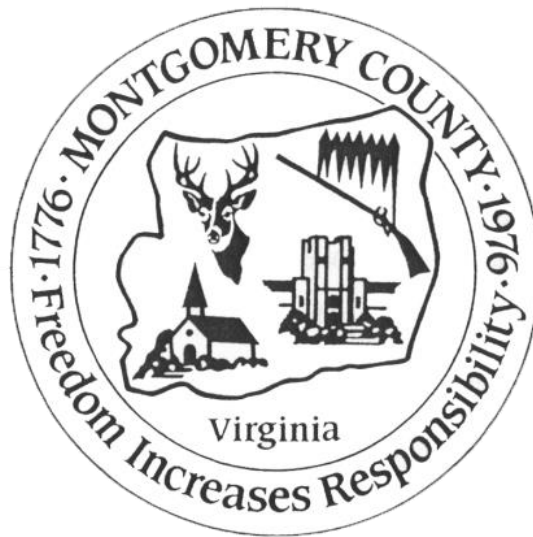


Montgomery County
Municipal Separate Storm Sewer System (MS4)
VPDES Permit No. VAR040134
Annual Report



Reporting Period: July 1, 2018 through June 30, 2019

Prepared by:
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Date: September 20, 2019

General Information

Montgomery County, Virginia has MS4 coverage under General Permit No. VAR040134, effective November 1, 2018 – October 31, 2023. This document serves as the Montgomery County Municipal Separate Storm Sewer System (MS4) annual report for the reporting period of July 1, 2018 through June 30, 2019. The annual report time period includes the July 1, 2018 - September 30, 2019 period when previous 2013 MS4 general permit coverage was administratively continued until the effective date of the current permit.


The permit conditions require that all annual reports submitted under the current permit are to be maintained as separate documents from the Program Plan. In this permit cycle the Program Plan serves as a planning and implementation tool to demonstrate compliance with the permit. The Program Plan includes specific items as set out in the general permit but is not an extension or enforceable part of the permit. The evaluation sections of this report reference components of the Program Plan as a part of the overall evaluation of the MS4 program implementation.

No stormwater discharge monitoring was performed under this permit year.

No Waste Load Allowances (WLAs) are currently assigned to Montgomery County in any TMDL, therefore no action plan status updates are included in this report.

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



County Administrator

9/19/19

Date

VAR040134

Permit Number

Montgomery County, VA

MS4 Name

PROGRAM PLAN REVISIONS

The 2018-2023 general permit requires that each annual report shall summarize revisions to the Plan. During this permit year the following revisions were made to the County MS4 Program Plan.

The MS4 organizational roles and responsibilities chart was modified by removal of the Christiansburg High School and Middle School Principals. Their removal was due to the removal of those two school from the requirements for maintaining a Good Housekeeping Stormwater Pollution Prevention Plan (SWPPP). A revision date was also added to the chart. Note that the organizational chart outlines roles and responsibilities and specific Best Management Practices (BMPs) within the Program Plan may also identify responsible parties in additional detail.

The Minimum Control Measure (MCM) MCM1 Public Education and Outreach section was modified by inclusion of three tables listing education and outreach strategies available for use for each of the three identified water quality issues. The tables are based on Table 1 of the general permit. The Program Plan tables include anticipated timelines for implementation as well as measurable goals for each strategy. As a planning tool, these tables provide more than the minimum permit requirement of two strategies in total. The actual MCM 1 strategies employed within this reporting year are provided in this annual report.

The MCM2 Public Involvement and Participation section was modified by inclusion of a Strategies for Public Involvement Opportunities table based on Table 2 of the general permit. The table includes anticipated timelines for implementation as well as measurable goals for each strategy.

The BMP 2-1 description was modified to specify that the website link allows for the reporting of illicit discharge, the ability to comment on the MS4 Program Plan, and to register complaints concerning stormwater management.

The MCM 3 Illicit Discharge Detection and Elimination section was revised to reflect the completion of the mapping of all known outfalls. The section was revised to include a link to the County website to view interconnection notifications. The MCM 3 measurable goals remain meeting the MCM3 dry weather screening inspection and illicit discharge investigation requirements, annual reporting requirements, and MS4 service area information updating requirements, as well as documenting the availability of the standard operating procedures in place. The permit requirement to provide GIS compatible shapefiles of the MS4 was met by electronically transmitting information to DEQ staff on June 28, 2019.

