan McCoy

Facility: Landfill Transfer Facility

Date: 02/22/13

Municipal Facility Stormwater Assessment Checklist					
Checklist A - General Housekeeping /Records Management					
Item	Evaluation Criterion	Yes	No	N/A	Comments
1	Are site plans for the facility on file with the Stormwater Division?	✓			
2	Is the facility located in the MS4?	✓			
3	Is the site part of a stormwater master-planned development?		✓		
4	Is there one or more stormwater BMP structures located at the facility?	✓			
5	Is there a Storm Water Pollution Prevention Plan (SWPPP) located at the facility?		✓	✓	N/A
6	Is there a Nutrient Management Plan for this facility?		✓	✓	N/A
7	Is the facility generally well kept, without excessive clutter or debris?	✓			see "other comments"
8	Is the impervious surface primarily asphalt or concrete?	✓			Both.
9	Is the impervious surface primarily packed gravel or stone?		✓		Gravel access roads only.
10	Are yard drains / curb inlets free of debris & silt?		✓		some trash in ditches. outfall pipe near parking lot filled w/ sediment.
11	Do yard drains / curb inlets have stormwater medallions on them?		✓		
12	Have staff at the facility received training regarding proper housekeeping practices?				
13	Have staff at the facility been advised not to put material down storm drains?				
14	Does the parking area receive periodic sweeping?	✓			

Municipal Facility Stormwater Assessment Checklist					
Checklist A - General Housekeeping /Records Management					
Item	Evaluation Criterion	Yes	No	N/A	Comments
15	Is all trash in a receptacle and are trash receptacles covered?	✓	✓		Trash in receptacles, containers not covered until transfer
16	Have staff at the facility received training regarding spill prevention and cleanup?	✓			
	a. Are stored products and materials labeled properly?	✓			
	b. Is there an adequate supply of absorbant material ready and available?	✓			
	c. Is there a suitable waste container for spent or contaminated absorbent material?	✓			
17	Does the facility serve as a maintenance or operation facility? (If yes attach Checklist B)	✓			
18	Are drums of material stored at the facility? (If yes attach Checklist C)	✓			
19	Are vehicles fueled at the facility? (If yes attach Checklist D)		✓		
20	Are vehicles washed at the facility? (If yes attach Checklist E)		✓		

Other comments or concerns: Slight housekeeping adjustments suggested to avoid stormwater:

- Batteries out in the open exposed to stormwater, need 2nd containment.
- concrete beam suggested around hazardous materials bin, 2nd containment
- Storage drums locked w/ pad locks, Good, but one padlock missing & one drum w/ anti-freeze leaking out, potential contact w/ runoff
- Great job routinely cleaning lots, sweep first rather than wash, avoid rinsing debris/waste into storm drains.
- can tarps be put on waste containers while they wait for transfer?
- * Garbage leachate running down driveway, informed that a drain is clogged, transfer company has been notified; try absorbing material, not rinsing to a storm drain

- Fence needs repair around transfer facility, & open trash can w/ debris needs a cover.
 - Tire receptacle open, exposed to stormwater



York County Environmental & Development Services

Inspector: Braman McRay

Facility: Landfill Transfer Facility

Date: 2/22/13

Municipal Facility Stormwater Assessment Checklist					
Checklist B - Maintenance and Operations Facilities					
Item	Evaluation Criterion	Yes	No	N/A	Comments
1	Is the ground stabilized to prevent sediment runoff into the storm drain system?	✓			
2	After visual inspection, are all pervious areas free from stains spills and leaks?	✓			
3	Are loading and unloading areas clean and free from litter?		✓		Garbage on transfer station driveway & outside station
4	Vehicle Parking and Maintenance Areas				
a.	Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?		✓		Lubricating w/ hydraulic fluids use drip pan & do indoors
b.	Are drip pans placed under equipment and vehicles (where appropriate)?		✓		in the venue. ↓ appropriate
c.	Are oil/gas filters punctured and allowed to drain 24 hours before disposal or recycling with solid waste?			✓	
d.	Are batteries stored indoors in containers appropriate to contain possible leakage?		✓		on pallet, but outside, no cover.
e.	Are parts washed in designated service bays and with designated solvent wash tanks? Do parts drip and dry in a containment area or basin?			✓	
f.	Are drained fluids removed promptly to designated storage containers as quickly as is practical?			✓	
5	Storage Areas				
a.	Are salt piles bermed and covered or located in a structure?			✓	
b.	Are street sweepings, soil piles, landscape waste and other piles of material bermed to prohibit runoff from entering the storm water system?	✓			Trash/waste in receptacle
c.	Are street sweepings, soil piles, landscape waste and other piles of waste material limited to being stored for short periods of time before disposal?	✓			trash in receptacles, wait for transfer in 2 days at most.



York County Environmental & Development Services

Inspector: Brandi Mcloy

Facility: landfill transfer station facility

Date: 2/28/13

Municipal Facility Stormwater Assessment Checklist					
Checklist C - Liquid and Drum Storage					
Item	Evaluation Criterion	Yes	No	N/A	Comments
1	Are all containers properly labelled, with labels facing out so that they can be read?	✓			
2	Are all liquids in their original containers? Are replacement containers suitable for the material being stored?	✓			
	a. Are all containers in servicable condition (no rust, blisters, cracks etc)?	✓			
3	Are all containers properly closed and securely fastened?	✓			Great safety procedures, padlock missing on one oil drum.
4	Are appropriate MSDS sheets maintained and stored in proximity to the container storage?				
5	Are all containers stored indoors or in a covered area?		✓		
	a. For containers stored outside, are containers stored on pallets to avoid contact with runoff?	✓			
	b. For containers stored outside, are containers covered with tarps to avoid contact with rain?		✓		Chemical pad w/ 2nd containment all others, no cover exists.
6	Have storm drains down slope of the stored material been identified?	✓			
	a. Are there spill response measures, such as berms or a sump, available to contain a spill and prevent it from entering the storm system?	✓			
	b. Are rags or absorbant material, with an appropriate disposal recepticle, available to handle small spills?	✓			
	c. Is an emergency response contact information posted nearby for larger spills or breaches?				
	d. Is absorbant material from small spills swept or vacuumed up instead or washed down the storm drain?	✓			
7	Are drums of hazardous or liquid waste material stored at the facility?	✓			

Facility: Landfill

Date: 2/22/13

Municipal Facility Stormwater Assessment Checklist					
Checklist C - Liquid and Drum Storage					
Item	Evaluation Criterion	Yes	No	N/A	Comments
a.	Are waste containers clearly identified as being hazardous or liquid waste and labeled as to their contents?	✓			
b.	Are waste containers properly closed, secured and stored in secondary containment?	✓			NOT All, but there is a canopy for chemical wastes
c.	Are procedures in place to prevent mixing of different types of waste materials?	✓			
d.	Are waste drums collected by a proper waste collection and disposal firm?	✓			

ATTACHMENT 6: OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed:		Outfall ID:	
Today's date:		Time (Military):	
Investigators:		Form completed by:	
Temperature (°F):	Rainfall (in.):	Last 24 hours:	Last 48 hours:
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	_____ ' _____"	Ft, In	Tape measure
	Measured length	_____ ' _____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? Yes No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Faint	<input type="checkbox"/> 2 – Easily detected	<input type="checkbox"/> 3 – Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Faint colors in sample bottle	<input type="checkbox"/> 2 – Clearly visible in sample bottle	<input type="checkbox"/> 3 – Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 – Slight cloudiness	<input type="checkbox"/> 2 – Cloudy	<input type="checkbox"/> 3 – Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Few/slight; origin not obvious	<input type="checkbox"/> 2 – Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? Yes No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input type="checkbox"/> Unlikely <input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Suspect (one or more indicators with a severity of 3) <input type="checkbox"/> Obvious

Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
2. If yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
3. Intermittent flow trap set?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



**E & S Data
York County
Jul 2012 to Jun 2013**

Approved E&S Plans

TOTAL: 14

	HUC Codes											Total	
	CB21	CB22	JL28	JL31	JL34	JL35	JL38	YO65	YO66	YO67	YO68		YO69
July, 2012													
August, 2012													
September, 2012	1										1		2
October, 2012													
November, 2012										1			1
December, 2012	2												2
January, 2013	1												1
February, 2013		1									1		2
March, 2013											1		1
April, 2013	2												2
May, 2013	1											1	2
June, 2013											1		1
HUC Totals:	7	1								1	4	1	14

Disturbed Acres on Approved E&S Plans

TOTAL: 24.55

HUC Codes



E & S Data
York County
 Jul 2012 to Jun 2013

	CB21	CB22	JL28	JL31	JL34	JL35	JL38	YO65	YO66	YO67	YO68	YO69	Total
July, 2012													
August, 2012													
September, 2012	0.25										2		2.25
October, 2012													
November, 2012									0.75				0.75
December, 2012	2												2
January, 2013	0.5												0.5
February, 2013		0.25									0.3		0.55
March, 2013											1		1
April, 2013	1												1
May, 2013	1											15	16
June, 2013											0.5		0.5
HUC Totals:	4.75	0.25								0.75	3.8	15	24.55

E&S Inspections

TOTAL: 148

HUC Codes



**E & S Data
York County
Jul 2012 to Jun 2013**

	CB21	CB22	JL28	JL31	JL34	JL35	JL38	YO65	YO66	YO67	YO68	YO69	Total
July, 2012													
August, 2012													
September, 2012	19										18		37
October, 2012													
November, 2012										14			14
December, 2012	24												24
January, 2013	12												12
February, 2013		10									10		20
March, 2013											9		9
April, 2013	15												15
May, 2013	6											8	14
June, 2013											3		3
HUC Totals:	76	10								14	40	8	148

E&S Enforcement Actions

TOTAL:
HUC Codes



E & S Data
York County
Jul 2012 to Jun 2013

	CB21	CB22	JL28	JL31	JL34	JL35	JL38	YO65	YO66	YO67	YO68	YO69	Total
July, 2012													
August, 2012													
September, 2012													
October, 2012													
November, 2012													
December, 2012													
January, 2013													
February, 2013													
March, 2013													
April, 2013													
May, 2013													
June, 2013													
HUC Totals:													



COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION
203 Governor Street
Richmond, Virginia 23219-2010
(804) 786-1712

March 21, 2013

James O. McReynolds
County Administrator
P.O. Box 532
224 Ballard St.
Yorktown, VA 23690-0532

Re: York County Erosion and Sediment Control Program

Dear Mr. McReynolds:

In response to information presented to the Virginia Soil and Water Conservation Board by the Department of Conservation and Recreation Staff on February 26, 2013, The Board approved the following motion:

“The Virginia Soil and Water Conservation Board commends York County for successfully implementing the County’s Erosion and Sediment Control program to be fully consistent with the requirements of the Virginia Erosion and Sediment Control Law and Regulations, thereby providing better protection for Virginia’s soil and water resources.”

We congratulate York County on this substantial accomplishment and recognize the County’s efforts to proactively protect Virginia’s soil and water resources through implementation of effective erosion and sediment control.

Sincerely,

A handwritten signature in black ink that reads "John McCutcheon".

John McCutcheon
Training and Certification Program Manager

cc: Connie Bennett, York County Stormwater Division Chief / Floodplain Manager
Joseph Brogan, York County ESC Program Administrator
Wayne Davis, DCR Tappahannock Regional Office
Kevin Landry, DCR Tappahannock Regional Office
Kenneth Harper, DCR Local Program Compliance Coordinator



Inspection Request Line: 890-3910

Building Regulation Office: 890-3522
 Utilities Division,
 (757)890-3752

Service Request Summary**Report Date** 09/04/2013 02:49 PM**Submitted By**

Page 1

Search Criteria
Search Style Match **Sort By** Serv # Ascend **Service Req Status** ALL
Problem ES **Show Linked****Problem** 07/01/2012 00:00 **To** 06/30/2013 23:59**Service Request Summary**

Service # 75983	Problem ES	Link # 1	Priority 4	A/P Attached N	Problem Date 07/02/2012 07:45
Address 102 MIDDLEWOOD LN			Taken By WEB	Project	Scheduled Date
Cross Street			Responsibility UTAD	Source WEB	Start Date
Cross Street					Inspection Date
Name HAAS			Map #	Resolve Code RES	Resolve Date 07/03/2012 13:37
Location					

Service # 76422	Problem ES	Link # 1	Priority 4	A/P Attached N	Problem Date 07/13/2012 09:57
Address 123 DEVONSHIRE DR			Taken By WEB	Project	Scheduled Date
Cross Street			Responsibility UTAD	Source WEB	Start Date
Cross Street					Inspection Date
Name DANFORTH			Map #	Resolve Code RES	Resolve Date 07/15/2012 08:48
Location					

Service # 77052	Problem ES	Link # 1	Priority	A/P Attached N	Problem Date 07/31/2012 15:09
Address 101 FIRBY RD			Taken By MAPPLE	Project	Scheduled Date 07/31/2012 15:14
Cross Street			Responsibility UTAD	Source CONT	Start Date
Cross Street					Inspection Date
Name MOODY			Map #	Resolve Code	Resolve Date
Location DARBY- FIRBY					

Service # 77097	Problem ES	Link # 1	Priority	A/P Attached N	Problem Date 08/02/2012 09:58
Address 106 COPSE WAY			Taken By MAPPLE	Project	Scheduled Date
Cross Street			Responsibility UTAD	Source CUST	Start Date
Cross Street					Inspection Date
Name HORRES			Map #	Resolve Code	Resolve Date
Location QUEENS LAKE, EAST QUEENS DRIVE.					

Service # 77500	Problem ES	Link # 1	Priority 4	A/P Attached N	Problem Date 08/16/2012 09:36
Address			Taken By WEB	Project	Scheduled Date
Cross Street			Responsibility UTAD	Source WEB	Start Date
Cross Street					Inspection Date
Name HALVORSON			Map #	Resolve Code RES	Resolve Date 08/16/2012 15:05
Location BAILEY DR/CHESTNUT INTERSECTION YORKTOWN VA					

Building Regulation Office: 890-3522
 Utilities Division,
 (757)890-3752

Report Date 09/04/2013 02:49 PM

Submitted By

Page 2

Service Request Summary

Service # 77659	Problem ES	Link # 1	Priority	A/P Attached N	Problem Date 08/23/2012 13:17
Address 207 TERREBONNE RD			Taken By PLEVEL	Project	Scheduled Date
Cross Street			Responsibility VDOT	Source CUST	Start Date
Cross Street					Inspection Date
Name DEFOSSE			Map #	Resolve Code VDOT	Resolve Date 08/27/2012 14:21
Location FRONT DRIVEWAY					

Service # 77817	Problem ES	Link # 1	Priority	A/P Attached N	Problem Date 08/29/2012 14:25
Address 404 WHISPERING PINE DR			Taken By PLEVEL	Project	Scheduled Date
Cross Street			Responsibility UTAD	Source CUST	Start Date
Cross Street					Inspection Date
Name BAKER			Map #	Resolve Code RES	Resolve Date 09/05/2012 14:16
Location FRONT DRAINAGE AREA ERODING					

Service # 77836	Problem ES	Link # 1	Priority 4	A/P Attached N	Problem Date 08/29/2012 23:19
Address 100 DONOVAN CT			Taken By WEB	Project	Scheduled Date
Cross Street			Responsibility VDOT	Source WEB	Start Date
Cross Street					Inspection Date
Name LIU			Map #	Resolve Code VDOT	Resolve Date 08/31/2012 02:38
Location					

Service # 78709	Problem ES	Link # 1	Priority	A/P Attached N	Problem Date 09/28/2012 09:23
Address 115 DAWSON CRES			Taken By PLEVEL	Project	Scheduled Date
Cross Street			Responsibility UTAD	Source CUST	Start Date
Cross Street					Inspection Date
Name KNUTSON			Map #	Resolve Code RES	Resolve Date 02/14/2013 15:13
Location SIDE OF PROPERTY LEADING TO DRAINAGE DITCH					

Service # 80427	Problem ES	Link # 1	Priority	A/P Attached N	Problem Date 01/03/2013 09:50
Address 406 MANSION RD			Taken By VG	Project	Scheduled Date
Cross Street			Responsibility C	Source	Start Date
Cross Street					Inspection Date
Name EASTEP			Map #	Resolve Code RES	Resolve Date 01/10/2013 16:17
Location WOODS OF MANSION ROAD - CONSTRUCTION ENTRANCE FOR DEVELOPMENT OF PHASE II					

Building Regulation Office: 890-3522
 Utilities Division,
 (757)890-3752

Report Date 09/04/2013 02:49 PM

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Service Request Summary

Service # 81986	Problem ES	Link # 1	Priority	A/P Attached N	Problem Date 03/22/2013 09:39
Address 122 PEBBLE BEACH LN			Taken By PLEVEL	Project	Scheduled Date
Cross Street			Responsibility UTAD	Source CUST	Start Date
Cross Street					Inspection Date
Name WILKINSON			Map #	Resolve Code RC	Resolve Date 05/21/2013 13:12
Location ON LEFT SIDE OF HOUSE IF FACING HOUSE					

Service # 82242	Problem ES	Link # 1	Priority	A/P Attached N	Problem Date 04/03/2013 16:29
Address 101 TERRYWOOD CT			Taken By PLEVEL	Project	Scheduled Date
Cross Street			Responsibility UTAD	Source CUST	Start Date
Cross Street					Inspection Date
Name BANKS			Map #	Resolve Code	Resolve Date
Location BETWEEN LOTS					

Service # 82462	Problem ES	Link # 1	Priority	A/P Attached N	Problem Date 04/15/2013 13:10
Address 104 ANNS CT			Taken By PLEVEL	Project	Scheduled Date
Cross Street			Responsibility UTAD	Source CUST	Start Date
Cross Street					Inspection Date
Name WELDY			Map #	Resolve Code	Resolve Date
Location STORMWATER EASEMENT ON RIGHT, DIAGONALLY, IF FACING HOUSE FROM ROAD					

Service # 82681	Problem ES	Link # 1	Priority 4	A/P Attached N	Problem Date 04/20/2013 21:24
Address 410 LAKESIDE DR			Taken By WEB	Project	Scheduled Date
Cross Street			Responsibility UTAD	Source WEB	Start Date
Cross Street					Inspection Date
Name			Map #	Resolve Code	Resolve Date
Location					

Service # 82799	Problem ES	Link # 1	Priority 4	A/P Attached N	Problem Date 04/24/2013 09:26
Address			Taken By WEB	Project	Scheduled Date
Cross Street			Responsibility UTAD	Source WEB	Start Date
Cross Street					Inspection Date
Name DIXON			Map #	Resolve Code RES	Resolve Date 04/25/2013 14:37
Location 101 SANCTUARY COVE ST YORKTOWN VA					

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 Utilities Division,
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Report Date 09/04/2013 02:49 PM

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Service Request Summary

Service # 82804	Problem ES	Link # 1	Priority	A/P Attached N	Problem Date 04/24/2013 11:07
Address			Taken By ADRK	Project	Scheduled Date
Cross Street			Responsibility UTAD	Source CUST	Start Date
Cross Street					Inspection Date
Name			Map #	Resolve Code RES	Resolve Date 04/24/2013 14:46
Location					

Service # 84553	Problem ES	Link # 1	Priority 4	A/P Attached N	Problem Date 06/05/2013 15:24
Address			Taken By WEB	Project	Scheduled Date
Cross Street			Responsibility UTAD	Source WEB	Start Date
Cross Street					Inspection Date
Name WASHINGTON			Map #	Resolve Code	Resolve Date
Location 214 SIR JOHN WAY ST SEAFORD VA	THE DRAINAGE TRENCH IS DUG ON MY BACK YARD ON THE COUNTY EASEMENT BETWEEN 214 SIR JOHN WAY AND 111 FINCH LN, SEAFORD VA.				

Service # 84994	Problem ES	Link # 1	Priority	A/P Attached N	Problem Date 06/17/2013 12:00
Address 138 WEST QUEENS DR			Taken By MMCEL	Project	Scheduled Date
Cross Street			Responsibility UTAD	Source CUST	Start Date
Cross Street					Inspection Date
Name HARRISON			Map #	Resolve Code HO	Resolve Date 06/18/2013 10:40
Location					

Service # 85026	Problem ES	Link # 1	Priority	A/P Attached N	Problem Date 06/18/2013 11:27
Address 114 GLENN CIR			Taken By PLEVEL	Project	Scheduled Date
Cross Street			Responsibility UTAD	Source CUST	Start Date
Cross Street					Inspection Date
Name BRIDGES			Map #	Resolve Code RES	Resolve Date 06/25/2013 15:00
Location BACK YARD					

Service # 85054	Problem ES	Link # 1	Priority 4	A/P Attached N	Problem Date 06/18/2013 16:08
Address 100 KITTY DR			Taken By WEB	Project	Scheduled Date
Cross Street			Responsibility VDOT	Source WEB	Start Date
Cross Street					Inspection Date
Name KELLER			Map #	Resolve Code VDOT	Resolve Date 08/07/2013 09:45
Location KITTY DRIVE AND SHOWALTER RD					

SITE INFO																			
Site ID	Site No	Site Title	Street Number	Street Name	Total Site Area	Total Impervious Area	Plan Approval Date	Lid	Ownership Type	SWMF Type	Drainage Area	Land Use	Long	Lat	Phosphorus Removed	Nitrogen Removed	Date Online	Status	HUC
S05d-4341-1147	201100292	St. Lukes United Methodist Church	300	ELLA TAYLOR RD	5.68	3.43	5/29/2012	No	Private	Retention Basin	3.43	Commercial	-76.45	37.14	7.68	0	07/16/2013	Active	CB21
U03c-0938-1516	201100295	York County Schools - Tabb Elementary School	3711	BIG BETHEL RD	14.16	5.09	4/16/2012	Yes	School	General Infiltration Practices	0.85	Public/Semi-Public	-76.43	37.11	0	0	07/15/2013	Active	CB22
U07a-0496-4409	201000475	Radwan Family Subdivision	411	RAILWAY RD	2.5137	0	7/1/2013	No	Private	General Infiltration Practices	2.514	Single-Family Residential	-76.43	37.18	0	0	07/01/2013	Active	CB21
M11B-4112-3486	200200158	Lackey Free Clinic	1620	OLD WILLIAMSBURG RD	0.9708	0	11/8/2006	No	Private	Bioretention Basins	0.127	Public/Semi-Public	-76.56	37.23	0	0	06/07/2013	Active	JL38
200600306-1		Zion Prospect-B	408	DARBY RD	0.516	0.239	2/3/2012	No	Private	Extended Detention Basin	0.516	Commercial	-76.46	37.13	0.218	0.218	06/04/2013	Active	CB21
200600306-1		Zion Prospect-B	408	DARBY RD	0.516	0.239	2/3/2012	No	Private	Grassed Swale	1.71	Commercial	-76.46	37.13	0.25	0.25	06/04/2013	Active	CB21
200600306		Zion Prospect-A	408	DARBY RD	0.604	0.243	1/11/2013	Yes	Private	Bioretention Basins	0.604	Commercial	-76.46	37.13	0.282	0.282	06/04/2013	Active	CB21
Q08d-4540-0819		Yorktown Materials	120	GREENE DR	1.544	0.7	2/2/2012	Yes	Private	Bioretention Basins	0.7	Limited Industrial	-76.49	37.18	0.46	5.9	05/01/2013	Active	CB21
V02C-0915-1419		Pines of York Clubhouse	3100	HAMPTON HWY	3.8	1.02	2/20/2013	Yes	Private	Bioretention Basins	1.02	Multi-Family Residential	-76.42	37.1	0	0	04/12/2013	Active	CB22
T06d-3720-2457	201100007G	Ray's Cove Burcher Family Subdivision	306	PATRICKS CREEK RD	12.25	1.86	12/22/2011	Yes	Private	Grassed Swale	6.51	Single-Family Residential	-76.44	37.16	0.63	0	12/15/2012	Active	CB21
C20c-1236-0152	201100243	Casey Toyota	601	E ROCHAMBEAU DR	10.1	6.15	7/19/2011	Yes	Private	Retention Basin	10.1	Commercial	-76.73	37.35	9	0	10/14/2012	Active	YO67
U03c-0938-1516	201100295	York County Schools - Tabb Elementary School	3711	BIG BETHEL RD	14.16	5.09	4/16/2012	Yes	School	Manufactured BMP Systems	5.1	Commercial	-76.43	37.11	0	0	09/04/2012	Active	CB22
U03c-0938-1516	201100295	York County Schools - Tabb Elementary School	3711	BIG BETHEL RD	14.16	5.09	4/16/2012	Yes	School	Manufactured BMP Systems	5.1	Commercial	-76.43	37.11	0	0	09/04/2012	Active	CB22
U03c-0938-1516	201100295	York County Schools - Tabb Elementary School	3711	BIG BETHEL RD	14.16	5.09	4/16/2012	Yes	School	Bioretention Basins	0.89	Commercial	-76.43	37.11	0	0	09/04/2012	Active	CB22

