



Fauquier County, Virginia

**Municipal Separate Storm Sewer
System (MS4) Fiscal Year 2019
Annual Report**

October 1, 2019



Department of Community Development
10 Hotel Street
Warrenton, VA 20186
540-422-8210

**Submitted to the Virginia Department of Environmental Quality in
compliance with Permit No. VAR040123**

MS4 Fiscal Year 2019 Annual Report, Fauquier County

A. Report Requirements

a) *Permittee name and permit number:*

Fauquier County; Permit number VAR040123

b) *The annual report permit year and reporting period:*

The five-year MS4 permit was issued on October 31, 2018. The permit became effective on November 1, 2018. This permit will expire on October 31, 2023. This report is for the period July 1, 2018 – June 30, 2019.

c) *Signed Certification Statement:*

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.

Fauquier County by: Paul McCulla 9-30-19
Paul McCulla, Fauquier County Administrator Date

d) *Minimum Control Measure annual reporting items:*

These are listed on the following pages.

e) *Evaluation of program implementation:*

Evaluations are included on the following pages with the minimum control measure descriptions.

f) *Chesapeake Bay TMDL action plan implementation update:*

TMDL action plan implementation update included as appendix.

Minimum Control Measure Implementation

1. MCM1 – Public Education and Outreach

From the County's MS4 Permit:

1. Public education and outreach.

g. The annual report shall include the following information:

(1) A list of the high-priority stormwater issues the permittee addressed in the public education and outreach program; and

(2) A list of the strategies used to communicate each high-priority stormwater issue.

(1)

1. Chesapeake Bay Pollutants (Nitrogen, Phosphorous, and Suspended Solids)
2. Homeowner Strategies for Urban Stormwater Management
3. Value and Importance of Stream Buffers

(2) The public education related to the Chesapeake Bay pollutants took place through the "What Does Clean Water Mean To Me?" contest for elementary school students conducted through the Warrenton Waterways Cleanup Initiative as well as informational signage and messaging in the form of storm drain medallions and the "Write as Rain" campaign utilizing messaging that only was visible when sidewalks were wet.

Homeowner strategies were tackled through the provision of the Homeowner's Guide to a Watershed Friendly Backyard as an available resource from the County offices. The Community Development Department's Stormwater Division also had a presence at the Vint Hill Fall Festival to spread awareness of the importance of stormwater quality. Finally, a number of resources and links to relevant information are available through the Community Development website.

John Marshall Soil and Water Conservation District leads the County's efforts with regard to teaching the value and importance of stream buffers among other environmental concerns. They accomplished this through interactive workshops and events that reached 3,127 children and 296 adults.

The County is successfully implementing this minimal control measure in collaboration with the Town of Warrenton.

2. MCM2 – Public Involvement/Participation

From the County’s MS4 Permit:

2. Public involvement and participation.

f. The annual report shall include the following information:

- (1) A summary of any public input on the MS4 program received (including stormwater complaints) and how the permittee responded;*
- (2) A webpage address to the permittee’s MS4 program and stormwater website;*
- (3) A description of the public involvement activities implemented by the permittee;*
- (4) A report of the metric as defined for each activity and an evaluation as to whether or not the activity is beneficial to improving water quality; and*
- (5) The name of other MS4 permittees with whom the permittee collaborated in the public involvement opportunities.*

(1) There was no public input received on the MS4 program.

(2) MS4 Program website: <https://www.fauquiercounty.gov/government/departments-a-g/community-development/planning/long-range-planning/ms4-permit-program>

Stormwater website: <https://www.fauquiercounty.gov/government/departments-a-g/community-development/land-development/stormwater-and-erosion-sediment-control>

(3) There is some overlap between the public education and public involvement activities implemented to raise understanding and awareness of the importance of stormwater quality. In collaboration with the Town of Warrenton, the County helped to promote a stormwater pollution prevention poster contest that went out to all of the elementary students in the Fauquier community and resulted in 72 submissions of posters detailing various aspects of water quality concerns. The winners were showcased on a 3’x8’ banner before 8-9,000 in attendance at the 2018-19 “Warrenton Town Limits” event. Also previously mentioned, the John Marshall Soil and Water Conservation District presented 160 water programs and hosted 5 riparian tree planting/maintenance events that involved 3,127 children and 296 adults. The detailed list of those events can be found below.