The Program Plan MCM4 Construction Stormwater Runoff Control section was revised to reflect that the County has adopted and implemented the Virginia Erosion and Sediment Control (VESCP) program consistent with Virginia Erosion and Sediment Control Law. Requiring the implementation of appropriate controls to prevent nonstormwater discharges during land disturbing activities is addressed through the County Illicit Discharge ordinance. Relevant documents are accessible through electronic links to the County website. A summary of permit issuance and enforcement actions are measurable goals to be provided for in this report.

The MCM5 Post-Construction Stormwater Management section was revised to reflect completion of the stormwater facility tracking and reporting of BMP 5-2. This document includes reporting of

postconstruction inspections and certifications that stormwater management facility reporting requirements are met.

The MCM6 Good Housekeeping and Pollution Prevention section was revised by removing implementation schedules. All best management practices designed to comply with permit obligations are in effect. Two school SWPPP sites listed in the previous plan are delisted as described in this annual report. Completed nutrient management plans are noted in the revised program plan.

This document includes the annual reporting items as specified in each Minimum Control Measure (MCM) contained in Part I E of the permit, and each MCM section of this report includes an overall Minimum Control Measure evaluation of the program implementation.

The MS4 map and information table have been updated to reflect any changes to the MS4 in the reporting year. No new MS4 outfalls were added during the permit year. 100% of the 65 identified outfalls were inspected. No monitoring data was collected during the permit year.

MINIMUM CONTROL MEASURE ANNUAL REPORTING

MCM 1: PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS

The high priority issues addressed in the public outreach and education program for the 2018-2019 permit year were water quality issue #1, pet waste, and water quality issue #2, sediment, nutrients and trash/refuse.

The following strategies were employed:

Category	Strategy	Details and Evaluation
Traditional written materials	Montgomery County Parks and Recreation Department fall "Go Play" course catalog message	<p>Water quality issues #1 and #2 were addressed through messaging that provided information on the availability of soil testing through the Cooperative Extension Offices at the County Government Center and the value of healthy lawns and native species planting in reducing sediment, nutrient, and bacterial contamination of stormwater through soil, pesticide, and fertilizer runoff. The messaging and an invoice documenting the quantity of catalogs printed are provided in the appendix under BMP 1-1, 1-2, 1-3.</p> <p>Evaluation: 5,000 catalogs were printed for distribution, meeting the measurable goal of documenting the number of catalogs printed. An improvement to this outreach in the current permit year will be to document online viewing statistics to further demonstrate the extent of the outreach to the audience.</p>
Traditional written materials	Montgomery County Road Atlas message	<p>Water quality issues #1 and #2 were addressed through two inserts into the road atlas printed for sale to interested parties. A "Scoop the Poop" message addressing issues with pet waste and actions that the public can take was placed on the back page of the county atlas. A county map illustrating the impaired waters in the county and its unique position on the eastern continental divide was included, along with messaging that citizens play a role in keeping watersheds clean. The messaging and an invoice documenting the quantity of atlases printed are provided in the appendix under BMP 1-1, 1-2, 1-3.</p> <p>Evaluation: 145 atlases were printed during the permit year. Additional printings of the atlas will occur as needed in subsequent permit years.</p>
Traditional written materials	Montgomery County Parks and Recreation Department spring catalog message	<p>Water quality issue #2 was addressed through messaging that provided information on the impacts of excess lawn fertilization. The message also references nutrient management planning and included a link to the Cooperative Extension Services library of lawn care publications. The messaging and an invoice documenting the quantity of catalogs printed are provided in the appendix under BMP 1-1, 1-2, 1-3.</p> <p>Evaluation: 5,000 catalogs were printed for distribution, meeting the measurable goal of documenting the number of catalogs printed.</p>