Site	SWMF ID	Original Inspection Date	DCR Classification	Inlets	Outlets	Principal Spillway	Emergency Spillway	Embankments	Routine Maintenance	Vegetation	Side Slope Vegetation
Victory Automotive Building and parking lot	S03d-4105-0039	7/31/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	Unsat	Unsat - Recommend removal of woody vegetation within 10' of outlet pipe.	Sat
HRSD - York River Treatment Plant	0000000000-BMP 2	7/30/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	present within 10' of piping, including root. Stabilize and seed area after removal. There are currently saplings	Sat
HRSD - York River Treatment Plant	000000000-BMP 1	7/30/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat		Sat
Jacob's Springs	S06b-3939-3946	7/30/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat		Sat
Jacob's Springs 2 (Stephens Run)	200400081	7/30/2013	Constructed Stormwater Wetland	Sat	Sat	Sat	Sat	Sat	Sat		Sat
Kings Creek Plantation	I14c-0601-1017(BMP 9)	7/30/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat		Unsat
Comfort Suites	200800459-Pond A	7/29/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Unsat		Sat
Comfort Suites	200800459-Pond B	7/29/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Unsat		Sat
Walgreens - Grafton #9811	200700211-A	7/24/2013	Bioretention Basins	Sat	Sat	Sat	Sat	Sat	Unsat		Unsat
Walgreens - Grafton #9811	200700211-B	7/24/2013	Bioretention Basins	Sat	Sat	Sat	Sat	Sat	Unsat		Unsat
Coventry Apartments The Villas	200900141	7/23/2013	Bioretention Basins	Sat	Sat	Sat	Sat	Sat	Sat		Sat
Coventry Area 2 - Ferguson Glade	T02b-3939-2564	7/23/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat - Recommend removal of all woody vegetation within 10' of inlet/outlet piping.	Sat
Coventry Area 2 - Ferguson Glade	T02d-3686-2261	7/23/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat - Remove woody vegetation within 10' of inlet/outlet piping.	Sat
Coventry Area 3 - Justinian Grove	T02d-3187-2158	7/23/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat		Sat
Coventry Harvest Lake A	T02c-1288-1043	7/23/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat		Sat
Coventry Smithy Glen	T02d-3992-1503	7/23/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat		Sat
Coventry Smithy Glen	T02d-4264-0748	7/23/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat		Sat
Coventry Smithy Glen	T02d-4540-1703	7/23/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat		Sat
Falcon Crest 2 (Edgehill 4)	200600050	7/22/2013	Constructed Stormwater Wetland	Sat	Sat	Sat	Sat	Sat	Unsat - Remove tree fallen in basin; keep area around outlet mowed at all times.		Sat
Harts Storage	200500305	7/22/2013	Constructed Stormwater Wetland	Sat	Sat	Sat	Unsat - Remove woody vegetation.	Sat	Unsat - Mowing needed.		Sat
Quartermarsh Est. Sec. 3	200300068	7/22/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Unsat - mow and maintain slopes and embankments no between 5-	Unsat - Remove woody vegetation within 10' of inlet/outlet piping.	Sat
Dodd RV Trailer Sales	200300062	7/19/2013	Retention Basin	Sat	Sat - Some debris on grate cover.	Sat	Sat	Sat	Sat		Unsat - See above.
Great Wolf Lodge	200300612	7/18/2013	Retention Basin	Unsat		Sat	Sat	Sat	Sat		Sat
Sentara Williamsburg Comm. Hosp.	200200087-01	7/18/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat		Sat
Sentara Williamsburg Comm. Hosp.	200200087-02	7/18/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat		Sat
Bionetics	200900170	7/16/2013	General Infiltration Practices	Sat	Sat	Sat	Sat	Sat	Sat		Sat
Churchill Estates Phase 3	200600551A	7/16/2013	Extended Detention Basin	Sat	Sat	Sat	NA	Sat	Sat		Sat
Churchill Estates Phase 3	200600551B	7/16/2013	Extended Detention Basin	Sat	Sat	Sat	NA	Sat	Sat		Sat
Custom Design Works	S02B-3819-3171	7/16/2013	Bioretention Basins	Sat	Sat	NA	NA	NA	Sat		Sat
Days Inn Yorktown	2005-11	7/16/2013	Manufactured BMP Systems	Unsat	Unsat				Unsat		NA
Hawks Landing	200400096	7/16/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat		Sat
Major Family Subdivision	201100190	7/16/2013	Extended Detention Basin	Sat	Sat	Sat	NA	NA	Sat		Sat
P & H LC	S03c-2289-0512	7/16/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat		Unsat

Site	SWMF ID	Original Inspection Date	DCR Classification	Inlets	Outlets	Principal Spillway	Emergency Spillway	Embankments	Routine Maintenance	Vegetation	Side Slope Vegetation
St. Lukes United Methodist Church	S05d-4341-1147	7/16/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Victory Meadows	V03b-3423-4439	7/16/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat - Watch woody vegetation. Remove pine trees coming in. No woody	Sat
Villas on Shady Banks	200300059-1	7/16/2013	Extended Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Villas on Shady Banks	200300059-2	7/16/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Walgreens-Victory #10453	200800354	7/16/2013	Retention Basin	Unsat	Sat	Sat	NA	Sat	Unsat	Sat	Sat
Walmart Tabb	S03b-2811-3934	7/16/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
York Colony Sec. 2	V03b-2666-4495	7/16/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Zion Prospect-A	200600306	7/16/2013	Bioretention Basins	Sat	Sat	NA	Sat	NA	Sat	Sat	Sat
Zion Prospect-B	200600306-1	7/16/2013	Extended Detention Basin	Sat	to be a timber weir	Sat	NA	Sat	Sat	Sat	Sat
Zion Prospect-B	200600306-1	7/16/2013	Grassed Swale	Sat	Sat			Sat	Sat	Sat	
Animal Clinic of Williamsburg	200501064	7/15/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Grand Oaks	200400265 1	7/15/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	times to prevent woody vegetation.	Sat
Grand Oaks	200400265 2	7/15/2013	Extended Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	times to prevent woody vegetation.	Sat
Lackey Free Clinic	201100178	7/15/2013	Bioretention Basins	Sat	NA	NA	NA	NA	Sat	Unsat - Plants have not yet been added.	
Magnolia Park (Maple Terrace)	200701224	7/15/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Oak Ridge at Endview Plantation	M10a-1702-4019	7/15/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Tramuel, Helena Family Subdivision	N11c-0491-1011	7/15/2013	Bioretention Basins	Sat	NA	NA	NA	NA	Sat	Unsat - Basin at 800 needs additional plants added.	
Yorktown Trace	200000037	7/15/2013	Constructed Stormwater Wetland	Sat	Sat	Sat	NA	Sat	Sat	Sat	
7-Eleven Bypass Road	D15d-3396-1789	7/12/2013	Extended Detention Basin	Unsat	Unsat	to debris and access. Will assess during next inspection.	NA	Unsat - Woody vegetation present.	vegetation and debris from basin. Remove any sediment	10' of inlet/outlet piping or structures, from basin bottom and on embankment,	Unsat
Gateway Village	C20b-3184-2547	7/11/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Villas at Yorktown	200800104	7/11/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Radwan Family Subdivision	201300009	7/10/2013	General Infiltration Practices	Sat	Sat	NA	NA	NA	Sat	Sat	
Sunset Meadows	0	7/10/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Unsat	Sat
Big Al's Mufflers	R07d-3773-1195	7/9/2013	Detention Basin	Unsat - Swale coming in needs to be cleared of	Sat	Sat	NA	Sat	Sat	Unsat	Unsat
Country Inn and Suites	D15d-3106-1785	7/8/2013	Detention Basin	Unsat	Unsat	Unsat	NA	Unsat	Unsat	Unsat	Unsat
Highgrove Subdivision	200800021	7/8/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Unsat	Unsat
Consolidated Lodges	200500317	7/5/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
St. Kateri Parking Lot Exp.	200701036	7/5/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
AutoZone Williamsburg	200200022	7/3/2013	Detention Basin	Sat	Sat	Sat	NA	Unsat	Unsat - Keep basin mowed if you want to keep grass in it.	Unsat - Remove tree stumps within 10' of outlet structure. This was mentioned on	Sat
Falcon Crest	P09b-4719-3190	7/3/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Sommerville Sec 1&2	T09d-4348-0714	7/3/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Wendy's Patriots Square	Q08b-4325-3877	7/3/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Buggy Bathe Car Wash Lube Facility	98-SP021	7/2/2013	Manufactured BMP Systems	Sat	Sat				Unsat - Underground storage unit needs to be pumped (flushed)	NA	
Darby Estates	201200274	7/2/2013	Retention Basin	Unsat - Erosion around gabion baskets.	Unsat - Erosion around concrete headwall and	Sat	Sat	Sat	Sat	Unsat	Unsat - Vegetation is sparse. Seeding is needed.
Kmart	200000798	7/1/2013	Detention Basin	Unsat - Clear excess sediment and debris from	Sat	Sat	NA	NA	Unsat - Remove trash, limbs and debris.	Sat	Sat
Homewood Suites	D15d-3801-2313	6/27/2013	Manufactured BMP Systems	Sat	Sat				Sat	NA	
Kings Creek Plantation (BMP 1)	I14C-0601-1017	6/27/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Unsat - Remove woody vegetation present within 10' of inlet and outlet piping.	Sat
Kings Creek Plantation (BMP 2)	I14C-0601-1017	6/27/2013	Detention Basin	Sat	Unsat - Outlet appears obstructed.	Sat	NA	Sat	Unsat - Remove debris from outlet area.	Unsat - Remove woody vegetation present within 10' of inlet and outlet piping.	Sat
Kings Creek Plantation (BMP 4)	I14C-0601-1017	6/27/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Unsat - Remove woody vegetation present within 10' of inlet and outlet piping.	Sat
Kings Creek Plantation (mini golf)	I14C-0601-1017	6/27/2013	Extended Detention Basin	Sat	Sat	Sat	NA	Sat	Sat - Some debris on type of outlet grate and around	Sat	Sat
Kings Creek Plantation (BMP 9)	I14c-0601-1017	6/27/2013	Detention Basin	Sat	and on top of riser of leaves and debris. Remove	Sat	NA	is present on embankment that should be removed.	leaves, and dead vegetation from basin and slopes.	top of outlet pipe that has already cracked pipe and needs to be removed.	Sat

Site	SWMF ID	Original Inspection Date	DCR Classification	Inlets	Outlets	Principal Spillway	Emergency Spillway	Embankments	Routine Maintenance	Vegetation	Side Slope Vegetation
Kings Creek Plantation	114C-0601-1017 (BMP 3)	6/27/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat - Some debris on outlet cover grate and on basin bottom that	Sat	Sat
Kings Creek Plantation - SPH	200601242 (BMP 10)	6/27/2013	Retention Basin	Unsat - Erosion issue on inlet slope is being addressed; about halfway complete.	Sat	Sat	NA	Sat	Unsat	Sat	Sat
Kings Creek Plantation Phase I SPE	200200170 (BMP 6)	6/27/2013	Detention Basin	Sat	Sat	Sat	NA	Unsat - There is an eroded area and undermining of retaining wall. The eroded	Unsat - Prune trees; remove excessive/dead vegetation. Remove woody vegetation within	Sat	Sat
Skimino Landing Estates - Phase II	E20B-3288-4702	6/27/2013	Extended Detention Basin	Unsat	Sat	Sat	NA	Sat	Unsat	Unsat	Sat
Skimino Landing Phase I	200601022	6/27/2013	Retention Basin	Unsat	Unsat	Sat	NA	Unsat	Unsat	Sat	Sat
Strait Gate Temple/Korean Southern Baptist Church	G14c-1970-0222	6/26/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Bruton Glen Subdivision	199900359	6/25/2013	Detention Basin	Unsat - Inlet swales clogged and obstructed. Inlet areas of basin need to be cleared	Sat - Outfall area has been cleared. Outfall structure has been repaired.	Sat	Sat	Sat	Unsat - Remove trash and debris from basin. Remove dead vegetation.	Sat	Sat
Nelsons Grant Dev.	Q09d-4122-0113	6/25/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Unsat	Unsat
St. Demetrios Greek Orthodox Church/Williamsburg Hellenic Center	200800449	6/25/2013	Retention Basin	Unsat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Hall Custom Cabinets	200501113	6/24/2013	General Infiltration Practices	Sat	NA	NA	NA	Sat	Sat	Sat	Sat
Northside Church of Christ	200700856	6/24/2013	Retention Basin	Sat	Unsat - Remove obstructions at outlet.	Sat	NA	Sat	Unsat	Unsat	Unsat
Pines of York Clubhouse	V02C-0915-1419	6/24/2013	Bioretention Basins	Sat	Sat	NA	NA	NA	Sat	Sat	Sat
Great Wolf Lodge	200300612	6/20/2013	Retention Basin	Unsat - Inlet swale has not yet been stabilized.	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Miller Mart Lightfoot	B19c-1184-1546	6/20/2013	Extended Detention Basin	Sat	Sat	NA	Sat	Sat	Sat	Sat	Sat
Bruton Glen Subdivision	199900359	6/19/2013	Detention Basin	Unsat	Unsat	Unsat	Sat	Sat	Unsat	Sat	Sat
Callahan Village	94-SP030	6/19/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Comfort Suites	200800459-Pond A	6/19/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Unsat	Sat	Sat
Comfort Suites	200800459-Pond B	6/19/2013	Extended Detention Basin	Sat	Sat	Sat	NA	Sat	Unsat	Sat	Sat
Country Inn and Suites	D15d-3106-1785	6/19/2013	Detention Basin	Unsat	Unsat	Unsat	NA	Unsat	Unsat	Unsat	Unsat
Heritage Humane Society	200700189	6/19/2013	Bioretention Basins	Sat	Sat	Sat	Sat	NA	Sat	Sat	Sat
Holiday Inn & Suites Wmbg	2007-03	6/19/2013	Manufactured BMP Systems	Sat	Sat				Sat	Sat	
Patriots Place (Wyndham)	201000562	6/19/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Patriots Place (Wyndham)	D15b-4160-2525	6/19/2013	Retention Basin	Sat	Unsat - Outfall area is completely failing. Severe erosion, undermining, and	Unsat	NA	Unsat	Sat	Sat	Sat
Busch Gardens Connector Road-Biagi Building	201300106	6/18/2013	Grassed Swale	Sat	Sat			Sat	Sat	Sat	Sat
Yorktown Athletic Club	200501096	6/18/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat - Will need mowing in fall.	Sat	Sat
Bargain Box	201000215	6/17/2013	General Infiltration Practices	Sat	Sat	NA	NA	NA	Sat	Sat	Sat
Darby Estates	201200274	6/17/2013	Retention Basin	Unsat - There is erosion around gabion baskets at	Unsat - There is a fallen tree limb blocking outfall	Sat	Sat	Sat	Sat	Unsat - Supplemental seeding will be needed in fall. Slope vegetation is sparse.	Unsat
Hunter Estates	200800503-A	6/17/2013	Bioretention Basins	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Hunter Estates	200800503-B	6/17/2013	Bioretention Basins	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Endview Woods Sec. 1	M11d-2953-2247 (A)	6/14/2013	Extended Detention Basin	Unsat	Unsat	Unsat	Sat	Sat	Sat	Unsat	Unsat
Endview Woods Sec. 2	m11d-2833-1876 (B)	6/14/2013	Constructed Stormwater Wetland	Unsat	Unsat	Unsat	Sat	Unsat	Unsat	Unsat	Unsat
Ray's Cove Burcher Family Subdivision	T06D-3720-2457	6/14/2013	Grassed Swale	Sat	Unsat - some erosion at outfall that needs to be repaired			Sat	NA	Sat	

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Buffa Property - Grafton Station	200600295	6/13/2013	Constructed Stormwater Wetland	Sat	Sat	Sat	Sat	Sat	Sat	Sat	
Quarters of York	200500284	6/13/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Quarters of York Highgrove Subdivision	200500284-B	6/13/2013	Manufactured BMP Systems	Sat	Sat				Sat	Sat	
Hudgins- Holiday Cadillac/Chevrolet	200800021	6/12/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Unsat	Unsat
Shoppes at Yorktown	200500005	6/6/2013	Manufactured BMP Systems	Sat	Sat				Sat	Sat	
Shoppes at Yorktown	R07b-3488-2875	6/6/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Shoppes at Yorktown	R07d-3897-2450	6/6/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Unsat - Mow grassed areas of slopes.	Sat	Sat
Burnt Bridge Run	98-SP081-#1	6/5/2013	Constructed Stormwater Wetland	Sat	Sat	Sat	NA	Sat	Sat	Sat	
Burnt Bridge Run	980SP081#2	6/5/2013	Retention Basin	Sat	Sat	Sat	NA	NA	Sat	Sat	Unsat
Colonial Community Services	200200006	6/5/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat - Seed bare areas as needed.
Peninsula Emergency Vet Clinic	200200248	6/5/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Penniman East Subdivision	H13a-1382-2604	6/5/2013	Detention Basin	Sat - There are some eroded areas at inlet (mentioned in previous inspections and not	Sat	Sat	Sat	Sat	Sat - Embankment has been seeded. A full establishment of ground	Sat	Sat
Zion Prospect-A	200600306	6/4/2013	Bioretention Basins	Sat	Sat	Sat	NA	Sat	Sat	Unsat - Need to add plants.	
Zion Prospect-B	200600306-1	6/4/2013	Grassed Swale	Sat	Sat	Sat	NA	NA	Sat	Sat	
Zion Prospect-B	200600306-1	6/4/2013	Extended Detention Basin	Sat	Unsat	Unsat	NA	Unsat	Unsat	Unsat	Unsat
Bunting Point	200501050	6/1/2013	Extended Detention Basin	Some inlet areas obstructed and should be opened up to allow easier	Sat	Sat	Some inlet areas largely covered in vegetation. Trees are coming up through riprap. There is a	Sat	Sat	Sat	Sat
Grafton Animal Veterinary Hospital	200500013	5/29/2013	General Infiltration Practices	Sat	Sat	Sat	NA	Sat	Sat	Sat	
Plaza Azteca (Joe & Mimmas)/Stor Moore	200700797	5/29/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Winterfield BMP A	200700060-01	5/29/2013	Constructed Stormwater Wetland	Sat	Sat	Sat	Sat	Sat	Sat	Sat	
Winterfield BMP B	200700060-02	5/29/2013	Constructed Stormwater Wetland	Sat	Sat	Sat	Sat	Sat	Sat	Sat	
Casey Toyota	201100243	5/28/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Unsat - Establish full ground cover on all slopes and embankment. Lime and/or fertilizer may be needed.
Felgates Woods	200600042	5/28/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Unsat - Need to pick trash up from in and around pond.	Sat	Sat
Felgates Woods	200600189-1	5/28/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Felgates Woods	200600189-2	5/28/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Lackey Free Clinic	200200158	5/28/2013	Constructed Stormwater Wetland	Sat	Sat	Sat	Sat	Sat	Sat	Sat	
Lackey Free Clinic	201100178	5/28/2013	Bioretention Basins	Sat	Sat	NA	NA	NA	Sat	Unsat	
Cheyenne Hills Subdivision	200000027	5/24/2013	Constructed Stormwater Wetland	Sat	Sat	Sat	Sat	Sat	Sat	Sat	
Wyndham Kingsgate	199000000-1a	5/24/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Wyndham Kingsgate	199000000-1b	5/24/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Wyndham Kingsgate	199000000-2	5/24/2013	Retention Basin	Sat	Unsat - Area around outfall pipe is severely eroded and	Sat	NA	Sat	Sat	Sat	Sat
Arbys Restaurant - Ft. Eustis	200900479	5/23/2013	Bioretention Basins	Sat	Sat	Sat	Sat	Sat	Sat	Sat	
Bojangles	2007-12	5/23/2013	Manufactured BMP Systems	Sat	Sat				Sat	Sat	
J & K Heating	200600857	5/23/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Bruton Glen Subdivision	199900359	5/22/2013	Detention Basin	NA	Unsat	NA	NA	NA	NA	Unsat	NA
Ferguson Waterworks	200600290	5/22/2013	Manufactured BMP Systems	Sat	Sat				Sat	Sat	
International Center Ph II BMP2	200700033-Towne Park	5/22/2013	Manufactured BMP Systems	Sat	Sat				Sat	Sat	
Lakeside Dr. Retail Shops	200800437	5/22/2013	Bioretention Basins	Sat	Sat	NA	NA	NA	Sat	Sat	
Boxx&Blaney Dental Clinic	200900085	5/21/2013	General Infiltration Practices	Sat	Sat	NA	NA	NA	Sat	Sat	
Goddard School	20100083	5/21/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Goddard School	20100083-2	5/21/2013	Manufactured BMP Systems	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Rite Aid Pharmacy Store # 3971	S06a-1464-3889	5/21/2013	Detention Basin	Sat	to be cleared of trash and debris.	Sat - Replace grate cover on spillway (currently half way off).	Sat	Sat	middle of basin. Mow and maintain vegetation no higher	Sat	need to be seeded (always seed bare areas as they emerge).