Program Date	Location	Name of Group/Class	Purpose of Program	Children in Attendance	Adults in Attendance	Programs Presented
8/1/18	Northern Fauquier Community Park	Nature Day Camp	Watersheds/Chesapeake Bay	9	1	1
9/4/18	Kettle Run High School	Ecology	Stream Monitoring Training	50	2	2
9/6/18	Vint Hill Park	Ecology	Stream Monitoring	50	2	2
9/19/18	Bradley Elementary School	4th Grade	AR Sandbox - Watersheds	68	4	3
9/20/18	Brumfield Elementary School	5th Grade	Leaf Pack Project - Phase I	46	3	2
9/21/18	Brumfield Elementary School	5th Grade	Leaf Pack Project - Phase I	46	3	2
9/26/18	Fauquier Education Farm	AP Environmental Science	Stream Monitoring	15	1	1
10/3/18	PB Smith Elementary School	Ecology Club	Leaf Pack Project Phase I	30	1	1
10/4/18	Vint Hill Park	Ecology	Stream Monitoring	50	2	2

10/9/18	Fauquier High School	Ecology	Stream Monitoring Training	48	2	4
10/10/18	Liberty High School	Ecology	Water Monitoring/Leaf Pack Project Phase I	54	5	6
10/11/18	Cedar Run	Ecology	Stream Monitoring	48	2	2
10/15/18	Coleman Elementary School	5th Grade	Leaf Pack Project - Phase I	74	6	3
10/17/18	Brumfield Elementary School	5th Grade	Leaf Pack Project - Phase II	46	3	2
10/18/18	Brumfield Elementary School	5th Grade	Leaf Pack Project - Phase II	46	3	2
10/23/18	Fauquier High School	Ecology	Floating Wetland	22	1	1
10/25/18	Messick Farm	Taylor Middle School 7th Grade	7th Grade Farm Field Day	165	20	8
10/31/18	Marriott Ranch	Natural Resources - FHS	MWEE Field Experience	15	2	2
11/1/18	Vint Hill Park	Ecology & AP Environmental Science	Stream Monitoring	50	2	2
11/7/18	PB Smith Elementary School	Ecology Club	Leaf Pack Project Phase II	30	2	1
11/29/18	Liberty High School	Ecology	Leaf Pack Project - Phase II	54	5	6
11/30/18	Marshall Middle School	7th Grade	Leaf Pack Project - Phase I	80	5	4
12/6/18	Vint Hill Park	Ecology & AP Environmental Science	Stream Monitoring	50	3	2
12/17/18	Marshall Middle School	7th Grade	Leaf Pack Project - Phase II	80	5	4
12/19/18	PB Smith Elementary School	Ecology Club	Leaf Pack Project - Phase III	30	2	1
12/20/18	Coleman Elementary School	5th Grade	Leaf Pack Project - Phase II	74	6	3
2/5/19	Kettle Run High School	Ecology/AP Environmental Science	Stream Monitoring Training	76	4	3
2/7/19	Vint Hill Park	Ecology/AP Environmental Science	Stream Monitoring	76	4	3
2/19/19	Auburn Middle School	6th Grade	Enviroscape	81	6	4
2/25/19	Auburn Middle School	6th Grade	Enviroscape	77	5	4
3/7/19	Vint Hill Park	Ecology/AP Environmental Science	Stream Monitoring	50	3	2
3/11/19	Marriott Ranch	Teachers	Teacher Training	0	6	2
3/12/19	Marriott Ranch	Teachers	Teacher Training	0	8	2
3/16/19	Fauquier High School	5th Grade	Science Fair STEMinar	96	0	4
3/21/19	Auburn Middle School	6th Grade	Water Testing	82	4	4
3/27/19	Taylor Middle School	6th Grade	Water Testing	74	5	4
3/28/19	Taylor Middle School	6th Grade	Water Testing	74	5	4
3/30/19	Wildcat Hollow	PB Smith Ecology Club	Trout Release (Macros)	12	8	1
4/4/19	Vint Hill Park	Ecology/AP Environmental Science	Stream Monitoring	76	4	3
4/11/19	Fauquier Education Farm	3rd Grade	3rd Grade Farm Field Days	136	12	8
4/12/19	Fauquier Education Farm	3rd Grade	3rd Grade Farm Field Days	185	16	8
4/12/19	Kinloch Farm	3rd Grade	3rd Grade Farm Field Days	150	12	8

