



**J. Sargeant Reynolds
Community College**

**MS-4 Permit: VAR040107
July 1, 2019 - June 30, 2020
Annual Report**

Prepared for
J. Sargeant Reynolds Community College
Parham Road Campus
Facilities Management & Planning
1651 E. Parham Road
Richmond, VA 23228

September 14, 2020

Prepared by: Timmons Group
1001 Boulders Parkway, Suite 300
Richmond, VA 23225
(804) 200-6500

Table of Contents

1.0	Background Information	1
2.0	Status of Permit Condition Compliance	2
2.1.	Evaluation of MS4 Program Implementation	2
2.2.	Measurable Goals Progress.....	2
3.0	Results of Collected Data	9
4.0	Future Stormwater Activities.....	9
5.0	Changes in BMPs and Minimum Control Measures.....	9
5.1.	Changes in BMPs	9
5.2.	Changes in Program Elements	9
5.3.	Changes in Measurable Goals.....	10
6.0	Government Reliance for Permit Obligations.....	11
7.0	Section II C Program Status	11
8.0	TMDL Special Conditions Contained in Section I	11

Appendices & Documentation

- MCM1: Dumpster Fact Sheet Distribution Documentation
 Stormwater Awareness Distribution Documentation

- MCM2: Webpage Screenshot
 Community Creek Cleanup Documentation
 VCCS Conference Stormwater Meeting Documentation
 Stormwater Awareness PDO Documentation

- MCM3: Completed Stormwater Outfall Inspection Forms

- MCM4: No documentation this reporting year

- MCM5: Completed BMP Inspection Forms

- MCM6: SOP Training Documentation

1.0 Background Information

(1) Name and permit number of the program submitting the annual report; (2) The annual report permit year; (3) Modifications to any operator's department's roles and responsibilities; (4) Number of new MS4 outfalls and associated acreage by HUC added during the permit year; (5) Signed certification in accordance with 9VAC25-870-370

- Name and permit number of the program submitting the annual report
J. Sargeant Reynolds Community College, Permit # VAR040107

- The annual report permit year.
This serves as the annual report for permit year one of the 2018-2023 General Permit term. This annual report covers a time period from July 1 2019 – June 30 2020.

- Modifications to any operator's department's roles and responsibilities
The operator's roles and responsibilities have been provided in the Program Plan and are not considered to be modified for the purposes of this report.

- Number of new MS4 outfalls and associated acreage by HUC added during the permit year
No new outfalls were added during the permit year:

- Signed certification in accordance with 9VAC25-870-370
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.

Amelia M. Bradshaw

Digitally signed by Amelia M.
Bradshaw
Date: 2020.09.22 10:47:42 -04'00'

Amelia Bradshaw

Vice President of Finance and Administration

Date

*For questions about the annual report submittal or JSRCC's MS4 Program Plan, please contact:
Michael S. Verdú (Director of Facilities Management & Planning)
1651 E. Parham Road, PO Box 85622, Richmond VA 23285-5622
Tel: (804) 523-5790, mverdud@reynolds.edu*

2.0 Status of Permit Condition Compliance

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

2.1. Evaluation of MS4 Program Implementation

The Program Plan elements and are considered appropriate based on the 2018-2023 General Permit requirements And no changes were made to the Program Plan during this reporting year. See Section 5 for any changes in BMPs or Minimum Control Measures.

2.2. Measurable Goals Progress

MCM 1: Public Education and Outreach

Annual Reporting Requirement 1: Provide a list of the high-priority stormwater issues the permittee addressed in the public education and outreach program.

Reynolds identified three high-priority water quality issues in the 2018-2023 Program Plan:

1. *Pet Waste Contamination*
2. *Dumpster and Litter Management on Campus*
3. *Faculty and Staff Stormwater Education and Outreach*

Reporting Requirement 2: A list of the strategies used to communicate each high-priority stormwater issue.

The strategies used to communicate each high-priority stormwater issue are outlined in the table below:

High-Priority Water Quality Issue	Strategy Used to Communicate Issue
Pet Waste Contamination	Campus buildings were closed to the public for much of this reporting year due to the COVID-19 crisis. JSRCC maintained several pet waste stations throughout campus to satisfy this requirement.
Dumpster and Litter Management on Campus	JSRCC distributed dumpster best practices information to all (three) food service staff on campus. See Appendix MCM 1 for documentation.
Faculty and Staff Stormwater Education and Outreach	JSRCC distributed stormwater awareness information to all staff. See Appendix MCM 1 for documentation.

MCM 2: Public Involvement and Participation

Annual Reporting Requirement 1: A summary of any public input on the MS4 program plan received (including stormwater complaints) and how the permittee responded.

No public input or response was recorded for this reporting year.

Annual Reporting Requirement 2: A webpage address to the permittee's MS4 program and stormwater website.

The MS4 Program Plan and Annual Report are available for public review at the following website:
http://www.reynolds.edu/who_we_are/about/environmental_sustainability/ms4.aspx.

Annual Reporting Requirement 3: A description of the public involvement activities implemented by the permittee.

JSRCC identified and participated in the following four local events/activities provided in the 2018-2023 Program Plan to address public involvement with stormwater and environmental activities:

- 1. Community Creek Clean-up: Reynolds hosts an annual creek clean-up event that focuses on bringing the community together to remove waste from one of two creeks on campus. This year, JSRCC had coordinated with Henrico County for a join event in either March or May of 2020. However, the event was postponed due to the COVI crisis. Refer to Appendix MCM 2 for documentation.*
- 2. Storm Drain Stenciling: The College continued to participate in its storm drain marking program and performed a review of all stormwater structures to assess the condition of the markers, determine if additional markers were needed, etc. as part of the illicit discharge inspections. This year, two storm drains were identified as lacking storm drain markers. JSRCC is in the process of installing them. Refer to Appendix MCM 2 for documentation.*
- 3. Reynold's Environmental Sustainability Committee Participation: The Environmental Sustainability Committee was recently dissolved. JSRCC was planning an Earth Day event (April 22nd) to satisfy this requirement, but it was canceled due to COVID-19.*
- 4. General Stormwater Awareness: Facilities Management & Planning staff virtually presented on Stormwater Awareness to facilities staff on June 29, 2020. Refer to Appendix MCM 2 for documentation.*

Annual Reporting Requirement 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.

- 1. Community Creek Clean-up: Postponed due to COVID-19.*

2. *Storm Drain Stenciling: The majority of inlets on campus continued to remind the public the prevent illicit discharges.*
3. *Reynold's Environmental Sustainability Committee Participation: Postponed due to COVID-19.*
4. *General Stormwater Awareness: Approximately 18 faculty and staff received the presentation. This increased awareness is beneficial to improving water quality.*

Annual Reporting Requirement 5: The name of other MS4 permittees with whom the permittee collaborated in the public involvement opportunities.

Reynold's collaborated with Henrico County for one of the public involvement opportunities. However, the event was postponed due to COVID-19.

MCM3: Illicit Discharge Detection and Elimination

Annual Reporting Requirement 1: A confirmation statement that the MS4 map and information table have been updated to reflect any changes to the MS4 occurring on or before June 30 of the reporting year.

The MS4 map and information table do not require any updates this reporting year.

Annual Reporting Requirement 2: The total number of outfalls screened during the reporting period as part of the dry weather screening program.

All ten outfalls were screened during the reporting period. Refer to Appendix MCM3 for outfall screening results.

Annual Reporting Requirement 3: A list of illicit discharges to the MS4 including spills reaching the MS4 with information as follows:

- The source of the illicit discharge.
- The dates that the discharge was observed, reported, or both.
- Whether the discharge was discovered by the permittee during dry weather screening, reported by the public, or other method (describe).
- How the investigation was resolved.
- A description of any follow-up activities.
- The date the investigation was closed.

No illicit discharges were reported during the reporting period.

MCM 4: Construction Site Stormwater Runoff Control

VCCS Annual Standards and Specifications for Erosion and Sediment Control and Stormwater have been approved by DEQ. These new standards are comprehensive in addressing the Regulations and Programs and were adopted by JSRCC as soon as they were approved.

Annual Reporting Requirement 1: 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.

No regulated land disturbing activity occurred during the reporting period.

Annual Reporting Requirement 2: 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.

No land disturbing projects were not conducted with the department approved standards and specifications.

Annual Reporting Requirement 3: Total number of inspections conducted.

No regulated land disturbing activities occurred and therefore no inspections occurred.

Annual Reporting Requirement 4: The total number and type of enforcement actions implemented.

No enforcement actions taken during the reporting period.

MCM5: Post Construction Stormwater Management in New Development and Development on Prior Developed Lands

VCCS Annual Standards and Specifications for Erosion and Sediment Control and Stormwater have been approved by DEQ. These new standards are comprehensive in addressing the Regulations and Programs and were adopted by JSRCC as soon as they were approved.

Annual Reporting Requirement 1: Total number of inspections conducted on stormwater management facilities owned or operated by the permittee.

Six inspections were conducted on stormwater management facilities for the reporting year. Refer to Appendix MCM 5 for documentation.

Annual Reporting Requirement 2: A description of the significant maintenance, repair, or retrofit activities performed on the stormwater management facilities owned or operated by the permittee to ensure it continues to perform as designed. This does not include routine activities such as grass mowing or trash collection.

No significant maintenance, repair, or retrofit activities were performed on the stormwater management facilities owned or operated by the permittee.

Annual Reporting Requirement 3: 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.

The permittee did not complete any projects requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities.

Annual Reporting Requirement 4: 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.

No new BMPs were installed during the reporting period. A BMP was scheduled to be installed on August 19th, but as that falls outside of this reporting period, it will be included in next year's Annual Report.

MCM 6: Pollution Prevention/Good Housekeeping for Municipal Operations

Annual Reporting Requirement 1: A summary of any operational procedures developed or modified in accordance with Part I.E.6.a during the reporting period.

No new procedures were developed or modified during the reporting period.

Annual Reporting Requirement 2: A summary of any new SWPPPs developed in accordance with Part I.E.6.c during the reporting period.

No new SWPPPs were developed during the reporting period.

Annual Reporting Requirement 3: A summary of any SWPPPs modified in accordance with Part I.E.6.f of the rationale of any high-priority facilities desilted in accordance with Part I.E.6.h during the reporting period.

No SWPPPs were modified during the reporting period.

Annual Reporting Requirement 4: A summary of any new turf and landscape nutrient management plans developed that includes the location and the total acreage of each land area and the date of the approved nutrient management plan

JSRCC is required by the Virginia Department of Conservation and Recreation (DCR) to prepare and implement a Nutrient Management Plan for lands on which fertilizer, manure, etc. are applied, regardless of acreage.