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Walgreens-Victory #10453	200800354	5/21/2013	Retention Basin	around inlet pipe (from previous report).	Sat	Sat	Sat	Sat	areas as needed. Remove woody vegetation within 10' of	Sat	Unsat - Issues noted.
Crossing/Grafton Station Apartments	S06b-2606-2976	5/21/2013	Retention Basin	Sat	Unsat - there is woody vegetation present. Remove woody vegetation	Sat	Sat	Sat	Sat	Sat	Sat
Creekside Landing H	200501002-H	5/20/2013	Detention Basin	Sat - Minimal erosion at inlet. Appears stable now.	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Creekside Landing B-F-G	200700850-F	5/20/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Creekside Landing D-I-J-K	200700850-K	5/20/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Auto Haus	200600918	5/17/2013	Manufactured BMP Systems	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Ewell Industrial Park	200600541 (2)	5/17/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Ewell Industrial Park	200600541 (1)	5/17/2013	Extended Detention Basin	Unsat	Unsat	Unsat	NA	Unsat	Unsat	Unsat	Sat - Wooded system.
Water Country USA Parking	1996	5/17/2013	Retention Basin	Sat	Sat	Sat	NA	Unsat - Remove wax myrtle trees on front side of embankment.	Sat	Sat	Sat
Water Country USA Parking	200300731	5/17/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Williamsburg Motors	200200262	5/17/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Yorktown Materials Custom Builder Supply Company	Q08D-4540-0819	5/17/2013	Bioretention Basins	Sat	Sat	Sat	NA	NA	Sat	Sat	Sat
Lightfoot Crossing	200500688	5/16/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat - Seed bare areas as they emerge.
Lightfoot Crossing II	200600329	5/16/2013	General Infiltration Practices	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Busch Ind. Park (Duncan Pond)	94-SP063	5/15/2013	Retention Basin	Sat	Unsat - There is sediment deposition near the outlet that is causing debris to	Sat	Sat	Sat	Sat	Sat	Sat
Community Services Coalition	D15A-2443-4743	5/15/2013	Bioretention Basins	Sat	NA	NA	NA	NA	Sat	Sat	Sat
Hollymeade	T03b-3627-4549	5/15/2013	Detention Basin	Sat	Sat	NA	NA	Sat	Unsat - Remove deceased vegetation, limbs, leaves, and	Sat	Sat
Lakes at Dare Sec. 6	200200233 (H)	5/15/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Unsat - Remove all woody vegetation within 10' of inlet/outlet piping.	Sat
Lakes at Dare Sec. 6	U06b-2863-4906	5/15/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Unsat - Remove all woody vegetation within 10' of inlet/outlet pipes.	Sat
Ambrits Point	200700074	5/14/2013	Constructed Stormwater Wetland	Sat	Sat	Sat	Sat	Sat	Sat	plantings is evident. A supplemental planting is needed.	Sat
Lakes at Dare Sec 1	U07d-2630-2251 (E)	5/14/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Unsat - Remove woody vegetation within 10' of inlet/outlet pipes.	Sat
Lakes at Dare Sec 1	U07a-0267-2508	5/14/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Unsat - Remove woody vegetation within 10' of inlet/outlet pipes.	Sat
Lakes at Dare Sec 1	U07a-0420-2757	5/14/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Unsat - Remove woody vegetation within 10' of inlet/outlet pipe.	Sat
Lakes at Dare Sec 1	U07a-1646-2783	5/14/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Unsat - Remove woody vegetation within 10' of inlet/outlet pipe.	Sat
Lakes at Dare Sec 1	U07d-2630-2251	5/14/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Unsat - Remove woody vegetation present within 10' of inlet/outlet pipes.	Sat
Mcdonald Bluffs	T04a-0788-4013	5/14/2013	Retention Basin	Sat	Unsat - Unable to inspect, need to clear and maintain path to outfall pipe/outfall	NA - Unable to inspect	Sat - Remove vegetation from spillway.	Unsat - woody vegetation present on embankment. All woody vegetation	Sat	Sat	Sat
DAV Thrift Store	F14a-2210-3500	5/13/2013	General Infiltration Practices	Sat	NA	NA	NA	NA	Sat	Sat	Sat
Penniman Commerce Park	200400010	5/13/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Unsat - There are several bare areas that need seeding and likely fertilizer.
Summer's Crossing	200600008	5/13/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Virginia Trusses	200600049	5/13/2013	Retention Basin	Unsat - Erosion around inlets still needs repair.	Sat	Sat	Sat	Sat	Unsat - Mow slopes. Remove piles of debris (vegetation) present on	Unsat	Unsat - Slopes need seeding (also lime and fertilizer); this will need to occur in
American Pride Automotive	200600062	5/10/2013	Grassed Swale	Sat	Sat			NA	Sat	Sat	
Crossroads Community Church Ph II	200601227	5/10/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Lowes Pond	200400004	5/10/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat - Mowing needed.	Sat	Sat
Skimino Landing Ph 3B	200601022	5/10/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat - One bare are on slopes could use seeding.
Victory Industrial Park Lot 1	200500999	5/10/2013	Manufactured BMP Systems	Sat	Sat				Sat	Sat	

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Williamsburg Marketcenter	200600041	5/10/2013	General Infiltration Practices	Sat	Sat	Sat	Sat	Sat	Sat	Sat	
Victory Industrial Park	R07b-2764-4095	5/9/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Unsat - Mow and maintain slopes and embankment no more than 12".	Sat	Sat
Victory Industrial Park	R08c-2343-0012	5/9/2013	Retention Basin	Sat	Sat	Sat	spillway of leaves, trees, and debris.	Sat	Sat - Some trash present around BMP.	present in undesirable locations. Remove woody vegetation present on top of	Sat - Wooded system.
Water's Edge BMP	200800494	5/9/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Unsat - Some bare areas on slopes need seeding.
7-eleven Washington Square	S06c-1529-1559	5/8/2013	Detention Basin	Sat	Sat	Sat	Sat	NA	Sat	Sat	Sat
Bennett's Creek Nursery	H14d-3435-0698	5/8/2013	Grassed Swale	Sat	Sat			NA	Sat	Sat	
Bennetts Creek Wholesale Nursery Inc	H16d-2631-0865	5/8/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
C & F Bank	200501037	5/8/2013	Bioretention Basins	Sat	Sat	NA	NA	Sat	Sat	Sat	Sat
Dominion-Penniman Substation	201100202	5/8/2013	Detention Basin	Sat	Sat	Sat	Sat	NA	Unsat - Area needs to be mowed.	Sat	Sat
Hubbard Property	2006-32	5/8/2013	Extended Detention Basin	Sat	Sat	Sat - Keep top grate cover free of debris.	Sat	Sat	Unsat - Mow slopes, remove debris. Vegetation should be kept no higher than 10-12".	Sat	Unsat - Slopes have been seeded in last year; having hard time getting ground cover on rear slope due to shading.
Hubbard Property	s03c-2192-0533	5/8/2013	Manufactured BMP Systems	Unsat - Catchment openings are full of sediment and vegetation and need to be	Sat				Sat - Trees will need pruning soon.	Sat	
Marquis	I13c-0012-1173	5/8/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	vegetation no higher than 12" at all times. No woody vegetation is	Sat	Sat
Marquis	200701066-1A&B	5/8/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	higher than 12" (will need mowing soon). Continue to	Sat	Sat
Marquis	200701066-1A&B	5/8/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Unsat - Bushhog slopes and embankment. Maintain no higher	Sat	Unsat - Needs mowing (stated above).
Penniman Road Office Warehouse Park	200800013	5/8/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Safety Equipment Rental	200500935	5/8/2013	Extended Detention Basin	Unsat - Keep inlet swales/areas clear of debris at all times.	Sat - Keep grate cover clear of debris at all times.	Sat	Sat	Sat	Unsat - Mow slopes; maintain vegetation no higher than 12".	Sat	Sat
Seaford Scallop	200501125	5/8/2013	Bioretention Basins	Sat	NA	NA	NA	NA	Sat	Sat	
Strait Gate Temple/Korean Southern Baptist Church	G14c-1970-0222	5/8/2013	Retention Basin	NA	NA	NA	NA	NA	NA	NA	NA
WaWa/Stor Moore 3	200600834	5/8/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat - Ensure no woody/shrubby vegetation comes in around inlet pipes.	Sat
Willow Lakes Sec 1	S07c-1168-1224 (A)	5/8/2013	Retention Basin	Sat	Sat	Sat	Sat	NA	Sat	Sat	Sat
Willow Lakes Sec 1	S07c-1626-1429 (B)	5/8/2013	Retention Basin	Sat	Sat	Sat	Sat	NA	Unsat - Remove trash, clear brush from around shoreline for access.	Unsat	Unsat
Willow Lakes Sec. 3	200500314	5/8/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Unsat - Remove woody vegetation within 10' of concrete piping, including root.	Sat
Wmbg. Embassy Suites	200300085	5/8/2013	Detention Basin	Sat	Sat	Sat	NA	NA	Sat - Maintain vegetation no higher than 12"; remove debris regularly.	Sat	Sat
Hampton Inn - Wmbg	200701010	5/3/2013	Retention Basin	Sat	Unsat - Remove logs from outlet swale; there is currently standing water in	Sat	NA	Sat	Sat	Unsat - Remove two trees which are growing directly adjacent to inlet pipes.	Sat
Heritage Commons	200800389	5/3/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Swing Kings	B19a-1390-4015	5/3/2013	Detention Basin	Sat	Sat	NA	Sat	Sat	Sat	Sat	Sat
Williamsburg Commons II	D15d-3248-0081 (BMP 1)	5/3/2013	Extended Detention Basin	from mouth of inlet pipe (from Bastille). Clear inlet areas of debris.	Unsat - Outlet area is obstructed and water cannot drain; clear area.	Sat	Sat	vegetation from embankment, including root. Stabilize and seed	obstructing water flow at inlet or outlet pipes. Remove fallen, diseased, or deceased trees from	Sat	NA - This is a wooded system.
Williamsburg Commons II	D15d-3490-1172 (BMP 2)	5/3/2013	Extended Detention Basin		branches lying across mouth of pipe at outfall.	Sat	Sat	present on embankment. It is recommended that no	dead vegetation, limbs, etc. from basin. There is excessive trash	undesirable locations. Recommend removal of all woody vegetation within	Sat - Wooded system. No ground cover present.
York River Commerce Park	200900014	5/1/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat

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Yorktown Commerce Park	200700051	5/1/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Central Baptist Church	200100839	4/26/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Coastal Community Church	200900081	4/26/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	NA	Sat	Sat	Sat - Seed bare areas as needed.
Colonial Harbor Retirement Residence	200500971	4/26/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Penniman East Subdivision	H13a-1382-2604	4/26/2013	Detention Basin	NA	Sat	NA	NA	outfall pipe has been cleared. Rest of embankment will be	NA	NA	NA
Abel Construction	200800219	4/25/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat - Mowing will be needed soon.	Sat	Sat
Apple Door Systems	G12b-4798-3876	4/25/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	from basin. Slopes are overgrown and need mowing.	Sat	Sat
Patriot's Square Shopping Center	Q08b-4408-4590	4/25/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Unsat - Remove trash from in and around basin.	Sat	Sat
Peninsula Community Chapel	200600909-BMP1	4/24/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Peninsula Community Chapel	200900527-BMP2	4/24/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Peninsula Community Chapel	200900527-BMP3	4/24/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Trebor Pastures	V03a-1258-3143	4/24/2013	Retention Basin	Unsat - Inlet swales are all clogged with leaves and	Sat	Sat	NA	Sat	Sat	Sat	Sat
Trebor Pastures	V03a-1418-4014	4/24/2013	Retention Basin	Unsat - Inlet swales are all clogged with leaves and	Sat	Sat	NA	Sat	Sat	Sat	Sat
Trebor Pastures	V03a-2220-3186	4/24/2013	Retention Basin	clogged with leaves and	Sat	Sat	NA	Sat	Sat	Sat	Sat
Walgreens - Grafton #9811	200700211-A	4/24/2013	Bioretention Basins	Unsat - Clear inlet areas of leaves and debris.	Sat	Sat	Sat	Sat	Unsat - Mow slopes and basin bottom. Remove ALL leaves and debris.	Unsat - Add (replace) plants and shrubs in basin as per previous inspections.	
Walgreens - Grafton #9811	200700211-B	4/24/2013	Bioretention Basins	Sat	Sat	Sat	NA	Sat	Unsat - Mow slopes and basin bottom. Remove ALL leaves and debris.	Unsat - Add (replace) plants and shrubs in basin as per previous inspections.	
Cook, Marshall Subdivision	so3d-3423-1174	4/19/2013	Grassed Swale	Sat	Sat			Sat	Sat	Sat	
Melani Brothers parking lot expansion	SO3d-3585-1172	4/19/2013	Extended Detention Basin	Sat	Sat	Sat	Unsat - Remove trees from spillway.	Sat	Sat - Some trash. Will need mowing soon on slopes.	Sat	Sat
Busch Ind. Park (Duncan Pond)	94-SP063	4/18/2013	Retention Basin	Sat	Unsat - Outlet overflow swale has been completely cleared. Area in front of	Unsat - Issues noted.	Sat	Sat	Sat - Continue removing trees and limbs from dam. Dam will need to be seeded and regularly mowed	Unsat - Most of the undesirable trees and shrubs have been removed and work is still going on. Continue removal as	Sat - Wooded system.
Coxton's Center	200000100	4/18/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat - There are dead trees around perimeter that should be removed.	Sat
CVS Pharmacy#75555	200900124	4/18/2013	Bioretention Basins	Sat	Sat	NA	NA	NA	Sat	Sat	
Days Inn Yorktown	2005-11	4/18/2013	Manufactured BMP Systems	Sat	Sat				Unsat - System needs to be flushed out (per site plan).	NA	
J.A.B. (Academy of Rock Music)	200800428	4/18/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Peninsula Emergency Vet Clinic	200200248	4/18/2013	Extended Detention Basin	Unsat - Clear inlet areas of leaves and debris so that water can flow easily into	Sat	Sat	Sat	Sat	Unsat - Mow entire basin (sides and bottom); this will deter woody vegetation); remove excess leaves	Sat	Sat
Sonic - Route 17	200200228	4/18/2013	Constructed Stormwater Wetland	Sat	Sat	Sat	Sat	Sat	area. Remove debris/leaves from outlet area (on and around riser).	access. Maintain access path around pond. Remove woody vegetation within	
Williamsburg Country Club Pond	200700892	4/18/2013	Retention Basin	Sat	Sat	Sat	NA	Sat - Dam has been cleared of woody vegetation and stabilized.	Sat	Sat	Sat - Seed any bare areas.
Coventry Harvest Lake A	T02c-1288-1043	4/17/2013	Retention Basin	Sat	Sat	Sat	Unsat - Area still needs grading and removal of woody vegetation (previous	NA	Sat	Sat	Sat
Homewood Suites	D15d-3801-2313	4/16/2013	Manufactured BMP Systems	underground system are OK.	under forebay.				Sat	forebay.	
Reserve Retirement Community	200900143-01	4/16/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Reserve Retirement Community	200900143-03	4/16/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
UNO Chicago Grill	D15c-1922-2498	4/16/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Unsat - Recommend remove of woody vegetation within 10' of outlet structure,	Sat

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Hunter Estates	200800503-A	4/15/2013	Bioretention Basins	Unsat - Inlet (concrete) swale needs to be cleared	Sat	NA	NA	Sat	Unsat - Remove tree fallen over basin.	Unsat - Some trees/shrubs are missing from the basin. Replant any missing	
Hunter Estates	200800503-B	4/15/2013	Bioretention Basins	Sat	Unsat - Could not inspect 6" PVC at outlet. There is a	NA	NA	Sat	Sat	Sat	
Riverwalk Townes Ph 1	200700988-2	4/15/2013	Extended Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Riverwalk Townes Ph 1	200700988-1	4/15/2013	General Infiltration Practices	Sat	Sat	Sat	Sat	Sat	Sat	Sat	
Pines of York Clubhouse	V02C-0915-1419	4/12/2013	Bioretention Basins	Sat	Sat	NA	NA	NA	NA	NA - Not yet installed	
AT&T Pegasus Tower	N11a-0657-3503	4/11/2013	General Infiltration Practices	Sat	Sat	Sat	NA	NA	Sat - Will need mowing and clearing of stone area soon.	Sat	
AT&T Windsor Great Park	201100001	4/11/2013	General Infiltration Practices	Sat	Sat	NA	NA	NA	Sat	Sat	
Comfort Suites	200800459-Pond A	4/11/2013	Extended Detention Basin	Sat	Sat	Sat	NA	Sat	embankment from top to toe on both sides. Seed any bare areas.	Sat	Sat
Comfort Suites	200800459-Pond B	4/11/2013	Extended Detention Basin	Sat	Sat	Sat	NA	Sat	Unsat - Mow slopes and embankment from top to toe on	Sat	Sat
Comfort Suites	200800459 - 1	4/11/2013	General Infiltration Practices	Sat	Sat	NA	NA	NA	Sat	Sat	
Comfort Suites	200800459 - 2	4/11/2013	General Infiltration Practices	Sat	Sat	NA	NA	NA	Sat	Sat	
Coventry Professional Park	200600853 G	4/11/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
St. Demetrios Greek Orthodox Church/Williamsburg Hellenic Center	200800449	4/11/2013	Retention Basin	Unsat - Remove hay bales and inlet protection (E&S measures) on/around drop inlets that drain into BMP.	Sat - There are some saplings present on top of outfall pipe. No woody vegetation is permitted to grow within 10' of outlet	Sat	NA	Sat	Sat	Sat	Sat - Seed bare areas as needed.
Tabb Lakes- Lake 2	T02a-0026-4932	4/11/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Tabb Lakes-Lake 1	T02a-0026-4932	4/11/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Wyndham Governors Green	200000051-1A	4/11/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Wyndham Governors Green	200000051-1B	4/11/2013	Detention Basin	Sat	Unsat - Eroded area around outlet structure	Sat	NA	Sat	Sat	Sat	Sat
Wyndham Governors Green	200000051-1C	4/11/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Wyndham Governors Green	200200070	4/11/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Wyndham Governors Green	201000115	4/11/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Apple Door Systems	G12b-4798-3876	4/10/2013	Detention Basin	Sat	area due to debris. Need to make sure outfall area is	Sat	NA	NA	Sat	Sat	Sat
Callahan Village	94-SP030	4/10/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Unsat - Bare areas need seeding.
Casey Toyota	201100243	4/10/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Unsat	Unsat - Issues noted.
Colonial Crossing Timeshares	200700962	4/10/2013	General Infiltration Practices	Sat	Sat - Eroded area on slopes near outfall needs to be stabilized.	Sat	NA	Sat	Sat	Sat	
Colonial Crossing Timeshares	B20d-4226-1602	4/10/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	NA
Colonial Crossing Timeshares	B20d-4226-1602	4/10/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Crossroads Community Youth Home	200701222	4/10/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Dula Fam. Subdivision	200600348	4/10/2013	General Infiltration Practices	Sat	Sat	NA	NA	NA	Sat	Sat	
New Quarter Baptist Church	200900139	4/10/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Prospect Park	S06d-4084-1209	4/10/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Taylor Farms	T04b-3354-2963-BMP 1	4/10/2013	General Infiltration Practices	Sat	Sat	NA	Sat	Sat	Sat	Sat	
Taylor Farms	T04b-4388-2907-BMP 2	4/10/2013	General Infiltration Practices	Sat	Sat	NA	Sat	Sat	Sat	Sat	
Taylor Farms	200900084 - BMP 3	4/10/2013	General Infiltration Practices	Sat	Sat	NA	Sat	Sat	Sat	Sat	
Ashe Family Subdivision	200800398	4/8/2013	Grassed Swale	Sat	Sat			NA	Sat	Sat	
Harts Storage	200500305	4/8/2013	Constructed Stormwater Wetland	Sat - Some undermining of inlet pipes. Area under pipes should be fortified against	Sat	Sat	Unsat - Clear spillway of woody vegetation, leaves, and debris.	Sat - Woody vegetation present	Sat	Unsat - Need full ground cover established on slopes.	

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St Joan of Arc Catholic Church	Q09a-0760-2688	4/8/2013	Extended Detention Basin	Sat	Sat	Sat	NA	NA	Sat	Sat	Sat
St Joan of Arc Catholic Church	Q09a-0760-2688	4/8/2013	General Infiltration Practices	Sat	Sat	NA	Sat	NA	Sat	Sat	
Dirmeyer Veterinary Clinic	200200061	4/3/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Natasha House	R07b-3812-3287	4/3/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Yorkshire Downs Phase 4B	V02d-3357-2020	4/3/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Yorkshire Downs Phase 4B	V02d-4842-2423	4/3/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat - Recommend removal of woody vegetation within 10' of outfall pipe.	Sat
Dodd RV Trailer Sales	200300062	4/2/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Shoppes at Yorktown	R07b-3488-2875	4/1/2013	Detention Basin	Sat	Sat	Sat	NA	NA	Sat	Sat	Sat
Shoppes at Yorktown	R07d-3897-2450	4/1/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat - Wooded system. Cleared areas have good ground cover establishment.
Great Wolf Lodge	200300612	3/29/2013	Retention Basin	Unsat - Inlet area is still eroding and has not yet been repaired.	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Home Depot	200300747	3/29/2013	General Infiltration Practices	Sat	Sat	NA	NA	NA	Sat	Sat	
Stor Moore 5	200501120	3/29/2013	Retention Basin	Sat - There is a swale coming in to one of the forebays that needs to have ground	Sat	Sat	Sat	Sat	Sat	Sat	Sat
York County Schools - Tabb Elementary School	201200176-B	3/29/2013	Bioretention Basins	Sat	Sat	NA	NA	NA	Sat	Sat	
European Cars	200200305	3/28/2013	Detention Basin	Sat	Sat - There are some obstructions in VDOT outfall ditch.	Sat	Sat	Sat	Sat	Sat	Sat
Presidents Park	200300666	3/28/2013	Retention Basin	Sat	Unsat - There is erosion around the outfall pipe that needs to be repaired.	Sat	Sat	Sat	Unsat - Slopes need to be mowed and maintained no higher than 12".	Sat	Sat
Washington Square Shopping Center	S06a-2048-2592	3/28/2013	Detention Basin	Sat	Sat	Sat	NA	NA	Sat	Sat	Sat
WaWa - Williamsburg	200600352	3/28/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat - Remove trash at inlets.	Sat	Sat
Yorkminster Presbyterian Church	2006-29	3/28/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
York Convalescent Center	200100757	3/26/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat - Allow grass to grow 3-12 inches to prevent erosion.
Summer's Crossing	200600008	3/25/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Victory Estates	200600374-A	3/25/2013	Retention Basin	Sat	Sat - at corner is misplaced. When water level goes down,	Sat	Sat	Sat	Sat	Sat	Sat
Victory Estates	200600374-B	3/25/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Walmart Cedar Valley -Lightfoot	200700173 H	3/25/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Roberts Trace Sec 1	V03b-2791-4171	3/21/2013	Detention Basin	Sat	Sat - there is some debris build up at outlet area that is causing water to flow	Sat	Sat	Sat	Sat	Sat	Sat
Roberts Trace Sec 1A	V03a-1977-4772	3/21/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Unsat - Clear and maintain access paths to inlet/outlet areas.	present in undesirable locations. Recommend removal of all woody	Sat
Wythe Creek Farms	V03c-1601-1634	3/21/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Wythe Creek Farms	V03c-1621-0963	3/21/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Clairmont Apartments	200600266	3/20/2013	Constructed Stormwater Wetland	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Community Grocery & Deli	N11a-1396-3886	3/20/2013	Extended Detention Basin	Sat	Unsat - Outlet pipe to VDOT ditch is partially	NA	NA	Unsat - There is woody vegetation present on	Unsat - Remove leaves and debris from basins.	Unsat - BMP was designed as a narrow marsh and there is no wetland vegetation	Sat
Belmont Luxury Apartments	98-SP018	3/19/2013	Retention Basin	Sat - Some of the inlet swales are obstructed with sediment/vegetation. Swales should be completed cleared	Sat	Sat	NA	Sat	Sat	Sat	Sat
New Life Presbyterian	200600048	3/19/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Northside Church of Christ	200700856	3/19/2013	Retention Basin	Sat	Unsat - Remove debris from front of outlet pipe.	Sat	NA	Sat	Unsat - Clear leaves, pine needles, and debris from slopes. Seed slopes to establish full ground	Unsat - Remove tree stumps within 10' of inlet or outlet pipes. Then fill holes, seed, and stabilize.	Unsat - Issues noted above.
Quarters of York	200500284	3/19/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	stabilized and seeded. Continue to seed any bare areas. Ensure full ground cover