4/24/19	Liberty High School	Ecology	Leaf Pack Project - Phase I	70	4	3
4/29/19	Auburn Middle School	6th Grade	Water Testing	77	5	4
5/2/19	Vint Hill Park	Ecology/AP Environmental Science	Stream Monitoring	76	4	3
5/15/19	Taylor Middle School	7th Grade	Stream Study	80	4	4
5/16/19	Taylor Middle School	7th Grade	Stream Survey	80	5	4
5/21/19	Liberty High School	Ecology	Leaf Pack Project - Phase II	39	4	3
5/28/19	Fauquier Outdoor Lab	Auburn Middle School 6th Grade	Macroinvertebrates	80	8	6
				3077	229	160

Program Date	Location	Name of Group/Class	Purpose of Program	Children in Attendance	Adults in Attendance	
3/24/19	Riddell Property	Boy Scouts	Tree Maintenance - NO PLANTING	10	4	
4/1/19	Riverside Preserve	FHS Students	Tree Planting	35	4	*With Friends of the Rappahannock
4/7/19	Marriott Ranch	General Public	Tree Planting	15	55	*With Friends of the Rappahannock
4/22/19	Springfield Farm	KRHS Environmental Science	Tree Planting	23	1	*With Goose Creek Association
4/27/19	Hidden Creek Farm	Highland School	Tree Planting	12	3	*With Goose Creek Association

(4) It is believed that education is the most effective tool for improving water quality amongst the 'population' of the County's MS4 area which primarily consists of seven schools. The combined 2017-18 attendance (the most recent year for which attendance data is available) of these schools was 4,059. With over 3,000 students involved in the JMSWCD programs alone, the majority of these students are being educated on the importance of water quality.

(5) Fauquier County collaborated with the Town of Warrenton on public outreach opportunities.

The County is successfully implementing this minimal control measure on collaboration with the Town of Warrenton and other allied organizations in the community.