		An improvement to this outreach in the current permit year will be to document online viewing statistics to further demonstrate the extent of the outreach to the audience.
Traditional written materials	Real estate tax bill inserts	<p>Water quality issue #2 was addressed through messaging that provided information on the impacts of excess lawn fertilization. The “Being Clean and Green” message also references that lawn services can participate in the Virginia Water Quality Agreement Program as well as nutrient management planning and Cooperative Extension Services.</p> <p>The messaging and an invoice documenting the quantity of catalogs printed are provided in the appendix under BMP 1-1, 1-2, 1-3.</p> <p>Evaluation: 30,000 newsletters were printed for inclusion in 27,454 real estate bills sent to all county residents with 2,456 remaining for distribution in brochure racks at the county government center, meeting the measurable goal of documenting the number of catalogs printed.</p> <p>This outreach is evaluated as an effective strategy due to the number of mailings and the fact that every billable real estate owner receives the insert..</p>
Media materials	Social media messaging	<p>Facebook and Twitter social media posts were produced. The messaging and outreach summary are provided in the appendix under BMP 1-1, 1-2, 1-3</p> <p>Evaluation: 18 Facebook and Twitter social media postings were made in the permit year. 12,606 reaches/impressions and 294 engagements were registered. The number of postings exceed the measurable goal of four postings. This is the initial year that reported viewing statistics are summarized. Future outreach will focus on increasing engagements and incorporating additional postings for public education while maintaining the existing outreach efforts to boost MCM 2 public participation.</p>

MCM1 Evaluation:

Each item in the outreach is individually evaluated in the information table above. Overall, the number of printed materials exceeds 40,000 and is considered as a substantial outreach effort. The County employed two types of the strategies listed and five total outreach elements, with the 18 total social media messaging items grouped as a single element. Changes to the Program Plan are not necessary. Subsequent permit year education and outreach will maintain traditional written material outreach and will continue a focus on increasing social media outreach, including additional posting of educational information and links to other resources while continuing the promotion of MCM2 events.

MCM 2: PUBLIC INVOLVEMENT/PARTICIPATION

A total of 33 occurrences of public input related to stormwater were received during the permit year.

County staff received 4 phoned stormwater complaints that led to Notices of Violation or Stop Work Orders on sites with existing permits or unpermitted sites. These are included and summarized in the construction inspection enforcement actions in MCM4

4 phone calls, 1 email generated through the stormwater website, and 1 report by county staff resulted in 6 IDDE investigations that are reported in MCM3

The county received 22 additional phoned inquiries or complaints;

- 4 were citizen complaints about land disturbance that did not require IDDE investigation or construction permitting enforcement
- 6 were flooding complaints unrelated to any permitting requirements that resulted in referrals to VDOT or determinations that the issue was a private concern
- 1 county employee inquiry that resulted in contracted repairs to county storm drain
- 4 were non-land disturbance issues involving private culvert maintenance issues
- 7 were inquiries related to requirements for land disturbance permitting where a determination was provided to the landowner as to whether proposed activities would or would not require permitting from the county, or the county provided contact information for DEQ and Corps staff as guidance.

The county received 1 inquiry from an educator with regard to the proposed program plan during the permit year.

The county stormwater and MS4 webpage can be accessed at:

<https://montva.com/departments/stormwater>

A summary of the website viewing statistics are contained in the appendix under BMP 2-1.

Evaluation: The approximate number of unique views of between 1,300 and 1,400 for the County website pages dedicated to stormwater was essentially unchanged from the previous year. The website meets all permit requirements. Phone contact remains the primary form of contact, with only one contact in 33 total contacts in the permit year through the website. The county will continue to maintain the website and will continue to promote viewing of the site through social media outreach where interested parties can access the website via an active hyperlink.

Montgomery County collaborates with the following MS4 permittees without formal agreement:

Town of Blacksburg VAR040019

Town of Christiansburg VAR040025

Virginia Tech VAR040049

Virginia Department of Transportation VA0092975

The public involvement activities were implemented in the permit year are summarized in a table below. Two watershed cleanup events from the restoration