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Running Man	2009-117	3/19/2013	General Infiltration Practices	Sat	Sat	NA	NA	Sat	Sat	Sat	
Running Man Sec 2	U03b-4530-4439	3/19/2013	Retention Basin	Unsat - Erosion occurring around headwalls.	Sat	Sat	NA	Sat	Unsat - Remove leaves and debris from in and around pond.	Unsat	Sat
Running Man Sec. 10B	200800399	3/19/2013	Extended Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Consolidated Wings-Hooters	200300682	3/15/2013	Bioretention Basins	Sat	NA	NA	NA	NA	Sat	Sat	
Dominion-Waller Mill	D16d-4872-1229	3/15/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Dominion-Waller Mill	D16d-4872-1229(2)	3/15/2013	General Infiltration Practices	Sat	Sat	NA	Sat	Sat	Sat	Sat	
Jungle Jim's	C20c-2217-0920	3/15/2013	Grassed Swale	Sat	Sat	Sat	NA	NA	Sat	Sat	
Sunset Meadows	0	3/15/2013	Retention Basin	Unsat	Unsat	Unsat	NA	Sat	Unsat	Unsat	Unsat
Snowden Subdivision	200600869	3/14/2013	Bioretention Basins	Sat	NA	NA	NA	NA	Sat	Sat	
Boundary Homes	2006-406	3/13/2013	Bioretention Basins	Sat	NA	NA	NA	NA	Unsat - Remove weeds from basin.	Unsat - Replace any deceased or diseased vegetation.	
Boundary Homes	2006-404	3/13/2013	Bioretention Basins	Sat	NA	NA	NA	NA	Sat	Sat	
Boundary Homes	2006-402	3/13/2013	Bioretention Basins	Sat	NA	NA	NA	NA	Sat	Sat	
Boundary Homes	2006-400	3/13/2013	Bioretention Basins	Sat	NA	NA	NA	NA	Sat	Sat	
Caritas Meeting Hall	98-SP068	3/13/2013	Detention Basin	Sat	Sat	Sat	NA	NA	Sat	tree in close proximity to outlet pipe; including root.	Sat
Strait Gate Temple/Korean Southern Baptist Church	G14c-1970-0222	3/13/2013	Retention Basin	Unsat - Clear excessive vegetation and debris from inlet ditch.	Unsat - Clear vegetation from outlet area. Maintain access to outlet area.	NA - Unable to access at this time.	NA - Unable to access at this time.	Sat	Unsat	Sat	Unsat - Issues noted.
Highgrove Subdivision	200800021	3/12/2013	Retention Basin	Sat	Sat - Trees have been cleared from around riser.	Sat	NA	Sat	Unsat - Slope mowing will be needed in early spring.	Unsat	Unsat - Several bare areas on slopes. Full ground cover needs to be established throughout.
Water's Edge BMP	200800494	3/12/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Wolf Trap Road Industrial Park	S08a-0172-3054	3/12/2013	Retention Basin	Sat - Some erosion present in inlet ditch.	Sat	NA	NA	Sat	Sat	Sat	Sat
York County Darby Firby Lift Station	201000566	3/12/2013	Bioretention Basins	NA	NA	NA	NA	NA	Unsat - Leaves and debris need to be cleared from BMP and entire pump station.	Sat	
East Coast Exotics	S03b-4010-3823	3/11/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Victory Self Storage	S04d-2678-0817	3/11/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Williamsburg Country Club Pond	200700892	3/11/2013	Retention Basin	NA	Sat	Sat	NA	not complete. Some trees have been cut on back side	Sat	NA	NA
Meadowlake Farms	T03b-3458-3482	3/8/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	present in undesirable locations. Recommend removal of all woody	Sat
Tabb Meadows	U03a-1462-3769	3/8/2013	Grassed Swale	Sat	Sat - Some erosion around 6" PVC outlet pipe from			Sat	Sat	Sat	
Woodlake Crossing	T03d-4513-2353	3/8/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	present over 3 concrete outfall pipes. The roots pose a threat to the pipes. Also, the	Sat
York Meadows	S02d-4764-1358	3/8/2013	Retention Basin	Sat	Unsat - Outfall area needs to be cleared of debris.	Sat	NA	Sat	Sat	Unsat - recommend removal of woody vegetation within 10' of inlet/outlet	Sat
York Meadows	T02c-0750-1561	3/8/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Unsat - recommend removal of woody vegetation within 10' of outlet pipe,	Sat
Ebby's Auto Painting	201000126	3/7/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Holly Point Section A	U06b-2531-3668	3/7/2013	General Infiltration Practices	Sat	Sat	NA	NA	Sat	Sat	Sat	Sat
James York Plaza 2	200400193 A	3/7/2013	Manufactured BMP Systems	Unsat - Opening is completely obstructed with	NA				Unsat	Sat	
James York Plaza 2	200700976	3/7/2013	Detention Basin	Sat	Unsat - The detention basin outlet structure is	Sat	NA	Sat	Sat	Sat	Sat - Any bare areas need to be seeded.
Quarters of York	200500284-B	3/7/2013	Manufactured BMP Systems	Sat	Sat				Sat	Sat	
Shiloh Baptist Church	P11c-0304-1041	3/7/2013	General Infiltration Practices	Sat	Sat	Sat	NA	Sat	Sat	Sat	
Winder's Pond	T06c-0662-2287	3/5/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat - This is a wooded system.
Gateway Village	C20b-3184-2547	3/4/2013	Retention Basin	NA	NA	NA	NA	NA	NA	NA	NA
Pirates Cove Adventure Golf	D15a-0997-2793	3/4/2013	Retention Basin	Sat	Sat - Sink hole at outlet has been repaired. There is currently no erosion	Sat	NA	Sat	Sat	Sat	Sat
Sommerville Sec 1&2	T09d-4348-0714	3/4/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Williamsburg Players	200700046	3/4/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Woods of Tabb Sec1	200700049-A	3/4/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Woods of Tabb Sec1	V03d-4517-2272	3/4/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Woods of Tabb Sec1	V03d-4180-1844	3/4/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat

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Woods of Tabb-Sec7	200700049	3/4/2013	Constructed Stormwater Wetland	Sat	Unsat - Clear tree roots and debris from mouth of	Sat	Sat	Sat	Sat	Sat	
Woods on Mansion	200600301	3/4/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	NA	Sat	Sat	Sat
7-eleven York-Warwick	Q09c-2476-1501	3/1/2013	Detention Basin	cleared. Stone has been added at inlet.	Sat	Sat	NA	NA	Sat	Sat	is currently no ground cover. Will return in 30 days to ensure ground cover is
Homestead	U03a-0466-3747	3/1/2013	Retention Basin	Sat	Sat	Sat	Unsat	Sat	going on. All dead vegetation and excessive debris should be	undesirable locations. Remove woody vegetation present within 10' of	Sat
Patriot Village BP Gas Station	U02a-0155-2545	3/1/2013	Retention Basin	Sat	Sat	Sat	and debris. Trees can be cut flush with the ground.	Sat	Sat	Sat	Sat
Lightfoot	B19b-3450-4180	2/28/2013	General Infiltration Practices	Sat	Sat	Sat	NA	Sat	Sat	Sat	
Days Inn Lightfoot	200000002	2/28/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Prospect Park	S06d-4084-1209	2/28/2013	Retention Basin	NA	NA	NA	NA	NA	NA	NA	NA
Kiln Creek Villages and commercial Development	R04d-4731-0192 (Pond 14)	2/27/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Unsat - Clear and maintain access paths to inlet/outlet piping areas.	present in undesirable locations. Recommend removal of woody vegetation present on top and within 10'	Sat - Wooded system; minimal ground cover present.
Kiln Creek Villages and commercial Development	R04d-4731-0192 (Pond 15)	2/27/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	present in undesirable locations. Recommend removal of all woody vegetation within 10' of inlet/outlet	Unsat - Slope closest to houses is mostly bare and needs ground cover to be established.
Kiln Creek Villages and commercial Development	R04d-4731-0192 (Pond 16)	2/27/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	present in undesirable locations. Recommend removal of all woody vegetation within 10' of inlet/outlet piping and retaining wall.	Sat
Kiln Creek Villages and commercial Development	R03b-3961-3650 (Pond 4)	2/27/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Unsat - There is woody vegetation present in undesirable locations. Recommend removal of all woody vegetation within 10' of inlet/outlet piping.	Sat
Kiln Creek Villages and commercial Development	R03b-3961-3650 (Pond 5)	2/27/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Unsat - Clear and maintain access to inlet/outlet areas of pond.	present in undesirable locations. Recommend removal of all woody vegetation within 10' of inlet/outlet	Sat - This is a wooded system.
Kiln Creek Villages and commercial Development	R03a-2367-4769 (Pond 6)	2/27/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Unsat - There is woody vegetation present in undesirable locations. Recommend removal of all woody vegetation within 10' of inlet/outlet piping.	Sat
Kiln Creek Villages and commercial Development	R03b-3961-3650 (Pond 9)	2/27/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Unsat - Clear and maintain access paths to inlet/outlet areas.	Unsat - There is woody vegetation present in undesirable locations. Recommend removal of all woody vegetation within 10' of inlet/outlet	Sat - Wooded system.
Kiln Creek Villages and commercial Development	R03b-4149-4114 (Pond 10)	2/27/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	present in undesirable locations. Recommend removal of all woody vegetation within 10' of inlet/outlet	Unsat - There is a bare area at corner that is eroded. This area needs to be seeded and stabilized.
York County Schools - Tabb HS	199900001	2/27/2013	Detention Basin	Sat	Sat - Some of the riprap at new outfall section has washed down into the channel and there is exposed filter cloth. The riprap just needs to be replaced.	Sat	Sat	Sat	Sat	Sat	Sat
AT&T Windsor Great Park	201100001	2/26/2013	General Infiltration Practices	Sat	NA	NA	NA	NA	Sat	Sat - Area has been seeded. Will reassess ground cover at follow up inspection. Notified owner that any bare areas would need immediate seeding until entire site was stabilized.	
York County Operations Center	201100000	2/26/2013	Extended Detention Basin	Sat	Sat	Sat	Unsat - Emergency spillway is too high. There is a work order in for Shumaker to	Sat	Sat	Unsat - Phragmites present.	Sat
York County Firestation #6	T09a-0313-3559	2/25/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
York County Schools - Dare Elementary School	200800117	2/25/2013	Manufactured BMP Systems	Sat	Sat				Sat	Sat	
York County Schools - Grafton Bethel Elementary School	S05b-4398-3831	2/25/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat

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York County Schools-Grafton Bethel Elementary School	S05b-4398-3831	2/25/2013	Detention Basin	Sat	Sat	Sat	NA	NA	Sat - Some trash present in basin that needs to be removed.	Sat - Wetland vegetation present.	Sat
York County Schools-Mt. Vernon Elementary Building Addition	T04a-1221-3035	2/25/2013	Grassed Swale	Sat	Sat			NA	Sat	Sat	
York County Schools-Mt. Vernon Elementary Building Addition	T04a-1221-3035	2/25/2013	General Infiltration Practices	Sat	Sat	NA	NA	NA	Sat	Sat	
Brown Park Wetland	N11a-0565-3100	2/23/2013	Constructed Stormwater Wetland	Sat	Sat	NA	Sat	Sat	Sat	Sat	
IHOP-Grafton	201000091	2/22/2013	Extended Detention Basin	Unsat - Concrete swale at rear corner of IHOP parking lot is completely covered in sediment/grass and needs to	Sat	Sat	Sat	Sat	Unsat - Clear trash, leaves and debris from around outlet structure. Remove fallen tree from basin.	Sat	Sat
St. Kateri Parking Lot Exp.	200701036	2/22/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	as they emerge; do not permit additional woody vegetation to grow in basin or on	Sat
York County Firestation #4	O11d-4858-1419	2/22/2013	Extended Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
York County Schools - Grafton High School Bus Parking Lot	200900005	2/22/2013	Extended Detention Basin	Sat	Sat	Sat	NA	Sat	Sat - Minimal trash present.	Sat - Cannot assess wetland vegetation at this time due to season.	Sat
York County Schools - Tabb Elementary School	201200176-A	2/22/2013	Manufactured BMP Systems	Sat	Sat				Sat	NA	
York County Schools - Tabb Elementary School	201200176-C	2/22/2013	General Infiltration Practices	Sat	NA	NA	NA	NA	NA	NA	
Kiln Creek Villages and commercial Development	R03d-4506-1801 (Pond 8)	2/21/2013	Retention Basin	Sat - Some low areas around inlet pipes; recommend filling; will keep watch on these.	Sat	Sat	NA	Sat	Sat	Sat	Sat - There are some bare areas on slopes that could be seeded.
Kiln Creek Villages and commercial Development	S03a-0851-3485 (Pond 11)	2/21/2013	Retention Basin	Sat - There is a hole/burrow beside inlet pipe near gazebo that should be filled.	Sat	Sat	NA	Sat	Sat	Sat	Sat
Williamsburg Marketcenter	200600041	2/21/2013	General Infiltration Practices	Sat	Sat	Sat	Sat	Sat	Sat	Sat - Bare areas have been seeded but ground cover is not yet established. Ground coverage will be assessed during	
York County Sports Field Complex	200900093-A	2/21/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Unsat - Mow and remove trees on top and within 10' of entire length of outfall pipes; there are some	Sat	Sat
York County Sports Field Complex	200900093-B	2/21/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Unsat - There are trees growing through riprap around forebay that need to be removed. Area 5' to either side of emergency spillway needs to be mowed.	Sat
York County Sports Field Complex	200900093-C	2/21/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Unsat - There are trees growing through riprap around forebay that need to be removed. Area 5' to either side of emergency spillway needs to be mowed.	Sat
York County Sports Field Complex	200900093-D	2/21/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Unsat - There are trees growing through riprap around forebay that need to be removed. Area 5' to either side of emergency spillway needs to be mowed.	Sat - There are some bare areas on slopes that need seeding.
Buggy Bathe Car Wash Lube Facility	98-SPO21	2/20/2013	Manufactured BMP Systems	Unsat - Standing water present. Visible sediment and debris present in drop	Unsat - Standing water in drop inlet at outfall. Visible sediment accumulation in				Unsat	NA	
Falcon Crest	P09b-4719-3190	2/20/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Falcon Crest 2 (Edgehill 4)	200600050	2/20/2013	Constructed Stormwater Wetland	Unsat - Clear area around inlet pipe of vegetation, particularly woody vegetation. Cannot currently access this area.	Sat	Sat	Sat	Unsat - Top of embankment is bare of vegetation and needs to have ground cover established.	Sat	Unsat - Pine trees present on slopes and around water line that should be cut off flush with the ground. Will assess wetland vegetation during next inspection. Remove woody vegetation present within 10' of inlet or outlet pipes/structures.	

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Precision Landscaping	200700981	2/20/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Van Kniest, Inc Workshop	D17a-1576-3491	2/20/2013	Extended Detention Basin	Unsat - Mouth of inlet pipe is partially silted in. Inlet area around pipe should be	Sat	Sat	NA	Sat	Sat - Recommend removal of leaf litter, limbs, debris present in basin periodically.	Sat - Wooded system.	Sat
Wendy's Patriots Square	Q08b-4325-3877	2/20/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
York County Courthouse	1997-01	2/20/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Unsat - Leaf removal on slopes and inlet areas is needed to avoid more deposition into pond.	Unsat - there is a tree growing along side/on top of inlet pipe that should be removed. There is excessive leaf litter	Sat
York County Schools - York High School Field House	200600793	2/20/2013	Detention Basin	Sat	Sat	NA	NA	Sat	Sat	Sat	Sat
York County Schools - Yorktown Elementary School	200900019	2/20/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
York County Schools - Yorktown Elementary School	200900019	2/20/2013	Grassed Swale	Sat	Sat			Sat	Sat	Sat	
York County Schools - Yorktown Middle School	200601157 C	2/20/2013	Retention Basin	Sat	covered in debris; this needs to be removed regularly. Outfall ditch	Sat	Sat	Sat	Sat - There is minimal trash/debris present in pond that should be removed.	Sat	Sat
Consolidated Lodges	200500317	2/15/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Oaks at Fenton Mill	200600863	2/15/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Skimino Fire Station	C20d-4032-2444	2/15/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
York County H-1 Regional BMP	200900000	2/15/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
County Auto Broker	200200268	2/14/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Great Wolf Lodge	200300612	2/14/2013	Retention Basin	yet been completely repaired; waiting on drier	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Sean's Glen	F14b-3890-4885	2/14/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
York County Schools - Magruder Elementary School	200800173	2/14/2013	General Infiltration Practices	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Creekside Landing H	200501002-H	2/13/2013	Detention Basin	Sat - There is minimal erosion present at inlet. Ok for now but this is an area that will be watched.	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Bruton Glen Subdivision	199900359	2/12/2013	Detention Basin	Sat	Unsat	Sat	Sat	Sat	Unsat - Remove trash and debris from basin. Clear inlet areas of leaves and debris. Remove	Unsat - Remove fallen tree beside outfall structure. Remove all woody vegetation within 10' of outlet structure, including	Sat
Creekside Landing B-F-G	200700850-B	2/12/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Creekside Landing B-F-G	200700850-F	2/12/2013	Extended Detention Basin	Unsat - Erosion at inlet is still present and needs repair.	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Creekside Landing B-F-G	200700850-G	2/12/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Highgrove Subdivision	200800021	2/12/2013	Retention Basin	Sat	Unsat	Sat	Sat	Sat	Sat	Unsat	Unsat
York County Schools - Bruton HS	2004000001	2/12/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
York County Schools - Queens Lake Middle School Additions	F15d-4665-2009	2/12/2013	General Infiltration Practices	Sat	Sat	NA	NA	Sat	Sat	Sat	Sat
Colonial Community Services	200200006	2/11/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Creekside Landing A-C-E	200501002A	1/31/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat - Plants have been added. Will reassess growth during next inspection.
Creekside Landing A-C-E	200501002C	1/31/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Creekside Landing A-C-E	200501002E	1/31/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Creekside Landing D-I-J-K	200700850-D	1/31/2013	Extended Detention Basin	Sat	Sat	NA	Sat	Sat	Sat	Sat	Sat

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Creekside Landing D-I J-K	200700850-I	1/31/2013	Extended Detention Basin	Sat	Sat - Joints of outlet pipe have been grouted but pipe was not aligned before grout was applied; so, sections may separate again. I will be watching this area.	Sat	Sat	Sat	Sat	Sat	Sat
Creekside Landing D-I J-K	200700850-J	1/31/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Creekside Landing D-I J-K	200700850-K	1/31/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Busch Ind. Park (Duncan Pond)	94-SP063	1/30/2013	Retention Basin	Sat	Sat	Sat - Some debris around grate but water can still pass through.	Sat	Unsat - Clear dam of all woody vegetation, including root. Seed and	Unsat - None being performed.	Unsat - Remove woody vegetation from dam and within 10' of inlet/outlet pipes and structures, including root.	Sat - This is a wooded system.
Coventry Area 2 - Ferguson Glade	T02b-3939-2564	1/30/2013	Retention Basin	Unsat - Inlet areas clogged with leaves.	Sat	Sat	NA	Sat	Sat	Unsat - Woody vegetation present in undesirable locations. Recommend removal of woody vegetation within 10'	Sat
Coventry Area 2 - Ferguson Glade	T02d-3686-2261	1/30/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Unsat - Woody vegetation present in undesirable locations. Recommend removal of woody vegetation within 10'	Sat
Coventry Area 3 - Justinian Grove	T02d-3187-2158	1/30/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat - Recommend removal of any woody vegetation present within 10' of inlet/outlet pipes, including root.	Sat
Coventry Smithy Glen	T02d-4540-1703	1/30/2013	Retention Basin	Sat	Sat	Sat	NA	Sat - There is some erosion present at end of retaining wall. Recommend	Sat	Sat	Sat
Coventry Smithy Glen	T02d-3992-1503	1/30/2013	Retention Basin	over/around inlet pipe needs repair. Remove woody vegetation within 10'	Sat	Sat	NA	Sat	Sat	Sat	Sat
Coventry Smithy Glen	T02d-4264-0748	1/30/2013	Retention Basin	Sat - Some erosion occurring around inlet pipes that needs to be repaired.	Sat	Sat	NA	Sat	Sat	Sat	Sat
Bojangles	2007-12	1/25/2013	Manufactured BMP Systems	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
HRSD - York River Treatment Plant	000000000-BMP 1	1/25/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Unsat - There is woody vegetation present near outfall pipes. Remove all woody vegetation on top and within 10' of outlet pipes (along entire length);	Sat
HRSD - York River Treatment Plant	000000000-BMP 2	1/25/2013	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Bionetics	200900170	1/24/2013	General Infiltration Practices	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Custom Design Works	S02B-3819-3171	1/24/2013	Bioretention Basins	Sat	Sat	NA	NA	NA	Sat	Sat	Sat
Days Inn Lightfoot	200000002	1/24/2013	Retention Basin	Sat	Unsat - Mow area around riser (remove thorny vegetation). Remove	Sat	Unsat - Clear concrete spillway of all vegetation and debris. Remove woody	Sat	Sat	Sat - Issues noted.	Sat
Jacob's Springs	S06b-3939-3946	1/24/2013	Retention Basin	Sat	Unsat - Woody vegetation present close to outlet pipe. Remove all woody	Sat	Sat - Keep spillway clear of vegetation.	Sat	Sat	Sat	Sat
Jacob's Springs 2 (Stephens Run)	200400081	1/24/2013	Constructed Stormwater Wetland	Sat - There is some undermining/erosion occurring under inlet pipe.	Sat - For future, no woody vegetation is permitted to grown within 10' of inlet or	Sat	Sat - Keep spillway clear of vegetation.	Sat - Path around embankment has been cleared; ensure this path	Sat	Sat	Sat
P & H LC	S03c-2289-0512	1/24/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Sentara Williamsburg Comm. Hosp.	200200087-01	1/24/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat - Trees over outlet pipes have been removed; area has been stabilized and matted.	Sat
UNO Chicago Grill	D15c-1922-2498	1/24/2013	Detention Basin	Unsat - Clear inlet swales completely of leaves/debris.	Sat	Sat	NA	Sat	Unsat - Remove trash, leaves, and debris from basin.	Unsat - Remove woody vegetation within 10' of outlet structure,	Sat
Animal Clinic of Williamsburg	200501064	1/23/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Bennett's Creek Nursery	H14d-3435-0698	1/23/2013	Grassed Swale	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
BP Gas Station Lightfoot	B19b-3450-4180	1/23/2013	General Infiltration Practices	be completely cleared of sediment and debris. Inlet areas need to be cleared of	Sat	NA	NA	Sat	Unsat - Remove leaves, trash, tree limbs, and any other debris from basin.	Sat	Sat
Hawks Landing	200400096	1/18/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Major Family Subdivision	201100190	1/18/2013	Extended Detention Basin	Sat	Sat	NA	Sat	Sat	Sat	Sat	Sat
Villas at Yorktown	200800104	1/18/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Villas on Shady Banks	200300059-2	1/18/2013	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat

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Villas on Shady Banks	200300059-1	1/18/2013	Extended Detention Basin	NA	Sat	Sat	Sat	Sat	Sat	Sat	Sat - Issues noted.
Oak Ridge at Endview Plantation	M10a-1702-4019	1/17/2013	Extended Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Walmart Tabb	S03b-2811-3934	1/17/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Callahan Village	94-SP030	1/16/2013	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Unsat - Bare areas on slopes need seeding and probably lime/fertilizer.
Cheyenne Hills Subdivision	200000027	1/16/2013	Constructed Stormwater Wetland	Sat	Sat	Sat	Sat	Unsat - There are bare areas on top of embankment that need	Sat	Sat	
Yorktown Trace	200000037	1/16/2013	Constructed Stormwater Wetland	Sat	Sat	Sat	Sat	Sat - Some bare areas need seeding.	Sat	Sat	
Grand Oaks	200400265 1	1/11/2013	Detention Basin	Unsat - Inlet areas are obstructed with sediment and debris. Inlet areas	Unsat - Outlet structure is obstructed with debris. Clear top and sides of	Unsat - Woody vegetation is present on top of outlet pipes. Remove woody vegetation with	NA	Unsat - Top of embankment is bare of vegetation and needs to	Unsat - Remove trash from basin.	Unsat - Undesirable woody vegetation present. Remove as indicated above.	Sat
Grand Oaks	200400265 2	1/11/2013	Extended Detention Basin	Unsat - Inlet areas are completely obstructed by sediment and trees; pipes	Unsat - Some undermining of outlet pipes is occurring; recommend stabilizing this	Unsat - Top and sides of concrete outlet structure are covered in debris. Trees are growing in and	Sat	Unsat - Woody vegetation is present on embankment. It is	Unsat - Remove trash from basin. Remove dead vegetation, fallen trees from basin.	Unsat - Undesirable woody vegetation is present. Remove as indicated above.	Sat
7-eleven Washington Square	S06c-1529-1559	1/10/2013	Detention Basin	Sat - Concrete inlet swale has been installed. Stone inlet swale has been repaired.	Sat - Structure is clear and area around structure has been stabilized with stone.	Sat	NA	Sat	Sat	Sat	Unsat - Side slopes need to be seeded and have full ground cover established.
7-eleven York-Warwick	Q09c-2476-1501	1/10/2013	Detention Basin	of debris and need to be cleared. Remove sediment from inlet swales and	covered with leaves/debris and needs to be cleared. Woody vegetation is	Sat	NA	Sat	leaves from BMP. Remove thorny vegetation and vines from fence and entry area.	Unsat - Issues noted.	Sat
Magnolia Park (Maple Terrace)	200701224	1/10/2013	Extended Detention Basin	Unsat - woody growth has been removed from inlet areas. Eroded hole/channel at one of the inlets has still	Unsat - Sink hole/erosion occurring outside concrete riser box has still not been repaired. Orifice openings	Sat	Sat	Sat	Sat	Sat	Sat
Quartermarsh Est. Sec. 3	200300068	1/10/2013	Retention Basin	Sat	Unsat - Some partial obstructions in outlet channel. Receiving stream	NA	NA	Sat	Sat - Recommend clearing and maintaining an access path to outfall area (the area at the	Sat - Phragmites prevalent.	Sat - Vegetated buffer not present around entire pond perimeter (noted on previous inspection).
Queens Lake Sewer-Lakeshead Pump Station	G15C-2199-0646	1/10/2013	Manufactured BMP Systems	Sat - Drains are set too high, should be cut down a bit.	Sat				Sat	Sat - Site is stable.	
York Crossing/Grafton Station Apartments	S06b-2606-2976	1/10/2013	Retention Basin	concrete headwalls and spillway around it completely broken. Pipe is	vegetation present. Remove woody vegetation within 10' of outlet pipes,	Sat	Sat	Sat	Sat	Sat	Sat
7-eleven Washington Square	S06c-1529-1559	1/7/2013	Detention Basin	to be lined with stones or seeded. They are currently	Sat	Sat	NA	NA	Sat - Trash will need to be removed from this basin regularly.	Unsat - Need full ground cover established.	Unsat - Issues noted.
Churchill Estates Phase 3	200600551A	1/7/2013	Extended Detention Basin	Sat - There is some obstruction in side inlet pipe but water is still able to get through. Keep all inlet pipes clear of obstruction at all times.	Sat - Some leaf/debris build up at mouth of outlet pipes.	Sat	Sat	Sat	Sat	Sat	Sat
Churchill Estates Phase 3	200600551B	1/7/2013	Extended Detention Basin	Sat	Sat	NA	Sat	Sat	Sat	Sat	Sat
Prospect Park	S06d-4084-1209	1/7/2013	Retention Basin	Sat	Unsat - water level of pond is high but water is barely trickling out. One outlet pipe is likely	Sat	Sat	Unsat - there is woody vegetation present in the spillway that needs to be removed. Trees can be taken	Sat	Sat	NA - Will reassess in spring.
Victory Meadows	V03b-3423-4439	1/7/2013	Detention Basin	Sat	Sat	Sat	Sat	Sat - Some bare areas at top of embankment/slope that need seeding.	Sat	Sat	Sat
York Colony Sec. 2	V03b-2666-4495	1/7/2013	Detention Basin	Unsat - Yard drains are partially obstructed and need to be completely cleared of sediment/debris.	Sat - Remove all woody vegetation within 10' of outlet pipe, including root.	NA	Sat	Sat	Unsat - Mow/bush-hog slopes in early spring.	Sat	Sat
Wyndham Kingsgate	199000000-1a	1/4/2013	Retention Basin	Sat	Sat	Unsat - Outlet structure is seeping in some areas and needs grout.	NA	Sat	Sat	Sat	Sat
Wyndham Kingsgate	199000000-1b	1/4/2013	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Wyndham Kingsgate	199000000-2	1/4/2013	Retention Basin	Sat	Unsat - Outlet channel and area around outlet pipe are severely eroded and need repair. Areas on sides	Unsat - There is some seeping inside outlet structure; needs to be grouted.	NA	Sat	Sat	Sat	Sat
Country Inn and Suites	D15d-3106-1785	1/2/2013	Detention Basin	NA	NA	NA	NA	NA	NA	NA	NA

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Gateway Village	C20b-3184-2547	1/2/2013	Retention Basin	Sat	Sat	Sat	Sat	NA - Did not inspect in full detail	Sat	Unsat - Ground cover is sparse and not fully established throughout. Additional seeding is needed.	Unsat
Endview Woods Sec. 1	M11d-2953-2247 (A)	12/28/2012	Extended Detention Basin	Unsat - Clear concrete swales of debris. Thin/remove woody vegetation in this area.	Unsat - Outfall ditch (pipe) needs clearing and regrading. Pipe is obstructed.	Sat	Sat	Sat	Sat	Unsat - Woody vegetation has taken over shoreline and made pond hard to access. Need to clear woody vegetation from inlet/outlet areas and thin around	Unsat - Issues noted. Minimal ground cover present.
Endview Woods Sec. 2	m11d-2833-1876 (B)	12/28/2012	Constructed Stormwater Wetland	Unsat - Clear concrete swales of all debris along entire length. Remove woody vegetation within 10'	Unsat - Trees growing on concrete channel at outfall. Concrete channel needs to be cleared of all	Unsat - There is erosion on sides of concrete spillway that needs to be repaired.	NA	Unsat - Woody vegetation present. Minimal ground cover. Need to seed in early spring.	Unsat - Slopes need to be bushhogged. Remove dead/fallen vegetation from basin.	Unsat - Issues noted.	
WaWa/Stor Moore 3	200600834	12/28/2012	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat - Some trash present that needs to be removed.	Sat	Sat
Winterfield BMP A	200700060-01	12/27/2012	Constructed Stormwater Wetland	Sat - Some buildup of leaf debris at inlets.	Sat	Sat	NA	Sat	Sat	Sat	
Winterfield BMP B	200700060-02	12/27/2012	Constructed Stormwater Wetland	Unsat - Inlet areas are clogged with leaves. These areas should be cleared of debris.	Sat	Sat	NA	Sat	Sat	Unsat - There are trees growing in close proximity to outlet weir structure. Trees growing within 5' of the structure should be removed, including root.	
Comfort Suites	200800459 - 1	12/21/2012	General Infiltration Practices	Sat	NA	NA	NA	NA	Sat	Sat	
Comfort Suites	200800459 - 2	12/21/2012	General Infiltration Practices	Sat	NA	NA	NA	NA	Sat	Sat	
Comfort Suites	200800459-Pond A	12/21/2012	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Slopes/embankment need to be maintained no higher than 10" at	Sat	Sat
Comfort Suites	200800459-Pond B	12/21/2012	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Unsat - Bush hog slopes. Slopes/embankment need to be maintained no higher than 10" at	Sat	Sat
Heritage Humane Society	200700189	12/21/2012	Bioretention Basins	Sat	Sat	Sat	Sat	NA	Sat	Sat	
Miller Mart Lightfoot	B19c-1184-1546	12/21/2012	Extended Detention Basin	Sat - There is some debris present in inlet channel, mostly vegetation that could still be removed.	Sat - Outfall ditch is overgrown so it could not be inspected in detail. The ditch should be bush-hogged in spring.	NA	Sat	Sat	Unsat - Remove trash from in and around basin.	Sat	Sat
Patriots Place (Wyndham)	201000562	12/21/2012	Retention Basin	Unsat - Inlet channel is overgrown. Needs to be bush-hogged in early spring to keep trees out.	Sat	Sat	NA	Sat	Sat	Sat - Any woody vegetation within 10' of inlet/outlet piping or structures will need to be removed, including root.	Sat - Issues noted for forebay.
Patriots Place (Wyndham)	D15b-4160-2525	12/21/2012	Retention Basin	Sat	Unsat - Outfall area/receiving channel is completely eroded and needs repair. There are	Sat - There is some debris present in opening but not very much.	NA	Unsat - Owner aware of issues from previous inspections.	Sat	Sat	Sat
Buffa Property - Grafton Station	200600295	12/20/2012	Constructed Stormwater Wetland	Sat - Inlet area has been repaired and cleaned up. Trees have been removed.	was not inspected in detail during this inspection but there appears to be no	NA	Sat - Vegetation has been removed.	woody vegetation present on embankment but no action is necessary at this	slopes/embankment at no higher than 10". Ensure inlet area is kept clear of sediment and debris at all	Sat - No additional woody vegetation is permitted to grow in the BMP structure. Remove any saplings that emerge.	
Quarters of York	200500284-B	12/20/2012	Manufactured BMP Systems	Sat	NA	NA	Unsat - Seeding needed by spring. Minimal ground	Unsat - Survey needed. Embankment appears to	Sat	Sat	
Quarters of York	200500284	12/20/2012	Retention Basin	Sat	Sat	NA	NA	NA	Sat	Sat	Sat
Bargain Box	201000215	12/19/2012	General Infiltration Practices	Sat	NA	NA	NA	NA	Sat	Sat	
Burnt Bridge Run	98-SP081-#1	12/17/2012	Constructed Stormwater Wetland	Sat	Sat - Some debris piled up on top of outlet structure that should be cleared.	Sat	NA	Sat	Sat - Minimal trash that is present needs removal.	Unsat - there are small trees present in basin bottom and around BMP perimeter. These trees will definitely need pruning and possibly removal.	
Burnt Bridge Run	980SP081#2	12/17/2012	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Establish ground cover to water line at minimum. A vegetated or wetland buffer	Sat - Issues noted.
Coventry Apartments The Villas	200900141	12/17/2012	Bioretention Basins	Sat	Sat	Sat	Sat	Sat	Unsat - Remove cut down limbs from basin bottom.	Sat	
Yorktown Athletic Club	200501096	12/17/2012	Detention Basin	Sat	Sat - Some debris clogged at trash rack needs to be removed.	Sat	Unsat - Spillway is bare of vegetation. Will need seeding in spring.	Sat	Unsat - Slopes will need mowing in early spring. Remove trash from basin.	Sat	Unsat - Ground cover is sparse; slopes will need seeding in spring.
Skimino Landing Estates - Phase II	E20B-3288-4702	12/14/2012	Extended Detention Basin	Unsat - Inlet area at bottom of swale is completely clogged with leaves and debris. This area needs to be	Sat	NA	NA	Sat - Woody vegetation is present.	Unsat - Remove fallen tree from slope/basin. Remove excessive leaves/debris from in and around pond. Some (minimal) trash	Unsat - recommend removal of pine trees at bottom of slope (basin bottom). Recommend removal of any woody vegetation which occurs within 10' of the	Sat - Will reassess in spring; OK for now.
Skimino Landing Estates - Phase II	E21C-1957-1580 (Pond 2)	12/14/2012	Detention Basin	Sat	Sat	Sat	NA	Sat	Unsat - Bush-hog slopes. This needs to be done twice per year.	Sat	Sat
Skimino Landing Phase I	200601022	12/14/2012	Retention Basin	undermining occurring on inlet swales. One swale is cracked. Eroded areas need	completely stagnant and now flowing out; low flow orifice is likely clogged. Top	NA	NA	present on embankment. Embankment should be cleared of all woody	leaves, trash and debris present. All of the above should be removed from BMP area. Inlet	NA - Will re-access this during followup inspection (wrong season).	inspection. There should be full ground coverage (grass) on areas of slopes that are not currently wooded. This

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Lackey Free Clinic	200200158	12/12/2012	Constructed Stormwater Wetland	Sat	Sat	Sat	Sat	Sat	Sat	Sat	
Great Wolf Lodge	200300612	12/11/2012	Retention Basin	Unsat - inlet swale still needs to be repaired, graded, and seeded. Owner is aware of	Unsat - remove debris from outlet grate. Clear 10' path to outfall area (other	Sat	Sat	Sat	Sat	Unsat - remove woody vegetation as specified on previous reports. Owner is aware of issues and work is scheduled.	Sat - Seeding/aeration is complete and ground cover looks good.
Homewood Suites	D15d-3801-2313	12/11/2012	Manufactured BMP Systems	dry detention of leaves/debris. Remove	Sat				from dry detention area. Prune trees and remove thorny	Unsat - Maintain vegetation in dry basin as specified above.	
Bunting Point	200501050	12/10/2012	Extended Detention Basin	Sat	Sat	Sat	Unsat - Largely covered in vegetation. Trees are coming up through riprap. There is a	Sat	Sat	Sat - There are trees present in basin bottom. Recommend complete removal of willow trees in basin bottom, including	Sat
Felgates Woods	200600042	12/7/2012	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Felgates Woods	200600189-1	12/7/2012	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Felgates Woods	200600189-2	12/7/2012	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Holiday Inn & Suites Wmbg	2007-03	12/7/2012	Manufactured BMP Systems	Sat	Sat				Sat	NA	
Hudgins- Holiday Cadillac/Chevrolet	200500005	12/7/2012	Manufactured BMP Systems	Sat	Sat				Sat	NA	
James York Self Storage Buildings	F14d-4095-1525	12/7/2012	Retention Basin	buckled in some areas and clogged with leaves and	full of debris and needs to be cleared. Remove	NA - Did not inspect in detail at this time. Will after clean-up.	NA	Unsat - Woody vegetation present.	leaves, trash, shopping cart, dead/dying vegetation. Clear and	10' of inlet/outlet piping and outlet riser. Remove dead/dying vegetation	removal is required at this time other than what is specified on this report.
Marquis	200701066-1A&B	12/7/2012	Retention Basin	Sat - Recommend addition of riprap under/around mouth of inlet pipe to	Sat	Sat	NA	Sat	Sat	Sat	Sat - Seeding will likely be needed in spring.
St. Demetrios Greek Orthodox Church/Williamsburg Hellenic Center	200800449	12/7/2012	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Unsat - Remove woody vegetation present between forebay and main basin. Owner has been previously notified of this issue.	Sat
Animal Clinic of Williamsburg	200501064	12/4/2012	Detention Basin	to be cleared of leaves and debris. Remove grate over	Sat	Sat	NA	Sat	Sat	inlet pipe has been cut down put stump is present. Stump needs to be completely	Sat
Country Inn and Suites	D15d-3106-1785	12/4/2012	Detention Basin	Unsat - Clear inlet area of debris. Remove woody vegetation within 10' of inlet pipe, including root.	Unsat - Clear outlet area of debris. Remove woody vegetation within 10' of outlet riser, including root.	Unsat - Clear spillway orifice of debris.	NA	Unsat - Embankment has completely washed out near outlet riser. Embankment needs to be	Unsat - Clear leaves, trash, debris, and dead vegetation from BMP. Remove woody vegetation as indicated above. Seed and	Unsat	Unsat - Establish ground cover on embankment once it has been cleared.
Plaza Azteca (Joe & Mimmas)/Stor Moore	200700797	12/3/2012	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Shoppes at Yorktown	R07b-3488-2875	12/3/2012	Detention Basin	Sat - inlet pipe has been cleared and exposed. Drop inlets have been cleared of	Sat	Sat	NA	NA	Sat	Sat	Sat
Days Inn Yorktown	2005-11	11/30/2012	Manufactured BMP Systems	Sat	Unsat - Sediment and debris visible in outlet pipe and sump chamber that needs to be cleared.				NA	NA	
Kings Creek Plantation	I14C-0601-1017 (BMP 2)	11/30/2012	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat - Work in progress. Remove all cut down limbs and debris from basin.	Unsat - Remove woody vegetation present within 10' of inlet piping.	Sat - Wooded system.
Kings Creek Plantation	I14C-0601-1017 (BMP 4)	11/30/2012	Detention Basin	obstructed with leaves/debris and should be cleared. There is also erosion	Sat - Replace perforated pipe laying in front of riser (it has fallen off).	Sat	NA	Sat	Sat - Basin has been cleared of debris.	Sat	Sat - This is a wooded system.
Kings Creek Plantation	I14C-0601-1017 (mini golf)	11/30/2012	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat - Remove fallen tree/limbs on slope closest to playground.	Sat	Sat - Vegetation is fine for now but additional seeding may be needed in Spring if slopes are not fully vegetated.
Kings Creek Plantation	I14C-0601-1017(BMP 9)	11/30/2012	Detention Basin	Sat	and on top of riser of leaves and debris. Remove	Sat	NA	is present on embankment that should be removed.	leaves, and dead vegetation from basin and slopes.	top of outlet pipe that has already cracked pipe and needs to be removed.	Sat - This is a wooded system.
Kings Creek Plantation Phase I SPE	200200170 (BMP 6)	11/30/2012	Detention Basin	Sat	Sat - Outfall unobstructed.	NA	NA	Unsat - Dam is being undermined. There is a large eroded cavity along	Unsat - Recommend removal of excessive leaves, dead vegetation. Also recommend thinning of trees	Unsat	Unsat - This is a wooded system.
Penniman East Subdivision	H13a-1382-2604	11/29/2012	Detention Basin	Sat - inlet pipes were not checked during this inspection. Any woody vegetation present on top or	Unsat - Outlet area needs to be cleared of leaves, trash, and debris. Perforated pipe needs to	Sat	Unsat - remove woody vegetation, leaves and debris from spillway. Seed and stabilize.	Unsat - There are trees present on embankment. All woody vegetation should be removed from	Unsat - Remove trash, dead vegetation and excessive leaf litter, especially from outlet area.	Unsat - There is woody vegetation present in undesirable locations.	Sat - This is a wooded system. Minimal ground cover present.
American Pride Automotive	200600062	11/27/2012	Grassed Swale	Sat	Sat			Sat	Sat	Sat	
Auto Haus	200600918	11/27/2012	Manufactured BMP Systems	Sat	Sat				Sat	Sat	
Hall Custom Cabinets	200501113	11/27/2012	General Infiltration Practices	Sat	Sat	NA	Sat	Sat	Sat	Sat	
Hubbard Property	2006-32	11/27/2012	Extended Detention Basin	Sat	Sat - Some debris present on top of drop inlet.	Sat	NA	Sat	Unsat - Remove leaves and debris from basin.	Sat	Unsat - There are bare areas that will need seeding in Spring
Hubbard Property	s03c-2192-0533	11/27/2012	Manufactured BMP Systems	covered in debris and need to be cleared.	NA				Unsat - Keep inlet and grate areas clear of debris.	Sat	

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Shoppes at Yorktown	R07b-3488-2875	11/27/2012	Detention Basin	Sat - Mouth of pipe from drop inlet closest to Goodwin Neck is completely	Sat	Sat	NA	Sat	Sat	Sat	Sat
Walgreens - Grafton #9811	200700211-A	11/27/2012	Bioretention Basins	Sat	Sat	Sat	Sat	Sat	Unsat - Remove leaves and debris from basin bottom before adding mulch.	Unsat - Required trees and shrubs (from earlier inspection) have not yet been planted. These will need to be planted in early spring.	
Walgreens - Grafton #9811	200700211-B	11/27/2012	Bioretention Basins	Sat	Sat	Sat	Sat	Sat	Unsat - Remove leaves and debris from basin bottom before adding mulch.	Unsat - Required replacement trees and shrubs have not yet been added.	
Walgreens-Victory #10453	200800354	11/27/2012	Retention Basin	Unsat - Eroded areas around corner inlet pipe still need repair and stabilization.	Sat	Sat	Sat	Sat	Unsat - Slope mowing needed; slopes need to be maintained. Trash removal needed.	Unsat - Woody vegetation present within 10' of inlet/outlet piping will need to be completely removed, including root.	Unsat - There is virtually no ground cover present. Will need seeding and fertilizing in early Spring.
Water's Edge BMP Ferguson	200800494	11/27/2012	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Unsat - No ground cover present around shoreline.	Sat
Waterworks	200600290	11/26/2012	Manufactured BMP Systems	Sat	NA				Sat	Sat	
Summer's Crossing	200600008	11/26/2012	Retention Basin	Sat - Riprap areas have been cleared.	Sat	Sat	Sat	Sat	Sat	throughout BMP structure needs to be removed. Pines can be taken off flush	Sat
Swing Kings	B19a-1390-4015	11/26/2012	Detention Basin	Sat	Sat - Recommend removal of woody vegetation, including root within 10' of	NA	NA	Sat	Sat - Some trash/debris present in basin that should be regularly removed. Vegetation in basin	Sat	Sat
Williamsburg Marketcenter	200600041	11/26/2012	General Infiltration Practices	NA	NA	NA	NA	NA	NA	NA	
Bojangles	2007-12	11/19/2012	Manufactured BMP Systems	Unsat - Clogged with sediment. Remove all visible	NA				Unsat - Remove leaves and debris from structure.	Sat	
Boxx&Blaney Dental Clinic	200900085	11/19/2012	General Infiltration Practices	Sat	Sat	NA	NA	NA	Sat	Sat	
Seaford Scallop	200501125	11/19/2012	Bioretention Basins	NA	NA	NA	NA	Sat	Sat	Sat	
Shoppes at Yorktown	R07d-3897-2450	11/16/2012	Retention Basin	Sat - There is some debris build-up in mouth of 2 inlet	Sat	Sat	NA	Sat	Sat	Sat	Sat - Note that the areas that have been cleared will need to have established
Williamsburg Motors	200200262	11/16/2012	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Bruton Glen Subdivision	199900359	11/15/2012	Detention Basin	Sat - Some leaf build up in swales but water is flowing. There is a build-up of debris	Unsat	Sat	Sat	Sat	Unsat - Remove fallen tree laying over embankment. Remove as many leaves and dead vegetation	Unsat - Recommend removal of woody vegetation within 10' of outlet structure, including root.	Sat - Slopes are wooded but no action is necessary at this time.
DAV Thrift Store	F14a-2210-3500	11/15/2012	General Infiltration Practices	NA	NA	NA	NA	NA	Sat	NA	
J & K Heating	200600857	11/15/2012	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Kings Creek Plantation - SPH	200601242 (BMP 10)	11/15/2012	Retention Basin	NA	NA	NA	NA	Sat	NA	NA	Unsat - Seeding will be needed in repaired areas in the Spring.
Staybridge Suites	200800015	11/15/2012	Manufactured BMP Systems	70% full of sediment and needs to be cleared. All	NA				Unsat - Keep structure clear of leaves and debris.	Sat	
Strait Gate Temple/Korean Southern Baptist Church	G14c-1970-0222	11/15/2012	Retention Basin	Unsat	Unsat	NA	Sat	Sat	Unsat - Clear and maintain access path to and around BMP. Remove large pile of cut down limbs on embankment.	Unsat - Trees coming in on slopes (mimosas, etc.) that need removal, including root.	Unsat - Ground cover not fully established. Slopes need mowing and will need seeding in Spring.
Vineyard Heights	200500312	11/15/2012	Detention Basin	Sat	Unsat - There is some erosion present on either side of outlet pipe from	Sat	NA	Sat - There are trees present on dam. It is recommended that no	Unsat - Remove trash, dead vegetation from basin.	Sat	Sat - This is a wooded system.
Country Club Acres Sec. 5	200700892	11/14/2012	Retention Basin	obstructed. Some swales have buckled due to roots. Recommend removal of any	rusted and cracking. Fluted end section is cracked and broken. Trees are present	Unsat - Outlet structure within pond is clogged with vegetative debris and needs clearing.	NA	Unsat - Woody vegetation present on embankment.	dead/fallen trees or branches in or immediately around the pond shoreline.	Sat	Sat - Issues noted.
Marquis	200701066-1A&B	11/14/2012	Retention Basin	Unsat	Unsat	Sat	NA	Unsat	Unsat	Unsat	Unsat
Marquis	200701066-1A&B	11/14/2012	Retention Basin	Sat	Unsat - Trees present in close proximity to outlet structure.	Sat	NA	Unsat - woody vegetation present. One animal burrow found.	Unsat - Slopes and embankment need bush-hogging. Excessive trash present in basin needs to be	Unsat	Unsat
Marquis	I13c-0012-1173	11/14/2012	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Williamsburg Country Club Pond	200700892	11/14/2012	Retention Basin	Unsat	Sat	Sat	NA	Unsat	Unsat	Unsat	Sat
Penniman Commerce Park	200400010	11/13/2012	Retention Basin	Sat	Sat	Sat	Sat - Channel may need grading right at the mouth (pond side).	Sat	Sat	Sat	Unsat - There are bare areas on slopes and top of embankment that need seeding, and likely fertilizer. OK for
Virginia Trusses	200600049	11/13/2012	Retention Basin	Unsat - Some erosion around both inlets that still needs to be repaired	Sat	Sat	Sat	Sat	Sat - Mowing will be needed in early Spring. Remove cut down trees/branches from site.	Sat	Sat - Some bare areas
Heritage Commons	200800389	11/9/2012	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat - Vegetation is cut very low. It would be better to not cut grass in the BMP