NMPs have been implemented on 5.61 acres of the Parham Road campus;

Location	Address	Size
<i>Athletic Fields</i>	<i>1701 East Parham Rd, Richmond VA 23228</i>	<i>2.23 AC</i>
<i>Parham Campus</i>	<i>1701 East Parham Rd, Richmond VA 23228</i>	<i>3.38 AC</i>

A copy of the approval letters and approved plans have been incorporated into the Program Plan. The current versions of the nutrient management plans are approved through 12/14/2020.

Annual Reporting Requirement 4: A list of the training events conducted in accordance with Part I.E.6.m, including the following information:

1. The date of the training event.
2. The number of employees who attended the training event.
3. The objective of the training event.

Virtual training was provided on the Standard Operating Procedures on June 29, 2020 as documented in Appendix MCM 2. Approximately 18 faculty and staff received the training event. The objective of the training event was to familiarize

the faculty and staff with the Standard Operating Procedures and explain their importance.

3.0 Results of Collected Data

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

J. Sargeant Reynolds was not required to collect and analyze any formal monitoring data during this reporting period.

4.0 Future Stormwater Activities

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

- *Continue to implement Chesapeake Bay TMDL Action Plan*
- *Continue to implement Standard Operating Procedures*
- *Continue to implement Training Program as developed in the 2018-2023 Program Plan*
- *Continue to implement Public Education and Outreach Program as proposed in the 2018-2023 Program Plan*
- *Continue to implement Public Involvement and Participation Program as identified in the 2018-2023 Program Plan*
- *Continue to implement IDDE Program as identified in the 2018-2023 Program Plan*
- *Continue to implement Construction Site Stormwater Runoff Control Program as identified in the 2018-2023 Program Plan*
- *Continue to implement the Post-Construction Stormwater Management Program as identified in the 2018-2023 Program Plan*
- *Continue to implement the Pollution Prevention/Good Housekeeping for Municipal Operations Program as identified in the 2018-2023 Program Plan*
- *Continue to update outfall mapping*
- *Continue to implement "High-Priority Facility" SWPPP*

5.0 Changes in BMPs and Minimum Control Measures

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

5.1. Changes in BMPs

No changes to any best management practices were made during this reporting period.

5.2. Changes in Program Elements

There were no changes to the Program Plan, as presented below.

SC: Special Conditions for the Chesapeake Bay TMDL

No changes made to this program element

MCM 1: Public Education and Outreach

No changes made to this program element.

MCM 2: Public Involvement and Participation

No changes made to this program element.

MCM 3: Illicit Discharge Detection and Elimination

No changes made to this program element.

MCM 4: Construction Site Stormwater Runoff Control

No changes made to this program element.

MCM 5: Post Construction Stormwater Management in New Development and Development on Prior Developed Lands

No changes made to this program element.

MCM 6: Pollution Prevention/Good Housekeeping for Municipal Operations

No changes made to this program element.

5.3. Changes in Measurable Goals

No changes were made to measurable goals.

6.0 Government Reliance for Permit Obligations

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

- JSRCC relies on the Virginia Community College System (VCCS) as its Erosion and Sediment Control Authority as part of Minimum Control Measure 4 (Construction Site Stormwater Runoff Control) as documented in the 2018-2023 Program Plan
- JSRCC relies on the Virginia Community College System (VCCS) as its Virginia Stormwater Management Program Authority as part of Minimum Control Measure 5 (Post-Construction Stormwater Management) as documented in the 2018-2023 Program Plan.
- JSRCC relies on Henrico County for the operation and maintenance of an athletic complex on JSRCC property as described in the Program Plan as part of Minimum Control Measure 6 (Pollution Prevention Good Housekeeping for Municipal Operations) as documented in the 2018-2023 Program Plan.

7.0 Section II C Program Status

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

Not applicable at this time.

8.0 TMDL Special Conditions Contained in Section I

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

- JSRCC has been assigned a TMDL WLAs for bacteria and has developed and implemented a Bacterial TMDL Action Plan.
- A Chesapeake Bay TMDL Action Plan has been prepared to meet the special condition requirements for the Chesapeake Bay TMDL.
- Control measures implemented during the reporting period:
 - No control measures were implemented during this reporting period.
- Control measures expected to be implemented during the next reporting period:
 - JSRCC has approved construction plans to implement one filtering manufactured treatment device to treat runoff from parking lots L and M. JSRCC has secured funding for construction of this project. A contract has been awarded to construct this device and construction is scheduled for August 2020.
 - JSRCC has been in contact with Henrico County regarding a stream restoration project on campus and has prepared a feasibility study to determine if this would be a viable project.
 - Progress toward meeting compliance targets:
 - JSRCC has made significant progress in construction the first BMP to meeting compliance targets. This facility is expected to be constructed during the next few weeks.

Appendix MCM 1

Matthew Webb

From: Matthew E. Thompson Sr <MThompson@reynolds.edu>
Sent: Monday, June 29, 2020 9:40 AM
To: 'Jonathan Leach'; 'allamericancafe1@gmail.com'; Larry D. Long
Cc: Michael S. Verdú; Matthew Webb
Subject: Reynolds - Food Service and MS4 Best Trash Management and Dumpster Use
Attachments: Dumpster Fact Sheet - Minimizing Stormwater Pollution.pdf

Its time for our Annual Reminder on MS4 Best Trash Management & Dumpers Use! Our responsibility here at Reynolds Community College is to make each of you aware of our Storm Water Management Program that impacts our Students, faculty, staff, and vendors who operate a service and may have an impact on the Storm water that discharges in the surrounding storm water inlets around our Parham Road Campus. Keeping in compliance with ***Municipal Separate Storm Sewer Systems*** (MS4) Program, I am reaching out to you again this year of yours and our requirements and obligation according to DEQ and EPA storm water management. It is very important that we work as a team and ensure our staff are trained and aware of the requirements that need to be followed when disposing of trash into the dumpsters. I had attached a Dumpster Fact Sheet for your review and awareness and will also drop off a hard copy at the Campus Café of the best practice in keeping our dumpster from polluting or contributing to storm water pollution. Please feel free to reproduce and post these facts sheets on your bulletin board to help promote this awareness to your staff for training. If I can be of any further assistance to you in the knowledge of your part in Storm Water Management here at the College, just let me know.

MINIMIZING STORMWATER POLLUTION

Stormwater is water from rain or melting snow that does not soak into the ground but runs off into waterways. It flows from rooftops, bare soil and paved areas and lawns. It picks up a variety of contaminants (pet waste, fertilizers, oil, grease) along the way. These enter our lakes, streams, wetland and rivers and can harm fish, wildlife, vegetation. It can also foul your drinking water.

PRACTICES TO REDUCE STORMWATER POLLUTION INCLUDE CONTAINING AND COVERING GARBAGE, WASTE MATERIALS, AND DEBRIS. EVEN THE SIMPLE PRACTICE OF KEEPING A TRASH CAN LID CLOSED CAN BE A VERY EFFECTIVE POLLUTION PREVENTION MEASURE. OTHER EASY WAYS TO PREVENT STORMWATER POLLUTION INCLUDE: WASHING YOUR CAR OVER LAWN OR GRAVEL; USING LAWN CHEMICALS SPARINGLY, AND CLEANING UP PET WASTE.



To report illegal dumping on a Reynolds campus, call (804)-523-5224.

Reynolds Community College is an equal opportunity institution providing education and employment opportunities, program, services, and activities. For the full nondiscrimination policy and contact information, visit Reynolds.edu/nondiscrimination.



www.reynolds.edu

Thank you again for your support!
Matthew

Matthew E. Thompson, Sr.

Buildings and Grounds Manager
Facilities Management and Planning
J. Sargeant Reynolds Community College
1651 E. Parham Road, Richmond, VA 23285
Office #: 804-523-5795
Fax #: 804-371-3049
Email: mthompson@reynolds.edu



MINIMIZING STORMWATER POLLUTION

Stormwater is water from rain or melting snow that does not soak into the ground but runs off into waterways. It flows from rooftops, bare soil and paved areas and lawns. It picks up a variety of contaminants (pet waste, fertilizers, oil, grease) along the way. These enter our lakes, streams, wetland and rivers and can harm fish, wildlife, vegetation. It can also foul your drinking water.

PRACTICES TO REDUCE STORMWATER POLLUTION INCLUDE CONTAINING AND COVERING GARBAGE, WASTE MATERIALS, AND DEBRIS. EVEN THE SIMPLE PRACTICE OF KEEPING A TRASH CAN LID CLOSED CAN BE A VERY EFFECTIVE POLLUTION PREVENTION MEASURE. OTHER EASY WAYS TO PREVENT STORMWATER POLLUTION INCLUDE: WASHING YOUR CAR OVER LAWN OR GRAVEL; USING LAWN CHEMICALS SPARINGLY, AND CLEANING UP PET WASTE.



To report illegal dumping on a Reynolds campus, call (804)-523-5224.

Reynolds Community College is an equal opportunity institution providing education and employment opportunities, program, services, and activities. For the full nondiscrimination policy and contact information, visit Reynolds.edu/nondiscrimination.

Matthew Webb

From: Matthew E. Thompson Sr <MThompson@reynolds.edu>
Sent: Monday, June 29, 2020 11:47 AM
To: DLIST REYNOLDS ALLSTAFF
Cc: Matthew Webb
Subject: Storm Water Awareness Program At Reynolds (June 29 2020)

“ATTENTION REYNOLDS FACULTY AND STAFF!”

This year 2020 has been a very challenging year for each of us with the Novel Coronavirus pandemic changing the way we do business today. However, at Reynolds Community College, we still have the responsibility of managing and participating in the Stormwater Pollution Prevention Program that is designed to protect the North Run Creek that flows around our Parham Road Campus. Reynolds Community College along with the County of Henrico and others municipal, industrial and commercial facilities in the Commonwealth of Virginia have the responsibility to ensure that the waterways which flow throughout the Commonwealth are protected against pollutants as mandated by the Department of Environmental Quality (DEQ) in conjunction with the Environmental Protection Agency (EPA) **Clean Water Act**.



Reynolds continues to participate in an on-going **“GREEN”** program to help protect the storm waters that flows from our Campus, and eventually flows into the Chesapeake Bay! We are involved with the Environmental Protection Agency (EPA Department of Environmental Quality (DEQ) program which is called **“Municipal Separate Storm Sewer System” better known as MS4!** The MS4 Program is designed to help prevent contaminate pollutants from coming in contact with storm water run-off that flows from our parking lots, sidewalks and our landscape areas. Pollutants that dump

into our water ways not only contaminate our drinking water supply, but they also kill the fish and other living creatures that inhabit those water ways. One of the means we have in place to discourage illegal dumping into the storm water inlets around the Parham Road Campus are medallions installed on top of the inlet with the wording, **“No Dumping, Drains To Bay”** imprinted on the medallions. **(A sample is attached below)**



Reynolds Community College along with other Local and State Agencies participate in the MS4 Program that helps reduce but more important stop contaminants from getting into the Chesapeake Bay. One of the tools that helps make this program effective is **“Community Awareness”**, which is the purpose of this e-mail? There is another step also in our MS4 program which requires your participation too! You say, “How Can You Help?” By being aware of the program, you can help by remembering the following **six (6) points**:

1. What we do on the land affects the quality of the water we drink!

- 2. Many small sources of pollution add up and eventually cause big water quality problems!**
- 3. Natural things such as soil, leaves, grass clippings and pet waste can cause water pollution!**
- 4. Waste dumped into storm sewers flows into lakes, streams and coastal waters sending untreated contaminants into the environment and waterways!**
- 5. Oil and anti-freeze spillage from Automobiles and other vehicles cause serious water pollution that can kill animal and aquatic life as well as poison our drinking water!**
- 6. Everyone can make a difference!**

Thank you for your participation by reading this information!