Site ID	Site Description	Watershed	Proposed Practice	RR or ST	Impervious Cover (acre)	Turf Cover (acre)	Forest Cover (acre)	Drainage Area (acre)	%KIC	%Turf	%Forest	P (in)	Rv	Target Storage WCq (CF)	Available Practice Width (ft)	Available Practice Length (ft)	IWS (Yes/No)	Ponding Depth (in)	Dry Filter Depth (in)	Wet Filter Depth (in)	Gravel Depth (in)	Top Surface Area (SF)	Bottom Surface Area (SF)	Ponding Volume (CF)	Soil & Gravel Storage Volume (CF)	Max avail vol (CF)	Proposed Volume (CF)	% Water Quality	TN Pollutant Load (lbs/yr)	TP Pollutant Load (lbs/yr)	TSS Pollutant Load (lbs/yr)	Runoff Depth (in)	Captured per (in)	Total Nitrogen Removal (%)	Total Nitrogen Removal (lbs/yr)	Total Phosphorus Removal (%)	Total Phosphorus Removal (lbs/yr)	Total TSS Removal (%)	Total TSS Removal (lbs/yr)	Construction Cost \$
F1 - A	Taylor Middle School	Potomac	Bio-retention	RR	1.74	3.43	2.34	7.21	24%	43%	32%	1.00	0.34	8,834	50	90	No	12	24	0	12	4500	3696	4098	3326.4	7424	7424	84%	73.20	4.40	2773.0	1.18	52.2	45.52	72.8	3.20	78.0	2,162.3	181,611	
F1 - B (Option 1)	Taylor Middle School	Potomac	Dry Swale	RR	0.11	0.41	0.18	0.70	16%	59%	26%	1.00	0.29	737	10	100	No	12	24	0	12	1000	376	588	338.40	1026	737	100%	0.95	0.37	216.57	1.82	56.5	4.62	77.7	0.29	83.4	180.66	14,733	
F1 - B (Option 2)	Taylor Middle School	Potomac	Bio-retention	RR	0.25	0.12	0.00	0.38	67%	33%	0%	1.00	0.71	967	15	90	No	12	24	0	12	1350	756	1053	880.40	1733	967	100%	5.49	0.46	316.56	1.06	50.7	3.33	71.0	0.33	76.1	240.75	523,654	
F1 - C	Taylor Middle School	Potomac	Bio-retention	RR	0.42	2.55	0.12	3.09	14%	83%	4%	1.00	0.31	3,506	30	180	No	12	24	0	12	5400	4176	4788	3758.4	3546	3506	100%	13.41	1.74	950.91	2.29	87.1	22.43	78.4	1.37	84.4	802.27	85,766	
F2	James Brumfield Elementary School	Potomac	Filtering Practice	ST	4.81	2.90	0.34	8.05	50%	36%	4%	1.00	0.65	18,962			No	12	18	0	12	4600	4000	4300	3100.0	7400	7400	39%	112.1	0.03	5174.5	0.42	23.7	16.55	37.2	3.36	47.4	2,973.8	363,822	
F4 - A	Warrenton Middle School (Dry Swale & Bio-retention combo)	Potomac	Bio-retention	RR	4.28	5.85	3.07	13.20	32%	44%	23%	1.00	0.41	19,871			No	12	18	0	12	5000	4500	4750	3487.5	8238	8238	41%	147.2	0.73	5285.5	0.53	46.3	68.17	34.0	5.25	57.9	3,636.2	2,901,531	
F4 - B	Warrenton Middle School	Potomac	Regenerative Stormwater Conveyance	RR	0.01	0.74	0.22	0.97	1%	77%	23%	1.00	0.18	547	20	240	No	6	9	0	6	4800	3650	3169	1368.8	4538	547	100%	0.75	0.34	155.23	0.19	70.0	5.13	80.0	0.27	85.0	131.95	249,096	
F6 - A	Alice Jane Childs Building	Rappahannock	Permeable Pavers	RR	1.25	0.18	0.12	2.55	49%	7%	44%	1.00	0.50	4,629	40	100	No	6	6	0	6	4000	4000	0	2400.0	2400	2400	52%	17.23	1.98	605.83	0.53	46.2	7.96	53.8	1.07	57.7	349.43	151,551	
F6 - B1	Alice Jane Childs Building	Rappahannock	Bio-retention	RR	0.21	0.01	0.03	0.25	84%	4%	12%	1.00	0.81	726	10	20	No	6	24	0	12	200	119	80	107.10	187	187	26%	2.11	0.30	89.98	0.25	27.8	0.59	32.5	0.10	34.8	31.30	54,575	
F6 - B2	Alice Jane Childs Building	Rappahannock	Bio-retention	RR	0.44	0.46	0.56	1.46	30%	32%	38%	1.00	0.37	1,967			No	6	24	0	12	584	500	296	450.00	746	746	38%	8.84	0.87	244.33	0.47	43.1	3.81	50.3	0.44	53.9	131.59	318,250	
F7	Fauquier High School	Rappahannock	Construct Wetlands	ST	10.48	28.55	25.12	64.15	16%	45%	39%	1.00	0.27	52,600	52	300	Yes	6	6	0	24	5100	4753	2488	792.17	3280	3280	5%	352.0	28.90	7484.3	0.09	8.3%	22.18	5.9%	22.6	0.86	12.6	343.76	40,578
F8 - A	Bradley Elementary School	Potomac	Bio-retention	RR	0.90	0.73	0.59	2.22	41%	33%	26%	1.00	0.47	3,770	15	100	No	6	12	0	12	1500	1164	566	291.00	957	957	25%	25.64	1.83	2228.5	0.29	31.6	11.0	36.8	0.67	38.4	484.44	523,412	