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Wmbg. Embassy Suites	200300085	11/9/2012	Detention Basin	inlet have been filled. This area may need seeding in	Sat	NA	Sat	Sat	Sat	Sat	Sat
Custom Builder Supply Company	200500688	11/8/2012	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Ewell Industrial Park	200600541 (2)	11/8/2012	Extended Detention Basin	Sat	appear to be draining. It has been full of water for	Sat - See above	Sat - Some minor erosion. Could use seeding.	Sat	Sat	vegetation within 10' of inlet/outlet piping, including root.	Sat
Ewell Industrial Park	200600541 (1)	11/8/2012	Extended Detention Basin	Sat	outlet of "wet" basin in detail but it is likely	Sat	NA	Sat	debris. Clear area around inlet/outlet pipes and structures	undesirable locations. Recommend removal of woody vegetation within 10'	Sat
Williamsburg Commons II	D15d-3248-0081 (BMP 1)	11/8/2012	Extended Detention Basin	Unsat - Fallen tree is partially blocking inlet pipe running from Bastille Ct. There is also woody	Unsat - Outlet orifice is obstructed; there is a large log on top of/in front of outlet structure. 6" pipe	Unsat	NA	Unsat - There is woody vegetation present on the embankment. It is recommended that all	Unsat - Ensure no debris is obstructing water flow at inlet or outlet pipes. Remove fallen, diseased, or deceased trees from	Sat	Sat - Wooded system OK.
Williamsburg Commons II	D15d-3490-1172 (BMP 2)	11/8/2012	Extended Detention Basin	Sat	Unsat - There are some tree branches laying across mouth of pipe at outfall	Sat - Outlet riser OK.	NA	Unsat - Woody vegetation present on embankment. It is recommended that no	Unsat - Remove trash, debris, dead vegetation, limbs, etc. from basin. There is excessive trash	Unsat - Woody vegetation is present in undesirable locations. Recommend removal of all woody vegetation within	Sat
7-eleven Washington Square	S06c-1529-1559	11/6/2012	Detention Basin	Unsat - Channels from parking lot curb cuts need to be regraded.	Unsat - Outlet grate cover is completely buried in debris and a fallen tree.	Unsat - See above	NA	Unsat	Unsat - Excessive debris present. Remove all trash, tires, debris, leaves, dead vegetation, and	Unsat	Unsat
Hollymeade	T03b-3627-4549	11/6/2012	Detention Basin	Sat	Sat - Outlet channel clear.	NA	Sat	Sat	Unsat - There is a fallen tree in middle of basin that should be removed. Remove deceased	Sat	Unsat - Issues noted.
WaWa/Stor Moore 3	200600834	11/6/2012	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Willow Lakes Sec 1	S07c-1168-1224 (A)	11/6/2012	Retention Basin	Sat	Sat	Sat	Sat	NA	Sat - Some trash that needs to be removed, particularly around inlets.	Sat	Sat
Willow Lakes Sec 1	S07c-1626-1429 (B)	11/6/2012	Retention Basin	Sat	Sat	Sat	Sat	Sat	Unsat - Remove trash from area around basin. Clear and maintain access path around BMP.	Unsat - Issues noted.	Unsat - Issues noted.
Willow Lakes Sec. 3	200500314	11/6/2012	Detention Basin	woody on top/near them. All woody vegetation growing	Sat	Sat	Sat	Sat	clippings, limbs, and leaves is occurring in the basin. Advise	Sat	Sat
Wolf Trap Road Industrial Park	S08a-0172-3054	11/6/2012	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Busch Ind. Park (Duncan Pond)	94-SP063	11/5/2012	Retention Basin	NA	NA	NA	NA	NA	NA	NA	NA
Dominion-Penniman Substation	201100202	11/5/2012	Detention Basin	Sat	Sat	Sat	Sat	NA	Unsat - Mowing of vegetation outside of the gate, where water outfalls, is needed.	Sat	NA
Goddard School	20100083	11/5/2012	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Goddard School	20100083-2	11/5/2012	Manufactured BMP Systems	Sat	NA				Sat	Sat	
Hampton Inn - Wmbg	200701010	11/5/2012	Retention Basin	Sat	Sat	Unsat - The paved swale at the outlet still has sections of chopped down tree in it that	Sat	Sat	Sat	Sat	Sat - There are three trees present around forebay (willow, pine) that will need to be removed in Spring, OK for
Arbys Restaurant - Ft. Eustis	200900479	11/2/2012	Bioretention Basins	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Unsat - Cattails are present. One willow tree is present that will need to be removed.
Grafton Animal Veterinary Hospital	200500013	11/2/2012	General Infiltration Practices	Sat	Unsat - Note that outlet has been covered with wood. This is OK for now but cover will need to be	Sat	Sat	Sat	Sat	Sat	Sat
Ambrits Point	200700074	11/1/2012	Constructed Stormwater Wetland	in inlet channel but does not appear to be actively eroding now.	Sat - Water flow does not appear to be obstructed.	due to access and overgrowth. Area around riser needs to be maintained at all times to allow	NA	Sat	Unsat - Clear and maintain access path to inlet/outlet areas at all times. Mow/bushhog slopes.	plantings is evident. A supplemental planting is needed. Woody vegetation is present in undesirable locations. All	
Bennett's Creek Nursery	H14d-3435-0698	11/1/2012	Grassed Swale	Unsat	Unsat - There is erosion and seeping around drop inlet at end of side swale.			Sat	NA	Unsat - Slope on side of property has been cleared of all vegetation and is eroding into the swale and storm drain.	
C & F Bank	200501037	11/1/2012	Bioretention Basins	Sat	Sat	NA	NA	NA	Sat	Sat	Sat
Coventry Professional Park	200600853 G	11/1/2012	Retention Basin	Sat	been cleared to allow water to flow out. There is a lot of pine needle debris	Sat	Sat	Sat	Sat	Sat	Unsat
Mcdonald Bluffs	T04a-0788-4013	11/1/2012	Retention Basin	Sat	outfall area due to overgrowth. Need to clear and maintain path to	NA	vines and vegetation. Spillway should be kept clear of all vegetation.	shrubby vegetation and minimal ground cover. Unable to inspect in detail	Sat	Sat - Issues noted.	should be mowed/bushhogged. Once complete, any eroded areas should be repaired. Dam should then be seeded.
Penniman Road Office Warehouse Park	200800013	11/1/2012	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Rite Aid Pharmacy Store # 3971	S06a-1464-3889	11/1/2012	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat

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Riverwalk Townes Ph 1	200700988-2	11/1/2012	Extended Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	present but there is a plan in place to remove it once the basin bottom dries out.	Sat
Yorktown Commerce Park	200700051	10/26/2012	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat - Grass height is a little short. Would be better kept at 4-5".
AutoZone Williamsburg	200200022	10/25/2012	Detention Basin	Sat	Sat	Sat	NA	NA	Sat	Sat	Sat
AT&T Pegasus Tower	N11a-0657-3503	10/24/2012	General Infiltration Practices	Sat	Sat - Sediment has been removed from drop inlets.	NA	NA	Sat	Sat	Sat	Sat
Victory Industrial Park	R08c-2343-0012	10/24/2012	Retention Basin	Sat - there is a lot of sediment present in swale beside 406 Redoubt. This sediment is depositing into	Sat - Outlet is unobstructed. There is a lot of vegetative debris (mostly leaves and pine)	Sat	Sat - Spillway looks visually OK but no elevations were measured during this inspection.	Sat	Sat - some trash present. Recommend removal of as many leaves/dead vegetation as possible throughout fall/winter so	Sat - there is woody vegetation present on top of outlet piping and concrete headwall. Recommend removal of woody vegetation present within 10' of	Sat
Clairmont Apartments	200600266	10/23/2012	Constructed Stormwater Wetland	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
CVS Pharmacy#75555	200900124	10/23/2012	Bioretention Basins	Sat - Some visible sediment build up	NA	NA	NA	NA	NA	Unsat - Prune tree. Remove shoots coming up through grate cover so that grate cover is able to	Sat
Dodd RV Trailer Sales	200300062	10/23/2012	Retention Basin	Sat	Sat	Sat - Ensure grate cover is kept clear of vegetation and debris.	Sat	Sat	Sat	Sat - Mowing of side slopes and embankments will not be needed again until early spring.	Sat
J.A.B. (Academy of Rock Music)	200800428	10/23/2012	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat - There is some trash present in and around basin that needs to be removed.	Unsat - Vegetated buffer is sparse and no wetland vegetation is present.
Lakeside Dr. Retail Shops	200800437	10/23/2012	Bioretention Basins	Sat	NA	NA	NA	NA	Sat	Sat	Sat
Victory Industrial Park	R07b-2764-4095	10/23/2012	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat - Some bare areas but overall well vegetated.
Community Services Coalition	D15A-2443-4743	10/22/2012	Bioretention Basins	Sat	NA	NA	NA	NA	Sat	Sat	Sat
New Quarter Baptist Church	200900139	10/22/2012	Extended Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Presidents Park	200300666	10/22/2012	Retention Basin	Sat	Unsat - Outfall area is overgrown and needs clearing. Remove logs and	Sat	NA	Sat	Sat	Unsat - Mow slopes. Remove trash and debris from BMP structure. Maintain access to	Unsat - Needs mowing, but will wait until early spring until it is required.
Reserve Retirement Community	200900143-03	10/22/2012	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Unsat	Sat
Coventry Professional Park	200600853 G	10/18/2012	Retention Basin	Sat	Unsat - there is some woody vegetation present within 10' of outlet pipe and	Unsat	Unsat	Sat	Sat	Sat	Sat
Patriot's Square Shopping Center	Q08b-4408-4590	10/18/2012	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Peninsula Community Chapel	200600909-BMP1	10/18/2012	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Peninsula Community Chapel	200900527-BMP2	10/18/2012	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Peninsula Community Chapel	200900527-BMP3	10/18/2012	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
York River Commerce Park	200900014	10/18/2012	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Colonial Harbor Retirement Residence	200500971	10/15/2012	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Unsat - Still bare areas on slopes of larger basin. These areas need to be seeded and stabilized now before it gets too cold. It is	Unsat - Ground cover not satisfactory.
Sherwood Forest	V02a-1822-3572	10/15/2012	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat - Recommend regular removal of as much leaves, debris and trash as possible regularly.	Unsat - There is woody vegetation present in undesirable locations. Recommend removal of all woody
Sherwood Forest	V02a-1822-3572	10/15/2012	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat - Recommend removal of leaves/debris, etc. regularly. There are a lot of limbs, fallen	Unsat - There is woody vegetation present in undesirable locations. Recommend removal of all woody
Sherwood Forest	V02a-1822-3572	10/15/2012	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat - Removal of limbs, leaves, debris as needed.	woody vegetation within 10' of inlet/outlet pipes, including root. After
Crossroads Community Church Ph II	200601227	10/14/2012	Extended Detention Basin	Sat - No current erosion evident.	Sat	Sat	Sat	Sat	Sat	Sat - Recommend keeping area (about 6' diameter) mowed to discourage woody growth near structure and to allow for access	Unsat - There is some woody vegetation coming in on basin bottom. This will need to be removed if it is within 10' of the concrete swale, including root.
Colonial Crossing Timeshares	200700962	10/11/2012	General Infiltration Practices	Sat	more stable than last inspection. Outlet channel is holding for now. Water	Sat	NA	Sat	Sat	Sat	Sat
Colonial Crossing Timeshares	B20d-4226-1602	10/11/2012	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat

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Colonial Crossing Timeshares	B20d-4226-1602	10/11/2012	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Crossroads Community Youth Home	200701222	10/11/2012	Detention Basin	Sat	Sat - One animal burrow where outfall pipe meets riser.	Sat	Sat	Sat	Sat	Sat	Sat
Harts Storage	200500305	10/11/2012	Constructed Stormwater Wetland	Sat	Sat	Sat	Unsat - Clear emergency spillway of leaves/debris. Also remove trees in	Sat	Sat	Sat - Magnolia has dominated all other wetland vegetation; do not see any original plantings.	Sat
Penniman Woods	G14c-1248-1413	10/11/2012	Detention Basin	Unsat - Swales are relatively clear. There are trees present over inlet pipe running from Vineyard Lane.	Unsat - riser has some rust present. There also appear to be some low areas around base. Unable to	NA	NA	Unsat - Woody vegetation present.	Unsat - Remove trash, dead vegetation, fallen limbs, excessive leaves and debris from basin. Clear area around riser for	Unsat - woody vegetation is present in undesirable locations. Recommend removal of woody vegetation occurring within 10' of piping, inlet or outlet	Unsat - wooded system, no ground cover. Do not recommend tree removal on slopes at this time unless trees occur within 10' of inlet/outlet structures/pipes
Sentara Williamsburg Comm. Hosp.	200200087-01	10/11/2012	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	concrete headwall (and piping) at outfall. These trees need to be removed, including root to avoid pipe damage. Holes need to be filled and	Sat
Sentara Williamsburg Comm. Hosp.	200200087-02	10/11/2012	Retention Basin	Sat	Sat	Sat	Sat	Sat	Unsat - Remove trash from around shoreline and in vegetated buffer.	Sat	Sat
Abel Construction	200800219	10/9/2012	Extended Detention Basin	Sat	Unsat - Low flow orifice and top of drop inlet grate are covered in debris and	Unsat - See above.	Sat	Sat	Sat	Sat	Sat
Brandywine Section 7	S06b-4972-4853	10/9/2012	Retention Basin	Sat	occurring on either side of elliptical pipe that runs under Brandywine Dr. This	Sat	NA	Sat	Sat	Sat	Sat
Coastal Community Church	200900081	10/9/2012	Extended Detention Basin	Sat	Sat	Sat - There is debris on top of drop inlet grate cover that should be removed. Also, this has been a reoccurring problem so clearing	Sat	Sat	Sat	Sat	Sat - There are a few bare spots that need to be seeded. Now is the time to apply seed (fall).
Maranatha Baptist Church	200500948	10/9/2012	General Infiltration Practices	Sat	Sat	NA	NA	NA	Sat	NA	
Maranatha Baptist Church	200500948-2	10/9/2012	General Infiltration Practices	Unsat - Yard drain is under 3" of water.	NA	NA	NA	NA	NA	NA	
Wachovia - Grafton	200400016	10/8/2012	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Central Baptist Church	200100839	10/5/2012	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Gables of York	U02d-4641-1404	10/5/2012	Retention Basin	Sat	Sat - Outfall pipe clear. Outfall ditch clear of obstructions.	Sat	NA	Sat	Sat	Sat	Sat
Greenlands	T03c-1471-1267	10/5/2012	Retention Basin	inlet pipe (directly behind library and across from bench and walking trail) is	Sat	Sat	NA	area at corner inlet near posted signage that should be repaired.	Sat	Unsat - There are 2 trees coming up right beside inlet pipe that should be removed, including root.	Sat
Greenlands	T03c-1258-0578	10/5/2012	Retention Basin	Sat	Sat	Sat	NA	Sat	Unsat - Recommend advising landscapers to remove any vegetation that they cut down	Sat	Sat
Greenlands	T03c-2028-0478	10/5/2012	Retention Basin	Sat	Sat	Sat	NA	Sat	Unsat - Same comment as pond 2 - advise landscapers to remove cut down vegetation from BMP	Sat	Sat
Greenlands	T02a-2393-4312	10/5/2012	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat - Some trash in buffer region.	Sat	Sat
Greenlands	T02a-2393-4312	10/5/2012	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Animal Clinic of Williamsburg	200501064	10/4/2012	Detention Basin	Unsat - There is a tree growing up at inlet and through inlet pipe grate. This tree and any other woody	Sat	Sat	NA	Sat	Sat - Remove leaves and debris from inlet area.	Sat - Nice vegetation on pond bottom.	Sat
Tabb Lakes- Lake 2	T02a-0026-4932	10/3/2012	Retention Basin	Sat	Sat - Pipes clear	Sat	NA	Sat	Sat	Sat - Woody vegetation present. No actions necessary at this time.	Sat
Tabb Lakes-Lake 1	T02a-0026-4932	10/3/2012	Retention Basin	Sat - Pipes clear	Sat - Pipes clear	Sat	NA	Sat	Sat	Sat - Slopes are wooded with no ground cover but no action is necessary at this time.	Sat - Slopes are mostly wooded
Foxwood	S04c-2389-0131	10/2/2012	Retention Basin	Sat - Recommend removal of woody vegetation, including root, within 10' of	Sat - See note number 2	Sat - See note number 2	NA	Sat	Sat - Recommend mowing/bush hogging areas of slopes where possible now, including vegetated	Sat - No further tree removal is needed at this time unless tree is within 10' of piping. Heavily wooded (mature) side of	Sat
Foxwood Sec 2&3	S04c-0255-0436	10/2/2012	Retention Basin	Sat - Operational. Recommend removal of woody vegetation 10' to	Sat - See note item 2	Sat - See note item 2	NA	Sat - Woody vegetation present; minimal ground cover.	Unsat - There is a lot of dumping going on at this pond. Grass clippings, limbs, and leaves	Sat	Unsat
Foxwood Sec 2&3	S04c-0255-0436	10/2/2012	Retention Basin	Sat - Operational. Recommend removal of woody vegetation 10' to	Sat - See note item 2	Sat - See note item 2	NA	Sat - Seed bare areas	Sat	Unsat - Recommend removal of woody vegetation within 10' of piping.	Unsat - No ground cover.

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Foxwood Sec 2&3	S04c-0678-0916	10/2/2012	Retention Basin	Sat - recommend removal of all woody vegetation, including root, within 10' of inlet/outlet piping. Three	Sat	Sat	NA	Sat	Sat - recommend bush-hogging of slopes around 1/2 of pond (the half without pine trees). The slopes and buffer zone here will	Sat	Unsat - There are bare areas on the slopes that have been cleared and need to be seeded.
Grafton Baptist Church	S06a-1710-3266	10/2/2012	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Peninsula Emergency Vet Clinic	200200248	10/2/2012	Extended Detention Basin	Sat	Sat	Sat	NA	Sat	willow and pine saplings/seedlings from basin bottom before they take over BMP. You want to preserve the	Sat	Sat
Safety Equipment Rental	200500935	10/2/2012	Extended Detention Basin	Sat	Sat	Unsat - Remove debris on top of drop inlet grate cover (and keep clear).	NA	Sat	fencing from rear of pond. Remove woody saplings emerging in bottom. There are a few tall willow trees that can be left for	Sat	Sat
Wmbg. Embassy Suites	200300085	10/2/2012	Detention Basin	Unsat - Inlet area is full of leaves, trash and debris. All of the above needs to be cleared. Repair eroded/low	Sat	NA	NA	Sat	Unsat - Remove leaves, pine needles, trash and debris from basin. Remove thorny vegetation from basin. Prune/thin vegetation	Unsat	Unsat
Penniman Road Office Warehouse Park	200800013	10/1/2012	Detention Basin	Sat	NA - Will check during follow up	NA	NA	Sat	Unsat - Slopes need to be mowed. There is woody vegetation coming in. Bushhog/mow slopes between 5-10". If bottom is dry, mow bottom as well. If not, do not mow until it is dry so that no damage occurs.	Sat	Sat
Sonic - Route 17	200200228	10/1/2012	Constructed Stormwater Wetland	Unsat - remove tree that was pushed down from concrete inlet swale and is now laying in basin bottom.	Unsat - Clear area around and on top of outlet riser of leaves and debris. Remove woody vegetation	Sat	Sat	Sat	Unsat - Continue to thin woody vegetation around BMP perimeter as needed to maintain visibility and accessibility.	Sat	
St Joan of Arc Catholic Church	Q09a-0760-2688	10/1/2012	General Infiltration Practices	Sat	Sat	Sat	NA	Sat	Sat	Sat	
St Joan of Arc Catholic Church	Q09a-0760-2688	10/1/2012	Extended Detention Basin	Sat	Unsat - Water is not flowing out	Sat	Sat	Sat	Sat	Sat	Sat
Strait Gate Temple/Korean Southern Baptist Church	G14c-1970-0222	10/1/2012	Retention Basin	Unsat	Unsat	Unsat	Sat	Unsat	Unsat	Unsat	Unsat
Buffa Property - Grafton Station	200600295	9/26/2012	Constructed Stormwater Wetland	tree, including root, and all other trees growing in inlet area. Riprap will need to be	Sat	Sat	vegetation from spillway. Stabilize and seed after removal.	is present and needs to be removed as indicated above.	mowed. Once tree removal is complete and ground cover is established, regular mowing of	structure and needs to be removed. Original wetland plantings are no longer present but cattails have colonized BMP	
Coventry Harvest Lake A	T02c-1288-1043	9/26/2012	Retention Basin	woody vegetation, including root, within 10' of any inlet piping.	to clear outlet area of woody vegetation. Recommend removal of all	Sat	operational. May want to take some elevation shots to see if minor grading is	Sat	Unsat - There is a lot of trash around shoreline that needs to be removed.	Sat	Sat - There are bare areas that need to be seeded on some areas of slopes but the majority is OK.
Coxton's Center	200000100	9/26/2012	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Unsat - Rear embankment is lined with dead trees that should be removed. Once they are removed, stabilize and seed	Sat
York Convalescent Center	200100757	9/26/2012	Retention Basin	Sat	NA - Outfall area currently under renovation. Will assess at followup.	NA - See above.	NA	Sat	Sat	Sat	Sat - Bare areas need to be seeded.
Yorkminster Presbyterian Church	2006-29	9/25/2012	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
AT&T Pegasus Tower	N11a-0657-3503	9/24/2012	General Infiltration Practices	Sat	Sat	NA	NA	Sat	Unsat	Unsat - vegetation is present and growing over stone (infiltration) surface. All vegetation needs to be cleared and	
Wyndham Governors Green	200000051-1A	9/24/2012	Retention Basin	Sat - Some erosion along riprap channel that runs under white bridge	Sat	Sat	Sat	Sat	Sat	Sat	Sat - Recommend leaving a vegetated buffer strip around shoreline.
Wyndham Governors Green	200000051-1B	9/24/2012	Detention Basin	Unsat - Area at mouth of inlet (pipe) at corner has accumulated sediment and vegetation. This area should	Unsat - Eroded areas present around outlet structure. These eroded areas need to be repaired.	Sat	Sat	Sat	Sat	Sat	Sat
Wyndham Governors Green	200000051-1C	9/24/2012	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Wyndham Governors Green	200200070	9/24/2012	Retention Basin	(hole) at corner riprap area that needs to be filled; recommend filling with	Sat	Sat	Sat	Sat	Sat	Sat - Recommend allowing a vegetated buffer strip to grow around shoreline to help prevent erosion.	Sat

