2015

Annual NPDES MS4 Report

Prepared for:

Maryland Department of the Environment

Water Management Administration

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National Pollutant Discharge Elimination System
Municipal Separate Storm Sewer Systems

2015 Annual Report

Prepared for

Maryland Department of the Environment
Water Management Administration
1800 Washington Boulevard
Baltimore, Maryland 21230

Prepared by

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ACKNOWLEDGEMENTS

The Prince George's County Department of the Environment, Stormwater Management Division, prepares the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Annual Report on behalf of Prince George's County. The status of the County's NPDES programs is based upon information solicited from County agencies that administer jurisdiction-wide water quality programs and accomplishments achieved in partnership with State and Federal agencies and non-profit organizations. Primary administrative and technical personnel responsible for compliance with the NPDES MS4 Permit are referenced under Permit Administration, beginning on page 7 of this report. The following groups also provide the County with programmatic assistance, information and/or ancillary funding to assist the County's efforts in protecting and improving water resources:

Maryland-National Capital Park and Planning Commission
- Department of Parks and Recreation, Department of Planning

Maryland Department of Natural Resources
Maryland Department of the Environment
Neighborhood Design Center
Prince George's County Agencies
- Environment:
  - Directors Office: Communications and Community Engagement Section
  - Administrative Services Division: Budget and Procurement Section
  - Stormwater Management Division: Capital Projects Construction Section, Capital Projects Design Section, Environmental Programs Section, Inspection and Compliance Section
  - Waste Management Division: Disposal Section, Recycling Section, Project Management Section, Collections Section
  - Sustainability Initiatives Division: Community Outreach Promoting Empowerment Section
- Fire/Emergency Medical Services: Hazardous Materials Division
- Health Department: Environmental Engineering Program
- Office of Information Technology and Communications
- Public Works and Transportation:
  - Office of Engineering & Project Management: Engineering Division
  - Office of Highway Maintenance: Storm Drainage Maintenance Division, Special Services Division
  - Office of Transportation: Transit Planning Section
  - Office of Project Management: Plans and Programs, Bridge Inspection & Management
- Permitting, Inspections and Enforcement: Site/Road Review Division, Inspections Division, Enforcement Division, Building Plan Review

Prince George's County Beautification Committee
Prince George's County Public Schools
United States Environmental Protection Agency, Region III
United States Army Corps of Engineers
Washington Metropolitan Council of Governments
Washington Suburban Sanitary Commission

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ABBREVIATIONS

95-CLEAN	Prince George's County Water Pollution Line
AFF	Alice Ferguson Foundation
ASD	Administrative Services Division, (DoE)
AWS	Anacostia Watershed Society
BBW	Black Branch Watershed
B-IBI	Benthic-Index of Biotic Integrity
BMP	Best Management Practices
BPRUC	Bureau of Public Roads Use Codes
BSR	Brown Station Road Sanitary Landfill
CAP	Compliance Action Plan
CBT	Chesapeake Bay Trust
CCCP	Comprehensive Community Cleanup Program
CIP	Capital Improvements Program
COMAR	Code of Maryland Regulations
COPE	Community Outreach Promoting Empowerment, (DoE)
CORP	County Office Recycling Program, (DoE)
CPCS	Capital Projects Construction Section, (DoE)
CPDS	Capital Projects Design Section, (DoE)
CFR	Code of Federal Regulations
Cu	Total Copper
CWP	Clean Water Partnership
DoE	Prince George's County Department of the Environment
DO	Director's Office
DPIE	Department of Permitting, Inspection and Enforcement
DPW&T	Prince George's County Department of Public Works and Transportation
DVD	Digital Versatile Disc
E. coli	Escherichia coli
EED	Environmental Engineering Division (Health Department)
EMC	Event Mean Concentration
EMS	Emergency Medical Services
EPA	U.S. Environmental Protection Agency
ESD	Environmental Site Design
ESS	Engineering Services Section (DoE)
ETHM	End Time Harvest Ministries
FD	Fire Department
FEMA	Federal Emergency Management Agency
F-IBI	Fish-Index of Biotic Integrity
FOG	Fats, Oil and Grease
GIS	Geographic Information System
HAZMAT	Prince George's County Hazardous Materials Team
HD	Prince George's County Health Department

HMD	Prince George's County Fire/Emergency Medical Services Department, Hazardous Materials Division
ICS	Inspection & Compliance Section
ID	Inspections Division (DPIE)
IDDE	Illicit Discharge Detection and Elimination
IPM	Integrated Pest Management
KPGCB	Keep Prince George's County Beautiful
LED	Light-Emitting Diode
LID	Low Impact Development
MDE	Maryland Department of the Environment
MD DNR	Maryland Department of Natural Resources
MEP	Maximum Extent Practicable
MES	Maryland Environmental Service
M-NCPPC	Maryland-National Capital Park and Planning Commission
MOU	Memorandum of Understanding
MRF	Materials Recycling Facility
MS4	Municipal Separate Storm Sewer System
MWCOG	Metropolitan Washington Council of Governments
NDC	Neighborhood Design Center
NO3+NO2	Total Nitrate+Nitrite
NPDES	National Pollutant Discharge Elimination System
OCS	Prince George's County Office of Central Services
OEPM	Office of Engineering and Project Management (DPW&T)
OHMD	Office of Highway Maintenance Division, (DPW&T)
OPM	Office of Project Management, (DPW&T)
P2	pollution prevention
P3	Public Private Partnership
PAG	Proposal Analysis Group
Pb	Total Lead
PGCPS	Prince George's County Public Schools
PGSCD	Prince George's Soil Conservation District
PSS	Program Support Section (DoE)
QA/QC	Quality Assurance/Quality Control
R&DS	Research & Development Section (DoE)
RS	Recycling Section (DoE)
RTPID	Real-Time Passenger Information Display
SDI	Storm Drain Inventory
SDMD	Storm Drain Maintenance Division, (DPW&T)
SIC	Standard Industrial Classification
SID	Sustainability Initiatives Division (DoE)
SMD	Stormwater Management Division (DoE)
SOP	Standard Operating Procedures
SRRD	Site/Road Review Division (DPIE)
SSO	Sanitary Sewage Overflows

SWM	Stormwater Management
SWMF	Stormwater Management Facility
SWPPP	Stormwater Pollution Prevention Plan
TKN	Total Kjeldahl Nitrogen
TMDL	Total Maximum Daily Load
TNI	Transforming Neighborhoods Initiative
TP	Total Phosphorus
TSS	Total Suspended Solids
UM	University of Maryland
UMES	University of Maryland Extension Service
US ACE	United States Army Corp of Engineers
VOC	Volatile Organic Compounds
WMD	Waste Management Division, (DoE)
WSSC	Washington Suburban Sanitary Commission
Zn	Total Zinc

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OVERVIEW

This report summarizes the activities carried out by various departments and agencies within the Prince George's County in accordance with the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permit terms during FY 2015.

This year's report is a continuation of the major revisions initiated in last year's report. With the renewal of the County's NPDES MS4 permit effective January 2, 2014, a major change occurred when MDE revised the reporting period from calendar year to State's and County's fiscal year. To accommodate this change, the previous report submitted to MDE represented only six months reporting period from January to June, 2014. This is the first report after the permit renewal that incorporates full fiscal year's activities from July 1, 2014, to June 30, 2015. Following the changes in the revised permit conditions, some of the highlights included in the previous year's report were the completion of the County's regulated MS4 areas, impervious surface base line, reconciled CIP restoration project inventory, and updated land development BMPs and storm drain system. These updates were included in GIS format to facilitate the tracking of the County's inspection and restoration progress. The report also included the progress on programs that were part of the routine activates of various County agencies such as street sweeping, litter control, outreach and education, green card certification, assistance to municipalities for SWPPP, trash cleanup and maintenance activities.

On January 20, 2015, the County received the comments from MDE on its Impervious Area Baseline Assessment. Following the MDE comments, the County revised its Impervious Area Baseline acres and submitted to MDE on May 20, 2015, which was subsequently approved by MDE on July 17, 2015. With the approval of the County's Impervious Area Baseline Assessment, the MDE provided additional comments and required County to submit response with this report. The County has included its response to MDE's comment in Table 0-1 below.

On May 28, 2015, the MDE completed its review of the entire report and provided its comments in two categories: 1) comments that needed immediate response, 2) comments that needed a response with FY 2015 annual NPDES MS4 report. While the County has already submitted its response to the comments that needed immediate response on June 25, 2015, in Table 0-2 below, the County is including it's response to the comments that needs to be provided with this annual NPDES MS4 report.

Additionally, Attachment 2 of the MDE's May 28, 2015, letter included the comments on the local watershed restoration plans that the County developed and submitted to MDE on January 2, 2015. The County submitted its response to MDE on August 31, 2015, via email. In Table 0-3, the County is including its response to MDE's comment on local watershed restoration plans. Note that the table and pages referred in the comments in Table 0-3 are related to local watershed restoration plans documents. Based on the comments, the revised local watershed restoration plans are included electronically with this submission on the DVD.

Table 0-1. County Response to MDE's Comments Dated July 17, 2015.

MDE Comments	County Response
1. Verifying water quality treatment for BMPs constructed during 1985 to 2002:	
The County is assuming that all best management	The County has completed the desktop analysis for

MDE Comments	County Response
practices (BMPs) implemented between 1985 and 2002 provide one half inch of water quality treatment. However, a number of practices tabulated in the BMP database are not acceptable water quality treatment practices. The County believes that these practices were equipped to detain one half inch of runoff and plans to inspect all ponds to verify their performance and identify any ponds with potential for retrofitting. Future annual reports shall provide status and updates on these pond inspections. This will verify the assumptions described in the Impervious Area Baseline Assessment.	ponds and currently is on schedule to complete the field evaluations during the first quarter of 2016. The County expects to complete this phase of verification by the summer of 2016.
2. Providing restoration data in accordance with Attachment A:	
MDE will require that the impervious acres treated for historic and future restoration BMPs shall be recorded in the restoration tracking database in accordance with Attachment A of the County's permit.	This has been addressed under the Restoration Plan and TMDL section on page 109.
3. Updating missing drainage area information in the BMP database:	
Approximately 15% of the BMPs in the County's database do not have drainage area information. The next annual report shall update this information.	Prince George's County acknowledges BMPs with missing Drainage Areas have been excluded from the County's Impervious Area Baseline Assessment. The County is currently working to rectify this. To date, we have completed 116 BMPs, and we will continue production in 2016.
4. Submitting a complete list of BMPs to meet the twenty percent restoration requirement:	
The County has reported that the restoration requirement for the impervious acre baseline of 6,105 acres will be met through a combination of capital improvement projects (CIP), the public private partnership program (P3}, and street sweeping activities. Approximately 2,000 acres of restoration is anticipated through each program by the end of the permit term. MDE believes that this list is too vague to verify that the County is on track to meet impervious area restoration requirements by the end of the permit term. The successful implementation of restoration activities and meeting the twenty percent restoration requirement are integral components of the permit. Therefore, the County must submit to MDE a comprehensive list of BMPs that can more than meet the twenty percent requirement. The County can then select a subset of these BMPs for meeting the twenty percent permit requirement. Data on this list need to include: • Local ID • Specific BMP type (use the comprehensive list of BMP's from MDE's geodatabase)	Prince George's County is pleased to submit the planning areas for impervious restoration within the permit term. This work was part of the County's Anacostia Restoration Plan containing approximate project locations, drainage areas, impervious acres, load reductions and estimated costs. While this is a planning document, the actual locations and treatment areas may vary during implementation due to site conditions and constraints. Please see page 109 for the details.

MDE Comments	County Response
• Watershed (8-digit, 12-digit) • Precise location (lat. /long.) • Estimated impervious acres treated (drainage area or equivalent impervious acres) • Estimated construction completion (FY) • Estimated cost The annual report should also include a schedule with the following benchmark data for each FY: • Impervious acres proposed for BMP design • Impervious acres proposed for BMP construction completion • BMPs completed with impervious acres treated and cost MDE will use this information to assess the level of implementation necessary for meeting the twenty percent requirement within the five year permit term. Comparing actual implementation against the proposed benchmarks can help MDE to ensure that Prince George's County is remaining on schedule.	
5. Providing an analysis to support excluded rural residential and roadway impervious areas:	
The rural residential land deducted from the impervious acre baseline is reported to be 1,437 acres. MDE will require an analysis which includes a representative field sample of rural areas deducted from the baseline. In addition, the Prince George's County Department of Public Works has begun an analysis which deducts 350 acres of rural roadway areas from the baseline. However, a final report has not been submitted to MDE for either residential or roadway impervious areas. A rural area disconnection analysis is required in accordance with MDE Accounting for Storm water Wasteload Allocations and Impervious Acres Treated (August 2015) for both the residential (1,437 acres) and roadway areas (350 acres) deducted from the baseline. Please provide this detailed information in the next annual report.	The County is in the process of issuing a task order to a consultant to perform the field evaluation of rural residential properties having 3 acres or greater for Impervious Area Baseline credits. This work should be completed by the summer of 2016. The rural road analysis and field evaluation has been completed by the Department of Public Works and Transportation, a summary report is being prepared and will be submitted to MDE for review during the first quarter of 2016.

Table 0-2. County's Response to MDE's Comments dated May 28, 2015.

Permit Condition	Responsible Agency	MDE Comments and Prince George's County's Response
General	DoE	*MDE Comment: The County's illicit discharge detection and elimination (IDDE) program data showed a poor success rate in locating potential pollutant sources. The County also has not provided any information on how it is targeting commercial and industrial areas for field screening.* Response: Detailed information on how the County is targeting commercial and industrial areas for field screening is provided on Page 39 under Illicit Discharge Detection and Elimination Section.

Permit Condition	Responsible Agency	MDE Comments and Prince George's County's Response
Part V. A Annual Reporting	DoE	*MDE Comment: The reporting period covered fiscal year July 2013 to June 2014. Prince George's County provided the required information under several different submissions between December 30, 2014, and March 16, 2015. A complete annual report is due on the anniversary date of the permit. Therefore, all information for next year's annual report shall be submitted to MDE no later than January 2, 2016.* Response: Comment noted.
Part IV. C Source Identification	DoE	*MDE Comment: In 2014, Prince George's County provided significant updates to the storm drain inventory and resolved data deficiencies that have existed since 2012. MDE recognizes the progress made toward a complete inventory and assessment of the County's storm drain system. As the condition of the storm drain infrastructure is evaluated, MDE encourages the County to consider incorporating water quality improvement projects into any upgrades or repairs.* Response: Comment noted.
	DoE	*MDE Comment: MDE's February 20, 2015, correspondence detailed specific items related to the County's urban BMP database. These comments will need to be addressed before MDE can complete the evaluation of the County's stormwater database.* Response: The response was submitted to MDE on May 20, 2015.
	DoE/ DPIE/ DPW&T	*MDE Comment: Any BMP database deficiencies need to be resolved by the next annual report submittal so that Chesapeake Bay Program credit may be taken. Otherwise, assumptions related to treated impervious area and TMDL baseline loads should discount any BMP with missing data.* Response: The County is diligently working to resolve any BMP database deficiencies. A response to this was submitted to MDE on May 20, 2015.
Part IV.D.1 Stormwater Management	DPIE	*MDE Comment: In FY 2014, the County reviewed 55 concept plans, 236 site development plans, 47 final plans, 10 redevelopment projects, and 20 exemptions, and granted 3 waivers. This information raised concern that the concept plan submission is bypassed for a large number of projects. The County needs to provide more information to explain the significant difference between the number of concept and site development plan reviews (a resubmittal should not count as a separate project).* Response: The basis of this comment is a misread from MDE that 236 site development plans were reviewed. The County reported 236 BMPs associated with the 55 concept plan approvals and not the 236 site development plans. In FY 2014 annual report, the County reported 43 site development Plans.