BMP Tabular Data

Date Installed	BMP Name	Practice Description	Impervious Acres Treated	Total Acres Treated	Runoff Captured	Measurement Unit	Amount Applied	Latitude	Longitude	HUC12	State FIPS	Lifespan	Inspect Date	Maint Date	Contact Name	Contact Phone	Contact Email
6/30/2005	Alice Jane Childs Building Swale 1	Grassy Swale	1.89	3.03				6,944,408 N	11,680,131 E	20801030203					Michael Kresse		michael.kresse@faquiercounty.gov
6/30/2005	Alice Jane Childs Building Swale 2	Grassy Swale	2.66	5.93				6,944,408 N	11,680,131 E	20801030203					Michael Kresse		michael.kresse@faquiercounty.gov
6/30/2005	Auburn Middle School Dry Pond	Dry Retention Pond	3.12	19.7				6,951,621 N	11,706,554 E	20700100503			5/1/2019		Tom Edwards		tedwards@fcps1.org
6/30/2005	Auburn Middle School Swale 1	Grassy Swale	0	0.55				6,952,888 N	11,706,345 E	20700100503					Tom Edwards		tedwards@fcps1.org
6/30/2005	Auburn Middle School Swale 2	Grassy Swale	0.32	0.78				6,953,134 N	11,706,475 E	20700100503					Tom Edwards		tedwards@fcps1.org
6/30/2005	Auburn Middle School Swale 3	Grassy Swale	0.47	7.22				6,952,768 N	11,706,113 E	20700100503					Tom Edwards		tedwards@fcps1.org
6/30/2005	CM Bradley Elementary School Swale	Grassy Swale	1.03	7.66				6,951,677 N	11,682,825 E	20700100601					Tom Edwards		tedwards@fcps1.org
6/30/2005	Brumfield Elementary School Dry Pond	Dry Retention Pond	4.65	5.41				6,938,531 N	11,684,339 E	20700100602			5/1/2019		Tom Edwards		tedwards@fcps1.org
6/30/2005	Brumfield Elementary School Swale	Grassy Swale	4.05	18.46				6,938,551 N	11,684,706 E	20700100602					Tom Edwards		tedwards@fcps1.org
6/30/2005	Fauquier High School Swale 1	Grassy Swale	0	3.18				6,947,032 N	11,677,057 E	20801030203					Tom Edwards		tedwards@fcps1.org

6/30/2005	Fauquier High School Swale 2	Grassy Swale	0	8.13					6,946,919 N	11,677,309 E	20801030203				Tom Edwards	tedwards@fcps1.org
6/30/2005	Fauquier High School Swale 3	Grassy Swale	0	5.96					6,946,841 N	11,677,593 E	20801030203				Tom Edwards	tedwards@fcps1.org
6/30/2005	Fauquier High School Swale 4	Grassy Swale	0	1.55					6,946,079 N	11,677,112E	20801030203				Tom Edwards	tedwards@fcps1.org
6/30/2005	Fauquier High School Swale 5	Grassy Swale	0	0.1					6,946,545 N	11,678,248 E	20801030203				Tom Edwards	tedwards@fcps1.org
6/30/2005	PB Smith Elementary School Swale	Grassy Swale	0.49	7.41					6,952,039 N	11,693,998 E	20700100601				Tom Edwards	tedwards@fcps1.org
6/30/2005	Taylor Middle School Swale 1	Grassy Swale	0.38	0.86					6,939,519 N	11,684,846 E	20801030203				Tom Edwards	tedwards@fcps1.org
6/30/2005	Taylor Middle School Swale 2	Grassy Swale	0.75	3.55					6,939,100 N	11,685,024 E	20801030203				Tom Edwards	tedwards@fcps1.org
6/30/2005	Vint Hill Village Green Pond	Dry Retention Pond	3.47	17.52					6,954,391 N	11,716,976 E	20700100503		4/24/2019		Gary Rzepecki	gary.rzepecki@faulquiercounty.gov
6/30/2005	Warrenton Middle School Swale	Grassy Swale	3.97	9.76					6,944,459 N	11,681,353 E	20801030203				Tom Edwards	tedwards@fcps1.org

Table 2b: Calculation Sheet for Estimating Existing Source Loads for the Potomac River Basin *Based on Chesapeake Bay Program Watershed Model Phase 5.3.2					
Subsource	Pollutant	Total Existing Acres Served by MS4 (6/30/09)	2009 EOS Loading Rate (lbs/acre)	Estimated Total POC Load Based on 2009 Progress Run	
Regulated Urban Impervious	Nitrogen	78.871	16.86	1,329.759	5,160.306
Regulated Urban Pervious		380.392	10.07	3,830.547	
Regulated Urban Impervious	Phosphorus	78.871	1.62	127.770	283.731
Regulated Urban Pervious		380.392	0.41	155.961	
Regulated Urban Impervious	Total Suspended Solids	78.871	1,171.32	92,382.756	159,255.663
Regulated Urban Pervious		380.392	175.8	66,872.907	