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Wyndham Governors Green	201000115	9/24/2012	Retention Basin	fabric and an exposed pipe section at corner that needs to be covered. There is also	Sat	Sat	NA	Sat	Sat	Sat - Recommend allowing vegetated buffer strip to grow around shoreline.	Sat
James York Plaza 2	200700976	9/21/2012	Detention Basin	NA	NA	NA	NA	NA	NA	NA	NA
James York Plaza 2	200400193 A	9/21/2012	Manufactured BMP Systems	NA	NA				NA	NA	
James York Plaza 2	200400193 B	9/21/2012	Manufactured BMP Systems	NA	NA				NA	NA	
New Life Presbyterian	200600048	9/19/2012	Extended Detention Basin	Sat	Unsat - Both outlet ditches are partially obstructed causing water to pool.	Sat	Sat	Sat	Sat	Sat - wetland vegetation is present in basin bottom. May want to do a supplemental wetland planting to help	Sat
Trebor Pastures	V03a-1258-3143	9/19/2012	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	but is mowed very short. Recommend not mowing slope vegetation shorter
Trebor Pastures	V03a-1418-4014	9/19/2012	Retention Basin	Sat - Erosion repair holding up well at inlet swale under bridge.	Sat - Wire mesh over outlet pipe is damaged.	Sat	NA	Sat	Sat - Remove fallen tree branch from basin.	Sat	Sat - Recommend not mowing ground cover (grass) on slopes shorter than 5 inches.
Trebor Pastures	V03a-2220-3186	9/19/2012	Retention Basin	Sat - inlet swales partially full of sediment and/or leaves & pine needles.	Sat	Sat	Sat	Sat	Sat	Unsat - there are bare areas on slopes that need ground cover. Fall would be a good time for re-seeding.	
Lakes at Dare Sec 1	U07a-0267-2508	9/17/2012	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat - there is a willow tree (looks like a bush right now) coming in near to corner inlet pipe across from #203 Blue Heron.	Sat
Lakes at Dare Sec 1	U07a-0420-2757	9/17/2012	Retention Basin	Sat - Woody vegetation present near inlet/outlet pipes. Recommend removal	Sat - See above.	Sat	Sat	Sat	Sat	Sat - Phragmites and cattails present. Recommend mowing buffer strip to shoreline at least once per year to deter	Sat
Lakes at Dare Sec 1	U07a-1646-2783	9/17/2012	Retention Basin	Unsat - concrete swale running along Waterfowl is completely obstructed behind 209 Waterfowl and	Sat - See above.	Sat	Sat	Sat	Sat - recommend mowing of vegetated buffer to shoreline at least once per year (do not remove any wetland vegetation).	Sat - Woody vegetation present in buffer.	Sat - See note above.
Lakes at Dare Sec 1	U07d-2630-2251	9/17/2012	Retention Basin	vegetation present close to inlet/outlet pipes. Recommend removal of all	Sat - See above.	Sat	Sat	Sat	Sat	willow. Recommend removing any additional saplings as they emerge. Also, thinning willow. There is woody	especially on wooded side. Recommend stabilization of slopes in these areas and addition of ground cover.
Lakes at Dare Sec 1	U07d-2630-2251 (E)	9/17/2012	Retention Basin	Unsat - There is erosion occurring (holes) around double inlet pipes at corner that needs repair.	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Lakes at Dare Sec. 6	200200233 (H)	9/17/2012	Retention Basin	present near inlet/outlet pipes. Recommend removal of all woody vegetation	Sat - See above.	Sat	Sat	Sat	Sat - Recommend maintaining clear access all the way around pond.	around shoreline. Some areas have no vegetated buffer in all areas around	Sat
Lakes at Dare Sec. 6	U06b-2863-4906	9/17/2012	Retention Basin	Sat	Sat	Sat	Sat - Saplings are emerging through riprap in spillway. Recommend removal of all	Sat	Sat - Noticed some dumping of trash and clippings around perimeter.	Sat - One side of pond is wooded (OK). Width of vegetated buffer is varied around shoreline. Recommend having	Sat
Lowes Pond	20040004	9/17/2012	Retention Basin	Sat	have been cleared of woody vegetation and	Sat	NA	Sat	Sat	mowed/cleared at some point to deter trees.	Sat
Jungle Jim's	C20c-2217-0920	9/14/2012	Grassed Swale	Sat	Sat			NA	Sat	Sat	
Sunset Meadows	0	9/14/2012	Retention Basin	Unsat	Unsat - Sediment is visible in outfall pipe and is discharging from pond.	Unsat	Unsat	Sat	NA	Unsat	Unsat
Water's Edge BMP	200800494	9/14/2012	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Williamsburg Marketcenter	200600041	9/13/2012	General Infiltration Practices	Sat - Pipes OK.	Unsat - there are some eroded areas present on slope near outlet structure that need to be filled and	Sat	Sat	Sat	Unsat - Ensure vegetation around inlet pipes and outlet structure is regularly mowed/cut so that pipes are visible and accessible. Remove	Unsat - Saplings are present throughout. No woody vegetation is permitted within BMP structure. Ground cover is sparse on basin bottom and bare spots are present	
Dominion-Waller Mill	D16d-4872-1229	9/12/2012	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Dominion-Waller Mill	D16d-4872-1229(2)	9/12/2012	General Infiltration Practices	Sat	Sat	Sat	NA	Sat	Sat	No ground cover present at outlet spillway. Vegetation in basin bottom is largely deceased. Looks as if herbicide or	
WaWa - Williamsburg	200600352	9/12/2012	Detention Basin	cleared of woody vegetation and mowed. There is a lot of trash present at inlets and	cleared of debris and looks OK. Trees that were cut down for access to outfall	Sat	NA	Sat	basin, especially at inlet areas. Regular trash removal is needed in this basin due to the amount of	Sat	Sat
Lightfoot Crossing	200600329	9/11/2012	General Infiltration Practices	Unsat - Inlet pipes filled with sediment and debris. Clear all inlet pipes of debris.	basin appear to be clogged or covered. Ensure that drop inlets are clear of	Sat	Sat	Sat	Sat	Sat	Sat
Lightfoot Crossing II	200600329	9/11/2012	General Infiltration Practices	Unsat - Debris present in inlet pipes. Inlet pipe that releases into vegetated section of rear basin is clogged with debris and	Sat - Ensure drop inlets in the middle of infiltration basins are open and clear of debris so that water can flow out. These appear to	Sat	Sat	Sat	Sat	Unsat - See note above regarding woody vegetation.	

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Williamsburg Players	200700046	9/11/2012	Extended Detention Basin	Sat - There is woody vegetation and sediment present at inlets. Continue to remove woody vegetation	Sat - Trash rack has been replaced. If it is not bolted down, recommend that property owner bolt it	Sat	NA	Sat	Sat - Minimal trash present.	Sat	Sat
European Cars	200200305	9/10/2012	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat - Few bare spots.
Consolidated Wings-Hooters	200300682	9/6/2012	Bioretention Basins	NA	NA	NA	Sat	Sat	Sat	Sat	
Home Depot	200300747	9/6/2012	General Infiltration Practices	Sat	Sat	NA	NA	NA	Sat	Sat	
Walmart Cedar Valley -Lightfoot	200700173 H	9/6/2012	Retention Basin	Sat	Sat	Sat	NA	Sat - There are 5 animal burrows present and there has been a previous rodent issue at this site.	Sat - Well maintained.	Sat - Excellent wetland vegetation. Cattails are present in aquatic bench.	Sat
Williamsburg Motors	200200262	9/6/2012	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Victory Estates	200600374-B	9/5/2012	Retention Basin	Sat - Inlet area OK; pipe underwater.	Sat	Sat	Sat - Water has passed over emergency spillway; all seems to be operational.	Sat - Some bare areas at top of embankment (minimal).	Sat	Sat - Invasive species (phragmites) present. Woody vegetation present.	Sat
Victory Estates	200600374-A	9/5/2012	Retention Basin	Sat - Drop inlet at corner is full of standing water and appears to have been for some time. If water	NA - Outlet pipe is partially underwater due to water level; could not inspect at this time. Make sure outlet	NA	Sat	Sat	Sat	Unsat - Invasive species (phragmites and cattail) present; woody vegetation present.	Sat
Washington Square Shopping Center	S06a-2048-2592	9/5/2012	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Yorkshire Downs Phase 4B	V02d-4842-2423	9/5/2012	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat - There is no vegetated buffer strip present. Recommend allowing vegetated buffer strip to grow in this area to prevent erosion.	Sat
Yorkshire Downs Phase 4B	V02d-3357-2020	9/5/2012	Retention Basin	Sat - Pipes and swales good.	Sat - Outlet pipe is good and is free of debris. Outfall channel area is overgrown. At minimum, area around headwall and	Sat	NA	Sat	Sat	Sat - There is a vegetated buffer strip present around entire pond. Recommend allowing buffer to grow around entire pond to prevent erosion. Woody vegetation present.	Sat
WaWa - Williamsburg	200600352	8/30/2012	Detention Basin	Sat - Inlet area OK; pipe with sediment. Debris and woody vegetation present. Remove visible sediment	Sat	Sat	Sat	Sat	Sat - Keep maintenance path to outfall cleared/mowed at all times (cleared by York Co Aug 2012). Keep area around outfall	Sat	Sat
Clairmont Apartments	200600266	8/29/2012	Constructed Stormwater Wetland	Sat	Sat	NA	Sat	Sat	Sat - Work is ongoing.	Sat - Note cattails are present. Tree removal ongoing.	
Holly Point Section A	U06b-2531-3668	8/29/2012	General Infiltration Practices	Sat	Sat	Sat	NA	Sat	Sat	Sat	
Shoppes at Yorktown	R07b-3488-2875	8/29/2012	Detention Basin	Unsat - Two curb cut inlet areas are eroded and need repair/stabilization. The addition of riprap in these	Sat	Sat	NA	Sat	Sat	Sat	Sat
Victory Industrial Park Lot 1	200500999	8/29/2012	Manufactured BMP Systems	Sat	Sat				Sat	Sat	
Shoppes at Yorktown	R07d-3897-2450	8/28/2012	Retention Basin	filled with sediment. Woody vegetation present. Remove woody vegetation growing	of obstructions. Woody vegetation is present in area. Remove woody	Sat	NA	Unsat - Woody vegetation, no ground cover. No access around pond.	leaves, pine needles, trash and debris. Recommend clearing and maintaining an access path	Unsat - Completely wooded system. Vegetation is growing in to pond. There is no ground cover on slopes.	Unsat - Issues noted.
Woodlake Crossing	T03d-4513-2353	8/27/2012	Retention Basin	Sat	Unsat - Outlet pipes partially blocked by debris in lake. Perform regular inspections to insure outlet pipes are clear at all times.	Sat	Sat	Sat	Sat	Sat	Sat - Continue to seed any bare areas that develop.
York River Commerce Park	200900014	8/27/2012	Extended Detention Basin	of Ryson parking lot is obstructed with sediment/vegetation.	(eroded areas) present around outlet structure that need filling. Was	NA	Sat	Sat	basin sides and bottom to deter woody vegetation (there are hundreds of tree seedlings	established in all areas. Appears as if phragmites may be coming in on slopes. Woody vegetation present. Much of the	Sat - Issues noted.
Dirmeyer Veterinary Clinic	200200061	8/24/2012	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat - Entire basin is inhabited by phragmites.	Sat
Phillip Morris Facility	H12c-1676-2235	8/24/2012	Manufactured BMP Systems	Unsat - Drop inlet in parking lot was completely obstructed by debris and needs to be kept clear.	Sat				Sat - Ensure regular removal of debris from drop inlet grates.	NA	
Phillip Morris Facility	H12c-1676-2235	8/24/2012	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Pirates Cove Adventure Golf	D15a-0997-2793	8/24/2012	Retention Basin	Sat	Unsat - There are low spots and sink hole forming along pipe at outlet; beginning at curb inlet on Colony Drive.	Sat	Sat	Sat	Sat	NA	NA

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Riverwalk Townes Ph 1	200700988-2	8/23/2012	Extended Detention Basin	Sat	Unsat - Still awaiting conversion of outfall structure to permanent construction. Also waiting for pipe repair at outfall.	Unsat	NA	Sat	Sat	Sat - Cattail dominance in basin (OK).	Sat
Roberts Trace Sec 1	V03b-2791-4171	8/23/2012	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Roberts Trace Sec 1A	V03a-1977-4772	8/23/2012	Retention Basin	Unsat - there is woody vegetation present near to piping. Recommend removal of all woody vegetation	Unsat - woody vegetation present. Recommend removal of all woody vegetation within 10' of	Sat - Minimal debris present.	Unsat - Spillway is covered in debris (leaves, pine needles).	Sat	Unsat - maintain access path around pond at all times. Keep inlet and outlet areas clear of woody vegetation and debris at	Unsat - Issues noted.	Unsat - Issues noted.
Wythe Creek Farms	V03c-1601-1634	8/23/2012	Retention Basin	Sat	Sat	Sat	Sat	Sat	vegetated buffer at least once per year to deter woody growth; there are currently woody	Sat	Sat
Wythe Creek Farms	V03c-1621-0963	8/23/2012	Retention Basin	Sat - Minimal erosion present around some inlet piping. Recommend regular inspection of inlet pipe areas	Sat	Sat	Sat	Sat	Sat - Recommend mowing vegetated buffer strip (to water line) at least once per year to deter woody growth.	Sat	Sat
Highgrove Subdivision	200800021	8/22/2012	Retention Basin	Sat	Unsat - window trees coming in around outlet structure need to be removed, including root.	Unsat - Unable to inspect riser due to access. Owner to install a gate for maintenance and access.	Sat	Unsat - Erosion occurring on North slope under fence.	Sat	Unsat - Issues noted.	Unsat - Bare areas need seeding and stabilization.
Strait Gate Temple/Korean Southern Baptist Church	G14c-1970-0222	8/22/2012	Retention Basin	Unsat - Inlet area completely overgrown and clogged with debris. Clear and keep inlet areas clear of debris at all times.	Unsat - Outlet ditch is overgrown and needs clearing. Remove any obstructions present in ditch. Remove any woody vegetation present in ditch.	Sat	Sat	Unsat - Overgrown and need mowing.	Unsat - Maintain an access path to BMP, completely around BMP and to inlet/outlet areas at all times. Remove leaves, debris. Remove woody vegetation.	Unsat - Issues noted.	Unsat - Issues noted.
Belmont Luxury Apartments	98-SP018	8/21/2012	Retention Basin	swales and inlet pipes have some build up of sediment and vegetation at the bottom. OK for now. If water	Sat - Front outfall ditch is clear of large obstructions and flowing.	Sat - Trees have been removed from outlet area. Area is clear of debris.	NA	Sat	strip once a year in early spring to prevent further woody encroachment and to check for erosion.	largely dominated by phragmites. There is woody vegetation present in inlet/outlet areas. Recommend removing all woody vegetation, including root,	Sat
Running Man Sec.9A	200000772	8/21/2012	Extended Detention Basin	Sat - recommend keeping vegetation around concrete headwall and piping mowed to deter woody growth.	Sat - Same comment as above.	Sat	Sat	Sat	Sat	Sat	Sat
Tabb Meadows	U03a-1462-3769	8/21/2012	Grassed Swale	Sat	Sat			Sat	Sat	Sat	Sat
York County H-1 Regional BMP	200900000	8/21/2012	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat - Cattails are present and occupying much of aquatic bench area.	Sat - Vegetation sparse in some areas but slopes are stable.
York County Schools - Dare Elementary School	200800117	8/21/2012	Manufactured BMP Systems	Sat	Sat				Sat	NA	
Running Man	2009-119	8/20/2012	General Infiltration Practices	Sat	Sat	NA	NA	Sat	Sat	Sat	
York County Schools - Mt. Vernon Elementary Building Addition	T04a-1221-3035	8/20/2012	Grassed Swale	Sat	Sat - Note that there is some erosion occurring at area around pipes located across from McDonald Bluffs BMP (before you get to road).			Sat	Sat	Sat	
Quarters of York	200500284	8/17/2012	Retention Basin	(from curb inlet on Generals Way) is still clogged with cattails, trash, and debris.	Sat - Sediment still present inside concrete outfall structure.	Sat	vegetation established on slopes in this area; will be done by March. Also note	Sat - Top of embankment bare on far slope but being addressed.	and remove woody saplings as they emerge. Let vegetated buffer strip grow for now and be cut	Sat - Issues noted.	Sat - Issues noted.
Running Man	2009-113	8/17/2012	General Infiltration Practices	Sat	Sat	NA	NA	Sat	Sat	NA	
Running Man	2009-118	8/17/2012	General Infiltration Practices	Sat	Sat	NA	NA	Sat	Sat	NA	
Running Man	2009-105	8/17/2012	General Infiltration Practices	Sat	Sat	NA	NA	Sat	Sat	NA	
Running Man	2009-117	8/17/2012	General Infiltration Practices	Sat	Sat	NA	NA	Sat	Sat	NA	
Running Man	2009-110	8/17/2012	General Infiltration Practices	Sat	Sat	NA	NA	Sat	Sat	NA	
Running Man	2009-102	8/17/2012	General Infiltration Practices	Sat	Sat	NA	NA	Sat	Sat	NA	
Running Man	2009-115	8/17/2012	General Infiltration Practices	Sat	Sat	NA	NA	Sat	Sat	NA	
Running Man Sec 2	U03b-4530-4439	8/17/2012	Retention Basin	with sediment, vegetation, leaves, and debris. Inlet swale at corner full of pine	filled in with sediment and debris and appears to be converting into a	Unsat	NA	maintenance/access path all the way around pond. Woody vegetation	Unsat - Debris and leaf removal needed. Tree removal needed.	Unsat - Woody vegetation has taken over; minimal ground cover present.	Unsat - Issues noted.
Running Man Sec. 10B	200800399	8/17/2012	Extended Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
York County Firestation #6	T09a-0313-3559	8/17/2012	Extended Detention Basin	disturbed/eroded area at top of inlet (near railroad) that needs repair. PVC pipe present here is not indicated	Sat	Sat	Sat	Sat	responsible to mow basin slopes and bottom periodically to maintain vegetation height no higher than 10". Mowing not	Sat - Wetland vegetation present in basin bottom. May need reinforcement planting in the Spring.	Sat

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York County Schools - York High School Field House	200600793	8/17/2012	Detention Basin	Sat	Sat	NA	NA	Sat	Sat	Sat	Sat
York County Firestation #4	O11d-4858-1419	8/16/2012	Extended Detention Basin	Sat	Sat - Some leaf build up on top of trash rack at outlet. Also sediment present at mouth of pipe into outfall	Sat	Sat	Sat	Unsat - Need mowing on slopes.	Sat - Wetland vegetation is coming in on bottom channel; phragmites and cattails are present.	Unsat - Issues noted.
Lowes Pond	20040004	8/15/2012	Retention Basin	covers from Lowes parking lot covered in debris. Trees are present around inlet	clearing of trash, debris, and trees. Trees are present on dam that need	Sat	NA	Unsat - Woody vegetation present.	need mowing. Access path near Chick-Fil-A needs mowing. Woody vegetation coming through rock	Unsat - Issues noted.	Unsat
York County Schools - Bruton HS	2004000001	8/15/2012	Detention Basin	Sat	Sat	Sat	NA	Sat - Erosion in same area as indicated above needs repair.	Sat	Sat	Sat
Felgates Woods	200600042	8/14/2012	Retention Basin	Unsat	Unsat	NA	Unsat	Unsat	Unsat	Unsat	Unsat
Oaks at Fenton Mill	200600863	8/14/2012	Retention Basin	Unsat - Inlet pipe areas have been cleared of woody/shrubby vegetation. Ensure no woody vegetation grows in these areas. Seed	Sat	Sat	Unsat - Spillway has been cleared of woody vegetation. Now area needs to be seeded and have permanent ground cover established.	Sat	Sat - Continue to remove woody vegetation as it emerges.	Sat - Continue to seed/stabilize any bare areas that may emerge.	Sat
Woods on Mansion	200600301	8/14/2012	Extended Detention Basin	vegetation present at inlet. Remove woody vegetation present with 10' of concrete headwall at inlet, including	have debris built up at mouth of pipe. Keep pipes clear of debris. Recommend adding some	NA - See above.	Sat	Sat	Sat	Unsat - Issues noted. Cattails present (OK). Woody vegetation present.	Sat
York County Operations Center	201100000	8/14/2012	Extended Detention Basin	Sat - Ditch on SD Cox side needs to have trees and debris completely removed from around pipe opening.	Sat	Sat	Sat	Sat	Sat	Unsat - Phragmites present in several areas around pond.	Sat
York County Courthouse	1997-01	8/9/2012	Extended Detention Basin	Unsat - Erosion present in inlet channels.	more detail. Perforated PVC is present on outlet structure that was used for sediment basin. Further	NA	NA	Sat	around this pond regularly to prevent deposition into the pond. Remove any fallen/deceased vegetation present.	Unsat - Some of the vegetation on wooded slope needs to be cleared and/or pruned.	Sat
York County Schools - Magruder Elementary School	200800173	8/9/2012	General Infiltration Practices	Sat	Sat	Sat - Some debris present on grate cover. Check drop inlet regularly and remove debris, especially pine needles.	Sat	Sat	Sat	Sat	Sat
York County Schools - Yorktown Middle School	200601157 C	8/9/2012	Retention Basin	Sat	Unsat - There is debris all around, on top, and clogging low flow orifice of outlet structure. Outlet structure and surrounding	Unsat - Clear and maintain an access path to terminal outfall area at all times. No trees should be permitted to grow on top or within 10' of outlet piping;	Sat	Sat	Sat - Note that there is a large bare area at the top of embankment of the far side of the pond. The area is permanently shaded so	Unsat - Remove debris (fallen tree?) from BMP. Maintain path to outfall (stated above).	Sat
Williamsburg Players	200700046	8/7/2012	Extended Detention Basin	Sat - Remove all woody vegetation occurring on top or within 10' of inlet piping or structures. Stabilize and repair eroded areas in inlet channel.	Unsat - Remove all woody vegetation occurring on top or within 10' of outlet piping or structures. Clear grate of drop inlet at outfall of all debris.	Unsat - Trash rack has been removed from top of riser and is laying beside structure. Replace and secure trash rack.	Sat	Sat	Unsat - Issues noted. Maintain slopes, bottom and embankments at no higher than 9".	Unsat - Issues noted. No woody vegetation is permitted to grow in the BMP structure.	Sat - Issues noted.
York County Schools - Tabb HS	199900001	8/7/2012	Detention Basin	Sat	Sat - New outlet structure and piping appears to be working well.	Sat	Sat	Sat	Sat - Mow/bushog entire basin bottom and slopes twice per year to discourage woody growth. Phragmites, typha and willow present. There is a tire near inlet	Sat	Sat
York County Schools - Yorktown Elementary School	200900019	8/7/2012	Grassed Swale	Sat	Unsat - At front corner of playing field where grass swales outfall into roadside ditch, there is a large eroded hole that needs repair. Looks like some			NA	Sat	Sat	Sat
York County Schools - Yorktown Elementary School	200900019	8/7/2012	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
York County Schools - Grafton Bethel Elementary School	S05b-4398-3831	8/7/2012	Detention Basin	present. Remove woody vegetation, including root, growing on top and within 10' of inlet pipe or headwall.	present. Remove woody vegetation, including root, growing on top or within 10' of outlet pipe, fill holes	Sat	Sat	Sat	Unsat - Remove trash, leaves, dead vegetation and litter. Mow slopes twice per year to discourage woody growth.	Sat	Sat
York County Schools - Grafton Bethel Elementary School	S05b-4398-3831	8/7/2012	Detention Basin	Sat - Note that there is some sediment present in inlet pipe.	Sat	Sat	NA	Sat	Sat	Sat	Sat