Permit Condition	Responsible Agency	MDE Comments and Prince George's County's Response
	DoE/DPIE/ DPW&T	*MDE Comment: Prince George's County has three different Departments involved with stormwater plan review, construction inspection, post construction inspection for public and private facilities, and BMP database tracking. These are the Department of Permitting, Inspections, and Enforcement (DPIE); Department of Public Works & Transportation (DPW&T); and Department of the Environment (DOE). In addition, the DOE is contracting with KCI Technologies, Inc., to perform BMP inspections for private facilities. MDE recommends that DPIE, DOE, and DPW&T work together to develop a process to foster ongoing communication and feedback between site inspectors and plan reviewers.* Response: Comment noted.
	DoE	*MDE Comment: The County conducted a total of 701 inspections of private stormwater management facilities over a three year period. This represents 72% of the required triennial inspections. While this is an improvement over past efforts, the drainage area for the remaining 28% of BMPs that have not been inspected will not be considered impervious acres.* Response: The County submitted its revised Impervious Area Baseline Assessment on May 20, 2015. BMPs that had not been inspected were excluded from the Impervious Area Baseline calculation.
	DoE/ DPW&T	*MDE Comment: The County provided separate databases for public and private BMP inspections. Both of these need to be aggregated and submitted in the urban BMP database required in the County's permit.* Response: One database that includes public and private BMP inspections is provided in the DVD under urban BMPs folder.
	DoE	*MDE Comment: The County reported that 27% of all private BMPs are located on residential or homeowner association property and were approved without recorded maintenance agreements. The County is the responsible agency for ensuring preventative maintenance of all stormwater management systems, and a recorded maintenance agreement shall be required when approving plans. Please provide further information to verify that this problem has been corrected.* Response: The County worked diligently and located the maintenance agreement for the individual BMPs that were not previously located. All BMPs have been inspected since then.
	DoE	*MDE Comment: The County reported that it is considering deleting 188 BMPs from the database because they are located on homeowner properties that do not have maintenance agreements. The County needs to consider solutions for reaching out to property owners and homeowner associations to resolve this problem, not simply delete the records. This may be an opportunity to accept homeowners into the County rebate program. Please provide more detail regarding how these maintenance agreements will be corrected.* Response: As mentioned above that the issue has been resolved and all 188 BMPs have been inspected by the County.
Part IV.D.2 Erosion	DPIE	*MDE Comment: In Fall/Winter 2014-2015 MDE initiated an evaluation of*

Permit Condition	Responsible Agency	MDE Comments and Prince George's County's Response
and Sediment Control		*the County's erosion and sediment control program. Results of this review were provided in MDE's April13, 2015, letter to Prince George's County.* Response: Comment noted.
	DPIE	*MDE Comment: The County has yet to adopt an erosion and sediment control ordinance that was required over two years ago. A copy of the County's signed ordinance must be submitted to MDE after it has been officially adopted. This needs immediate attention prior to MDE making a decision on the County's delegation application. Until this issue is resolved, the County is in violation of its NPDES permit and the Code of Maryland Regulations.* Response: The ordinance (CB-36-2015) was adopted by the County on June 23, 2015, for which, the MDE received a signed copy on August 4, 2015. On September 3, 2015, the MDE granted the delegation of authority to the County effective through June 30, 2017.
Part IV. D.3 Illicit Discharge Detection and Elimination (IDDE)	DoE	*MDE Comment: Prince George's County reported screening 145 outfalls. MDE acknowledges that this reporting period is less than one year because of the transition to State fiscal year reporting. The next annual report shall reflect screening of at least 150 outfalls per permit condition.* Response: For FY 2015, the County is reporting 152 outfalls sampling. The details are provided on page 39 in this report.
	DoE	*MDE Comment: The County reported that zero outfalls had dry weather flow. MDE's July 16, 2014, annual report review letter expressed concern that Prince George's County's illicit discharge program is not successful in locating potential pollution sources during field screenings. This concern remains unaddressed.* Response: To address this concern, the County outsourced the inspections to a contractor. For FY 2015, the County is reporting 134 observed dry-weather flow. The details are provided on page 39 in this report.
	DoE	*MDE Comment: Prince George's County shall reevaluate current procedures for prioritizing and selecting outfalls in order to locate potential pollution sources. Please provide updated procedures in the next annual report. These are integral to an acceptable illicit discharge detection and elimination program. Future annual reports shall describe successful efforts for locating, tracking, and eliminating illicit discharges.* Response: The details are provided on page 39 in this report.
	DoE	*MDE Comment: The County's Attachment A included multiple deficiencies: 1) all data were missing for YEAR (annual report year), TEST_NUM, TIME, AIR_TEMP, DEPOSITS, and EROSION; 2) VEG_COND data did not follow the pollution prevention activities codes included in Attachment A of the permit; and 3) LAST_RAIN was not in date format. The County shall correct these deficiencies in the next annual report.* Response: The County has corrected the deficiencies. The database is included in the DVD/Management Program/IDDE folder.
	DoE /DPIE /DPW&T /HD/PGFD	*MDE Comment: The County reported that four environmental complaints were referred to other departments for correction, but did not describe any follow-up activities to confirm that the discharges were corrected.*

Permit Condition	Responsible Agency	MDE Comments and Prince George's County's Response
		MDE requests that the County detail any complaint tracking procedures used to ensure that illicit discharges are corrected. Response: The comment noted. For FY 2015 we have included a table (Table D-6) on page 42 that describes the follow-up actions taken by the DoE and the resolution on the referred cases.
	DoE	*MDE Comment: The County has not reported conducting routine surveys of commercial and industrial areas for discovering and eliminating pollutant sources, as required per Part IV.D.3.b of the permit. In future annual reports, the County shall provide information on its activities to meet this condition.* Response: The comment noted. For FY 2015 we have included this information on page 40.
	DoE/HD/ PGFD	*MDE Comment: MDE recognizes the County's plans to develop a database that includes details about complaints, the County's response, and any remedial actions taken. MDE encourages the County to continue that effort in order to build a stronger IDDE program.* Response: The comment noted.
Part IV.D.4 Trash and Litter	DoE / DPW&T	*MDE Comment: The County has performed an inventory and analysis of existing trash programs countywide and in the Anacostia River watershed. Surveys were used to evaluate successful approaches for trash reduction. This information was used to assist the County in updating strategies to address the Anacostia Trash TMDL.* Response: The comment noted.
	DoE	*MDE Comment: The County submitted the document, "Implementation Plan for the Anacostia River Watershed Trash Total Maximum Daily Load in Prince George's County." A TMDL work plan, implementation timeline, and public participation process have been incorporated into the strategy. The County is required to continue to evaluate the success of ongoing trash reduction programs and incorporate adaptive management strategies in order to meet the annual trash removal targets established in the permit. MDE believes that this work will address conditions outlined in the County's MS4 permit.* Response: Comment noted. For FY 2015 we have included this information on page 45.
Part IV.D.5 Property Management and Maintenance	DoE	*MDE Comment: The County reviewed the stormwater pollution prevention plans (SWPPPs) for all permitted industrial facilities in preparation for coverage under the new 12-SW permit as required by MDE.* Response: Yes.
	DoE	*MDE Comment: The County has been taking additional steps to enhance pollution prevention at industrial facilities, such as requiring facilities to submit monthly SWPPP inspection reports, hiring a consultant to improve SWPPP development and implementation at county-owned facilities, and assisting municipalities within the County with their SWPPP management. MDE commends the County for these efforts.* Response: The comment noted.

Permit Condition	Responsible Agency	MDE Comments and Prince George's County's Response
	DPW&T	*MDE Comment: In FY 2014, 503 miles of roadways were swept. This represents a decrease by nearly two thirds from the miles reported swept in 2013. The County should explain the reason for this significant reduction.* Response: The FY 2014 report included time period of January to June 2014 (6 months only) whereas 2013 report included over a year of reporting. The weather condition during this half of FY 2014 did not allow implementing an effective sweeping (e.g. snow condition on the road). For FY 2015 reporting, the county swept 1848 curb miles.
	DPW&T	*MDE Comment: The County reported that herbicide applications are "limited" but did not report the amounts used. The Annual Report should describe how integrated pest management techniques are utilized to reduce the use of pesticides and fertilizer. The County should specify how application rates are tracked and the level of training provided to applicators in order to reduce the amount of pesticides applied to County properties.* Response: DPWT OHM licensed contractor applies limited application of herbicides at medians, gateway locations, and as needed along curbline areas and islands. No fertilizers or pesticides are used along our roadway network. None of our personnel are utilized in the application of chemicals, and therefore, no training is needed.
	DPW&T	*MDE Comment: The County reported that an increased level of pre-treatment material was used in the past year to improve deicing efficiency and reduce salt application. Please provide more information regarding the pre-treatment application and specify the material(s) used. In addition, please clarify whether the pre-application rates are tracked in the same manner as salt applications.* Response: Pretreatment is performed when weather conditions permit. The pretreatment type used is salt brine and applied to known problem areas/roads such as intersections at steep grade, bridge over passes, and major arterial highways. Pretreatment applications are not tracked other than lane miles land locations sprayed. Using the SHA Salt Management Plan and eMDE research information, which states; "applying salt brine, which has a lower freeze point than dry salt, prior to the start of a storm can increase safety at the beginning of the storm and prevent snow or ice from bonding to the pavement, which can make it much easier to plow during the storm and reduce the total use of salt. The U.S. Environmental Protection Agency estimates that pretreatment techniques such as this can reduce deicer use by 41 to 75 percent."
	DPW&T	*MDE Comment: Salt and sand stockpiles were removed from Ritchie Yard because EPA "cited runoff emanating from the source." Please clarify where the piles were moved to and whether proper controls are in place in the new location to prevent further concerns with polluted runoff.* Response: Salt and sand stockpiles were removed by aggregating with regular salt stored under cover and loaded onto plow trucks until excess stockpile was eliminated. The aggregated salt sand salt material was

Permit Condition	Responsible Agency	MDE Comments and Prince George's County's Response
		applied to roadways during the snow removal operations. Thus, there are no stockpiles remaining except for the enclosed salt domes.
	DPW&T	*MDE Comment: Page D-44 under "Litter Control" stated: "the most highly littered roadways are serviced as often as 24 times per year... major collector and arterial urban roadways are serviced weekly." Please explain how the County determined the most littered roadways and where these roadways are located.* Response: The most littered roadways are determined based on various sources such as historical data; citizens complain calls data, visual inspections of the County employees, and proximity to the industrial areas. For location, please see details on page 70 under Litter Control section.
	DoE/ DPW&T	MDE Comment: The County has an active 311 line and received over 700 complaints from citizens in the last year. As a result of these complaints the County collected 680 tons of litter. Response: Yes. We are not sure if this is a question.
Part IV.D.6 Public Education	DoE	*MDE Comment: The County promotes environmental awareness and education outreach efforts to the public in coordination with watershed restoration projects. This meets the intent of the County's permit.* Response: Comment noted.
Part IV.E Restoration Plans and TMDLs	DoE	*MDE Comment: The County completed a total of 0.5 acres of impervious area restoration during this reporting period. At this pace the County will not meet restoration requirements established in the permit and may be subject to enforcement.* Response: Comment noted. The County is reporting approximately 35 acres of impervious area restoration completed within FY 2015. Please see page 126 for details of additional projects in planning and design.
	DoE	*MDE Comment: MDE provided comments on the County's impervious area assessment on February 20, 2015. MDE and the County have discussed these comments over two conference calls. The County has requested an extension to submit this information by May 20, 2015. MDE has granted the request.* Response: The Impervious Area Baseline Assessment was submitted to MDE on May 20, 2015, and accepted by MDE on July 17, 2015.
	DoE	*MDE Comment: The County submitted comprehensive restoration plans for each TMDL with EPA approved stormwater WLAs in the Anacostia River, Mattawoman Creek, Piscataway Creek, Upper Patuxent River, and Rocky Gorge Reservoir watersheds. MDE believes these plans represent a positive starting point from which to begin the long term commitments toward improving water quality in the County. MDE encourages the County to move forward with implementation of proposed projects. However, as the plans are modified through the adaptive management process, MDE will require that the specific comments provided below be addressed in the next annual report.* Response: Comment noted, see responses below.
	DoE/DPIE/ DPW&T	*MDE Comment: Pollutant load baseline analysis: An accurate baseline analysis is dependent on the completeness of the County's stormwater*

Permit Condition	Responsible Agency	MDE Comments and Prince George's County's Response
		database. In the July 16, 2014 comment letter, MDE noted that drainage area records were missing for approximately 20% of the total BMPs countywide and that the data deficiencies needed to be corrected. However, the County used an estimated drainage area for BMPs with missing information rather than updating and verifying the missing data. The County needs to supply any missing information using actual plan, maintenance, or inspection data. All estimated BMP credits from the County's current year load calculations shall not be used unless actual data can be provided in the analysis. Response: Comment noted, this refers to the previous year annual report and has been addressed through the Impervious Area Baseline Assessment submission dated May 20, 2015, and approved by MDE on July 17, 2015.
	DoE	*MDE Comment: Consistency with MDE guidance: The County is planning to take credit for several BMPs that are not currently identified in MDE guidance. These include a pet waste campaign, dumpster and washing program, and urban nutrient management. The following comments are in regard to these new BMPs and acceptability of credits in accordance with MDE guidance:* *1-Planned credits claimed from the dumpster and washing program and urban nutrient management strategy are only a small percent of the individual TMDLs. Because the credit claimed is only a small portion of the total WLA, MDE encourages the use of these programs. However, by the end of the permit term, the County should monitor progress and provide documentation to verify the water quality benefits claimed using these BMPs.* *2-Planned credits claimed for the pet waste campaign are significant for the bacteria TMDL in the Anacostia River and Upper Patuxent River watersheds. MDE considers this an opportunity to further monitor and research this BMP to verify the water quality benefits claimed. A thorough report shall be provided by the end of the permit term detailing all monitoring and research to support these reductions and any adaptive management strategies in instances when the reductions fall short of expectations.* *3-Planned credits claimed for the pet waste campaign for nitrogen reduction in the Anacostia River watershed are also significant (greater than 13% of total nitrogen load reductions). MDE recommends that the County use a conservative estimate for load reductions using this BMP until further monitoring and research can verify the reductions claimed. The County should also reevaluate plans for meeting the nitrogen TMDL in the Anacostia River watershed and include acceptable BMPs as outlined in MDE Guidance. This will allow the County to incorporate adaptive management strategies to meet the nitrogen reduction targets. Tables 6.2, 6.3, and 6.4 of the Anacostia Restoration Plan shall be revised and updated accordingly.* *4-MDE encourages the County to utilize acceptable BMPs allowed in the accounting guidance that have not been incorporated into the restoration plans. Examples include load reductions from future redevelopment,*