Sincerely,
Matthew

Matthew E. Thompson, Sr.
Buildings and Grounds Manager
Facilities Management and Planning
Reynolds Community College
1651 E. Parham Road, Richmond, VA 23285
Office #: 804-523-5795
Fax #: 804-371-3049
Email: mthompson@reynolds.edu



Appendix MCM 2

Municipal Separate Storm Sewer System

reynolds.edu/who_we_are/about/environmental_sustainability/ms4.aspx

Your safety is our top priority. To help stop the spread of COVID-19, Reynolds will conduct most classes remotely during the Fall 2020 semester. Facilities are open in a limited fashion to current and prospective students but closed to the general public. Current students and future students must wear a mask and bring a Reynolds ID, or other ID, to enter campus buildings. We also provide all services virtually and are here to help you.



Environmental Sustainability

MS4 Program Plan(Current)

[MS4 Program Plan \(2018-2023\)](#)

[Bacteria TMDL Action Plan \(April 30, 2020\)](#)

[Chesapeake Bay TMDL Action Plan](#)

MS4 Documents (Previous)

[MS4 2018 - 2019 Annual Report](#)

[MS4 Training Program Memorandum](#)

For More Information or to Report Any Illegal Dumping, Please Call Hotline at (804) 523-5224.

Matthew Webb

From: Matthew E. Thompson Sr <MThompson@reynolds.edu>
Sent: Tuesday, January 21, 2020 2:00 PM
To: Matthew Webb
Cc: Aislinn Creel
Subject: FW: Stream Cleanups at J Sarge

Hi Matt,

I just want to let you know Henrico County is reaching out to us to work together on our Stream Cleanup Day Program. They indicated that they could work with us on these projected dates:

March 20th and May 8th which both fall on a Friday. March 20th works best because that is Spring Break. Let me know your thoughts.

Thanks,
Matthew

Matthew E. Thompson, Sr.
Buildings and Grounds Manager
Facilities Management and Planning
Reynolds Community College
1651 E. Parham Road, Richmond, VA 23285
Office #: 804-523-5795
Fax #: 804-371-3049
Email: mthompson@reynolds.edu



From: Heflin, Stacey <hef001@henrico.us>
Sent: Tuesday, January 21, 2020 11:17 AM
To: Matthew E. Thompson Sr <MThompson@reynolds.edu>
Cc: Brown, Megan <BRO172@henrico.us>
Subject: RE: Stream Cleanups at J Sarge

Hello Mr. Thompson,

Thanks for getting back to me quickly, so great to hear there is an annual cleanup event around the stream—it looks like a successful event. I met with a partner agency, Megan Brown with Keep Henrico Beautiful (copied), on Friday, to plan for the upcoming year and we came up with possible dates to clean up around J Sarge stream:

March 19 or March 20 (March 20 is preferred date) and

May 8 as an additional 2nd cleanup or backup date if the weather in March isn't appropriate.

Would any of these dates work for you/the college? We did not look past May too much because of the amount of vegetation, heat and student summer schedules that may interfere with a cleanup, however, if June works better and if you have any other dates in mind, please let me know. Also, do you have an idea on how many volunteers usually help with this event? Would it be helpful to try pulling in more volunteers not linked to J Sarge? We are in the planning phase working with a radio station on a cleanup and they may be able to pull in volunteers if needed or we could reach out to past stream cleanup participants we have worked with who may be able to help.

Thanks again, looking forward to potentially working together!

Stacey Heflin

Conservation Specialist
HAWQS Program Coordinator
Henricopolis Soil & Water Conservation District
(804) 501-5289
www.henrico.us/swcd



From: Matthew E. Thompson Sr [<mailto:MThompson@reynolds.edu>]
Sent: Wednesday, January 15, 2020 3:22 PM
To: Heflin, Stacey
Subject: RE: Stream Cleanups at J Sarge

Hi Stacey!

That would be great if we could get together on the stream clean-up. I normally send out an email in April college-wide looking for students and staff to volunteer to be a part of our annual stream clean-up. I attached a sample of the email that I send out to recruit volunteers. So, in short, I welcome working with you. Please let me know if there is a time period you prefer so I can look at my schedule and the college's activities and see if we can find a date that works for both of us.

Thank you for reaching out to me and I look forward to hearing from you soon.

Matthew E. Thompson, Sr.
Buildings and Grounds Manager
Facilities Management and Planning
Reynolds Community College
1651 E. Parham Road, Richmond, VA 23285
Office #: 804-523-5795
Fax #: 804-371-3049
Email: mthompson@reynolds.edu



From: Heflin, Stacey <hef001@henrico.us>
Sent: Wednesday, January 15, 2020 2:53 PM
To: Matthew E. Thompson Sr <MThompson@reynolds.edu>
Subject: Stream Cleanups at J Sarge

Hello Mr. Thompson,

I am with the Henricopolis Soil & Water Conservation District and I am working with the Henrico Department of Community Revitalization and Keep Henrico Beautiful to organize stream cleanups around Henrico and I also coordinate a water quality monitoring team, HAWQS, or Henrico Area Water Quality Samplers. The past several months, our volunteer who monitors at the North Run stream along the Parham campus, has noticed a large amount of trash in the stream. While planning for future stream cleanups, we would love to add this stream to the list for a possible spring date. Would it be possible to have a cleanup and if so, is there a way to try getting the students and staff involved? Thank you,

Stacey Heflin

Conservation Specialist
HAWQS Program Coordinator
Henricopolis Soil & Water Conservation District
(804) 501-5289
www.henrico.us/swcd



NOTICE: The email domain @co.henrico.va.us is being retired in January 2020 and will no longer be valid. Please update your email contact or address book to use @henrico.us domain when contacting Henrico County Government staff.

NOTICE: The email domain @co.henrico.va.us is being retired in January 2020 and will no longer be valid. Please update your email contact or address book to use @henrico.us domain when contacting Henrico County Government staff.

Stormwater Inlets Missing a "No Dumping - Drains to Bay" Medallion

6/28/2020



Example Medallion:



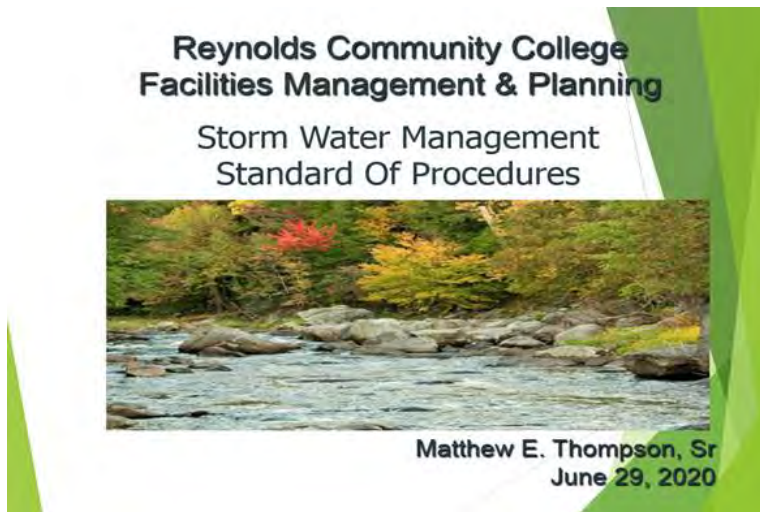
Matthew Webb

From: Matthew E. Thompson Sr <MThompson@reynolds.edu>
Sent: Monday, June 29, 2020 1:46 PM
To: Carlton Hayden; Anthony C. Neblett; F. Tommy Huffman; Kristopher J. Hall; Robert L. Gray; Robert T. Gruber; Rodney Frierson; Sametria M. Casper; Daniel R. Crosby; Elisha V. Claiborne; Samuel E. Washington; Donald J. Pollard; Joshua T. Smith; Frederick Fowler; Eisenhower Coleman; Wallace L. Stokes
Cc: Matthew Webb; Michael S. Verdú; Randy V. Kiah; Matthew E. Thompson Sr
Subject: Facilities - Storm Water Management Standard of Procedures (SOP)
Attachments: Facilities SOP - Storm Water Management Awareness Presentation - June 29 2020.pptx

Good Afternoon All:

Because of the COVID-19 pandemic, we are unable socially gather together into a auditorium or lecture room to review this required Storm Water Management Standard Of Procedure Presentation, so I am sending it to you per this email. It is required per our MS4 Storm Water Permit that you receive this training and information and I am requesting each facilities supervisor share this by email, to their staff who are not included on this email. I hope each of you review this important presentation and it improves your awareness of the importance of Storm Water Management Standard of Procedures.

Thanks in advance for your anticipated participation.
Matthew



Matthew E. Thompson, Sr.
Buildings and Grounds Manager
Facilities Management and Planning
Reynolds Community College
1651 E. Parham Road, Richmond, VA 23285
Office #: 804-523-5795
Fax #: 804-371-3049
Email: mthompson@reynolds.edu



Reynolds Community College
 Facilities Management & Planning
 Storm Water Management
 Standard Of Procedures






Matthew E. Thompson, Sr
 June 29, 2020

1


Question??

2

Which of the following items would be considered the most valuable item that exist today?

Personal Wealth Oil Gold




Precious Stones

3

The Answer would be:

NONE OF THEM!




Water is the most valuable item or element that exist today!

4


Why Is Water the Most Valuable Element For Us You Ask????

5




Water is of major importance to all living things.

6



In some organisms
Up to 90% of their body weight comes from water.

7




And up to 60% of the human adult body is water.

8

Water serves a number of essential functions to keep us all going:

The water in you

What Does Water do for You?




- Forms saliva (digestion)
- Keeps mucousal membranes moist
- Allows body's cells to grow, reproduce and survive
- Flushes body waste, mainly in urine
- Lubricates joints
- Water is the major component of most body parts
- Needed by the brain to manufacture hormones and neurotransmitters
- Regulates body temperature (sweating and respiration)
- Acts as a shock absorber for brain and spinal cord
- Converts food to components needed for survival - digestion
- Helps deliver oxygen all over the body

9

The water in you

What Does Water do for You?