Category	Activity	Event Metrics and Evaluation
Restoration	'ReNew the New' river cleanup 2018/08/25	Metrics: 100 volunteers, 1.50 miles of the New River and adjacent access road cleaned, and 0.91 tons of trash collected. See the MCM 2 appendix for related documentation. Evaluation: The event is beneficial to water quality through direct removal of gross pollutants, through the stormwater messaging conveyed to the public as a part of the event promotion, and through the educational outreach and distribution of giveaways at the event sign up and post collection lunch event.
Educational events	MCPS Stormwater Days 2018/11/02	Metrics: 300 students, 14 chaperones/teachers, and 30 presenters attended. See the MCM 2 appendix for related documentation. Evaluation: The event is beneficial to water quality through the direct educational outreach to the sixth grade class of the county school system at 12 distinct stations and through the participation of the students in pre- and post- event survey activities that increase the students' knowledge of watersheds and the value of healthy watersheds.
Educational events	New River Homebuilders Association Homebuilder's Expo Booth Participation 2019/08/08-10	Metrics: Approximately public 1,500 attendees and 8 participants from 4 MS4 permittees. Evaluation: The event is beneficial to water quality through the direct educational outreach to the public to convey knowledge of MS4 programs and of watersheds and the value of healthy watersheds, in answering stormwater related questions and engaging in dialogue on stormwater issues, and through giveaways including pet waste bags and dispensers, Scoop the Poop magnets, and coloring and activity books for youths.
Educational events	MCPS Stormwater Days 2019/04/15	Metrics: 99 students, 12 chaperones/teachers, and 24 presenters attended. See the MCM 2 appendix for related documentation. Evaluation: The event is beneficial to water quality through the direct educational outreach to the sixth grade class of the county school system at 12 distinct stations and through the participation of the students in pre- and post- event survey activities that increase the students' knowledge of watersheds and the value of healthy watersheds.
Educational events	MCPS Stormwater Days 2019/04/16	Metrics: 300 students, 14 chaperones/teachers, and 31 presenters attended. See the MCM 2 appendix for related documentation. Evaluation: The event is beneficial to water quality through the direct educational outreach to the sixth grade class of the county school system at 13 distinct stations and through the participation of the students in pre- and post- event survey

		activities that increase the students' knowledge of watersheds and the value of healthy watersheds.
Restoration	Broomin' and Bloomin' cleanup 2019/04/27	<p>Metrics: 132 persons in 25 groups participated. Trash was collected along a length of approximately 26 miles. 0.84 tons of trash were collected.</p> <p>Evaluation: The event is beneficial to water quality through direct removal of gross pollutants, through the stormwater messaging conveyed to the public as a part of the event promotion, and through the educational outreach and distribution of giveaways at the post collection lunch event.</p>
Education Events	New River Watershed Roundtable 2018/08/29 2018/10/28 2019/02/27 2019/05/09	<p>Metrics: One or more County staff attended all four quarterly meeting events listed.</p> <p>Evaluation: The event is beneficial to water quality through the opportunity to coordinate public participation events with other localities. The hosting organization, New River Planning District Commission, secured a grant and distributed pet waste dispensers and extra bags to participating localities, and the meetings provide a forum for engaging in dialogue on stormwater issues with 15-20 groups including area MS4 permittees, other localities, and independent organizations with an interest in healthy watersheds..</p>

MCM2 Overall Evaluation:

The stormwater webpage meets permit requirements. The report documents five public involvement activities from two categories in the permit year; note that the three MCPS stormwater days are considered as a single activity. Overall, the number of individuals involved in the activities is approximately 2,500 and 1.75 tons of trash were collected. The two restoration events provide the physical parameters of trash collected as an evaluation metric as well as communicating messaging that is expected to result in benefits to water quality through increased awareness and modified behaviors. The three types of education events employed are specifically named in the examples of allowable activities. These activities rely on communicating messaging that will increase awareness and is expected to lead to benefits to water quality through modified behaviors. Based on this evaluation, changes to the Program Plan are not necessary.

MCM 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION

The online [MS4 Outfall Map](#) and information table contained in the map attribute table have been updated to reflect any changes to the MS4 occurring on or before June 30, 2019.

All 65 identified MS4 outfalls were inspected during the permit year. Inspection results may be viewed in the outfall map.

Six illicit discharge investigations were conducted during the permit year. IDDE report 5 remains open pending repair work to a sanitary sewer manhole cover. All investigations provide the six required information items prescribed by the permit and are contained in the BMP 3-3 section of the report appendix.