Permit Condition	Responsible Agency	MDE Comments and Prince George's County's Response
		shoreline management, or septic upgrades. *5-The stream restoration expert panel report was amended in September 2014 to incorporate a sediment delivery factor for TSS removal rate. The County shall update load reductions, WLA, and final date analyses based on this new rate.* *6-The Chesapeake Bay Program (CBP) expert panels continue to evaluate BMPs that may be used for restoration. Prince George's County is responsible for maintaining credits according to the most recent CBP recommendations. MDE will update guidance for Maryland's MS4 community whenever possible.* Response: Comment noted. The County completed its restoration plans on January 2015 and submitted to MDE for review and comment. The plans include an evaluation of local TMDLs, associated load reductions, strategies, and estimated costs to achieve restoration. MDE accepted the County's technical approach of the local TMDL plans on October 9th, 2015. Further details on the progress are provided on page 127.
	DoE	*MDE Comment: Implementation schedules and interim milestones: Implementation plans need to be realistic and specific enough so that the expected interim milestones can be achieved. Therefore, the following information shall be provided:* *1-A list of specific BMPs with locations, drainage areas, impervious area treated, and construction schedules that will be implemented by the end of the permit term. This list shall coincide with interim targets identified in the restoration plans.* *2-The level of stream restoration anticipated in the Anacostia River watershed over the 15-year implementation period appears improbable. The plan anticipates implementation will occur at a rate greater than ten times the County's current annual efforts. Due to the complexity of planning, design, permitting, and construction of these projects, this level of implementation is unrealistic. The County shall reevaluate strategies for achieving the load reductions and revise Tables 6.3 and 6.4 of the Anacostia River watershed plan.* Response: The comment has been addressed. The MDE accepted the County's technical approach of the local TMDL plans on October 9th, 2015.
	DoE	*MDE Comment: Innovative Programs for water quality treatment:* *1-The Anacostia River watershed plan provided a discussion of projects that will be implemented by the Anacostia Watershed Restoration Partnership. This includes over $1 billion in restoration activities to treat more than 6,500 acres of impervious area in the watershed. MDE encourages the County to continue collaborating with the Partnership to facilitate greater restoration and ensure that long term maintenance of these BMPs will be provided.* *2-The County has initiated several programs that involve long term collaboration with the private sector, residents, and non-profit organizations. These include the Public-Private Partnership Program, the Rain Check Rebate and Grant Program, and the Alternative Compliance*

Permit Condition	Responsible Agency	MDE Comments and Prince George's County's Response
		Program. Various incentives are offered within these programs for participation, including a rebate from the County stormwater fees. MDE recognizes the significant effort required for education and outreach in order to initiate these programs. MDE encourages the County to continue to evaluate innovative programs, policies, and BMPs that collectively contribute to the long term water quality goals outlined in the restoration plans. Response: Comment noted.
	DoE	*MDE Comment: Please see the attached recommendations from MDE's Science Services Administration (Attachment 2) regarding all proposed restoration plans. Of note, the implementation plans should also include an overall summary of countywide load reductions for nitrogen and phosphorus for meeting the Chesapeake Bay TMDLs. These loads should provide a comparison of countywide baseline, target loads, and anticipated 2025 progress toward these targets.* Response: Comment noted. Please see Table 0-3 for County's response to MDE's Science Services Administration comments.
	DoE	*MDE Comment: The County shall address all MDE comments in the next annual report. In the meantime, implementation efforts shall continue to move forward.* Response: Comment noted.
	DoE	*MDE Comments:* • *Two public meetings were held on July 23 and July 24, 2014, to inform and engage citizens in creating draft restoration plans for all County watershed TMDLs.* • *The draft plans were posted online for public review and comment. Public comments were accepted from November 1 through December 1, 2014.* • *A third public meeting was held on November 12, 2014, to discuss the draft plans.* • *Three public meetings were held on December 3, 10, and 17, 2014, to discuss the Anacostia River Watershed Trash TMDL draft restoration plan.* • *Public comments were accepted through December 26, 2014.* • *On December 30, 2014, a thoughtful response to comments was prepared by the County that included follow-up plans to create clearer explanations in the final draft restoration plans, and for the County to consider incorporation of suggestions such as establishing citizen stakeholder groups and shaping the public outreach strategy.* Response: Comments noted.
Part IV.F Assessment of Controls	DoE	*MDE Comment: In 2014, the County monitored the Black Branch during 11 storms and took 8 baseflow samples. The relevant data requirements in Attachment A (Tables E, E.l, E.2, F, and H) appeared to be mostly complete, and the County is commended for its efforts in updating land use*

Permit Condition	Responsible Agency	MDE Comments and Prince George's County's Response
		and BMP information. *The stormwater assessment study was performed in the second half of 2014 and therefore will be provided in the next annual report.* Response: Comment noted.
Part IV.G Program Funding	DoE/ ASD	*MDE Comment: The County's expenditures for capital and operating budgets for implementing NPDES stormwater permit requirements in FY 2014 were $110,599,000 and $58,456,000, respectively. A "Clean Water Act Fee" has been established to support applicable programs. Funding has increased significantly over the past few years, demonstrating the County's commitment to the NPDES stormwater permit program and to improving water quality.* Response: Comment noted.

Table 0-3. County's Response to MDE's Comments on Stormwater Waste Load Allocation (WLA) Implementation Plan

No	MDE's Comments	County's Response
General		
1	The County submitted comprehensive restoration plans for each TMDL with EPA approved stormwater WLAs in the Anacostia River, Mattawoman Creek, Piscataway Creek, Upper Patuxent River, and Rocky Gorge Reservoir watersheds. MDE believes these plans represent a positive starting point from which to begin the long term commitments toward improving water quality in the County. MDE encourages the County to move forward with implementation of proposed projects. However, as the plans are modified through the adaptive management process, MDE will require that the specific comments provided below be addressed in the next annual report.	The County concurs.
WTM/Technical Memo		
2	The technical memorandum, which describes in detail the mapping and modeling approach, is very confusing. More specifically, MDE requires additional explanation and clarification of the variable annual mean concentrations (AMC) applied in the analysis, as well as the modeling approach for disconnected impervious surfaces and turf grass. It is unclear whether the disconnected AMC and loading are representative of both impervious surface and turf grass. Further explanation of how load reduction calculations are performed for the watersheds needs to be included, with a supporting example. The technical	Specific comments on the methodology used are described throughout the technical memorandum. The technical memorandum stated the basis for the AMCs in Section 5. It described how connected and disconnected runoff is partitioned in Section 2.2. Disconnected runoff AMCs are dominated by the receiving surface AMCs, as that is what is measured in stormwater sampling. Load reductions are using MDEs efficiencies applied to the loads. The simplifications for turf, sidewalks, and driveways were explained in Section 2.2. A detailed explanation of the model

No	MDE's Comments	County's Response
	memorandum also lacks descriptions regarding the major assumptions applied within the modeling analysis. For instance, all sidewalks are considered to be disconnected impervious, all driveways are connected and turf grass does not receive fertilizer inputs. The basis for these assumptions should be explained.	assumptions along with an example is provided with these responses.
3	Wetland and open water are assigned impervious coefficients of 50% and 100%, respectively. These coefficients are intended to reflect the volume of water delivered from these land-use classification types approximates 50% and 100% of an impervious area. MDE requests more clarity in the way this information is presented. Please reflect this change in the next plan revision.	These runoff coefficients are applied to the AMCs in these land covers to get their loads. By definition, lakes have 100% runoff, but at very low AMCs. Wetlands vary widely, so a mid-point value of 50% was chosen. Again, the AMCs for wetlands are low. These land covers have minimal bearing on overall watershed loads, which are dominated by impervious urban surfaces, and they have no bearing on MS4 loads by definition.
4	Section 9: In the watershed treatment model (WTM) calibration section of the technical memorandum, it is indicated that two-thirds of a precipitation event's groundwater (GW) outflow is considered to be event runoff. In the next revision of the plan, the county should explain the decision to use 66% of GW outflow as event runoff, instead of 100% and clarify how the remaining 34% of precipitation event GW outflow is treated.	The remaining 34% of event GW flow is considered baseflow, and thus not part of the stormflow responses monitored. The only stressor of concern in baseflow is nitrogen.
5	The county applies variable annual mean concentrations (AMCs) for impervious surfaces, based on the national stormwater database and the Tetratech 2014 literature review prepared for CBP. Based on the results of the literature review, CBP and its partners concluded that the only impervious surface sub-classification with enough data to support a unique loading rate is for roadways. Additionally, the AMCs identified in the technical memorandum do not match the event mean concentrations (EMCs) identified in the literature review. In the future, MDE would suggest the County perform a more simple analysis, since the data supporting the variable rates is not definitive and any added benefits are not worth the cost of the more in depth analysis.	The memo prepared by Tetra Tech noted substantial median differences when individual land covers were evaluated. Even though the differences may not have been statistically significant, when GIS data is available for specific land covers, it makes far more sense to use such literature values to provide a much more nuanced prediction of loads. The aggregate load assumptions were verified during the calibration process.
6	The technical memo states that the WTM output was compared to both the TMDL loadings and MAST loadings to verify that the results were similar; however the comparison only used the actual county MS4 urban loads. When calibrating	The AMCs were calibrated to total watershed loads for TN, TP, and TSS per MAST, and then adjusted down to the MS4 loads per TMDLs. BOD and bacteria were calibrated to loads in the TMDLs

No	MDE's Comments	County's Response
	the WTM to the TMDL and MAST loadings, MDE suggests using the total watershed nonpoint source loads (i.e., scaling the data up), to ensure accurate comparisons.	
7	MDE requests that the County explain its use of a MAST TP EMC value of 0.21 mg/L, since it is not possible to determine this using MAST output (MAST does not output flow information).	TP concentrations were obtained by determining runoff volumes using the curve numbers as explained in the technical memorandum (Section 9). The MAST loads were divided by runoff volume from the WTM model to obtain AMCs.
8	It is unclear what the target rates were for the Storm Water Management Model (SWMM) calibration. MDE asks that the County provide its SWMM calibration target rates. Additionally, the County should elaborate on the decision to use 30% of the precipitation in a watershed as baseflow return, instead of the literature recommended 15-25%.	GW flow is not "baseflow return". GW comprises both the recession limb return flow during events, as well as the baseflow between events. Most of the GW return flow from disconnected areas, which occurs during a storm event as subsurface flow, is not considered baseflow. The SWMM flow duration curves were calibrated to the Piscataway USGS gauge as shown in Table 4. By segregating connected, disconnected, and natural surfaces, it was possible to determine the relative contributions of these sources to GW. From that calibration, GW outflow from disconnected areas for the entire watershed was 29.5%, compared to surface runoff contributions of only 8.5%. Using one-third disconnected runoff allocated to baseflow, total runoff increased to 19.9%, leaving 18.1% as baseflow. As this is within the range of literature values, this partitioning is justified.
9	The County uses a modeled baseline year of 2009. Actual TMDL baseline years do not necessarily reflect a 2009 condition. Additionally, credit is being taken for BMPs implemented prior to the baseline year. This method of analysis and BMP accounting is not technically correct. Based on the analysis of the plans, MDE has determined that taking credit for current BMPs results in a negligible impact throughout the watershed, and as such, will not require immediate alteration of the plans. MDE requests that Prince George's County further explain BMP accounting prior to the baseline year and how BMPs were accounted for in model calibration in the next annual report.	DOE's approach for establishing a baseline year for its models was to use the TMDL baseline year. This was based on the assumption that the County's models were calibrated to the TMDL load and therefore representative of the loads present during the TMDL baseline year. We feel the calibration carries more weight than the more recent land use (& impervious) data used. However, we also agree that the impact of revising the baseline year will result in negligible impacts. DoE will provide a more detailed and complete database of County BMPs along with an explanation of how they were accounted for in the developed model for baseline load calculations in the next annual report.
10	Pollutant load baseline analysis: An accurate	In the past year, DoE has made substantial

No	MDE's Comments	County's Response
	baseline analysis is dependent on the completeness of the County's stormwater database. In the July 16, 2014 comment letter, MDE noted that drainage area records were missing for approximately 20% of the total BMPs countywide and that the data deficiencies needed to be corrected. However, the County used an estimated drainage area for BMPs with missing information rather than updating and verifying the missing data. The County needs to supply any missing information using actual plan, maintenance, or inspection data. All estimated BMP credits from the County's current year load calculations shall not be used unless actual data can be provided in the analysis.	progress in cleaning up historical BMP information and has investigated and filled in missing information into its BMP database. While this process is still ongoing, DoE will continue to update the calculation and reports with the most recent BMP information.
11	The Chesapeake Bay Program (CBP) expert panels continue to evaluate BMPs that may be used for restoration. Prince George's County is responsible for maintaining credits according to the most recent CBP recommendations. MDE will update guidance for Maryland's MS4 community whenever possible.	Comment noted.
12	Street sweeping is not consistent with the newest recommendations, which only apply to sediment. Current reductions are not available for TN or TP unless the area is swept 25 times per year.	Comment noted.
13	The stream restoration expert panel report was amended in September 2014 to incorporate a sediment delivery factor for TSS removal rate. The County shall update load reductions, WLA, and final date analyses based on this new rate.	The County will review the latest CBP expert panel reports and update restoration plans, as needed. The County is aware the street sweeping expert panel is under development and a draft version has not been released.
14	MDE encourages the County to utilize acceptable BMPs allowed in the accounting guidance that have not been incorporated into the restoration plans. Examples include load reductions from future redevelopment, shoreline management, or septic upgrades.	The County will attempt to utilize the full suite of acceptable BMPs to achieve water quality goals. However, the County does not believe that all the provided examples are directly applicable for the County's restoration plans. While the County can add shoreline management, this is not seen as a major contributor to load reduction due to the County's limited tidal shorelines. While septic upgrades are eligible for impervious reduction credit, they are not eligible for load reduction credits and therefore cannot be used to meet WLAs. While not explicitly stated in the restoration plans, any BMPs that are installed as part of redevelopment would be included under ESD retrofits. For example, if a commercial area were redeveloped, the resulting BMPs would