- Forms saliva (digestion)
- Keeps mucousal membranes moist
- Allows body's cells to grow, reproduce and survive
- Flushes body waste, mainly in urine
- Lubricates joints
- Water is the major component of most body parts
- Needed by the brain to manufacture hormones and neurotransmitters
- Regulates body temperature (sweating and respiration)
- Acts as a shock absorber for brain and spinal cord
- Converts food to components needed for survival - digestion
- Helps deliver oxygen all over the body

It regulates our internal body temperature by sweating and respiration.

10

The water in you

What Does Water do for You?




- Forms saliva (digestion)
- Keeps mucousal membranes moist
- Allows body's cells to grow, reproduce and survive
- Flushes body waste, mainly in urine
- Lubricates joints
- Water is the major component of most body parts
- Needed by the brain to manufacture hormones and neurotransmitters
- Regulates body temperature (sweating and respiration)
- Acts as a shock absorber for brain and spinal cord
- Converts food to components needed for survival - digestion
- Helps deliver oxygen all over the body

The carbohydrates and proteins that our bodies use as food are metabolized and transported by water in the bloodstream

11

The water in you

What Does Water do for You?



- Forms saliva (digestion)
- Keeps mucousal membranes moist
- Allows body's cells to grow, reproduce and survive
- Flushes body waste, mainly in urine
- Lubricates joints
- Water is the major component of most body parts
- Needed by the brain to manufacture hormones and neurotransmitters
- Regulates body temperature (sweating and respiration)
- Acts as a shock absorber for brain and spinal cord
- Converts food to components needed for survival - digestion
- Helps deliver oxygen all over the body

Water acts as a shock absorber for the brain, spinal cord, and fetus

12

The water in you

What Does Water do for You?

Forms saliva (digestion)

Keeps mucosal membranes moist

Allows body's cells to grow, reproduce and survive

Flushes body waste, mainly in urine

Lubricates joints

Water is the major component of most body parts

Needed by the brain to manufacture hormones and neurotransmitters

Regulates body temperature (sweating and respiration)

Acts as a shock absorber for brain and spinal cord

Converts food to components needed for survival - digestion

Helps deliver oxygen all over the body

Lubricates joints

13

The water in you

What Does Water do for You?

Forms saliva (digestion)

Keeps mucosal membranes moist

Allows body's cells to grow, reproduce and survive

Flushes body waste, mainly in urine

Lubricates joints

Water is the major component of most body parts

Needed by the brain to manufacture hormones and neurotransmitters

Regulates body temperature (sweating and respiration)

Acts as a shock absorber for brain and spinal cord

Converts food to components needed for survival - digestion

Helps deliver oxygen all over the body

The brain and heart are composed of 73% water,

14

The water in you

What Does Water do for You?

Forms saliva (digestion)

Keeps mucosal membranes moist

Allows body's cells to grow, reproduce and survive

Flushes body waste, mainly in urine

Lubricates joints

Water is the major component of most body parts

Needed by the brain to manufacture hormones and neurotransmitters

Regulates body temperature (sweating and respiration)

Acts as a shock absorber for brain and spinal cord

Converts food to components needed for survival - digestion

Helps deliver oxygen all over the body

The lungs are about 83% water.

15

The water in you

What Does Water do for You?

Forms saliva (digestion)

Keeps mucosal membranes moist

Allows body's cells to grow, reproduce and survive

Flushes body waste, mainly in urine

Lubricates joints

Water is the major component of most body parts

Needed by the brain to manufacture hormones and neurotransmitters

Regulates body temperature (sweating and respiration)

Acts as a shock absorber for brain and spinal cord

Converts food to components needed for survival - digestion

Helps deliver oxygen all over the body

The skin contains 64% water,

16

The water in you

What Does Water do for You?

Forms saliva (digestion)

Keeps mucosal membranes moist

Allows body's cells to grow, reproduce and survive

Flushes body waste, mainly in urine

Lubricates joints

Water is the major component of most body parts

Needed by the brain to manufacture hormones and neurotransmitters

Regulates body temperature (sweating and respiration)

Acts as a shock absorber for brain and spinal cord

Converts food to components needed for survival - digestion

Helps deliver oxygen all over the body

Muscles and kidneys are 79% water

17

The water in you

What Does Water do for You?

Forms saliva (digestion)

Keeps mucosal membranes moist

Allows body's cells to grow, reproduce and survive

Flushes body waste, mainly in urine

Lubricates joints

Water is the major component of most body parts

Needed by the brain to manufacture hormones and neurotransmitters

Regulates body temperature (sweating and respiration)

Acts as a shock absorber for brain and spinal cord

Converts food to components needed for survival - digestion

Helps deliver oxygen all over the body

And even the bones are about 31% water.

18

The water in you

What Does Water do for You?

Forms saliva (digestion)

Keeps mucous membranes moist

Allows body's cells to grow, reproduce and survive

Flushes body waste, mainly in urine

Lubricates joints

Water is the major component of most body parts

Needed by the brain to manufacture hormones and neurotransmitters

Regulates body temperature (sweating and respiration)

Acts as a shock absorber for brain and spinal cord

Converts food to components needed for survival - digestion

Helps deliver oxygen all over the body

No less important is the ability of water to transport waste material out of our bodies. And,

Water helps deliver oxygen all over the body!

19

Quality and healthy water is important to us and for us!

20

Which Brings Me To The Purpose of this Presentation

Storm Water Management Awareness
And Standard Of Procedures

21

At Reynolds Community College the Facilities Management department and its personnel have a major role in protecting pollutants from flowing from our campus through storm water into the North Run Creek which eventually flows into the Chesapeake Bays.

22

Pollutants flow in storm water runoff when rains water flows across the land and over impervious surfaces such:

- Sidewalks
- Paved streets
- Parking lots And
- Building rooftops

23

Unlike the vegetated areas where the rain and snow can be absorbed through the trees, plants, and the soil.

24



Impervious surface are solid surfaces that prevent water from absorbing into the soil and reaching underground water tables.

25

So rain and snow runoff flow from impervious areas into storm water inlets



26

That eventually discharges into our creeks,



27

Which discharges into our rivers



28

Which discharges into our bays and oceans



29

That flows on to our beaches

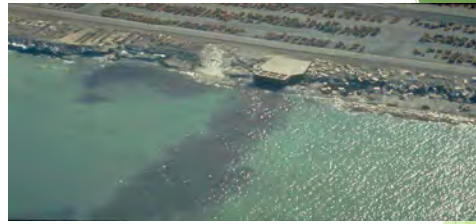


30

And eventually affect our drinking water supply.



31



In 1972 The Environment Protection Agency (EPA)
Established the Clean Water Act

32



Under the EPA Federal 1972 Clean Water Act,
the National Pollutant Discharge Elimination
System (NPDES) was established.

33



The NPDES requires that certain industries and
municipalities obtain permits if their discharges
go directly into surface waters such as creeks,
rivers, ponds and lakes.

34



Industries and municipalities are now more accountable
of what discharges into the waterways in their location.

35



The NPDES is governed by the EPA Office in
Washington D.C..

36



However, many NPDES policies are being enforced and regulated by State Environmental Agencies.
 In Virginia, The NPDES policies come under the Virginia Pollution Discharge Elimination System (VPDES).

37



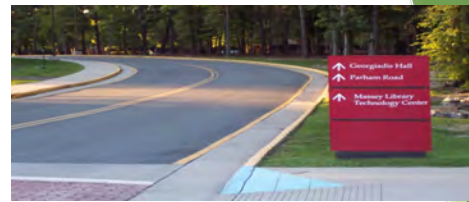
The Department of Environmental Quality (DEQ) administers the Virginia Pollutant Discharge Elimination System (VPDES) program for Commonwealth of Virginia.

38



DEQ regulates storm water discharges associated with "industrial activities" and now fully regulates storm water discharges from construction sites, and from municipal separate storm sewer systems (MS4) for the EPA.

39



Reynolds Community College is governed under DEQ's Municipal Separate Storm Sewer Systems (MS4) requirements.

40

One of the requirements under the Municipal Separate Storm Sewer Systems (MS4) is that Reynolds Community College Facilities Personnel understand the Standard Of Procedures (SOP) when it comes to Storm water Management Awareness.

Which is the purpose of this presentation.

41

Reynolds Community College MS4 Program



Under the Reynolds Community College MS4 Permit, there are six awareness control programs that we are required to follow. They are:

- Public Education and Outreach
- Public Participation and Involvement.
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post-Construction Runoff Control
- Pollution Prevention/Good Housekeeping

42

Public Education and Outreach Is



- ▶ The distribution of educational materials and conducting a community outreach to inform citizens about the impacts polluted storm water runoff can have on water quality.

43

Public Participation and Involvement



- Provides opportunities for citizens to participate in the program development and implementation.

44

Illicit Discharge Detection and Elimination involves:



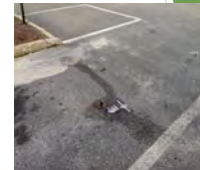
- Developing and implementing a plan to detect and eliminate illicit discharges to the storm drainage system.

45

Illicit Discharge Detection and Elimination involves:



Leaks from vehicles



Discarded trash on ground

46

Illicit Discharge Detection and Elimination involves:

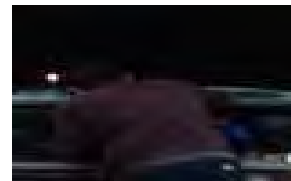


Factor that contribute to leaks from vehicles

47

Illicit Discharge Detection and Elimination involves:

Individuals pouring motor oil into their vehicles on College property



That could possibility become storm water pollution!

48

Illicit Discharge Detection and Elimination involves:



Pet Waste



Needs to be place in receptacles

49

Construction Site Runoff Control Is:



- Developing, implementing and enforcing an erosion and sediment control program for construction activities that disturb one or more acres so soil won't erode or wash into waterways.

50

Post-Construction Runoff Control Is:

- Developing, implementing and enforcing a program to address discharges of post-construction storm water runoff from new development.

51

Pollution Prevention/Good Housekeeping is:



- Developing and implementing a program with the goal of preventing or reducing pollutant runoff from municipal operations ie: regular street sweeping, reduction in the use of pesticides or street salt.

52

Facilities Management Storm Water Standard of Procedures



- Involves cleaning and keeping the grounds free of litter



53

Facilities Management Storm Water Standard of Procedures



Involves making others aware of what can and cannot be put into our dumpsters such as grease and liquids.



54

**Facilities Management Storm Water
Standard of Procedures**



It also involves making sure the dumpster door are kept closed

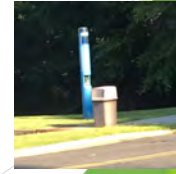


55

**Facilities Management Storm Water
Standard of Procedures**



It involves having trash receptacles available to avoid litter from being throw on the grounds.



56

**Facilities Management Storm Water
Standard of Procedures**



And keeping the Pet Waste receptacles service with fresh trash bags.



57

**Facilities Management Storm Water
Standard of Procedures**



And not running over or hanging out the bottom wear they can tear and dump on to the grounds adding litter and animal waste that can become pollutants.