Table 2c: Calculation Sheet for Estimating Existing Source Loads for the Rappahannock River Basin *Based on Chesapeake Bay Program Watershed Model Phase 5.3.2					
Subsource	Pollutant	Total Existing Acres Served by MS4 (6/30/09)	2009 EOS Loading Rate (lbs/acre)	Estimated Total POC Load Based on 2009 Progress Run	
Regulated Urban Impervious	Nitrogen	35.288	9.38	331.001	859.857
Regulated Urban Pervious		99.037	5.34	528.857	
Regulated Urban Impervious	Phosphorus	35.288	1.41	49.756	87.390
Regulated Urban Pervious		99.037	0.38	37.634	
Regulated Urban Impervious	Total Suspended Solids	35.288	423.97	14,961.024	20,508.076
Regulated Urban Pervious		99.037	56.01	5,547.052	

Table 3b: Calculation Sheet for Determining Total POC Reductions Required During this Permit Cycle for the Potomac River Basin *Based on DEQ Guidance Memo 15-2005					
Subsource	Pollutant	Total Existing Acres Served by MS4 (6/30/09)	Second Permit Cycle Required Reduction in Loading Rate (lbs/acre)	Total Reduction Required Second Permit Cycle (lbs)	
Regulated Urban Impervious	Nitrogen	78.871	0.60696	47.871	139.804
Regulated Urban Pervious		380.392	0.24168	91.933	
Regulated Urban Impervious	Phosphorus	78.871	0.10368	8.177	12.700
Regulated Urban Pervious		380.392	0.01189	4.523	
Regulated Urban Impervious	Total Suspended Solids	78.871	93.71	7,390.620	9,731.172
Regulated Urban Pervious		380.392	6.153	2,340.552	

Table 3c: Calculation Sheet for Determining Total POC Reductions Required During this Permit Cycle for the Rappahannock River Basin *Based on DEQ Guidance Memo 15-2005					
Subsource	Pollutant	Total Existing Acres Served by MS4 (6/30/09)	Second Permit Cycle Required Reduction in Loading Rate (lbs/acre)	Total Reduction Required Second Permit Cycle (lbs)	
Regulated Urban Impervious	Nitrogen	35.288	3.3768	119.160	131.853
Regulated Urban Pervious		99.037	0.12816	12.693	
Regulated Urban Impervious	Phosphorus	35.288	0.09024	3.184	4.276
Regulated Urban Pervious		99.037	0.01102	1.091	
Regulated Urban Impervious	Total Suspended Solids	35.288	33.92	1,196.882	1,391.029
Regulated Urban Pervious		99.037	1.96035	194.147	

5. Means and Methods to Meet the Required Reductions and Schedule

Table displaying potential green infrastructure improvements attached. The specific combination of improvements has not been determined, however, the final improvements will meet the required reductions. The Filtering Practice at James Brumfield Elementary School has been partially funded through a grant from the National Fish and Wildlife Foundation. Remaining funding is presently being sought and construction is anticipated to occur in the first half of 2020.

6. Means and Methods to Offset Increased Loads From New Sources Initiating Construction Between July 1, 2009 and June 30, 2014

No new construction initiated within MS4 area between 2009 and 2014.

7. Means and Methods to Offset Increased Loads From Grandfathered Projects That Begin Construction After July 1, 2014

There are no grandfathered projects.

8. A List of Future Projects, and Associated Acreage that Qualify as Grandfathered

There are no grandfathered projects.

9. An Estimate of the Expected Cost to Implement the Necessary Reductions

Table displaying estimated costs of potential green infrastructure improvements attached. The County has received updated cost estimates for the project at CM Bradley (\$75,300), Fauquier High School (\$127,596) and Vint Hill Village Green (\$412,656).

10. Public Comments on Draft Action Plan

The draft Chesapeake Bay TMDL Plan was posted to the Fauquier County Department of Community Development's MS4 webpage the week of May 28th, 2018. The Department's Facebook page also was used to advertise that the draft was posted. A stakeholder meeting of impacted property owners was held on May 30th to provide an overview of the draft plan. No comments were received.

3. MCM3 – Illicit Discharge Detection and Elimination

From the County's MS4 Permit:

3. Illicit discharge detection and elimination.

e. The annual report shall include:

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

(2) The total number of outfalls screened during the reporting period as part of the dry weather screening program; and

(3) A list of illicit discharges to the MS4 including spills reaching the MS4 with information as follows:

(a) The source of illicit discharge;

(b) The dates that the discharge was observed, reported, or both;

(c) Whether the discharge was discovered by the permittee during dry weather screening, reported by the public, or other method (describe);

(d) How the investigation was resolved;

(e) A description of any follow-up activities; and

(f) The date the investigation was closed.