MCM3 Overall Evaluation:

The following items demonstrate permit compliance:

- The MS4 Outfall Map posting and upkeep and transmittal of GIS-compatible shapefiles to DEQ in the permit year.
- The documentation of permit year [MS4 Interconnection Notices](#)
- The inspection of all known MS4 outfalls
- The IDDE ordinance as available online and linked in the Program Plan
- The written IDDE procedures and dry weather screening protocols as available online and linked in the Program Plan
- Completion of IDDE investigations as detailed in the annual report appendix

The evaluation concludes that no changes to the MCM3 procedures and protocols are required.

MCM 4: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

County staff conducted 1,457 inspections during the permit year. Inspections are documented in a permitting software application.

19 enforcement actions were taken in the permit year and are summarized in the BMP 4-2 section of the appendix; 12 Notices of Corrective Action, 4 Notices to Comply/Notice of Violation, and 3 Stop Work Orders.

MCM4 Overall Evaluation:

The following items demonstrate permit compliance:

- The County has an adopted Virginia erosion and Sediment Control Program (VESCP) as documented in the County Program Plan available online.
- The County maintains an Illicit Discharge Ordinance as available online and linked in the Program Plan that provides an enforceable mechanism to meet the permit requirements to prevent nonstormwater discharges on permitted projects not covered under the Construction general permit.
- Written erosion and sediment control (ESC) inspection procedures are established as documented in the County Program Plan available online.
- Written enforcement action procedures to require compliance with ESC regulations are established as documented in the County Program Plan available online.
- The roles and responsibilities of staff for MCM4 compliance are outlined in the county organizational chart and specific Best Management Practices (BMPs) within the plan may also identify responsible parties in additional detail.

The evaluation concludes that no changes to the MCM4 procedures and protocols are required.

MCM 5: POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND DEVELOPMENT ON PRIOR DEVELOPED LANDS

The County implements an approved Virginia Stormwater Management Program (VSMP) consistent with the Virginia stormwater management Act and VSMP regulations.

Two privately owned stormwater facilities were inspected in the permit year. No enforcement actions were initiated in regard to these facilities.

The County has identified 15 publicly owned stormwater facilities that lie within the MS4 regulated area. All 15 facilities were inspected in the permit year. No significant, non-routine repair or retrofit activities were performed in the permit year.

Montgomery County submitted stormwater management facility information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which the County was required to obtain coverage under the General VPDES CGP.

Montgomery County had no stormwater management facility or practice completed that required reporting using the DEQ BMP Warehouse between July 1, 2018 and June 30, 2019.

MCM5 Overall Evaluation:

The following items demonstrate permit compliance:

- The County maintains a stormwater management facility inspection and maintenance program for facilities owned and operated by the permittee in accordance with the permit, and conducts inspections and maintenance in accordance with written procedures and as outlined in the Program Plan and available online at the County stormwater webpage.
- The County implements an established stormwater management facility inspection and enforcement program for facilities not owned and operated by the permittee in accordance with the permit, and has legal authority for enforcement of maintenance responsibilities if maintenance is neglected as outlined in the program Plan and available online at the County stormwater webpage.
- The county maintains spreadsheets online for [Public Stormwater Facilities](#) and [Private Stormwater Facilities](#) in conformance with the permit requirement to maintain information on these facilities.

The evaluation concludes that no changes to the MCM5 procedures and protocols are required.

MCM 6: POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

No new operational procedures were developed and no existing operational procedures were modified in the permit year.

No new Good Housekeeping Stormwater Pollution Prevention Plans (SWPPPs) were developed in the permit year.

Two high priority sites were delisted from the requirement to maintain SWPPPs during the reporting period. The Christiansburg High School was originally listed due to the storage of school buses reasonably expected to be exposed to stormwater and have the potential for pollutant discharge on the property. This activity has ceased on the site. The Christiansburg Middle School was originally listed due to the outdoor storage of fertilizer reasonably expected to be exposed to stormwater and have the potential for pollutant discharge on the property. This activity has ceased on the site.

New [2019 Nutrient Management Plans](#) were developed during the permit year and available at the County website through the hyperlink. The following areas are covered under this plan.