58



Water is a very important source to our ecology and to our survival



59



And Storm water management is the way we preserves it and to protect it!

60

So what is the most valuable thing we need everyday



Personal Wealth



Oil



Gold



Precious Stones

61

Water



62

Reynolds Community College
Facilities Management & Planning
Storm Water Management
Standard Of Procedures



63

Appendix MCM 3

Stormwater Outfall Inspection Summary

2019-2020

Outfall ID	Screening Date	Illicit Discharge Detected?
01	06/28/2020	Unlikely
02	06/28/2020	Unlikely
03	06/28/2020	Unlikely
04	06/28/2020	Unlikely
05	06/28/2020	Unlikely
06	06/28/2020	Unlikely
07	06/28/2020	Unlikely
09	06/28/2020	Unlikely
10	06/28/2020	Unlikely
11	06/28/2020	Unlikely

Stormwater Outfall Inspection

Outfall ID: 01	Date: 06/28/2020	Time: 10:31	Inspector: Matthew Webb
----------------	------------------	-------------	-------------------------

LAST RAINFALL

Depth (in): 0.24	End Date: 06/25/2020	End Time: 17:00
------------------	----------------------	-----------------

Weather history can be found at: https://www.wunderground.com/history/daily/us/va/glen-allen/KRIC/date/2019-7-1?cm_ven=localwx_history

FLOW

Present?	No	If yes:	Approx. discharge rate:	NA
			Approx. depth of flow (in):	NA

POTENTIAL POLLUTANT INDICATORS

Indicator	Present?	Description	Relative Severity Index (1-3)
Odor	No	NA	NA
Turbidity	No	See Severity Index	NA
Floatables	No	NA	NA
Deposits/Stains	No	NA	NA
Poor Pool Quality	No	NA	NA
Pipe Benthic Growth	No	NA	NA

Notes:
None.

CERTIFICATION:

If no suspected illicit discharge is identified, certify the following:

"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."



Signature

06/28/2020

Date

Stormwater Outfall Inspection

Outfall ID: 01	Date: 06/28/2020	Time: 10:31	Inspector: Matthew Webb
----------------	------------------	-------------	-------------------------

VICINITY MAP



-77.47678, 37.63834

PHOTOGRAPHS



Stormwater Outfall Inspection

Outfall ID: 02	Date: 06/28/2020	Time: 10:20	Inspector: Matthew Webb
----------------	------------------	-------------	-------------------------

LAST RAINFALL

Depth (in): 0.24	End Date: 06/25/2020	End Time: 17:00
------------------	----------------------	-----------------

Weather history can be found at: https://www.wunderground.com/history/daily/us/va/glen-allen/KRIC/date/2019-7-1?cm_ven=localwx_history

FLOW

Present?	No	If yes:	Approx. discharge rate:	NA
			Approx. depth of flow (in):	NA

POTENTIAL POLLUTANT INDICATORS

Indicator	Present?	Description	Relative Severity Index (1-3)
Odor	No	NA	NA
Turbidity	No	See Severity Index	NA
Floatables	No	NA	NA
Deposits/Stains	No	NA	NA
Poor Pool Quality	No	NA	NA
Pipe Benthic Growth	No	NA	NA

Notes:
None.

CERTIFICATION:

If no suspected illicit discharge is identified, certify the following:

"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."



Signature

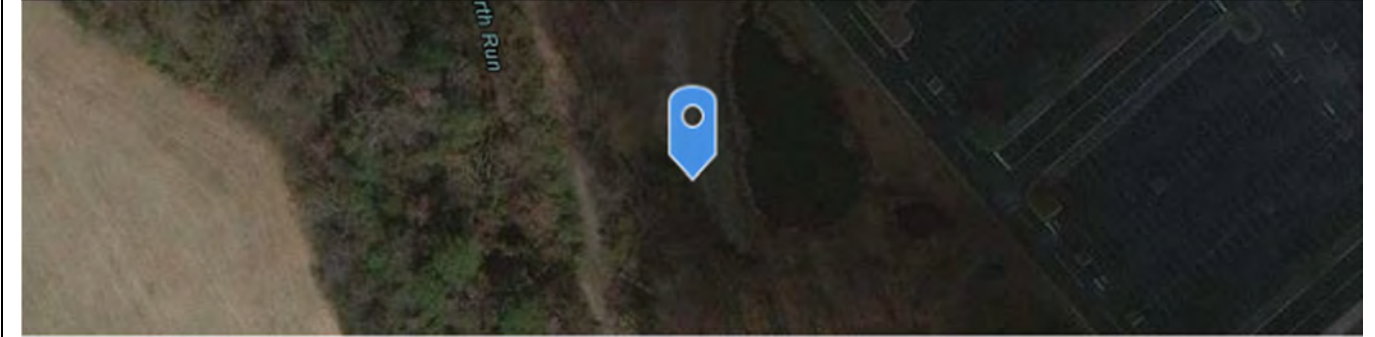
06/28/2020

Date

Stormwater Outfall Inspection

Outfall ID: 02	Date: 06/28/2020	Time: 10:20	Inspector:
----------------	------------------	-------------	------------

VICINITY MAP



-77.47677, 37.63687

PHOTOGRAPHS



If an illicit discharge is suspected, immediately contact the Hotline at (804)-523-5224.

Stormwater Outfall Inspection

Outfall ID: 03	Date: 06/28/2020	Time: 08:57	Inspector: Matthew Webb
----------------	------------------	-------------	-------------------------

LAST RAINFALL

Depth (in): 0.24	End Date: 06/25/2020	End Time: 17:00
------------------	----------------------	-----------------

Weather history can be found at: https://www.wunderground.com/history/daily/us/va/glen-allen/KRIC/date/2019-7-1?cm_ven=localwx_history

FLOW

Present?	No	If yes:	Approx. discharge rate:	NA
			Approx. depth of flow (in):	NA

POTENTIAL POLLUTANT INDICATORS

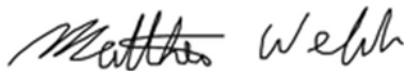
Indicator	Present?	Description	Relative Severity Index (1-3)
Odor	No	NA	NA
Turbidity	No	See Severity Index	NA
Floatables	No	NA	NA
Deposits/Stains	No	NA	NA
Poor Pool Quality	No	NA	NA
Pipe Benthic Growth	No	NA	NA

Notes:
None.

CERTIFICATION:

If no suspected illicit discharge is identified, certify the following:

"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."



Signature

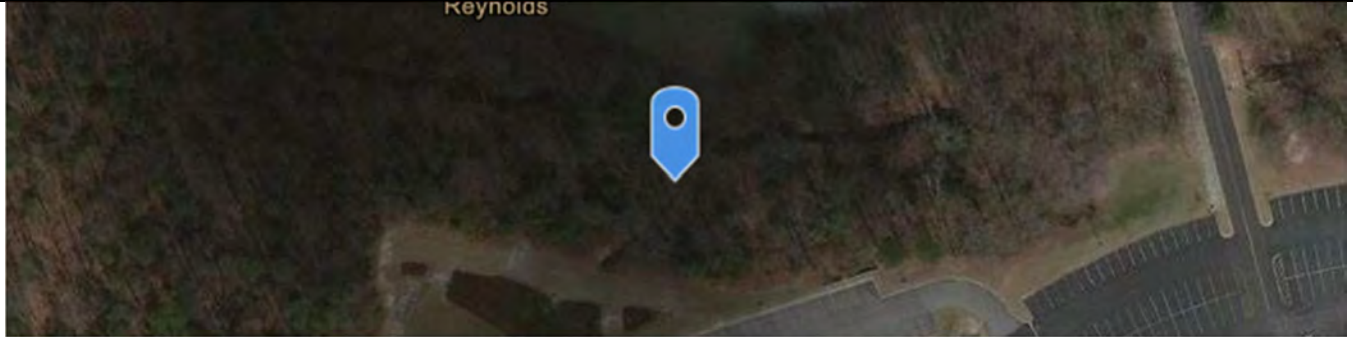
06/28/2020

Date

Stormwater Outfall Inspection

Outfall ID: 03	Date: 06/28/2020	Time: 08:57	Inspector: Matthew Webb
----------------	------------------	-------------	-------------------------

VICINITY MAP



-77.4746, 37.63574

PHOTOGRAPHS



Stormwater Outfall Inspection

Outfall ID: 04	Date: 06/28/2020	Time: 10:42	Inspector: Matthew Webb
----------------	------------------	-------------	-------------------------

LAST RAINFALL

Depth (in): 0.24	End Date: 06/25/2020	End Time: 17:00
------------------	----------------------	-----------------

Weather history can be found at: https://www.wunderground.com/history/daily/us/va/glen-allen/KRIC/date/2019-7-1?cm_ven=localwx_history

FLOW

Present?	No	If yes:	Approx. discharge rate:	NA
			Approx. depth of flow (in):	NA

POTENTIAL POLLUTANT INDICATORS

Indicator	Present?	Description	Relative Severity Index (1-3)
Odor	No	NA	NA
Turbidity	No	See Severity Index	NA
Floatables	No	NA	NA
Deposits/Stains	No	NA	NA
Poor Pool Quality	No	NA	NA
Pipe Benthic Growth	No	NA	NA

Notes:
None.

CERTIFICATION:

If no suspected illicit discharge is identified, certify the following:

"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."



Signature

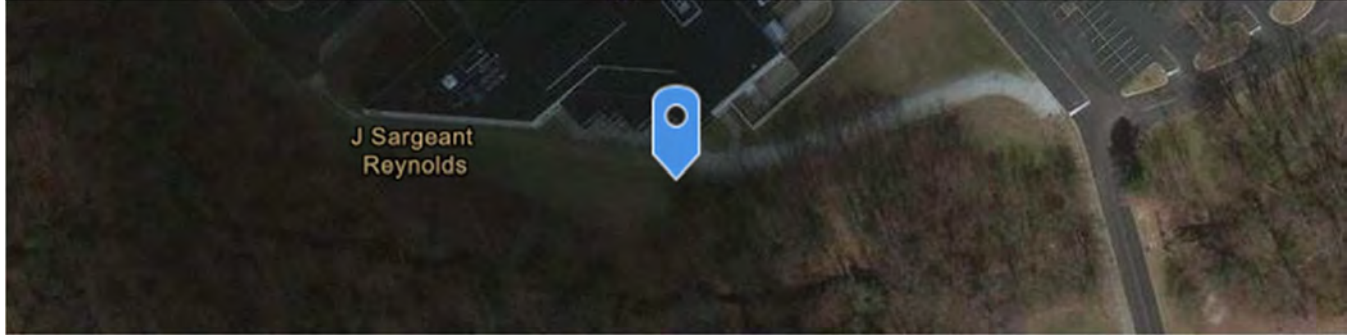
06/28/2020

Date

Stormwater Outfall Inspection

Outfall ID: 04	Date: 06/28/2020	Time: 10:42	Inspector: Matthew Webb
----------------	------------------	-------------	-------------------------

VICINITY MAP



-77.47438, 37.63608

PHOTOGRAPHS



Stormwater Outfall Inspection

Outfall ID: 05	Date: 06/28/2020	Time: 09:02	Inspector: Matthew Webb
----------------	------------------	-------------	-------------------------

LAST RAINFALL

Depth (in): 0.24	End Date: 06/25/2020	End Time: 17:00
------------------	----------------------	-----------------

Weather history can be found at: https://www.wunderground.com/history/daily/us/va/glen-allen/KRIC/date/2019-7-1?cm_ven=localwx_history

FLOW

Present?	No	If yes:	Approx. discharge rate:	NA
			Approx. depth of flow (in):	NA

POTENTIAL POLLUTANT INDICATORS

Indicator	Present?	Description	Relative Severity Index (1-3)
Odor	No	NA	NA
Turbidity	No	See Severity Index	NA
Floatables	No	NA	NA
Deposits/Stains	No	NA	NA
Poor Pool Quality	No	NA	NA
Pipe Benthic Growth	No	NA	NA

Notes:
None.