No	MDE's Comments	County's Response
		fall under the commercial ESD retrofits. At this time, there is not enough information to determine a breakdown of redevelopment BMPs and retrofits.
15	It is indicated in Table 5-2 that wet ponds/wetlands cannot be used to treat runoff from driveways, sidewalks and roofs. Please explain the rationale behind this decision.	While wet ponds can be technically used, they are not typically used for these locations. We'll clarify this further and revise the table.
16	A list of specific BMPs with locations, drainage areas, impervious area treated, and construction schedules that will be implemented by the end of the permit term. This list shall coincide with interim targets identified in the restoration plans.	The County will provide this information as discussed during the MS4 annual report comment resolution discussions.
17	The level of stream restoration anticipated in the Anacostia River watershed over the 15-year implementation period appears improbable. The plan anticipates implementation will occur at a rate greater than ten times the County's current annual efforts. Due to the complexity of planning, design, permitting, and construction of these projects, this level of implementation is unrealistic. The County shall reevaluate strategies for achieving the load reductions and revise Tables 6.3 and 6.4 of the Anacostia River watershed plan.	Comment noted.
18	Anacostia River Plan: Table 6-3 indicates that a 48,9561b TN reduction will result from planned stream restoration. This equates to 123 stream miles. The County should provide details on the planned stream restoration activities and possibly an analysis of the available stream miles in the watershed in the next annual report.	Stream restoration estimates will be revised with information provided to MDE in April 2015 in response to a February 13, 2015 email from MDE. Revised annual stream restoration estimate is 5,000 linear feet.
Load Reductions/Calculations		
19	The County should also provide overall summary of countywide load reductions for nitrogen and phosphorus, for meeting the Chesapeake Bay TMDLs. These loads should provide a comparison of countywide baseline, target loads, and anticipated 2025 progress towards these targets. The county should consider the contribution of implementation at an 8-digit watershed or Chesapeake Bay Segment watershed scale toward reductions in specific tidal tributaries.	DoE will add content to the restoration plans to show how the local TMDL restoration plan load reductions for nutrients and sediment compare to the County's Bay TMDL WLA.
20	Anacostia River Plan, Tables 2-3 & 5-3, & Mattawoman Creek: The County should elaborate on the discrepancy between total watershed impervious acres and impervious acres available for treatment in Tables 2-3 and 5-3. In addition, for the Mattawoman	Table 2-3 presents the total impervious area in the watershed. Table 5-3 presents the total impervious area available to the County for BMP retrofit. This area does not include impervious area on state or federal land. We

No	MDE's Comments	County's Response
	Creek, the explanation should address Table 6-1, as it estimates a retrofit area that is greater than both the impervious acres available for treatment and the total watershed impervious acres.	are looking into Table 6-1 in the Mattawoman Creek restoration plan. We will update the table accordingly when the model is updated with new BMP and other information.
21	Anacostia/Mattawoman: Anacostia Plan, Table 6-11 indicates that by 2030 the total TSS load reduction will be 179,290,194 tons. This appears to be a conversion error. It appears as though the units are supposed to be pounds of TSS.	This calculation will be checked and text updated.
22	Anacostia River Plan: The County estimates the TSS load reduction from current BMPs to be 21% of the total required reduction. The calculation of this estimate should be explained in the next revision.	Section 4.3.2 describes the process of calculating load reductions from current BMPs. This information will be recalculated using new BMP information, so the 21% will likely change.
23	Planned credits claimed for the pet waste campaign for nitrogen reduction in the Anacostia River watershed are also significant (greater than 13% of total nitrogen load reductions). MDE recommends that the County use a conservative estimate for load reductions using this BMP until further monitoring and research can verify the reductions claimed. The County should also reevaluate plans for meeting the nitrogen TMDL in the Anacostia River watershed and include acceptable BMPs as outlined in MDE Guidance. This will allow the County to incorporate adaptive management strategies to meet the nitrogen reduction targets. Tables 6.2, 6.3, and 6.4 of the Anacostia Restoration Plan shall be revised and updated accordingly.	Comment noted.
24	Anacostia River Plan: Since a significant amount (13%) of the total expected TN reductions are from pet waste, MDE requests data be provided to support the expected 80-85% compliance rate for pet waste education programs. This documentation should be included in the next draft of the report.	This is a restoration goal, just as identifying the amount of BMPs that will be implemented. The County will use a revised, more conservative, TN reduction percentage. However, this will result in a reduction gap towards meeting the TMDL requirements. The County will conduct public outreach and will re-evaluate this value as part of its adaptive management approach.
25	Upper Patuxent & Anacostia Plan Sediment: The cumulative load reduction from planned control actions is not compared to the SW-WLA or TMDL baseline loads. This comparison should be made in the next revision to demonstrate achievement of the allocation in the specified year.	Please see Table 6-4 and Table 6-11.
26	[*In reference to Prince George's County supplemental submittal dated 04/17/15*] Street sweeping comments: Table 6-3 of the "Anacostia_Restoration_Targets-New" document	DoE will revise the ton per mile assumption in the final calculations and report. This change will make it more difficult for the County to meet the high percent reductions for the

No	MDE's Comments	County's Response
	shows 40,425 pounds of nitrogen removed through street sweeping. This reduction is based on assumptions of sweeping 808 street miles, 26 times per year, with a collection rate of 0.55 tons per mile and a nitrogen concentration of 3.5 lbs-TN/ton collected. The times-per-year assumptions behind the 0.55 tons per mile value are not shown, but this value is similar to those from a study by Montgomery County that looked at residential roads swept once per year. The study states, "[t]he tons removed per curb mile showed an inverse relationship to frequency of sweeping. The tons per mile removed from the once per year residential road sweeping is more than three times greater than that removed from arterial roads (swept about once per month)". If the PG County study is for a road swept once per year, then we might expect the factor for roads swept twice per month to be around five. This would put the rate at 0.11 tons per mile and put it more in line with estimates that we've seen from another study done in Minnesota. Furthermore, trying to get such high reductions from street sweeping may not be the best course of action, as street sweeping does not have the benefits to watershed hydrology that we would expect to get from ESD or stream restoration (Our analyses have also shown it to be an extremely expensive way to manage nutrients). My recommendation would be to plan on using adaptive management rather than committing to getting these high reductions through street sweeping.	Anacostia River watershed for TN and will result in a reduction gap towards meeting the TMDL goals.
27	[*In reference to Prince George's County supplemental submittal dated 04/17/15*] Dry Pond Retrofits: It appears that the reductions for Dry Pond Retrofits practice are being calculated using the Wet Pond Efficiency applied to the No Action loads from the BMP drainage areas. This reduction should be calculated using the Wet Pond Efficiency minus the Dry Pond Efficiency.	DoE will revise the efficiencies before finalizing the calculations and report.
Monitoring		
28	PCB Restoration: While monitoring is not a requirement of the county's MS4 permit, this plan could be strengthened by explaining how the monitoring results will be used to guide implementation actions.	The County understands that toxics are monitored also by MDE as a function of regulating these substances (legacy sources as well as new sources). The County is open to coordinating these efforts with MDE.

No	MDE's Comments	County's Response
29	Planned credits claimed for the pet waste campaign are significant for the bacteria TMDL in the Anacostia River and Upper Patuxent River watersheds. MDE considers this an opportunity to further monitor and research this BMP to verify the water quality benefits claimed. A thorough report shall be provided by the end of the permit term detailing all monitoring and research to support these reductions and any adaptive management strategies in instances when the reductions fall short of expectations.	DoE has retained a contractor to develop a public outreach and education program to focus on a pet waste campaign. This program will be conducted over multiple years. At the end of the program, the County will be able to provide estimates on the bacteria reductions achieved.
30	Planned credits claimed from the dumpster and washing program and urban nutrient management strategy are only a small percent of the individual TMDLs. Because the credit claimed is only a small portion of the total WLA, MDE encourages the use of these programs. However, by the end of the permit term, the County should monitor progress and provide documentation to verify the water quality benefits claimed using these BMPs.	DoE looks to MDE to conduct a coordinated sampling approach with DoE, if desired. However, DoE feels that the low load reductions from this program do not justify the cost of conducting a detailed inspection program.
Costing/Schedule		
31	PCB Restoration: Table 6-11 does not clearly indicate a timeline for eliminating sources of PCBs within the watershed. This should be included in the next revision.	Toxics are regulated by the State and EPA, and legacy toxics should be addressed by a State plan. The County is willing to participate with MDE's plan.
32	The Anacostia River watershed plan provided a discussion of projects that will be implemented by the Anacostia Watershed Restoration Partnership. This includes over $1 billion in restoration activities to treat more than 6,500 acres of impervious area in the watershed. MDE encourages the County to continue collaborating with the Partnership to facilitate greater restoration and ensure that long term maintenance of these BMPs will be provided.	DoE intends to continue collaborating with the Partnership in achieving our shared goal of restoring impervious areas in the Anacostia watershed.
33	The County has initiated several programs that involve long term collaboration with the private sector, residents, and non-profit organizations. These include the Public-Private Partnership Program, the Rain Check Rebate and Grant Program, and the Alternative Compliance Program. Various incentives are offered within these programs for participation, including a rebate from the County stormwater fees. MDE recognizes the significant effort required for education and outreach in order to initiate these programs. MDE encourages the County to continue to evaluate innovative programs, policies, and BMPs that	DoE plans to continue exploring opportunities to expand our water quality programs and policies to make them both successful and cost effective.

No	MDE's Comments	County's Response
	collectively contribute to the long term water quality goals outlined in the restoration plans.	
Editorial		
34	Anacostia: Anacostia Plan, Table 6-11 indicates that by 2030 the total TSS load reduction will be 179,290,194 tons. This appears to be a conversion error. It appears as though the units are supposed to be pounds of TSS.	These changes will be made to the applicable documents.
35	Anacostia/Mattawoman: Although the County's method for estimating streambank erosion loads is valid, it incorrectly indicates that MAST loadings do not account for streambank erosion loads. This language should be corrected in the next plan revision.	
36	Patuxent: Rocky Gorge Plan, Table 3-3 & Table 6-4: The baseline, target, and required reduction loads identified in Table 3-3 are different from those identified in Table 6-4.	

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PART I: IDENTIFICATION

Permit Condition Part I: Prince George's County's NPDES MS4 Discharge Permit 11-DP-3314 MD0068284 covers stormwater discharges from the municipal separate storm sewer system in Prince George's County, Maryland, except for the City of Bowie. Discharges from the storm drain systems controlled by Prince George's County that may be subject to future NPDES MS4 stormwater program requirements may be added to this Permit at the discretion of the Maryland Department of the Environment (MDE). This permit was issued on January 2, 2014 and will remain in effect through January 1, 2019.

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PART II: DEFINITIONS

Permit Condition Part II: As required by MDE, terms used in this permit are defined in relevant chapters of Title 40 of the Code of Federal Regulations (CFR) Parts 122-I24 or the Code of Maryland Regulations (COMAR) 26.08.0 I, 26.I7.0 I, and 26.I7.02. Terms not defined in CFR or COMAR shall have the meanings attributed by common use.

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PART III: WATER QUALITY

Permit Condition Part III: As required by MDE, the Prince George's County's must manage, implement, and enforce a stormwater management program (SWMP) in accordance with the Clean Water Act (CWA) and corresponding stormwater National Pollutant Discharge Elimination System (NPDES) regulations, 40 CFR Part 122, to meet the following requirements:

1. *Effectively prohibit pollutants in stormwater discharges or other unauthorized discharges into the MS4 as necessary to comply with Maryland's receiving water quality standards;*
2. *Attain applicable wasteload allocations (WLAs) for each established or approved Total Maximum Daily Load (TMDL) for each receiving water body, consistent with Title 33 of the U.S. Code (USC) §1342(p)(3)(B)(iii); 40 CFR §122.44(k)(2) and (3); and*
3. *Comply with all other provisions and requirements contained in this permit, and in plans and schedules developed in fulfillment of this permit.*

Compliance with all the conditions contained in PARTs IV through VII of this permit shall constitute compliance with §402(p)(3)(B)(iii) of the CWA and adequate progress toward compliance with Maryland's receiving water quality standards and any EPA approved stormwater WLAs for this permit term.

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PART IV: STANDARD PERMIT CONDITIONS

A. PERMIT ADMINISTRATION

Permit Condition Part IV. A: Prince George's County shall designate an individual to act as a liaison with the Maryland Department of the Environment (MDE) for the implementation of this permit. The County shall provide the coordinator's name, title, address, phone number, and email address. Additionally, the County shall, in its annual reports, submit to MDE an organizational chart detailing personnel and groups responsible for major NPDES program tasks in this permit. MDE shall be notified of any changes in personnel or organization relative to NPDES program tasks.

Response

Jeff DeHan, Associate Director, Stormwater Management Division, Department of the Environment, Prince George's County, will act as a liaison for the implementation of this permit. Table A-1 below identifies the lead program management and technical personnel for the FY 2015. Table A-2 provides addresses of the coordinating agencies and Figure A-1 through Figure A-14 provides organization charts detailing personnel and groups responsible for major NPDES program tasks.