NMPs developed in the Reporting Year July 1, 2018 through June 30, 2019

Location	Acreage	Watershed Code	Approval date
Blacksburg High School	2.3	NE59	5/30/2019
Christiansburg High School	5.3	NE58	
Christiansburg Primary/Elementary School	1.8	NE58	
Gilbert Linkous Elementary School	0.8	NE59	
Harding Ave Elementary School	0.9	NE59	
Margaret Beeks Elementary School	1.6	RU07	
Total	12.7		

The following training events were conducted in the permit year. Complete training attendance sheets are provided in the appendix section BMP 6-5.

Date	Number of Attendees	The objective of the Training Event and materials provided
2018/07/11	118 MCPS Custodial and Facilities staff, County Stormwater Specialist	General Introduction to the MS4 Permit. The six MCMs. MCM 6 housekeeping responsibilities. Maximum Extent Practicable (MEP) approach to minimization. SWPPP coverage. Identification of Illicit Discharges. Spill Reporting. Materials provided: IDDE Field Guide and County Good Housekeeping Procedures.
2018/08/21	10 Parks and Recreation staff and County Stormwater Specialist	General Introduction to the MS4 Permit. The six MCMs. Maximum Extent Practicable (MEP) approach to minimization. Materials provided: IDDE Field Guide and County Good Housekeeping Procedures.

2018/08/22	14 Christiansburg High School and MCPS Facilities Staff, County Stormwater Specialist	General Introduction to the MS4 Permit. The six MCMs. MCM 6 housekeeping responsibilities. Maximum Extent Practicable (MEP) approach to minimization. SWPPP coverage. Identification of Illicit Discharges. Spill Reporting. Materials provided: IDDE Field Guide and County Good Housekeeping Procedures.
2018/08/23	7 Christiansburg Middle School and MCPS Facilities Staff, County Stormwater Specialist	General Introduction to the MS4 Permit. The six MCMs. MCM 6 housekeeping responsibilities. Maximum Extent Practicable (MEP) approach to minimization. SWPPP coverage. Identification of Illicit Discharges. Spill Reporting. Materials provided: IDDE Field Guide and County Good Housekeeping Procedures.
2018/08/31	5 MCPS Facilities Staff, County Stormwater Specialist	General Introduction to the MS4 Permit. The six MCMs. MCM 6 housekeeping responsibilities. Maximum Extent Practicable (MEP) approach to minimization. SWPPP coverage. Identification of Illicit Discharges. Spill Reporting. Materials provided: IDDE Field Guide and County Good Housekeeping Procedures.
2018/09/20	11 Montgomery County Fire and Rescue Commission members, County Stormwater Specialist	The separate MS4 permitting and service areas of the County and two towns. The distinction between fire and rescue response, hazardous material spill response, and daily good housekeeping procedures and spill reporting. No materials provided.
2018/10/29	6 County ESC and SWM Inspectors	The six MCMs. Maximum Extent Practicable (MEP) approach to minimization. IDDE reporting. Good housekeeping procedures. Inspection and enforcement, and MCM6 materials contained in the inspection guide. Materials provided: Stormwater Inspection guide. IDDE Field Guide and County Good Housekeeping Procedures. IDDE reporting forms.

MCM6 Overall Evaluation:

The following items demonstrate permit compliance:

- The County completed a review of all County owned facilities to re-evaluate each facility as high-priority or low-priority and subsequently evaluate any high-priority site for any high potential to discharge pollutants.
- The County maintains a Good Housekeeping SWPPP where appropriate, and has developed Good Housekeeping procedures for use.
- The County engaged a certified planner has developed all required turf and landscape Nutrient Management Plans and provided the plans to appropriate personnel.

- No deicing agents containing urea or other forms of nitrogen are employed for deicing application.
- The County maintains a training program and training documentation in accordance with the permit.
- Employees or contractors hired by the County to apply pesticides and herbicides are trained or certified in accordance with appropriate regulations.
- Employees serving as plan reviewers, inspectors, program administrators for ESC or SWM program implementation are appropriately certified.
- Emergency response personnel are trained in spill response.

The evaluation concludes that no changes to the MCM6 procedures and protocols are required.

ATTACHMENT INDEX

BMP 1-1, 1-2, 1-3 Public Education and Outreach Program Documentation

BMP 2-1: MS4 Webpage Statistics Report

BMP 2-2 Public Participation Documentation

BMP 3-3: IDDE Investigations

BMP 4-2: Enforcement Action Summary

BMP 6-5: Annual Training Documentation