CERTIFICATION:

If no suspected illicit discharge is identified, certify the following:

"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."



Signature

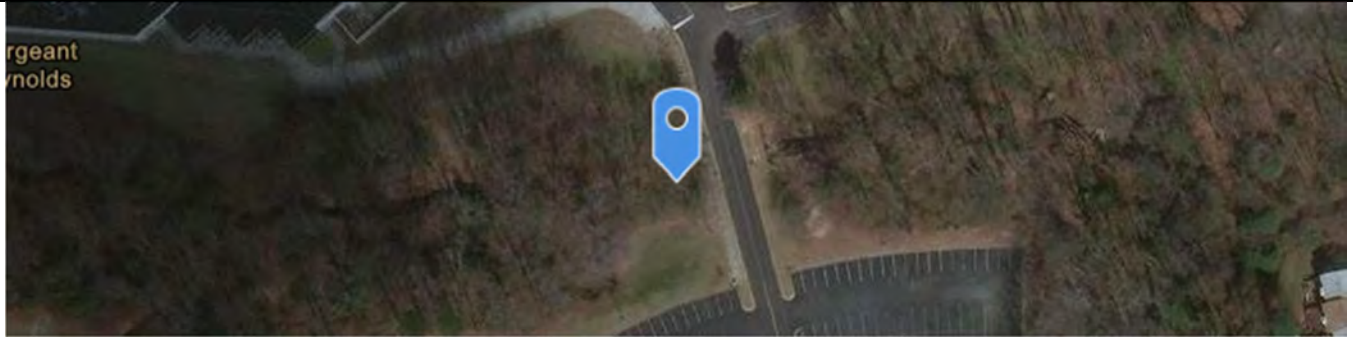
06/28/2020

Date

Stormwater Outfall Inspection

Outfall ID: 05	Date: 06/28/2020	Time: 09:02	Inspector: Matthew Webb
----------------	------------------	-------------	-------------------------

VICINITY MAP



-77.47332, 37.63589

PHOTOGRAPHS



If an illicit discharge is suspected, immediately contact the Hotline at (804)-523-5224.

Stormwater Outfall Inspection

Outfall ID: 06	Date: 06/28/2020	Time: 09:21	Inspector: Matthew Webb
----------------	------------------	-------------	-------------------------

LAST RAINFALL

Depth (in): 0.24	End Date: 06/25/2020	End Time: 17:00
------------------	----------------------	-----------------

Weather history can be found at: https://www.wunderground.com/history/daily/us/va/glen-allen/KRIC/date/2019-7-1?cm_ven=localwx_history

FLOW

Present?	No	If yes:	Approx. discharge rate:	NA
			Approx. depth of flow (in):	NA

POTENTIAL POLLUTANT INDICATORS

Indicator	Present?	Description	Relative Severity Index (1-3)
Odor	No	NA	NA
Turbidity	No	See Severity Index	NA
Floatables	No	NA	NA
Deposits/Stains	No	NA	NA
Poor Pool Quality	No	NA	NA
Pipe Benthic Growth	No	NA	NA

Notes:
 Outfall is overgrown and difficult to access. A tree has fallen on it.

CERTIFICATION:

If no suspected illicit discharge is identified, certify the following:

"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."



 Signature

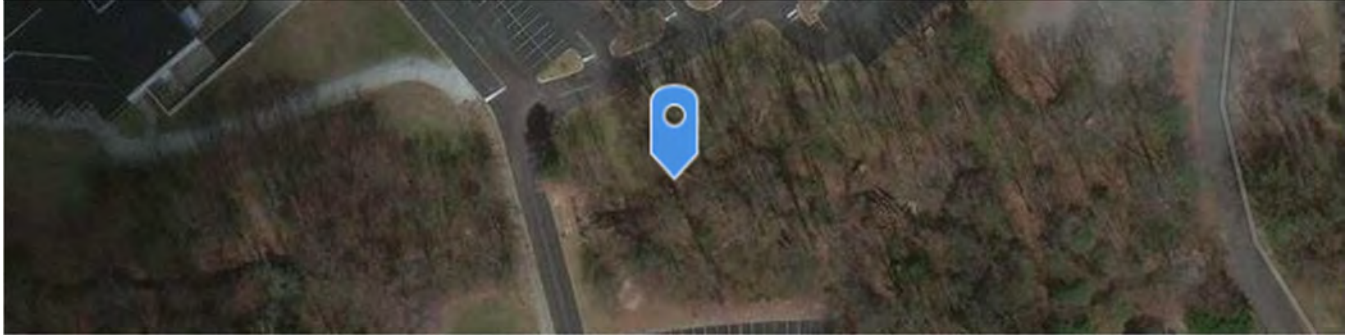
06/28/2020

 Date

Stormwater Outfall Inspection

Outfall ID: 06	Date: 06/28/2020	Time: 09:21	Inspector: Matthew Webb
----------------	------------------	-------------	-------------------------

VICINITY MAP



-77.47282, 37.63605

PHOTOGRAPHS



Stormwater Outfall Inspection

Outfall ID: 07	Date: 06/28/2020	Time: 09:28	Inspector: Matthew Webb
----------------	------------------	-------------	-------------------------

LAST RAINFALL

Depth (in): 0.24	End Date: 06/25/2020	End Time: 17:00
------------------	----------------------	-----------------

Weather history can be found at: https://www.wunderground.com/history/daily/us/va/glen-allen/KRIC/date/2019-7-1?cm_ven=localwx_history

FLOW

Present?	No	If yes:	Approx. discharge rate:	NA
			Approx. depth of flow (in):	NA

POTENTIAL POLLUTANT INDICATORS

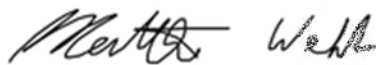
Indicator	Present?	Description	Relative Severity Index (1-3)
Odor	No	NA	NA
Turbidity	No	See Severity Index	NA
Floatables	No	NA	NA
Deposits/Stains	No	NA	NA
Poor Pool Quality	No	NA	NA
Pipe Benthic Growth	No	NA	NA

Notes:
 Outfall is overgrown and difficult to access. The end section is partially separated.

CERTIFICATION:

If no suspected illicit discharge is identified, certify the following:

"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."



06/28/2020

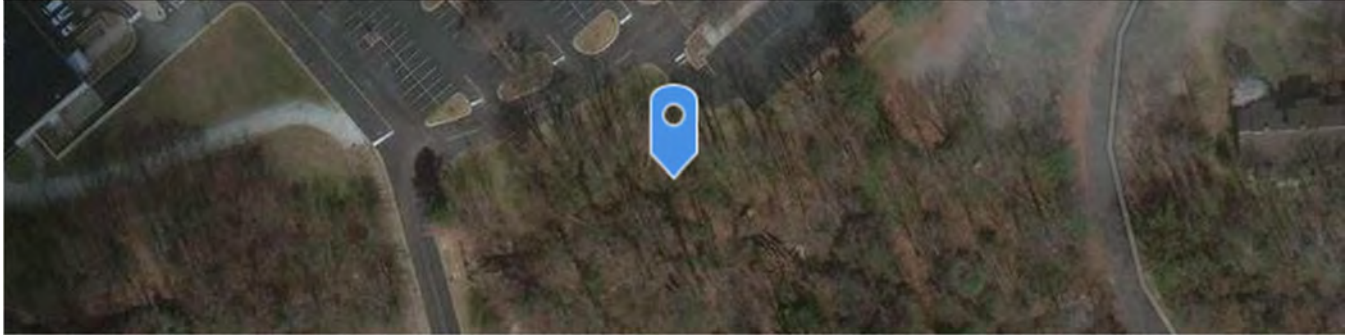
 Signature

 Date

Stormwater Outfall Inspection

Outfall ID: 07	Date: 06/28/2020	Time: 09:28	Inspector: Matthew Webb
----------------	------------------	-------------	-------------------------

VICINITY MAP



-77.47252, 37.63614

PHOTOGRAPHS



If an illicit discharge is suspected, immediately contact the Hotline at (804)-523-5224.

Stormwater Outfall Inspection

Outfall ID: 09	Date: 06/28/2020	Time: 08:28	Inspector: Matthew Webb
----------------	------------------	-------------	-------------------------

LAST RAINFALL

Depth (in): 0.24	End Date: 06/25/2020	End Time: 17:00
Weather history can be found at: https://www.wunderground.com/history/daily/us/va/glen-allen/KRIC/date/2019-7-1?cm_ven=localwx_history		

FLOW

Present?	No	If yes:	Approx. discharge rate:	NA
			Approx. depth of flow (in):	NA

POTENTIAL POLLUTANT INDICATORS


Indicator	Present?	Description	Relative Severity Index (1-3)
Odor	No	NA	NA
Turbidity	No	See Severity Index	NA
Floatables	No	NA	NA
Deposits/Stains	No	NA	NA
Poor Pool Quality	No	NA	NA
Pipe Benthic Growth	No	NA	NA

Notes:
 Outfall is overgrown.

CERTIFICATION:

If no suspected illicit discharge is identified, certify the following:

"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."



Signature

06/28/2020

Date

Stormwater Outfall Inspection

Outfall ID: 09	Date: 06/28/2020	Time: 08:28	Inspector: Matthew Webb
----------------	------------------	-------------	-------------------------

VICINITY MAP



-77.47734, 37.63177

PHOTOGRAPHS



Stormwater Outfall Inspection

Outfall ID: 10	Date: 06/28/2020	Time: 09:04	Inspector: Matthew Webb
----------------	------------------	-------------	-------------------------

LAST RAINFALL

Depth (in): 0.24	End Date: 06/25/2020	End Time: 17:00
------------------	----------------------	-----------------

Weather history can be found at: https://www.wunderground.com/history/daily/us/va/glen-allen/KRIC/date/2019-7-1?cm_ven=localwx_history

FLOW

Present?	No	If yes:	Approx. discharge rate:	NA
			Approx. depth of flow (in):	NA

POTENTIAL POLLUTANT INDICATORS

Indicator	Present?	Description	Relative Severity Index (1-3)
Odor	No	NA	NA
Turbidity	No	See Severity Index	NA
Floatables	No	NA	NA
Deposits/Stains	No	NA	NA
Poor Pool Quality	No	NA	NA
Pipe Benthic Growth	No	NA	NA

Notes:
None.