Table A-1. Key Prince George's County Staff

Permit Condition	Department/ Division	Manager, Title/ E-mail Address, Telephone	Technical Personnel, Title/ E-mail Address, Telephone
Permit Administration	DoE/SMD	Jeff DeHan, Associate Director Stormwater Management Division jmdehan@co.pg.md.us 301-883-5838	N/A
Legal Authority	Office of Law	County Attorney 301-952-5225	N/A
Source Identification	DoE/SMD	Jerry Maldonado, Section Head Environmental Programs Section jgmaldonado@co.pg.md.us 301-883-5943	Technical staff listed below
Storm Drain System	DoE/SMD	Jerry Maldonado, Section Head Environmental Programs Section jgmaldonado@co.pg.md.us 301-883-5943	Tony Newsome, Engineer Environmental Programs Section acnewsome@co.pg.md.us 301-883-7647
Industrial Commercial Sources	DoE/SMD	George Nicol, Section Head Inspection Programs Section gsnicol@co.pg.md.us 301-883-5976	Outsourced
Urban Best Management Practices (BMP)	DoE/SMD	Jerry Maldonado, Section Head Environmental Programs Section jgmaldonado@co.pg.md.us 301-883-5943	Catherine Escarpeta, GIS Specialist Environmental Programs Section crescarpeta@co.pg.md.us 301-883-5990
Impervious Surfaces	DoE/SMD	Jerry Maldonado, Section Head Environmental Programs Section	Catherine Escarpeta, GIS Specialist

Permit Condition	Department/ Division	Manager, Title/ E-mail Address, Telephone	Technical Personnel, Title/ E-mail Address, Telephone
		jgmaldonado@co.pg.md.us 301-883-5943	Environmental Programs Section crescarpeta@co.pg.md.us 301-883-5990
Monitoring Locations	DoE/SMD	Jerry Maldonado, Section Head Environmental Programs Section jgmaldonado@co.pg.md.us 301-883-5943	Outsourced
Water Quality Improvement Projects	DoE/SMD	Jerry Maldonado, Section Head Environmental Programs Section jgmaldonado@co.pg.md.us 301-883-5943	Outsourced
Management Programs			
Stormwater Management			
Implementing SWM Design Policies and Principles	DPIE/SRRD	Mary Giles, PE, Associate Director Site/Road Review Division mcgiles@co.pg.md.us 301-636-2060	Rey de Guzman, Chief Site/Road Review Division redeguzman@co.pg.md.us 301-636-2060
SWM Programmatic Information	DPIE/SRRD	Rey de Guzman, Chief Site/Road Review Division redeguzman@co.pg.md.us 301-636-2060	Deming Chen, Engineer III Site/Road Review Division dchen@co.pg.md.us 301-636-2060
SWM Design Manual	DPIE/SRRD	Mary Giles, PE, Associate Director Site/Road Review Division mcgiles@co.pg.md.us 301-636-2060	Rey de Guzman, Chief Site/Road Review Division redeguzman@co.pg.md.us 301-636-2060
Erosion and Sediment Control and SWM Construction Inspections	DPIE/ID	Michael Reahl, Code Enforcement Officer, Inspections Division mreahl@co.pg.md.us 301-883-3820	See program manager
Private BMP Inspection and Enforcement	DoE/SMD	George Nicol, Section Head Inspection and Compliance Section gsnicol@co.pg.md.us 301-883-5976	Satinder Sachdeva, CSI III Inspection and Compliance Section sssachdeva@co.pg.md.us 301-883-5830
Public BMP Inspection and Maintenance	DPW&T/OHMD	Gwen Clerkley, Associate Director Office of Highway Maintenance gtclerkley@co.pg.md.us 301-499-8522	Vernon Stinnett, Division Chief Storm Drainage Maintenance Division vlstinnett@co.pg.md.us 301-499-8520
Erosion and Sediment Control			
Green Card Training	DPIE/ID	Michael Reahl, Code Enforcement Officer, Inspections Division mreahl@co.pg.md.us 301-883-3820	See program manager
Quarterly Grading	DPIE/SRDD	Rey de Guzman, Chief	Deming Chen, Engineer III

Permit Condition	Department/ Division	Manager, Title/ E-mail Address, Telephone	Technical Personnel, Title/ E-mail Address, Telephone
		Site/Road Review Division redeguzman@co.pg.md.us 301-636-2060	Site/Road Review Division dchen@co.pg.md.us 301-636-2060
Illicit Connection and Enforcement Program			
Field Screening and Outfall Sampling	DoE/SMD	George Nicol, Section Head Inspection and Compliance Section gsnicol@co.pg.md.us 301-883-5976	Paul DeSousa, Planner IV Inspection and Compliance Section pddesousa@co.pg.md.us (301) 883-5871
Commercial Industrial Area Surveys	DoE/SMD	George Nicol, Section Head Inspection and Compliance Section gsnicol@co.pg.md.us 301-883-5976	Paul DeSousa, Planner IV Inspection and Compliance Section pddesousa@co.pg.md.us (301) 883-5871
Investigation and Enforcement	DoE/SMD	George Nicol, Section Head Inspection and Compliance Section gsnicol@co.pg.md.us 301-883-5976	Paul DeSousa, Planner IV Inspection and Compliance Section pddesousa@co.pg.md.us (301) 883-5871
	HD/EED	Manfred Reichwein, Program Chief Environmental Engineering mreichwein@co.pg.md.us 301-883-7632	See program manager
	FD/EMS	Craig Walker Black Hazardous Materials Coordinator, Fire/EMS Department cwblack@co.pg.md.us 301-262-6325	See program manager
Trash and Litter			
Program Assessment and Public Education and Outreach	DoE/SID	Dawn Hawkins-Nixon, Acting Associate Director Sustainable Initiatives Division DHNixon@co.pg.md.us 301-883-5839	See program manager
Trash and Litter Control – Private Property	DPIE	Ruby Sherrod, Associate Director Enforcement Division RJSherrod@co.pg.md.us 301-883-6067	See program manager
Street Sweeping	DPW&T/OHMD	Gwen Clerkley, Associate Director Office of Highway Maintenance gtclerkley@co.pg.md.us 301-499-8522	Michael Brown, Division Chief Special Service Division mobrown@co.pg.md.us 301-499-8520
Recycling, Trash and Garbage Collection, Public	DoE/WMD	Roger Merritt, Associate Director Waste Management Division REMerritt@co.pg.md.us	Marilyn Rybak, Section Head Recycling 301-883-6081

Permit Condition	Department/ Division	Manager, Title/ E-mail Address, Telephone	Technical Personnel, Title/ E-mail Address, Telephone
Education		301-780-6315	
Property Management and Maintenance			
SWPPP	DoE/SMD	George Nicol, Section Head Inspection and Compliance Section gsnicol@co.pg.md.us 301-883-5976	Kemba Saibou, Planner III Inspection and Compliance Section ksaibou@co.pg.md.us 301-883-5958
Street Sweeping	DPW&T/OHMD	Gwen Clerkley, Associate Director Office of Highway Maintenance gtclerkley@co.pg.md.us 301-499-8522	Michael Brown, Division Chief Special Service Division mobrown@co.pg.md.us 301-499-8520
Storm Drain Maintenance	DPW&T/OHMD	Gwen Clerkley, Associate Director Office of Highway Maintenance gtclerkley@co.pg.md.us 301-499-8522	Vernon Stinnett, Division Chief Storm Drainage Maintenance Division vlstinnett@co.pg.md.us 301-499-8520
Vegetation Management	DPW&T/OHMD	Gwen Clerkley, Associate Director Office of Highway Maintenance gtclerkley@co.pg.md.us 301-499-8522	See program manager
Roadside Litter Control	DPW&T/OHMD	Gwen Clerkley, Associate Director Office of Highway Maintenance gtclerkley@co.pg.md.us 301-499-8522	Michael Brown, Division Chief Special Service Division mobrown@co.pg.md.us 301-499-8522
Snow and Ice Control	DPW&T/OHMD	Gwen Clerkley, Associate Director Office of Highway Maintenance gtclerkley@co.pg.md.us 301-499-8522	Vernon Stinnett, Division Chief Storm Drainage Maintenance Division VLStinnett@co.pg.md.us 301-499-8520
Public Education			
Community Outreach and Education	DoE/SID	Deborah Weller, Planner IV Community Outreach Promoting Empowerment dmweller1@co.pg.md.us 301-883-7161	See program manager
	DoE/Director Office	Linda Lowe, Public Information Specialist Communications and Community Engagement Section lmlowe@co.pg.md.us 301-883-5952	See program manager
Restoration Plans and TMDL			
Watershed Assessments	DoE/SMD	Jerry Maldonado, Section Head Environmental Programs Section jgmaldonado@co.pg.md.us 301-883-5943	See program manager

Permit Condition	Department/ Division	Manager, Title/ E-mail Address, Telephone	Technical Personnel, Title/ E-mail Address, Telephone
Restoration Plans	DoE/SMD	Jerry Maldonado, Section Head Environmental Programs Section jgmaldonado@co.pg.md.us 301-883-5943	Outsourced
Public Participation	DoE/SMD	Jerry Maldonado, Section Head Environmental Programs Section jgmaldonado@co.pg.md.us 301-883-5943	See program manager
TMDL Compliance			
Water Quality Retrofits	DoE/SMD	Frank Galosi, Section Head Capital Projects Design Section flgalosi@co.pg.md.us 301-883-5876	See program manager
Construction of SWM Retrofits	DoE/SMD	Dan Rybak, Section Head Capital Projects Construction Section dorybak@co.pg.md.us 301-883-5980	See program manager
Program Evaluation	DoE/SMD	Jerry Maldonado, Section Head Environmental Programs Section jgmaldonado@co.pg.md.us 301-883-5943	See program manager
Assessment of Controls			
Watershed Restoration Assessment	DoE/SMD	Jerry Maldonado, Section Head Environmental Programs Section jgmaldonado@co.pg.md.us 301-883-5943	Outsourced
Stormwater Management Assessment	DoE/SMD	Jerry Maldonado, Section Head Environmental Programs Section jgmaldonado@co.pg.md.us 301-883-5943	Outsourced
Program Funding			
	DoE/ASD	Michelle Russell, Associate Director Administrative Services Division mwrussell@co.pg.md.us 301-952-3954	Kara Chernet, Budget Analyst Budget and Procurement Section KChernet@co.pg.md.us 301-883-5808

Table A-2. Department Addresses

Department/ Division/Section	Address
DoE/DO:	Department of the Environment, Director's Office 1801 McCormick Drive, Suite 500, Largo, MD 20774
DoE/SMD:	Department of the Environment, Stormwater Management Division (SMD) 1801 McCormick Drive, Suite 500, Largo, MD 20774
DoE/SMD/CPDS:	Department of the Environment, SMD, Capital Projects Design Section (CPDS) 1801 McCormick Drive, Suite 500, Largo, MD 20774
DoE/SMD/CPCS:	Department of the Environment, SMD, Capital Projects Construction Section (CPCS) 1801 McCormick Drive, Suite 500, Largo, MD 20774
DoE/SMD/I&CS:	Department of the Environment, SMD, Inspection & Compliance Section (I&CS) 1801 McCormick Drive, Suite 500, Largo, MD 20774
DoE/SMD/EPS:	Department of the Environment, SMD, Environmental Programs Section (EPS) 1801 McCormick Drive, Suite 500, Largo, MD 20774
DoE/SID:	Department of the Environment, Sustainable Initiatives Division (SID) 1801 McCormick Drive, Suite 500, Largo, MD 20774
DoE/SID/ESS:	Department of the Environment, SID, Engineering Services Section (ESS) 1801 McCormick Drive, Suite 500, Largo, MD 20774
DoE/SID/COPE:	Department of the Environment, SID, Community Outreach Promoting Empowerment Section (COPE) 1801 McCormick Drive, Suite 500, Largo, MD 20774
DoE/SID/R&DS:	Department of the Environment, SID, Research & Development Section (R&DS) 1801 McCormick Drive, Suite 500, Largo, MD 20774
DoE/SID/PSS:	Department of the Environment, SID, Program Support Section (PSS) 1801 McCormick Drive, Suite 500, Largo, MD 20774
DoE/WMD:	Department of the Environment, Waste Management Division (WMD) 3500 Brown Station Road, Upper Marlboro, MD 20774
DPW&T:	Department of Public Works and Transportation (DPW&T) 9400 Peppercorn Place, Suite 300, Largo, MD 20774
DPW&T/OEPM:	Department of Public Works and Transportation, Office of Engineering & Project Management (OEPM) 9400 Peppercorn Place, Suite 300, Largo, MD 20774
DPW&T/OHMD:	Department of Public Works and Transportation, Office of Highway Maintenance Division (OHMD) 8400 D'Arcy Road, Forestville, MD 20747
DPIE:	Department of Permitting, Inspections and Enforcement (DPIE) 9400 Peppercorn Place, First Floor, Largo, MD 20774
HD/EHDC:	Health Department, Environmental Health/Disease Control Division 9201 Basil Court, Suite 318, Largo, MD 20774

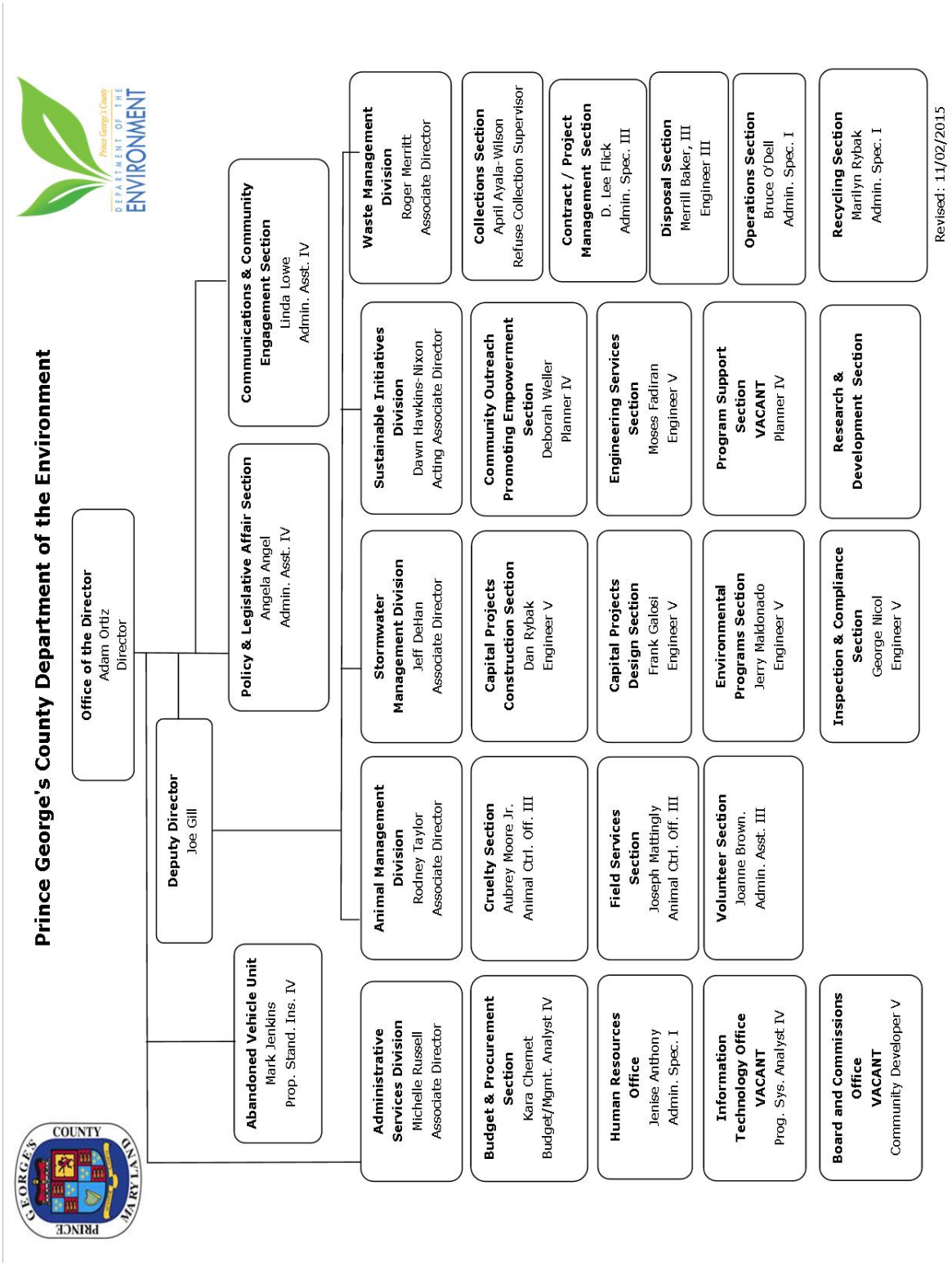

Figure A-1. Department of the Environment - Office of the Director Organizational Chart