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Kiln Creek Villages and commercial Development	R03d-4506-1801 (Pond 8)	8/6/2012	Retention Basin	Sat	Sat	Sat	NA	Sat	Sat - Recommend mowing/cutting of vegetated buffer strip twice per year to deter woody vegetation. Currently there are pines and	Sat	Sat - Issues noted
York County Schools - Grafton High School Bus Parking Lot	200900005	8/6/2012	Extended Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat - The last time grass was cut, clippings were left in the shallow pool. No clippings should be deposited into pool.	Sat - The wetland plants that were added are doing well for the most part. Three of the plants were left in pots and need to be planted.	Sat
York County Sports Field Complex	200900093-A	8/6/2012	Retention Basin	Sat	Sat	Sat	Sat	Sat	Unsat - Mow/trim around inlet headwall and outfall structure.	Sat	Sat
York County Sports Field Complex	200900093-B	8/6/2012	Retention Basin	Sat	Sat	Sat	Sat	Sat	growing on top or within 10' of inlet or outlet pipe, including root. Mow area around inlet pipe. Mow both sides of emergency	Sat	Sat
York County Sports Field Complex	200900093-C	8/6/2012	Retention Basin	Sat - Mow area over inlet pipe along entire length and maintain at no higher than 9".	Sat	Sat	Sat	Sat	Unsat - Mow both sides of spillway and maintain area within 10' of spillway at no higher than 9".	Sat	Sat
York County Sports Field Complex	200900093-D	8/6/2012	Retention Basin	Sat	Sat	Sat	Sat	Sat	Unsat - Mow area around inlet and maintain at no higher than 9". Remove woody vegetation within 10' of piping, including	Sat - There is a large dead tree present on the embankment near the concrete spillway. Remove this tree before it falls onto spillway or into pond.	Sat
Ebby's Auto Painting	201000126	8/3/2012	Extended Detention Basin	Sat - Sediment is present in inlet pipe. Recommend lining curb inlet from parking lot with stones to help	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Homestead	U03a-0466-3747	8/3/2012	Retention Basin	Unsat - Trees present over inlet piping. All woody vegetation growing on top or within 10' of inlet pipe	NA - Could not inspect at this time.	NA - Could not inspect at this time.	NA - Could not inspect at this time.	NA - Could not inspect at this time.	Unsat - There needs to be an access path all the way around the pond that is always maintained.	Unsat - Remove leaves, needles and debris from slopes and embankments.	Unsat - Issues noted.
James York Plaza 2	200700976	8/3/2012	Detention Basin	corner that needs repair. Recommend riprap addition. Unsat - Inlet openings are clogged with sediment, vegetation and debris.	Unsat	(top and sides) of all debris. Remove outlet protection cover.	NA	Sat	Sat	Sat	Sat - Few bare areas need seeding.
James York Plaza 2	200400193 A	8/3/2012	Manufactured BMP Systems		Sat				Unsat - Prune trees in filter areas. Clear top of grates of vegetation and debris.	Sat	
York County Schools-Queens Lake Middle School Additions	F15d-4665-2009	8/3/2012	General Infiltration Practices	Sat	Sat	Sat	NA	NA	Sat	Sat	Sat
Patriot Village	U02a-0155-2545	8/2/2012	Retention Basin	Sat	Sat	Sat	Unsat - Woody vegetation, vines, debris present on spillway. Spillway should be	Sat - Recommend cleaning and maintaining a path all the way around the pond.	Sat	Sat	Sat
Patriot's Square Shopping Center	Q08b-4408-4590	8/2/2012	Retention Basin	vegetation present. Remove all woody vegetation present on top and within 10' of inlet	partially obstructed by a log and vegetative debris. Remove all debris from	Sat	NA	Sat	around pond; there is currently a significant amount present. Remove leaves and pine needles	Unsat - Issues noted.	Unsat - Issues noted above.
Skimino Fire Station	C20d-4032-2444	8/2/2012	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat - Remove fallen limbs from basin.	Sat - Wetland vegetation present in basin bottom. May need reinforcement planting at later date.	Sat
Kiln Creek Villages and commercial Development	R03a-2367-4769 (Pond 6)	7/31/2012	Retention Basin	concrete inlet swales are clogged with leaves and debris at the end of the	Unsat - Woody vegetation present near pipes needs removal.	Sat	NA	Sat	Sat	Sat	Sat - Issues noted.
Kiln Creek Villages and commercial Development	R03b-3961-3650 (Pond 5)	7/30/2012	Retention Basin	present. No woody vegetation should be present on top or within 10'	Unsat	NA	NA	Sat	from vegetated buffer zone and slopes. At minimum, prune vegetation to allow some access	Unsat - Issues noted.	Unsat
Kiln Creek Villages and commercial Development	R03b-3961-3650 (Pond 9)	7/30/2012	Retention Basin	in the inlet swale behind 310 Fairway; there is a hole forming. Hole should be filled and ground cover re-	Sat	NA	NA	on one side is completely wooded. At minimum, there should be a maintained access path	inlet/outlet areas and around embankment. Remove leaf litter and debris from vegetated buffer strip.	Sat	Unsat - Issues noted.
Kiln Creek Villages and commercial Development	S03a-0851-3485 (Pond 11)	7/30/2012	Retention Basin	Unsat - Inlet openings (area at end of pipe) near shopping center are obstructed with sediment and vegetation. Areas in	Sat	Sat	NA	(counted 5) low/eroded areas present on both sides along the retaining wall near golf course	Sat - Recommend annual mowing of vegetated buffer to keep out invasive/woody species. Keep inlet/outlet (pipe) areas clear and visible at all times.	Sat - Woody and invasive species present on slopes.	Sat - Issues noted.
Kiln Creek Villages and commercial Development	R03b-4149-4114 (Pond 10)	7/27/2012	Retention Basin	Sat	present. Remove all woody growth on top or within 10' of outlet (and/or inlet) piping; fill holes, and reestablish ground cover as	Sat	NA	Sat	Sat	Sat - Woody vegetation is present throughout vegetated buffer strip. Recommend periodic mowing of the buffer strip to deter woody growth.	Sat - Issues noted

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Kiln Creek Villages and commercial Development	S03c-1111-0506 (Lake 13)	7/25/2012	Retention Basin	Sat - Water level is high so could not inspect pipes in detail but appear to be in working order. Recommend top of inlet pipes.	Sat - Some sediment build up along channel but water flow is unobstructed.	Sat	NA	Sat	Sat - Vegetated buffer strip in place; recommend mowing this buffer all the way to water's edge twice per year to prevent further	Sat	Sat
Kiln Creek Villages and commercial Development	R04d-4731-0192 (Pond 16)	7/25/2012	Retention Basin	Recommend removing all woody vegetation growing on top or within 10' of inlet	Sat	NA	NA	access path completely around BMP. There is woody vegetation present along the retaining wall.	that directly behind residences. Remaining slopes could use mowing and clearing of leaves/debris.	Sat	Sat - Issues noted. Ground cover fairly well established (except in forested areas).
Kiln Creek Villages and commercial Development	R04d-4731-0192 (Pond 15)	7/25/2012	Retention Basin	Unsat - woody vegetation present over piping. Remove all woody vegetation occurring on top or within 10' of inlet piping, including	Sat	NA	NA	is present along retaining wall. Remove all woody vegetation within 10' of retaining wall and	Unsat - Clear leaves, pine needles, etc from slopes so that they do not deposit into pond. Maintain clear access to inlet/outlet areas at all times.	Unsat - there is no vegetated buffer strip present around entire shoreline. Recommend allowing this to grow to help prevent erosion. Undesireable woody vegetation present. Ground cover not	Unsat - Issues noted.
Kiln Creek Villages and commercial Development	R04d-4731-0192 (Pond 14)	7/25/2012	Retention Basin	keep accessible at all times. Remove woody vegetation growing on top or within 10' of inlet pipe, including root.	Unsat - Same as above for outlet areas.	NA	NA	present throughout. Clear and maintain an access path around entire structure.	leaves, debris from slopes and embankments. This needs to occur at minimum twice per year. Thin vegetation to allow access to	Unsat - Slopes are completely wooded and overgrown. There is no clear access to pond.	and allowed to become completely wooded. Recommend removal of some of the woody vegetation to allow access to pond.
Walgreens-Victory #10453	200800354	7/23/2012	Retention Basin	Sat	Sat	Sat	Sat	Sat	Unsat - Remove excessive (cut down) vegetative debris present on slopes.	Unsat - Ground cover not fully established throughout. Fully establish ground cover (seed & stabilize) on all slopes.	Unsat - See above.
Walgreens - Grafton #9811	200700211-A	7/20/2012	Bioretention Basins	Sat	Sat	Sat	NA	Sat	Sat	Unsat - Add four shrubs to replace deceased vegetation. See letter for acceptable species.	
Walgreens - Grafton #9811	200700211-B	7/20/2012	Bioretention Basins	Sat	Unsat - Repair eroded area (hole) occurring against drop inlet at corner of basin.	NA	NA	Sat	Sat	Unsat - Add 5 trees and 5 shrubs to replace deceased vegetation. See letter for acceptable species.	
WaWa - Williamsburg	200600352	7/20/2012	Detention Basin	vegetation growing on top or within 10' of inlet piping, including root. Fill holes and re-establish ground cover in any bare areas.	around outlet structure so that it is visible and easily accessible at all times. Remove any obstructions to outlet. Clear and	NA	Sat	Sat	Unsat - Mowing required.	Sat	Sat
Lackey Free Clinic	200200158	7/19/2012	Constructed Stormwater Wetland	Sat	not addressed from the first inspection was to clear and maintain a path to the outfall area (where pipe	Sat	Sat	Sat	Sat	Sat	Sat
Victory Meadows	V03b-3423-4439	7/18/2012	Detention Basin	Sat - Keep inlet areas clear of woody vegetation and visible at all times.	NA - Unable to inspect due to overgrowth. Will assess in winter. Keep outlet	NA	Sat	Unsat - Top of embankment is completely bare and eroding.	Sat	Unsat - Woody vegetation present. Phragmites and cattails abundant. Wetland vegetation OK.	Sat
York Colony Sec. 2	V03b-2666-4495	7/18/2012	Detention Basin	Sat	NA - Unable to inspect in detail due to overgrowth; will access in winter.	NA	Sat	Sat	Sat - Mow entire basin twice per year to discourage woody growth.	Unsat - Wetland plants present. Phragmites and cattails present. Woody vegetation present.	Sat
Mcdonald Bluffs	T04a-0788-4013	7/17/2012	Retention Basin	NA - Area overgrown. Unable to inspect in detail. Appears as if this part of the BMP may have become	NA - Unable to access.	NA - Unable to access.	Sat - Riprap is visible (has been cleared); unsure if spillway is at correct grade.	Sat	Sat - Clear and maintain access paths to inlet and outfall.	Unsat - Phragmites present and beginning to dominate. Vegetation needs to be cleared from inlet/outlet areas.	Sat - Issues noted.
Natasha House	R07b-3812-3287	7/17/2012	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Unsat - Need to leave more of a buffer strip around shoreline, especially since there is erosion occurring higher up on the slope.	Unsat
Wolf Trap Road Industrial Park	S08a-0172-3054	7/17/2012	Retention Basin	Sat	Sat	Sat	Sat	Sat	Unsat - Needs mowing on embankment	Sat	Sat
Caritas Meeting Hall	98-SP068	7/16/2012	Detention Basin	Sat	tree growing beside/on top of the outlet PVC pipe. This tree, including root, needs to be removed.	NA	Sat	Sat	Sat	Sat	Sat
Hollymeade	T03b-3627-4549	7/16/2012	Detention Basin	Sat - One eroded area in inlet channel that runs parallel to Victory. The	Unsat - Outlet ditch is filled with sediment/sand. The side slopes of the ditch	Sat	NA	Unsat - Woody growth present.	Unsat - Dead vegetation, limb and leaf removal needed.	Unsat	Unsat
Meadowlake Farms	T03b-3458-3482	7/16/2012	Retention Basin	Sat	Sat - Outlet channel unobstructed.	Sat	NA	Sat	Sat	Sat	Sat
New Life Presbyterian	200600048	7/16/2012	Extended Detention Basin	Unsat - Woody vegetation is present. Need to remove woody vegetation on top and within 10' of inlet	Sat - Outfall area (ditch) OK. Need to clear woody growth from outlet area (inside BMP) as stated	NA	Sat	Unsat - Woody vegetation present. Need to maintain access path around top of embankment at all times.	Unsat - Remove leaves and clippings from BMP. Do not dump limbs, clippings, etc. into BMP. Tree removal as indicated above.	Unsat - Issues noted.	Unsat - Issues noted.
P & H LC	S03c-2289-0512	7/16/2012	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Unsat - Ground cover not yet established throughout.	Sat - Issues noted.

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Precision Landscaping	200700981	7/16/2012	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Water's Edge BMP	200800494	7/16/2012	Retention Basin	Sat	Sat	Sat	Sat	Sat	Sat	throughout. The 3106 duck potato plants have not yet been installed. Right now, the focus will be establishing ground	Sat
Boundary Homes	2006-406	7/12/2012	Bioretention Basins	NA	NA	NA	NA	NA	Unsat - Remove weeds from basin, remove and replace dead plants, add mulch.	Unsat - Some plants missing or dead.	
Boundary Homes	2006-404	7/11/2012	Bioretention Basins	NA	Sat	NA	NA	NA	Sat - Remove weeds from basin	Sat	
Boundary Homes	2006-402	7/11/2012	Bioretention Basins	NA	Sat	NA	NA	NA	Sat	Sat	
Boundary Homes	2006-400	7/11/2012	Bioretention Basins	NA	Sat	NA	NA	NA	Sat	Sat	
Kmart	200000798	7/11/2012	Detention Basin	up at bottom of inlet swales and needs removal. Swales themselves are clear.	NA - Unable to inspect due to overgrowth in area.	NA	NA	Sat	leaves and dead vegetation from basin. Mow slopes and basin bottom as needed. Prune trees on	Unsat - Issues noted.	Unsat
Miller Mart Lightfoot	B19c-1184-1546	7/11/2012	Extended Detention Basin	corner has a lot of debris (clippings, limbs, vegetation) and needs clearing.	Sat	Sat	NA	Sat	Sat	Sat - Wetland vegetation present throughout bottom.	Sat
Sommerville Sec 1&2	T09d-4348-0714	7/10/2012	Retention Basin	no woody vegetation be present on top or within 10' of inlet or outlet structures	Sat	Sat	Sat	Sat	Sat	Sat	Sat
Winder's Pond	T06c-0662-2287	7/10/2012	Retention Basin	Sat - Inspected easement ditches and pipes. No major obstructions present.	vegetative debris inside the outfall structure that needs to be removed.	Sat	NA	Sat	Sat	Sat - Woody vegetation present; this is a mature system.	Sat - Issues noted. Overall satisfactory.
Winterfield BMP A	200700060-01	7/10/2012	Constructed Stormwater Wetland	Sat - Inlet swales all clear.	Sat - Outlet structure clear of debris and in good repair. Note that it is recommended that no	Sat	NA	Sat	Sat	Sat - Wetland vegetation good. Cattails are established in basin. There is undesirable woody vegetation present.	
Winterfield BMP B	200700060-02	7/10/2012	Constructed Stormwater Wetland	Sat - Inlet areas clear.	(including root) of any woody vegetation on top or within 10' of outlet structure or piping.	Sat	NA	Sat	Sat	Sat - Cattails present; woody vegetation present.	
Falcon Crest	P09b-4719-3190	7/9/2012	Detention Basin	Sat	Sat - There are some low spots occurring around the yard drain at the outlet. Recommend filling and re-	Sat	NA	Sat	Sat	Sat	Sat
Falcon Crest 2 (Edgehill 4)	200600050	7/9/2012	Constructed Stormwater Wetland	Unsat - Inlet pipe not visible due to vegetation. Recommend keeping inlet area clear and pipe visible at all times. Recommend	Sat - Outfall area clear.	Unsat - Sediment is built up around screen at outlet. Debris present on top of outlet grate. One tree coming up right beside (touching) outlet structure.	Sat	Unsat - Top of embankment is completely bare on one side and in various other areas; need ground cover.	Sat	Sat - Wetland vegetation is good. Pine trees need removal, especially near concrete piping. Cattails present and established. Willows are present throughout basin and will likely begin	
Prospect Park	S06d-4084-1209	7/9/2012	Retention Basin	inaccessible due to vegetation overgrowth and fencing. Recommend	of woody vegetation on top or within 10' of outlet pipe and/or structure.	Sat	Sat	present. Need to maintain access path around pond at all times.	path around pond. Clear inlet area to allow for access and regular inspection.	Unsat - Issues noted.	Sat - Not all slopes were accessible so this only applies to those that were during this inspection.
St. Kateri Parking Lot Exp.	200701036	7/9/2012	Extended Detention Basin	Unsat - Inlet piping not visible due to vegetation. Need to clear trees/shrubs from inlet area so that inlet	Unsat - woody vegetation in area, could not see pipe. There is also no access to outfall area. Recommend	NA	Sat - Recommend keeping riprap spillway clear of all vegetation.	Sat	Sat	Sat - Wetland vegetation and ground cover good. Excessive woody vegetation present.	Sat
Bruton Glen Subdivision	199900359	7/6/2012	Detention Basin	Unsat - Inlet swales contain stagnant water and sediment. Need to be cleared out to allow water	Unsat - Outlet area has woody vegetation and debris present. Outlet area needs to be clear of debris.	Unsat - The outfall structure is completely broken. One piece of the side wall is laying across in outfall structure. Unsure how	Sat	Sat - Well maintained.	Unsat - Remove leaves/dead vegetation from basin. Remove sediment from inlet swales.	Unsat	Sat
Consolidated Lodges	200500317	7/6/2012	Retention Basin	and there is visible sediment (no ground cover in channel). However the	joint between two of the concrete pipes that is not completely sealed. Graffiti	Sat - Completely dry - water level is low. No issues.	NA	Sat	Sat	Sat - Cattails are present and established at various locations along pond perimeter.	Sat
Sean's Glen	F14b-3890-4885	7/6/2012	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat - Woody vegetation is present in basin but it appears as if it may have never been cleared.	Unsat - The basin slopes are all wooded.
Victory Automotive Building and parking lot	S03d-4105-0039	7/6/2012	Detention Basin	Sat	removing holly tree (including root) growing on top of headwall of outlet structure. Pipe is clear.	Sat	NA	Sat	Sat	Unsat - Woody/shrubby vegetation (minimal) is present in BMP.	Sat
Woods of Tabb Sec1	200700049-A	7/5/2012	Retention Basin	Sat - Most inlet pipes are clear of vegetation/debris and 100% visible; this is perfect. Recommend not	Sat - Recommend removal of any woody vegetation occurring on top of or within 10' of outlet	Sat	NA	Sat	Sat	Sat - Woody vegetation present. Buffer not present throughout.	Sat
Woods of Tabb Sec1	V03d-4517-2272	7/5/2012	Retention Basin	unobstructed. Recommend removal of all woody vegetation growing on top	apparent. Recommend removal of all woody vegetation on top or within	Sat	NA	Sat	Sat	Sat	Sat

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Woods of Tabb Sec1	V03d-4180-1844	7/5/2012	Retention Basin	Lakes A&B regarding woody vegetation. The inlet pipe across from 207 Champions has riprap in the mouth of inlet - woody vegetation is present near piping. Remove woody vegetation on top of	the outlet area have been removed. Continue to remove saplings as they emerge to ensure woody area due to overgrowth. It appears OK; there is no	Sat	NA	Sat	Sat	Sat	Sat
Woods of Tabb-Sec7	200700049	7/5/2012	Constructed Stormwater Wetland	Unsats - woody vegetation is present near piping. Remove woody vegetation on top of	NA - Could not inspect area	NA - See above.	NA	Sat	Sat	Unsats - wetland vegetation is not present throughout BMP as per original plan. Specifically, the low marsh area is largely	
Woods on Mansion	200600301	7/5/2012	Extended Detention Basin	Unsats - Trees present close to piping that need removal.	NA	NA	NA	NA	Unsats - Mow and maintain BMP at 3-9" high. Maintain clear access path around BMP at all times.	Sat - Note that cattails are present in and around forebay.	Sat - Ground cover good but needs mowing.
7-eleven York-Warwick	Q09c-2476-1501	7/3/2012	Detention Basin	Unsats - The two inlet swales are clogged with sediment and debris and need clearing.	Unsats - there is woody vegetation present in the area. Recommend removal of woody vegetation,	Unsats - The grate on top of the drop inlet is completely covered with debris and needs clearing.	NA	NA	Unsats - Remove leaves, dead vegetation, trash, and debris from structure. Clear and maintain an access path to outfall area.	Unsats - Heavy, shrubby and woody vegetation present throughout. Poison ivy & sumac also present in structure. Minimal ground cover present.	Unsats - Issues noted.
AutoZone Williamsburg	200200022	7/3/2012	Detention Basin	Sat - Inlet riprap swale is covered in sediment and debris. Recommend clearing of riprap.	Unsats - Trees present near outlet structure. Recommend removal of woody vegetation within 10' of outlet structure,	Unsats - Grate is missing (corroded?) from top of outlet structure and should be replaced. 4" low flow orifice at bottom of structure appears to be	NA	NA	Unsats - Clear and maintain a path to outfall area, it is currently inaccessible. Remove trash from basin.	Sat - Cattails have dominated basin. Willow trees are emerging.	Sat
Buggy Bathe Car Wash Lube Facility	98-SP021	7/3/2012	Manufactured BMP Systems	Unsats - Both drop inlets are clogged. One is completely filled with sediment to ground level and the other	NA				NA	NA	NA
County Auto Broker	200200268	7/3/2012	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
Van Kniest, Inc Workshop	D17a-1576-3491	7/3/2012	Extended Detention Basin	Unsats - Black pipe draining into basin from adjacent drop inlet is almost full of sediment at opening; need	Sat - Clear vegetation from stone section at bottom of stringer (in middle of dam).	NA	NA	Sat - Woody vegetation is present.	Unsats - Remove leaves and debris from basin bottom. Remove sticks/dead vegetation piled beside/around the dam.	Sat	Sat - Noted woody vegetation, minimal ground cover.
Wendy's Patriots Square	Q08b-4325-3877	7/3/2012	Detention Basin	Sat	Sat	Sat	Sat	Sat	Sat	Sat	Sat
7-eleven Washington Square	S06c-1529-1559	7/2/2012	Detention Basin	Sat	Unsats - Yard drain covered in debris. Woody vegetation present around outlet structure. Outlet	NA	NA	Unsats - Woody vegetation present.	Unsats - BMP is full of trash that needs to be removed. Need to clear basin of woody vegetation as indicated above.	Unsats - Excessive woody/weedy vegetation present. Ground cover has been mostly shaded out.	Unsats
East Coast Exotics	S03b-4010-3823	7/2/2012	Detention Basin	Unsats - Pipe is clogged with sediment and vegetation. Recommend clearing pipe. Rearrange riprap if needed so that it is not blocking	Unsats - there is undermining going on around concrete outlet pipe, ground is loose in area around pipe. One	NA	NA	Sat	Sat	Sat	Sat
Shiloh Baptist Church	P11c-0304-1041	7/2/2012	General Infiltration Practices	Sat - Unable to see piping due to water level but there is no evidence of obstruction.	Sat	Sat	NA	Sat	Sat - Will need mowing soon.	Sat	
Victory Self Storage	S04d-2678-0817	7/2/2012	Detention Basin	Sat	Sat	Sat	NA	Sat	Sat	Sat	Sat
York Meadows	S02d-4764-1358	7/2/2012	Retention Basin	Unsats - woody vegetation present in area. Recommend removal of all woody vegetation on top or within	NA - Could not assess due to overgrowth. There is woody vegetation present. Same comment as inlet	NA - Unable to assess.	NA	Sat	Sat	Unsats - Woody/shrubby vegetation surrounding pond.	Sat - Issues noted
York Meadows	T02c-0750-1561	7/2/2012	Retention Basin	and unobstructed. There are trees present in area. Recommend removal of	above regarding outlet piping. Recommend keeping outlet area clear	Sat	NA	Sat	Sat	Sat - Woody vegetation noted. Vegetated buffer is present but does contain a lot of weedy/shrubby species.	Sat - Issues noted