CERTIFICATION:

If no suspected illicit discharge is identified, certify the following:

"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."



Signature

06/28/2020

Date

Stormwater Outfall Inspection

Outfall ID: 10	Date: 06/28/2020	Time: 09:04	Inspector: Matthew Webb
----------------	------------------	-------------	-------------------------

VICINITY MAP



-77.47324, 37.63598

PHOTOGRAPHS



Stormwater Outfall Inspection

Outfall ID: 11	Date: 06/28/2020	Time: 09:06	Inspector: Matthew Webb
----------------	------------------	-------------	-------------------------

LAST RAINFALL

Depth (in): 0.24	End Date: 06/25/2020	End Time: 17:00
------------------	----------------------	-----------------

Weather history can be found at: https://www.wunderground.com/history/daily/us/va/glen-allen/KRIC/date/2019-7-1?cm_ven=localwx_history

FLOW

Present?	No	If yes:	Approx. discharge rate:	NA
			Approx. depth of flow (in):	NA

POTENTIAL POLLUTANT INDICATORS

Indicator	Present?	Description	Relative Severity Index (1-3)
Odor	No	NA	NA
Turbidity	No	See Severity Index	NA
Floatables	No	NA	NA
Deposits/Stains	No	NA	NA
Poor Pool Quality	No	NA	NA
Pipe Benthic Growth	No	NA	NA

Notes:

CERTIFICATION:

If no suspected illicit discharge is identified, certify the following:

"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."



Signature

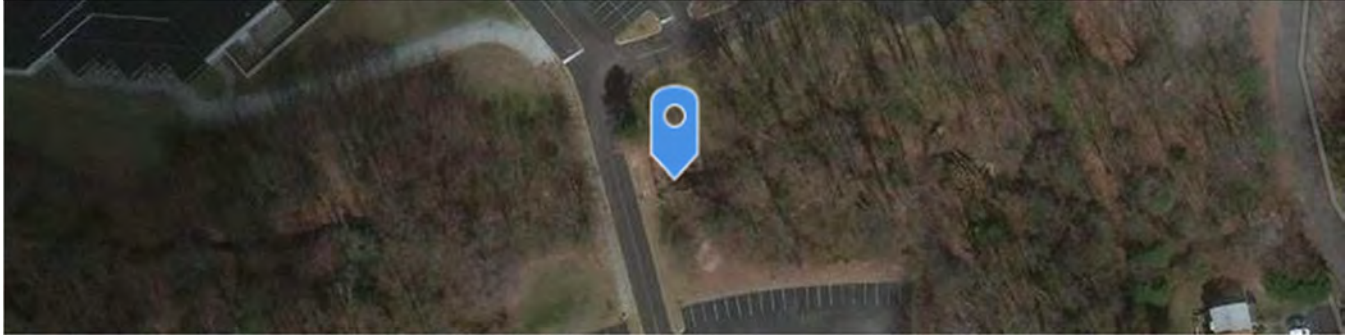
06/28/2020

Date

Stormwater Outfall Inspection

Outfall ID: 11	Date: 06/28/2020	Time: 09:06	Inspector: Matthew Webb
----------------	------------------	-------------	-------------------------

VICINITY MAP



-77.47303, 37.63597

PHOTOGRAPHS



Appendix MCM 4

No Documentation For
This Reporting Year

Appendix MCM 5

Filterra BMP
J. Sargeant Reynolds Community College Inspection & Maintenance Checklist

Date: 6/28/2020		Inspector Name: MSW			
Type of BMP: Curb Inlet Filterra		Inspection Date: 6/28/2020			
BMP ID #: 01		Filterra Size: 6' x 6'			
Component		Comments:			
Initial Observations					
Standing Water?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>			
Damage to Box Structure?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>			
Damage to Grate?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>			
Is Bypass Clear?	Y <input checked="" type="checkbox"/>	N <input type="checkbox"/>			
Waste					
Silt/Clay	Y <input checked="" type="checkbox"/>	N <input type="checkbox"/>	Unit is full of silt and clay. The emergency dissipation stones are likely buried under the accumulated silt and clay.		
Cups/Bags/Trash	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>			
Leaves	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>			
Other	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>			
Media					
Depth from Top of Slab to Surface of Mulch (in.)	9		Note: If depth from top of slab to surface of mulch exceeds 14", mulch is added until the depth of 14" is achieved.		
Mulch					
Netting in Need of Replacement?	NA		Mulch Replacement or Addition Necessary?	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
Stones in Need of Replacement?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	Type of Mulch to Be Added or Replaced? Undyed, double shredded hardwood.		
Plantings					
Plant Information	#1	#2	Note: #1 indicates the plant to the left facing the throat of the inlet and #2 represents the plant to the right facing the throat of the inlet.	#1	#2
Height Above Grate? (ft.)	11	NA	Health of plant(s)	Alive	NA
Stem Diameter/Caliper? (in.)	4	NA	Damage to plant(s)?	No	NA
Width at Widest Point? (ft.)	16	NA	Plant(s) replaced?	No	NA

Notes:

Unit is full of accumulated sediment and is in bypass. Unit requires maintenance per manufacturer's guidance and may require rehabilitation.

Certification:

If no maintenance is required, certify the following:

"I certify that the inspection is complete and that no action is necessary at this time."

Signature of Inspector

Date

If maintenance is required, provide a time frame for maintenance completion: Prior to next inspection.
Upon maintenance completion, re-inspect and certify the following:

"I certify that all recommended maintenance is complete and no additional action is necessary at this time."

Signature of Inspector

Date

Next inspection date: Fall 2020

Photos:



Note Unstabilized Area (circled) Upgradient of BMP



Note Accumulated Sediment and Fines in Inlet Throat



Note High Water Mark (arrow) and Lack of Freeboard Between Accumulated Sediment and Unit (circled)

Filtterra BMP
J. Sargeant Reynolds Community College Inspection & Maintenance Checklist

Date: 6/28/2020		Inspector Name: MSW			
Type of BMP: Curb Inlet Filtterra		Inspection Date: 6/28/2020			
BMP ID #: 02		Filtterra Size: 6' x 4'			
Component		Comments:			
Initial Observations					
Standing Water?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>			
Damage to Box Structure?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>			
Damage to Grate?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>			
Is Bypass Clear?	Y <input checked="" type="checkbox"/>	N <input type="checkbox"/>			
Waste					
Silt/Clay	Y <input checked="" type="checkbox"/>	N <input type="checkbox"/>	Erosion dissipation stones are likely buried under accumulated sediment. Some trash in unit.		
Cups/Bags/Trash	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>			
Leaves	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>			
Other	Y <input checked="" type="checkbox"/>	N <input type="checkbox"/>			
Media					
Depth from Top of Slab to Surface of Mulch (in.)	12		Note: If depth from top of slab to surface of mulch exceeds 14", mulch is added until the depth of 14" is achieved.		
Mulch					
Netting in Need of Replacement?	NA		Mulch Replacement or Addition Necessary?	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	Amount of Mulch Addition or Replacement Needed (in.): TBD
Stones in Need of Replacement?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	Type of Mulch to Be Added or Replaced? Undyed, double shredded hardwood.		
Plantings					
Plant Information	#1	#2	Note: #1 indicates the plant to the left facing the throat of the inlet and #2 represents the plant to the right facing the throat of the inlet.	#1	#2
Height Above Grate? (ft.)	10	NA	Health of plant(s)	Alive	NA
Stem Diameter/Caliper? (in.)	4	NA	Damage to plant(s)?	No	NA
Width at Widest Point? (ft.)	17	NA	Plant(s) replaced?	No	NA

Notes:

Maintenance access grates could not be opened due to overgrown tree. Unit requires maintenance per manufacturers guidance and may require rehabilitation.

Certification:

If no maintenance is required, certify the following:

"I certify that the inspection is complete and that no action is necessary at this time."

Signature of Inspector

Date

If maintenance is required, provide a time frame for maintenance completion: Prior to next inspection.
Upon maintenance completion, re-inspect and certify the following:

"I certify that all recommended maintenance is complete and no additional action is necessary at this time."

Signature of Inspector

Date

Next inspection date: Fall 2020

Photos:





Maintenance Access Grate Cannot be Opened Due to Overgrown Tree



Note Accumulated Road Grit Within Unit

Detention, Retention, & Impoundment BMP

J. Sargeant Reynolds Community College Inspection & Maintenance Checklist

Date: 6/28/2020			Inspector Name: MSW	
			Inspection Date: 6/28/2020	
BMP ID #: 03			Type of BMP: Detention	
Component:	Yes	No	N/A	Comments:
I. Embankment				No embankment.
A. Top				
1. Visual settlement	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Misalignment	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Cracking	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
B. Upstream Slope				
1. Erosion	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Adequate groundcover	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Trees, shrubs, or other vegetation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. Cracks, settlements, or bulges	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. Rodent holes	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C. Downstream Slope				
1. Erosion	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Adequate groundcover	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Trees, shrubs, or other vegetation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. Cracks, settlements, or bulges	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. Rodent holes	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
E. Drainage/seepage control				
1. Internal drains flowing	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Seepage at toe	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
II. Emergency Spillway				No emergency spillway.
1. Eroding or backcutting	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Obstruction	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Component:	Yes	No	N/A	Comments:
3. Leaking	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. Operational	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
III. Principal Spillway Barrel				None.
1. Seepage into pipe	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Debris present	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Displaced or offset joints	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
IV. Outlet Protection/Stilling Basin				Basin ties into piped storm drainage network.
1. Obstruction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Adequate riprap	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Undercutting at the outlet	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Outlet channel scour	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
V. Internal Basin Area				None.
A. Low Flow Channel*				
1. Erosion	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Adequate vegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Obstruction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B. Basin Bottom & Side Slopes				
1. Erosion	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Adequate stabilization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Sediment accumulation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Floating debris	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5. High water marks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6. Shoreline protection	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C. Inflow Channels/Pipes				
1. Erosion	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Adequate stabilization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Component:	Yes	No	N/A	

3. Undercutting	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Obstruction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D. Sediment Forebay			
1. Sediment accumulation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Stable overflow into basin	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E. Upland Landscaping			
F. Aquatic Landscaping			
*Only applies to Extended Detention Facilities			

Notes:

Facility was originally designed as dry detention but is permanently holding water. Many dragonflies were observed during the inspection. This indicates a healthy biophysical environment.