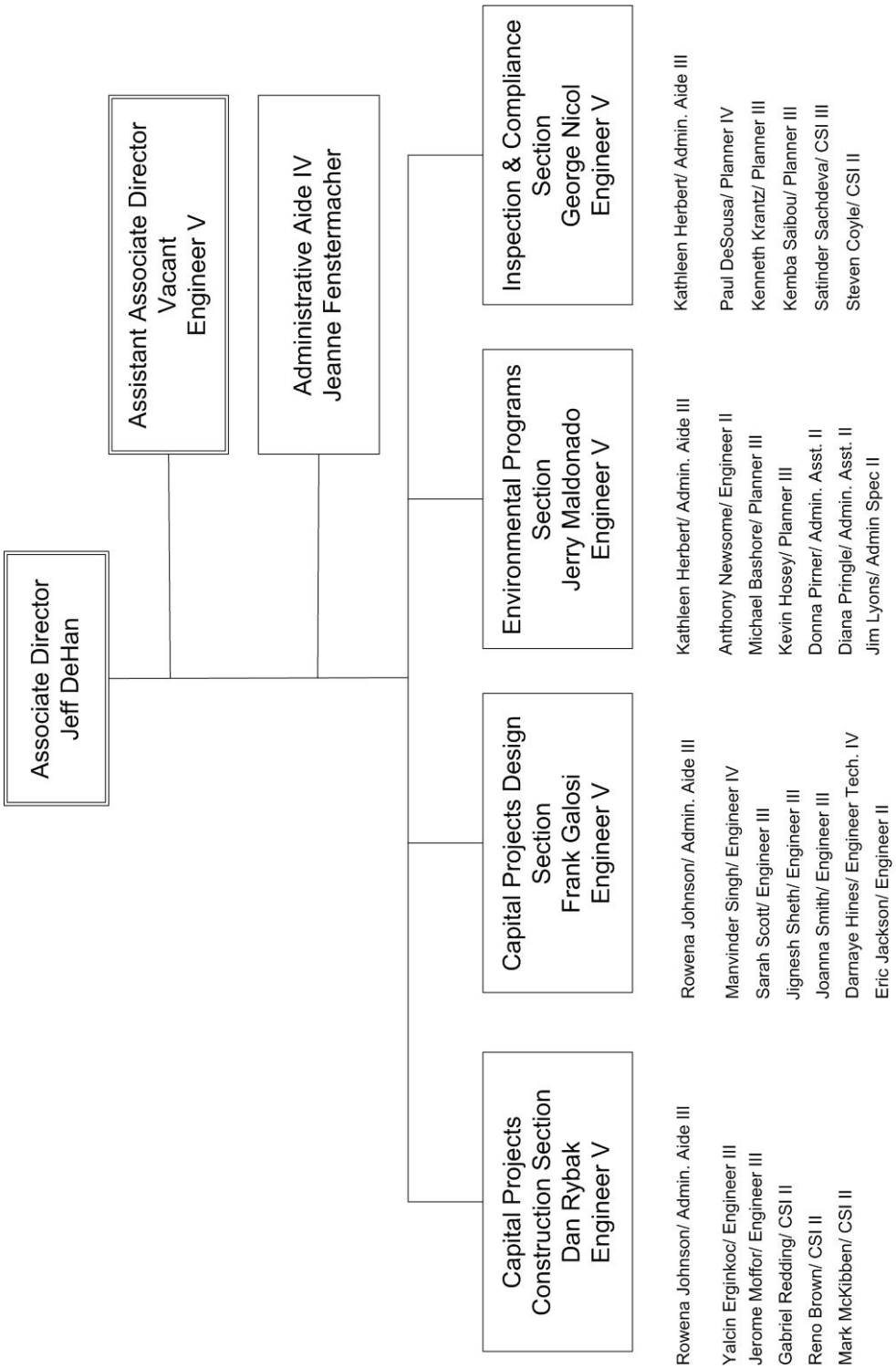

Figure A-2. Department of the Environment - Stormwater Management Division Organizational Chart

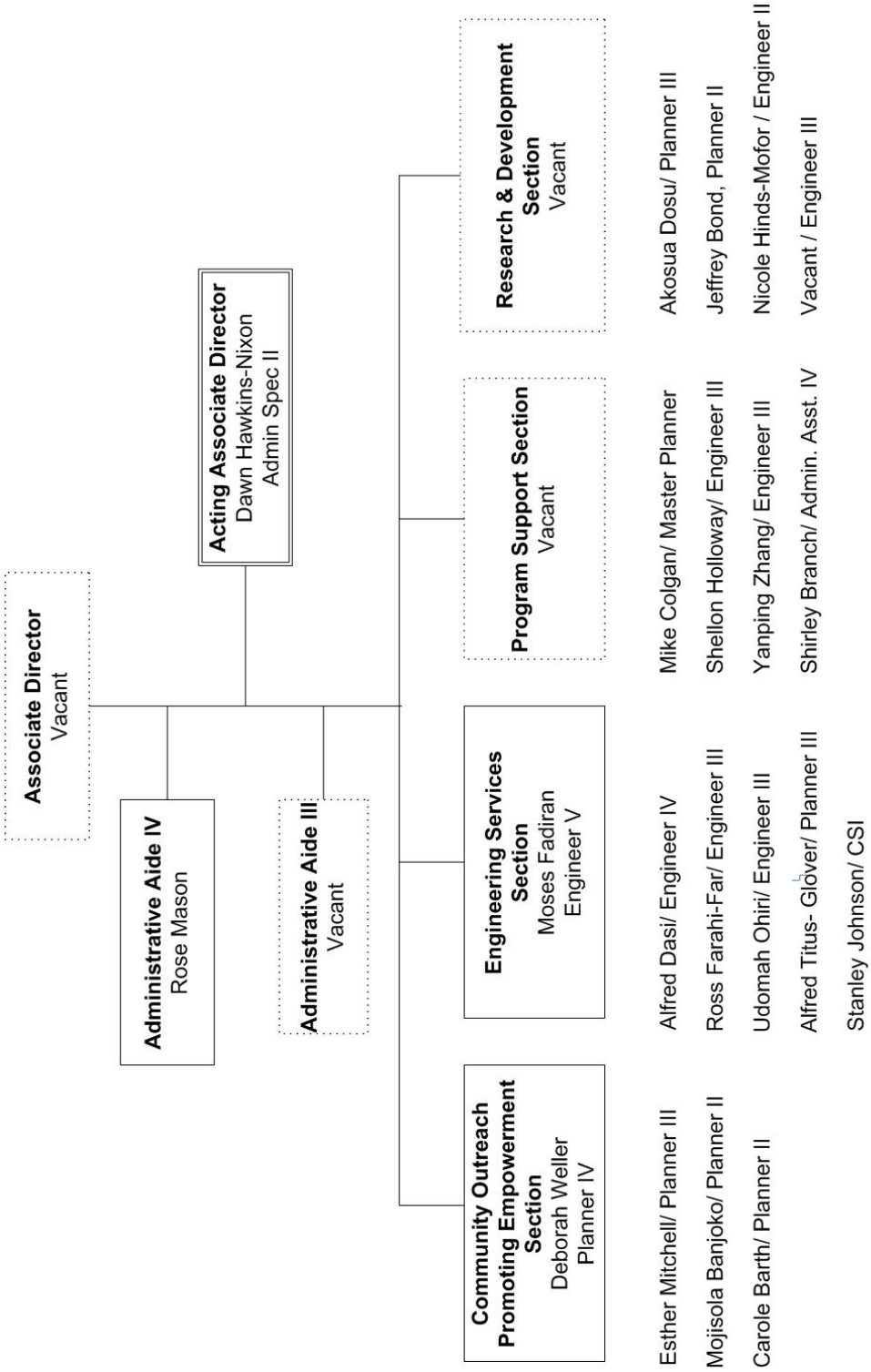

Figure A-3. Department of the Environment - Sustainable Initiatives Division Organizational Chart

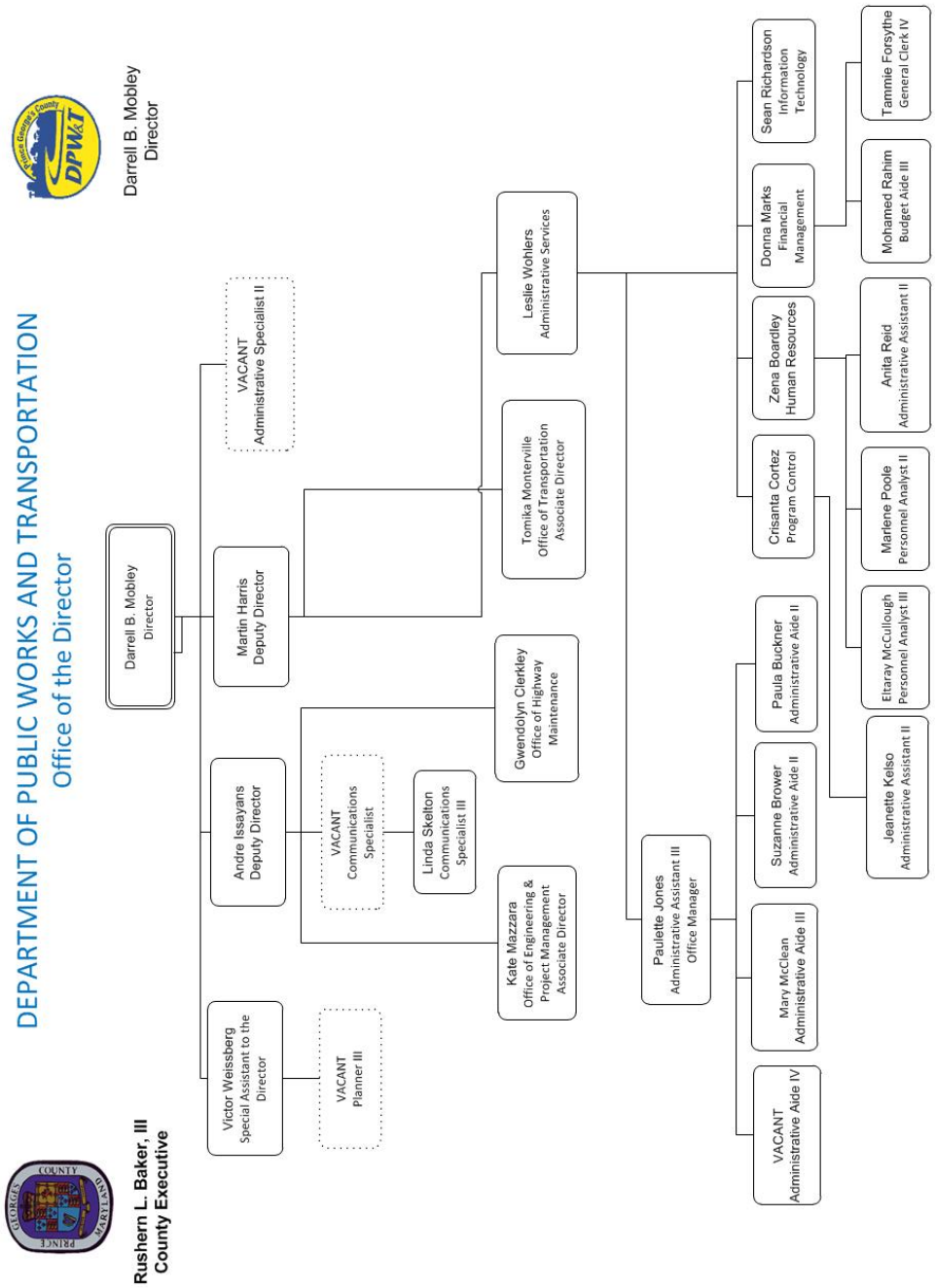

Figure A-4. Department of Public Works and Transportation - Office of the Director Organizational Chart

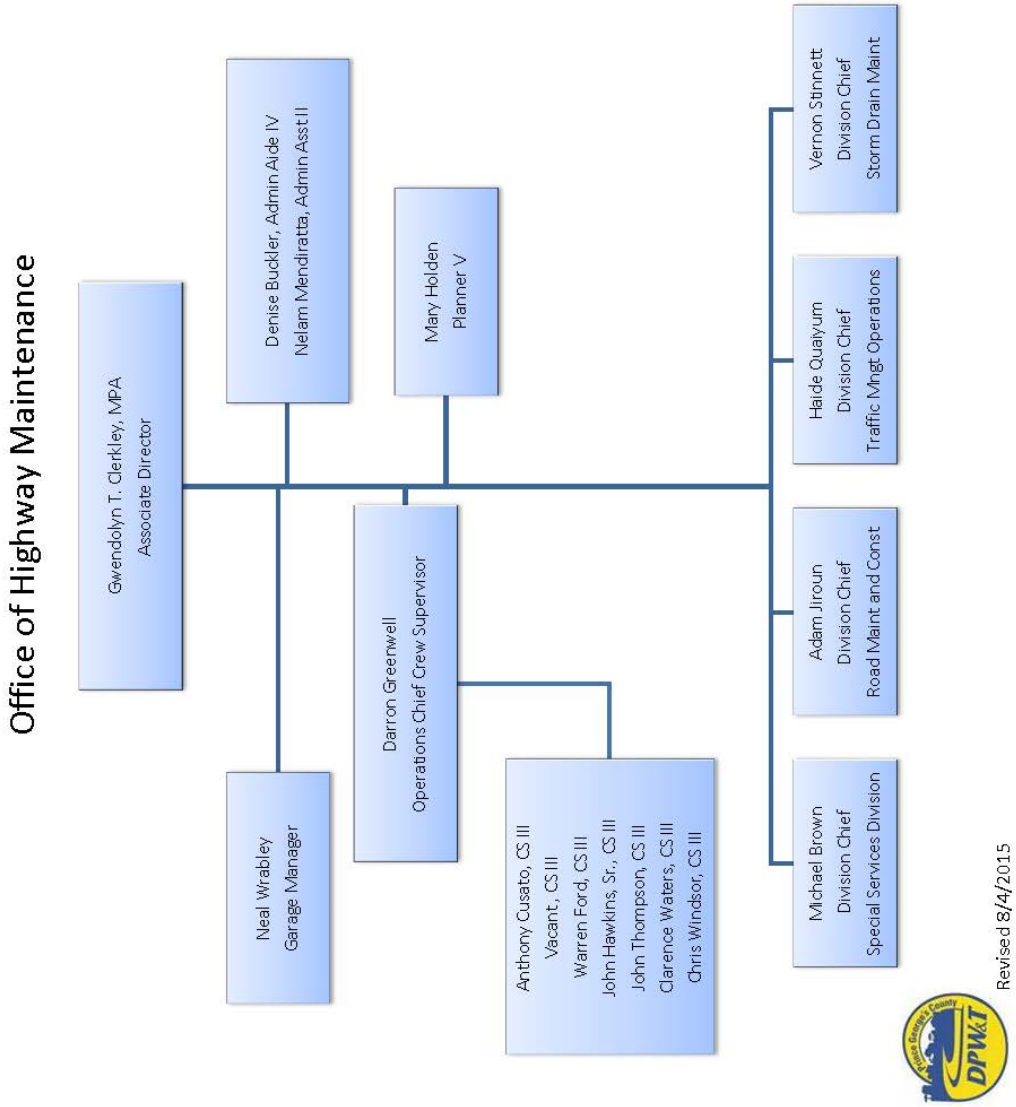

Figure A-5. Department of Public Works and Transportation - Office of Highway Maintenance Division (OHMD) Organizational Chart