(1) The MS4 Map and information table have been updated to reflect any changes to the MS4 occurring on or before June 30, 2019.

(2) All MS4 outfalls (22 outfalls) were screened during the reporting year as a part of the dry weather screening program. The results were:

Outfall	Location	Type	Date	Condition
OF-001	Fauquier High School	12" PVC Pipe	04/17/2019	Dry and in good condition
OF-002	Fauquier High School	18" HDPE Pipe	06/17/2019	Dry and in good condition
OF-003	Fauquier High School	12" Vitreous Clay Pipe	04/17/2019	Dry and in good condition - Inlet upstream in parking lot was clogged and required maintenance
OF-004	Fauquier High School	18" HDPE Pipe	04/17/2019	Dry and partially submerged in sediment – required maintenance
OF-005	Fauquier High School	Earthen Stream Channel	06/17/2019	Stream with steady flow – monitoring results in next table
OF-006	Alice Jane Childs Building	36" RCP Pipe	04/18/2019	Dry and in good condition
OF-007	Alice Jane Childs Building	24" RCP Pipe	04/18/2019	Dry with parking lot sediment present
OF-008	Warrenton Middle School	Earth Lined Swale	06/04/2019	Water was flowing at time of inspection but not tested at this location
OF-009	Fleet Maintenance Facility	15" RCP Pipe	04/18/2019	Dry and in good condition
OF-010	Fleet Maintenance Facility	Gulley	05/16/2019	Dry w/ vegetation in outfall vicinity
OF-011	Fleet Maintenance Facility	Gulley	05/16/2019	Dry w/ vegetation in outfall vicinity
OF-012	Brumfield Elementary School	15" RCP Pipe	06/04/2019	Dry and in good condition
OF-013	Bradley Elementary School	Swale/Pipe	04/18/2019	Outfall not located on site – believed to be in VDOT ROW
OF-014	PB Smith Elementary School	18" HDPE Pipe	04/18/2019	Dry and in good condition
OF-015	PB Smith Elementary School	Earth Lined Swale	06/27/2019	Vicinity in good condition, flowing water at time of inspection – monitoring results in next table
OF-016	Auburn Middle School	42" RCP Pipe	06/27/2019	Perennial waters flow through BMP to outfall – monitoring results in next table

OF-017	Auburn Middle School	15" RCP Pipe	04/18/2019	Fully submerged in sediment and partially submerged in water, required maintenance
OF-018	Auburn Middle School	18" RCP Pipe	04/18/2019	Dry and in good condition
OF-019	Vint Hill Village Green	Grass Lined Swale	04/18/2019	Dry and in good condition
OF-020	Vint Hill Village Green	15" RCP Pipe	04/18/2019	Dry and in good condition
OF-021	Vint Hill Village Green	15" RCP Pipe	04/18/2019	Dry and in good condition
OF-022	Vint Hill Village Green	15" RCP Pipe	06/27/2019	Water was flowing at time of inspection – monitoring results in next table

Outfall	Cloud Cover	Air Temp	Water Temp	Chlorine (mg/L)	Hardness (mg/LCaCO ₃)	Turbidity (FNU/NTU)	pH	DO (mg/L)	Nitrate (mg/L)
OF-005	Partly Cloudy	86F	26.9C	1.05	75	4.93	7.39	13.0	28.4
OF-015	Mostly Cloudy	92F	22.3C	1.16	<20	8.90	5.63	12.0	58.2
OF-016	Mostly Cloudy	92F	31.2C	3.64	20	81.9	7.74	>15	23.3
OF-022	Mostly Cloudy	92F	22.1C	0.65	35	15.7	6.19	10.8	28.0

(3) There were no illicit discharges to the MS4 during the reporting year.

The County is successfully implementing this minimal control measure. Outfalls requiring maintenance have been reported to Fauquier County Public Schools for repair and will be verified during the next dry screening.

4. MCM4 – Construction Site Stormwater Runoff Control

From the County's MS4 Permit:

4. Construction site stormwater runoff control.

d. The annual report shall include the following:

(1) If the permittee implements a construction site stormwater runoff control program in accordance with Part I E 4 a (3):

(a) A confirmation statement that land disturbing projects that occurred during the reporting period have been conducted in accordance with the current department approved standards and specifications for erosion and sediment control; and

(b) If one or more of the land disturbing projects were not conducted with the department approved standards and specifications, an explanation as to why the projects did not conform to the approved standards and specifications.