Certification:

If No maintenance is required, certify the following:

"I certify that the inspection is complete and that No action is necessary at this time."

Signature of Inspector

Date

If maintenance is required, provide a time frame for maintenance completion: _____
 Upon maintenance completion, re-inspect and certify the following:

"I certify that all recommended maintenance is complete and No additional action is necessary at this time."

Signature of Inspector

Date

Next inspection date: Spring 2021

Photos:



Main Inlet (submerged)





Main Inlet



Control Structure



Control Structure (interior)



Aquatic Bench

Detention, Retention, & Impoundment BMP

J. Sargeant Reynolds Community College Inspection & Maintenance Checklist

Date: 6/28/2020			Inspector Name: MSW	
			Inspection Date: 6/28/2020	
BMP ID #: 04			Type of BMP: Retention	
Component:	Yes	No	N/A	Comments:
I. Embankment				None.
A. Top				
1. Visual settlement	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Misalignment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Cracking	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B. Upstream Slope				
1. Erosion	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Adequate groundcover	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Trees, shrubs, or other vegetation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Cracks, settlements, or bulges	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5. Rodent holes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C. Downstream Slope				
1. Erosion	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Adequate groundcover	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Trees, shrubs, or other vegetation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Cracks, settlements, or bulges	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5. Rodent holes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E. Drainage/seepage control				
1. Internal drains flowing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Seepage at toe	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
II. Emergency Spillway				
1. Eroding or backcutting	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Obstruction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Component:	Yes	No	N/A	Comments:
3. Leaking	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Operational	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
III. Principal Spillway Barrel				
1. Seepage into pipe	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Debris present	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Displaced or offset joints	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
IV. Outlet Protection/Stilling Basin				
1. Obstruction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Adequate riprap	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Undercutting at the outlet	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Outlet channel scour	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
V. Internal Basin Area				
A. Low Flow Channel*				
1. Erosion	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Adequate vegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Obstruction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B. Basin Bottom & Side Slopes				
1. Erosion	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Adequate stabilization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Sediment accumulation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Floating debris	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5. High water marks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6. Shoreline protection	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C. Inflow Channels/Pipes				
1. Erosion	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Adequate stabilization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Component:	Yes	No	N/A	Comments:

3. Undercutting	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Obstruction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D. Sediment Forebay			
1. Sediment accumulation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Stable overflow into basin	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E. Upland Landscaping			
F. Aquatic Landscaping			
*Only applies to Extended Detention Facilities			

Notes:

Control structure could not be thoroughly access during inspection but appeared partially blocked. Many dragonflies were observed during the inspection. This indicates a healthy biophysical environment.

Recommended Maintenance:

- 1) Clear overgrown vegetation at least 6' from each inlet.
- 2) Remove woody vegetation from aquatic bench plantings.
- 3) Clear overgrown vegetation from forebay weir.
- 4) Clear overgrown vegetation at least 6' from riser and ensure it is clear of any obstructions.

Certification:

If No maintenance is required, certify the following:

"I certify that the inspection is complete and that No action is necessary at this time."

Signature of Inspector

Date

If maintenance is required, provide a time frame for maintenance completion: _____
 Upon maintenance completion, re-inspect and certify the following:

"I certify that all recommended maintenance is complete and No additional action is necessary at this time."

Signature of Inspector

Date

Next inspection date: Spring 2021

Photos:



East Inlet



Forebay Weir (note overgrown vegetation)



Forebay Weir Overflow



Basin Sideslopes (note woody vegetation)



Reservoir Area



Downstream Embankment Slope



Aquatic Bench (note woody vegetation, arrow)



Outfall



North Inlet (note overgrown vegetation and trees)



North Inlet



Control Structure (obstructed by overgrown vegetation)



Control Structure (arrow)

Detention, Retention, & Impoundment BMP

J. Sargeant Reynolds Community College Inspection & Maintenance Checklist

Date: 6/28/2020			Inspector Name: MSW	
			Inspection Date: 6/28/2020	
BMP ID #: 05			Type of BMP: Extended Detention	
Component:	Yes	No	N/A	Comments:
I. Embankment				There are trees on the embankment downstream slope.
A. Top				
1. Visual settlement	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Misalignment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Cracking	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B. Upstream Slope				
1. Erosion	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Adequate groundcover	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Trees, shrubs, or other vegetation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Cracks, settlements, or bulges	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5. Rodent holes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C. Downstream Slope				
1. Erosion	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Adequate groundcover	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Trees, shrubs, or other vegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Cracks, settlements, or bulges	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5. Rodent holes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E. Drainage/seepage control				
1. Internal drains flowing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Seepage at toe	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
II. Emergency Spillway				
1. Eroding or backcutting	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Obstruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Component:	Yes	No	N/A	Comments:
3. Leaking	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Operational	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
III. Principal Spillway Barrel				The control structure's orifice is plugged, and the plug has an even smaller orifice. This may be intended. The complete original design plans are needed in order to confirm this.
1. Seepage into pipe	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Debris present	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Displaced or offset joints	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
IV. Outlet Protection/Stilling Basin				Area is overgrown.
1. Obstruction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Adequate riprap	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Undercutting at the outlet	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Outlet channel scour	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
V. Internal Basin Area				There is an eroded area (approximately 2'x2'x14') along the riprap ditch from the facilities management building yard.
A. Low Flow Channel*				
1. Erosion	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Adequate vegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Obstruction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B. Basin Bottom & Side Slopes				
1. Erosion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Adequate stabilization	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Sediment accumulation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Floating debris	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5. High water marks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6. Shoreline protection	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C. Inflow Channels/Pipes				
1. Erosion	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Adequate stabilization	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Component:	Yes	No	N/A	Comments:

3. Undercutting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Obstruction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D. Sediment Forebay			
1. Sediment accumulation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Stable overflow into basin	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E. Upland Landscaping			
F. Aquatic Landscaping			
*Only applies to Extended Detention Facilities			

Notes:

Overall, the basin appears to be in good condition.

Recommended Maintenance

- 1) Repair erosion at rip-rap inlet channels and permanently stabilize.
- 2) Provide complete original design plans to confirm control structure orifice size is correct.
- 3) Clear trees on downstream embankment slope to the original clearing limits and restore to grass cover. The original clearing limits can be identified by comparing where new tree growth meets old tree growth.
- 4) Clear overgrown vegetation at least 6' from outfall pipe.
- 5) Clear outfall ditch to the original clearing limits.

Certification:

If No maintenance is required, certify the following:

"I certify that the inspection is complete and that No action is necessary at this time."

Signature of Inspector

Date

If maintenance is required, provide a time frame for maintenance completion: Prior to next inspection.
 Upon maintenance completion, re-inspect and certify the following:

"I certify that all recommended maintenance is complete and No additional action is necessary at this time."

Signature of Inspector

Date

Next inspection date: Spring 2021

Photos:



Overall



Control Structure



Control Structure Interior (note orifice plug, arrow)



Emergency Spillway and Embankment Downstream Toe
Note old trees (arrow) and new trees (circle)



Level Spreader Inlet (into forebay)



West Forebay



Inlet Ditch



Inlet Ditch



Rip-rap Inlet from Facilities Maintenance Building Yard (note erosion, arrow)



Note Erosion



Outfall



Outfall Ditch (overgrown)

Detention, Retention, & Impoundment BMP

J. Sargeant Reynolds Community College Inspection & Maintenance Checklist

Date: 6/28/2020			Inspector Name: MSW	
			Inspection Date: 6/28/2020	
BMP ID #: 06			Type of BMP: Detention	
Component:	Yes	No	N/A	Comments:
I. Embankment				BMP does not have an embankment.
A. Top				
1. Visual settlement	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Misalignment	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Cracking	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
B. Upstream Slope				
1. Erosion	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Adequate groundcover	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Trees, shrubs, or other vegetation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. Cracks, settlements, or bulges	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. Rodent holes	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C. Downstream Slope				
1. Erosion	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Adequate groundcover	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Trees, shrubs, or other vegetation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. Cracks, settlements, or bulges	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. Rodent holes	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
E. Drainage/seepage control				
1. Internal drains flowing	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Seepage at toe	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
II. Emergency Spillway				BMP does not have an emergency spillway.
1. Eroding or backcutting	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Obstruction	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Component:	Yes	No	N/A	Comments:	
3. Leaking	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
4. Operational	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
III. Principal Spillway Barrel				The BMP discharges directly to the storm sewer pipe network.	
1. Seepage into pipe	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
2. Debris present	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
3. Displaced or offset joints	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
IV. Outlet Protection/Stilling Basin				Not applicable, the BMP discharges directly to the storm sewer pipe network.	
1. Obstruction	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
2. Adequate riprap	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
3. Undercutting at the outlet	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
4. Outlet channel scour	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
V. Internal Basin Area					
A. Low Flow Channel*					
1. Erosion	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
2. Adequate vegetation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
3. Obstruction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
B. Basin Bottom & Side Slopes					
1. Erosion	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
2. Adequate stabilization	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
3. Sediment accumulation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
4. Floating debris	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
5. High water marks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
6. Shoreline protection	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
C. Inflow Channels/Pipes					
1. Erosion	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
2. Adequate stabilization	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Component:	Yes	No	N/A		Comments:

3. Undercutting	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Obstruction	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. Sediment Forebay			
1. Sediment accumulation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Stable overflow into basin	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E. Upland Landscaping			
F. Aquatic Landscaping			
*Only applies to Extended Detention Facilities			

Notes:

The BMP generally seems to be in good condition and operating as intended. It appears that the forebay check dam has been modified to a lower elevation. This reduces the forebay's water capacity and allows more debris to pass over the checkdam and clog the control structure's low flow orifice, increasing the maintenance needs. The checkdam appears clogged with debris. If the forebay is holding water for longer than intended, an underdrain through the forebay weir could be installed or the checkdam could be rebuilt.

Recommended Maintenance:

- 1) Ensure the low flow orifice is clear of any obstructions.
- 2) Clear inlet of accumulated sediment to ensure unobstructed flow into the basin.
- 3) Consider installing underdrain through forebay check dam and restoring to original design plans or rebuilding the checkdam.

Certification:

If No maintenance is required, certify the following:

"I certify that the inspection is complete and that No action is necessary at this time."

Signature of Inspector

Date

If maintenance is required, provide a time frame for maintenance completion: Prior to next inspection.
 Upon maintenance completion, re-inspect and certify the following:

"I certify that all recommended maintenance is complete and No additional action is necessary at this time."

Signature of Inspector

Date

Next inspection date: Spring 2021

Photos:



Overall



Control Structure (note low-flow orifice, circled)



Control Structure Interior



Forebay Checkdam - Appears Clogged with Sediment and Debris
(per plans, it should be 3' high on ends and 2.5' high in center)



Main Inlet (note accumulated sediment, arrow)

Appendix MCM 6

See Appendix MCM 2 for SOP training documentation.