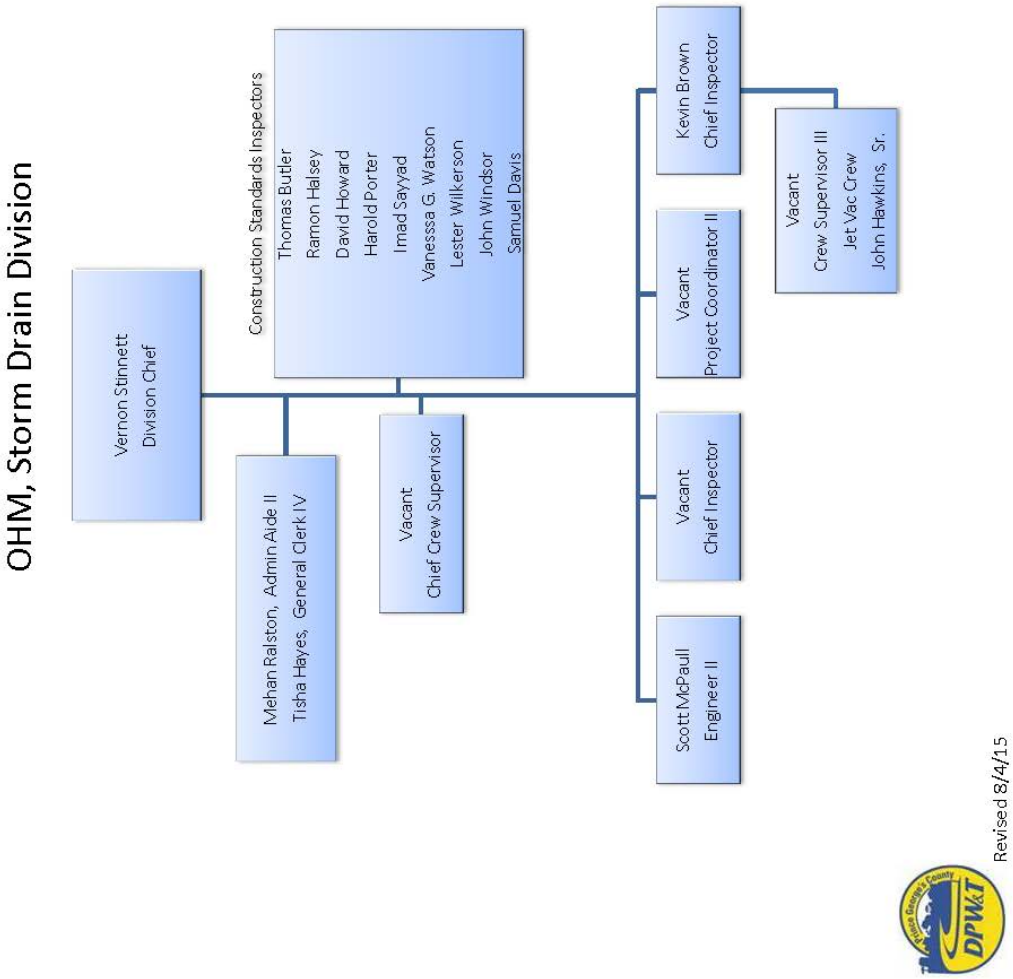

Figure A-6. Department of Public Works and Transportation, OHMD - Storm Drain Maintenance Division Organizational Chart

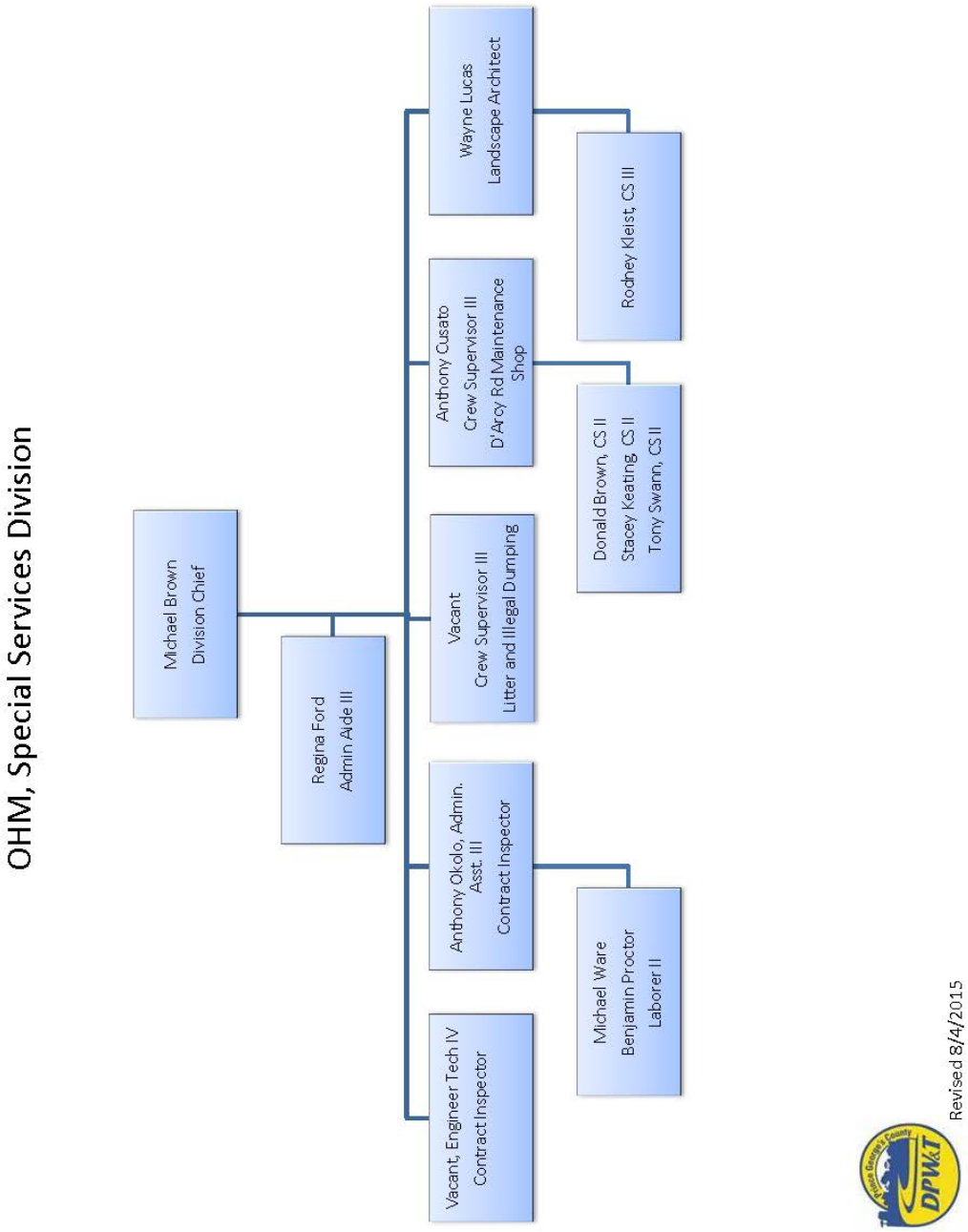

Figure A-7. OHMD-Special Services Division

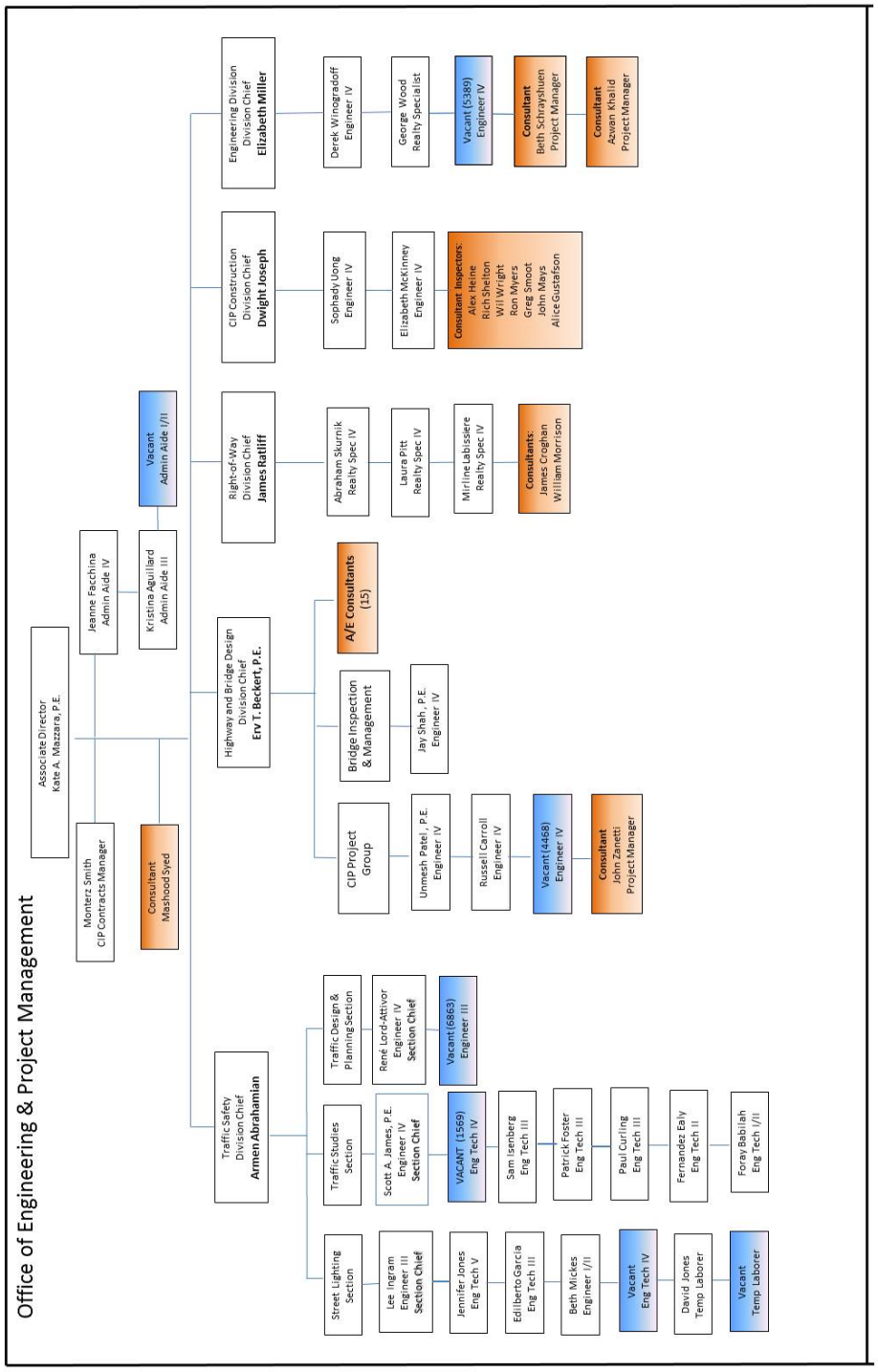

Figure A-8. Department of Public Works and Transportation - Office of Engineering and Project Management Organizational Chart