(2) Total number of inspections conducted; and

(3) The total number and type of enforcement actions implemented and the type of enforcement actions.

(1) There were no land disturbing projects that occurred during the reporting period within the MS4 area.

(2) There were no inspections conducted.

(3) There were no enforcement actions taken.

The County is successfully implementing this minimal control measure.

5. MCM5 – Post-Construction Stormwater Management

From the County's MS4 Permit:

5. Post-construction stormwater management for new development and development on prior developed lands.

h. The annual report plan shall include the following information:

(1) If the permittee implements a VSMP in accordance with Part I E 5 a (3):

(a) The number of privately owned stormwater management facility inspections conducted; and

(b) The number of enforcement actions initiated by the permittee to ensure long-term maintenance of privately owned stormwater management facilities including the type of enforcement action;

(2) Total number of inspections conducted on stormwater management facilities owned or operated by the permittee;

(3) A description of significant maintenance, repair, or retrofit activities performed on the stormwater management facilities owned or operated by the permittee to ensure it continues to perform as designed. This does not include routine activities such as grass mowing or trash collection;

(4) A confirmation statement that the permittee submitted stormwater management facility information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which the permittee was required to obtain coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities in accordance with Part I E 5 f or a statement that the permittee did not complete any projects requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities; and

(5) A confirmation statement that the permittee electronically reported BMPs using the DEQ BMP Warehouse in accordance with Part I E 5 g and the date on which the information was submitted.

- (1) There were no privately owned stormwater management facility inspections conducted. Similarly, there were no enforcement actions initiated by the permittee.
- (2) Three formal inspections were conducted by Community Development staff on the dry ponds located at Brumfield Elementary School, Auburn Middle School and Vint Hill Village Green.
- (3) There was no significant maintenance, repair, or retrofit activities performed on any stormwater management facilities owned or operated by the County.
- (4) Fauquier County did not complete any projects requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities within the MS4 area.
- (5) It is believed that the BMPs have previously been electronically reported to the DEQ BMP Warehouse in accordance with Part I E 5 g, however, searching the database provides no results regardless of what search terms have been utilized, so the submission date cannot be confirmed. The tabular data regarding the BMPs is included in this report as an appendix.

The County is implementing this minimum control measure, but improvements in formal inspection reporting of facility BMPs must occur.

6. MCM6 – Pollution Prevention/Good Housekeeping for Municipal Operations

From the County's MS4 Permit:

6. Pollution prevention and good housekeeping for facilities owned or operated by the permittee within the MS4 service area.

q. The annual report shall include the following:

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

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

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

(4) A summary of any new turf and landscape nutrient management plans developed that includes:

(a) Location and total acreage of each land area; and

(b) The date of the approved nutrient management plan; and

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

(a) The date of the training event;

(b) The number of employees who attended the training event; and

(c) The objective of the training event.

(1) There were no operational procedures developed or modified during the reporting period.

(2) There were no new SWPPPs developed during the reporting period.

(3) There were no SWPPPs modified or facilities delisted during the reporting period.

(4) There were two locations that received updated turf and landscape nutrient management plans during the reporting period. Auburn Middle School's plan became effective March 9, 2019 and covers 359,455sf of managed turf and 540,500sf in total. Vint Hill Village Green's plan also became effective March 9, 2019 and covers 395,700sf of managed turf and 720,000sf in total.

(5)

Annual Custodial Staff Training	7/31/2018	72	Includes overview of MS4 Program and importance of water quality
Annual Custodial Staff Training	8/8/2018	30	Includes overview of MS4 Program and importance of water quality
Vint Hill Village Green Training	4/24/2019	2	Site specific BMP maintenance training
Brumfield Elementary School Training	4/24/2019	3	Site specific BMP maintenance training
Fauquier High School Training	4/24/2019	3	Site specific BMP maintenance training
Brumfield Elementary School Training	5/1/2019	2	Site specific BMP maintenance training
Fauquier High School Training	5/1/2019	2	Site specific BMP maintenance training
Auburn Middle School Training	5/1/2019	3	Site specific BMP maintenance training

The County is successfully implementing this minimal control measure.