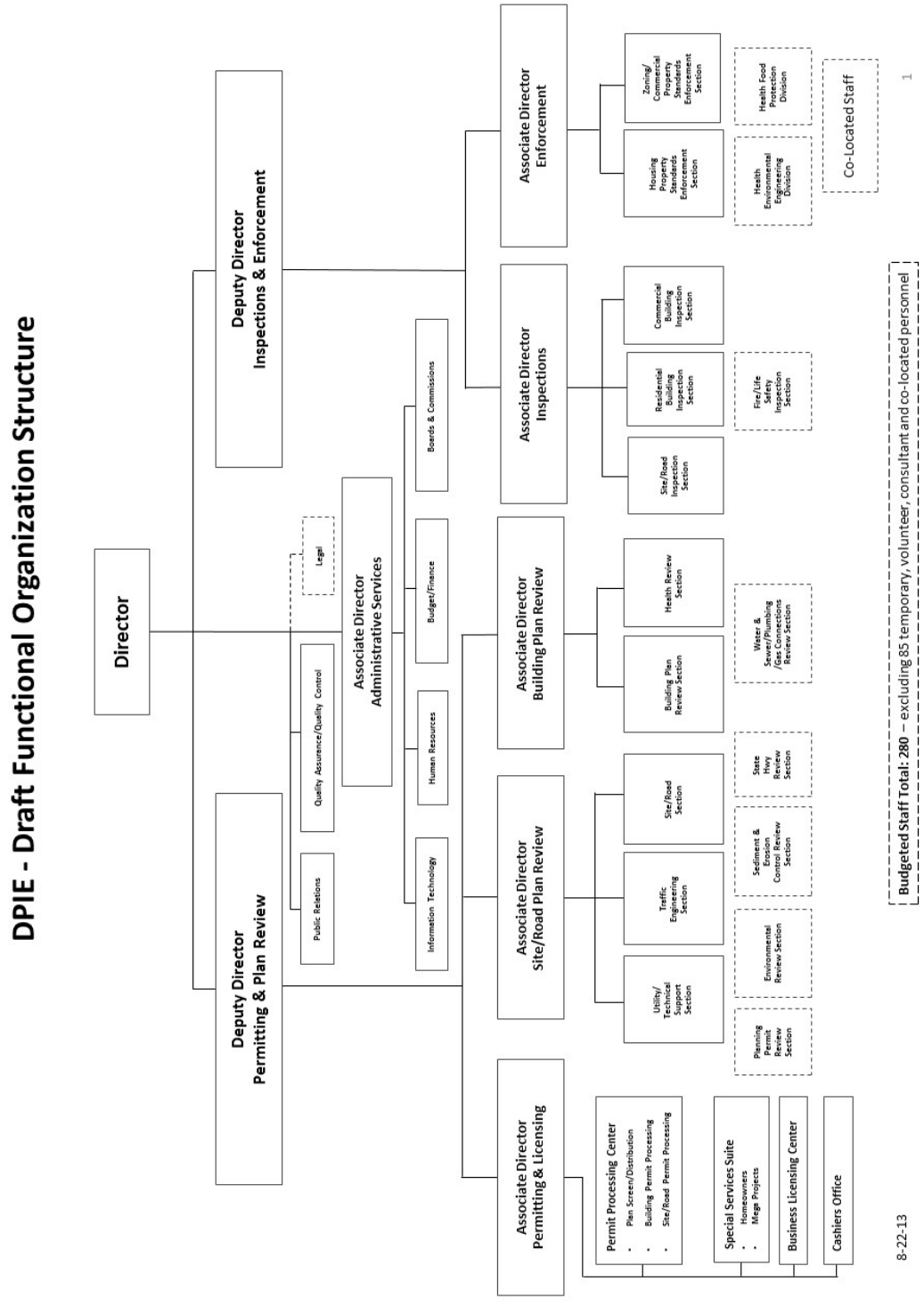

Figure A-9. Draft Functional Organization Structure

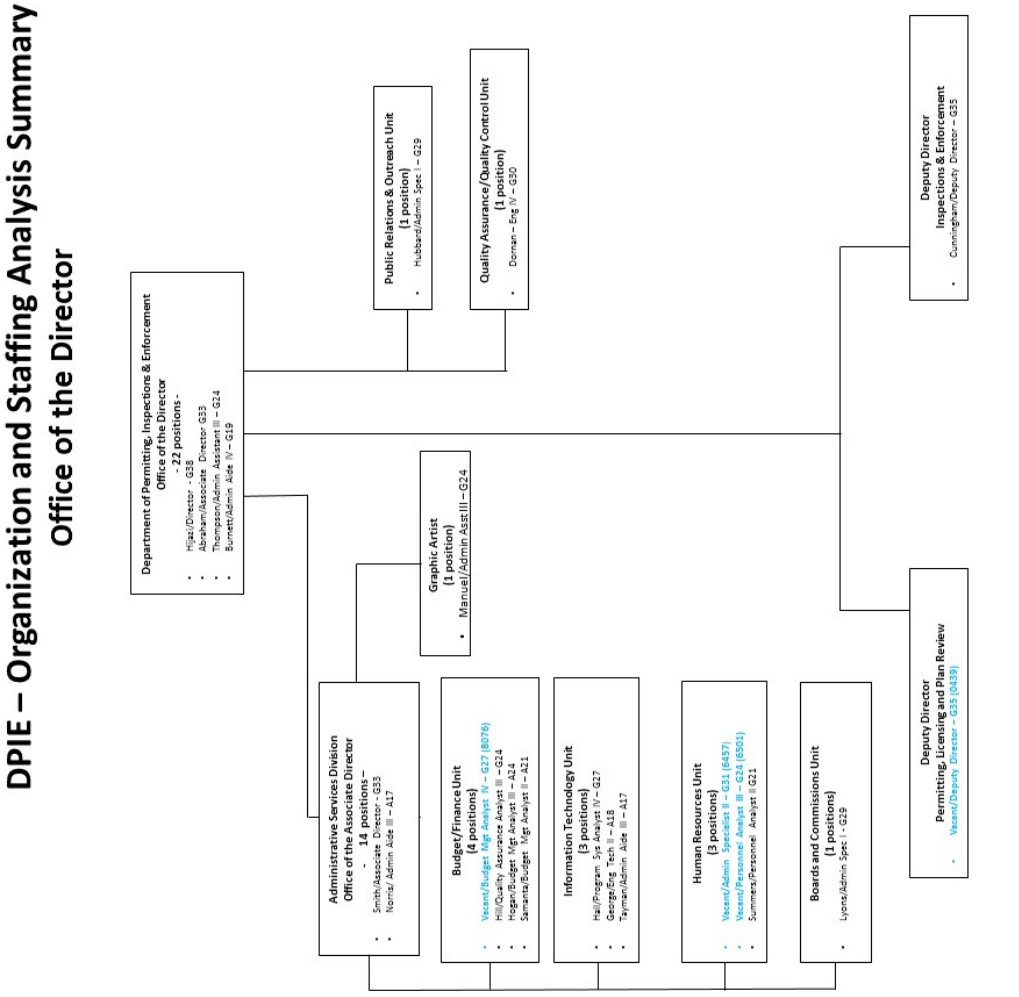

Figure A-10. Department of Permitting, Inspections and Enforcement - Organization and Staffing Analysis Summary, Office of the Director

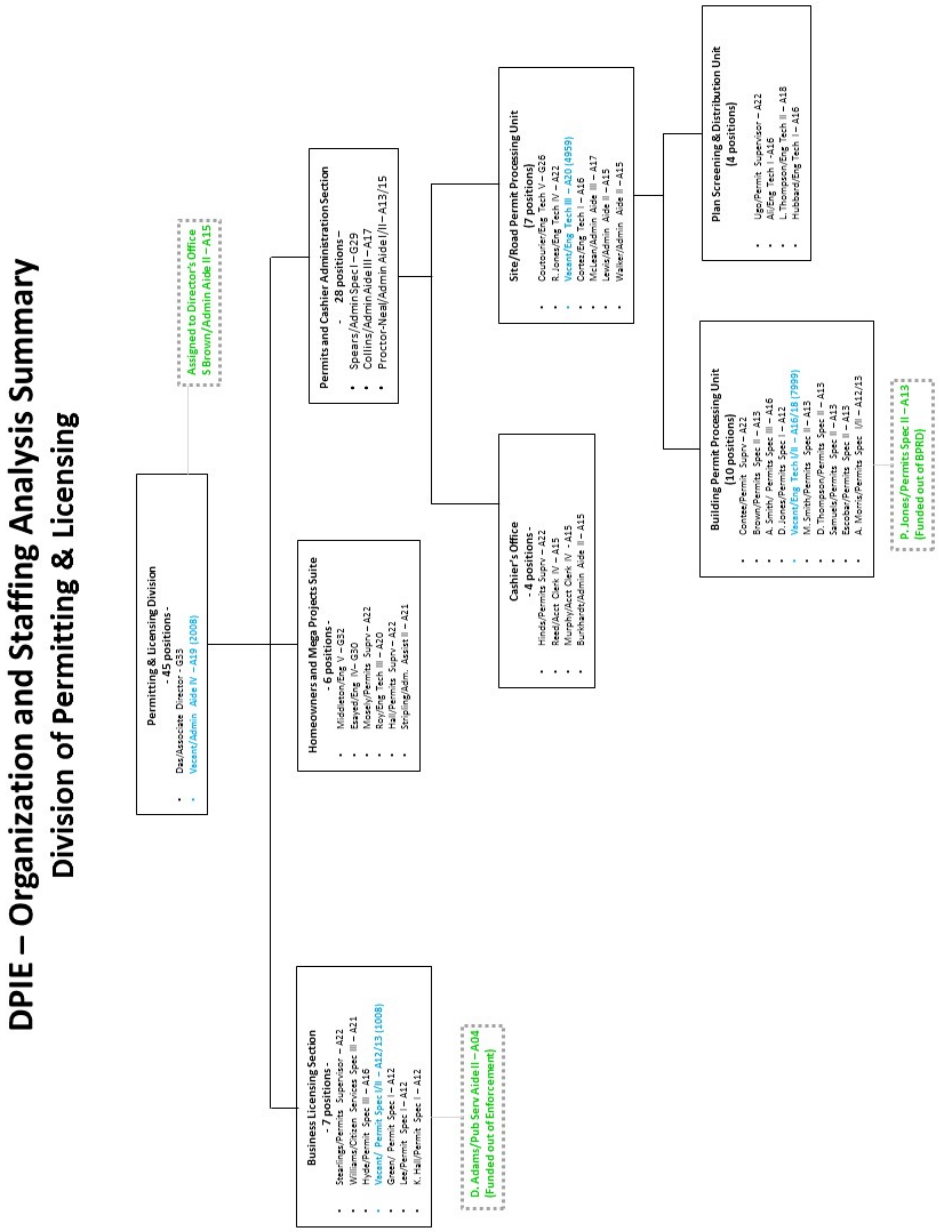

Figure A-11. Department of Permitting, Inspections and Enforcement - Organization and Staffing Analysis Summary Division of Permitting and Licensing

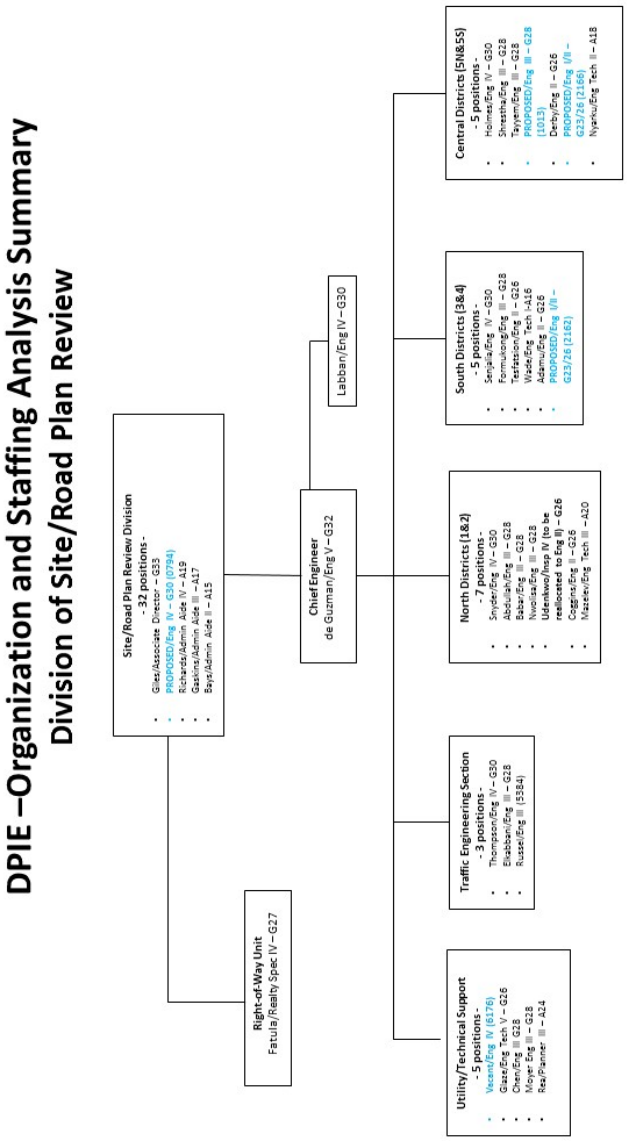

Figure A-12.Department of Permitting, Inspections and Enforcement - Organization and Staffing Analysis Summary, Division of Site/ Road Plan Review

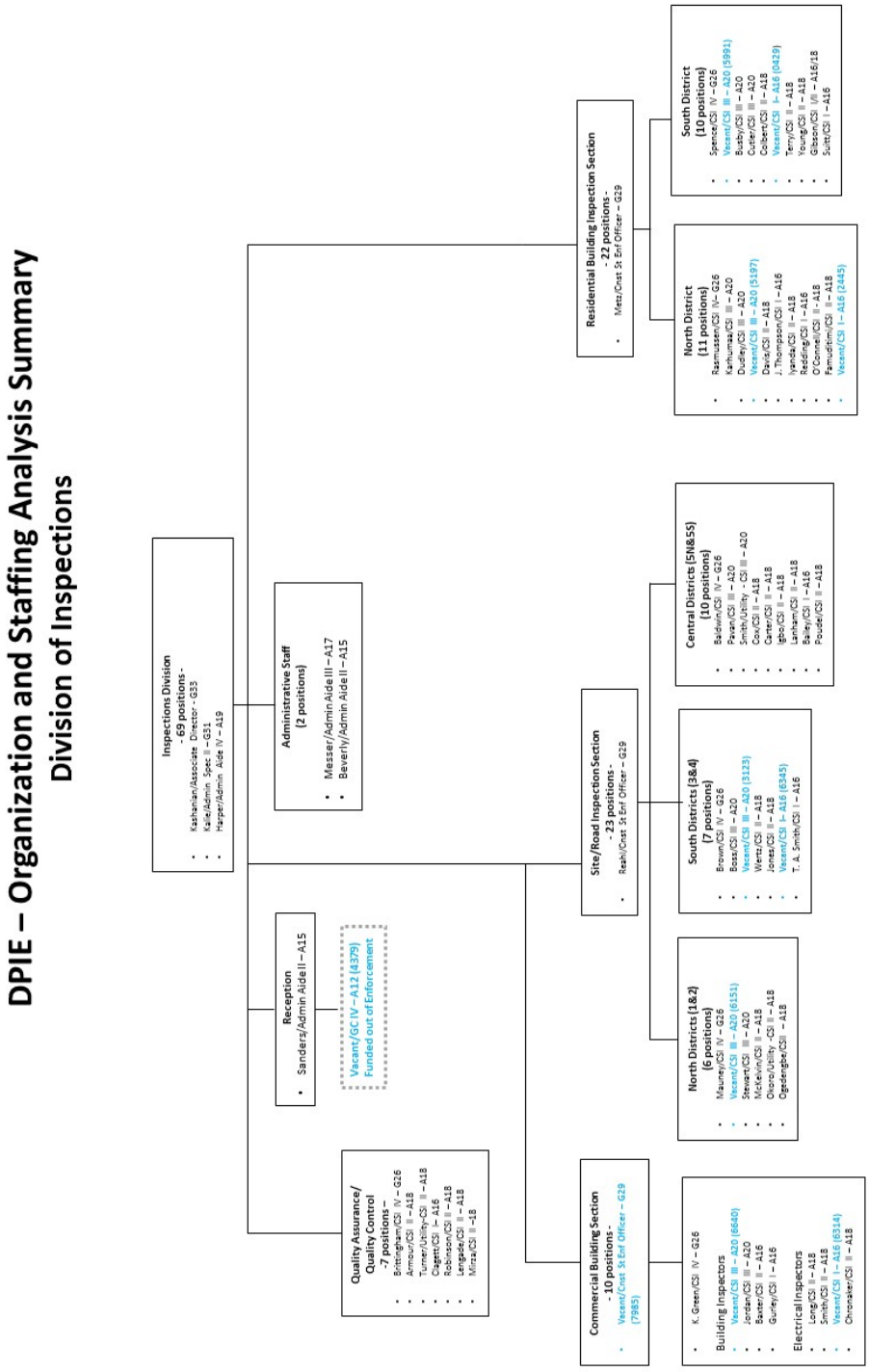

Figure A-13. Department of Permitting, Inspections and Enforcement - Organization and Staffing Analysis Summary, Division of Inspections

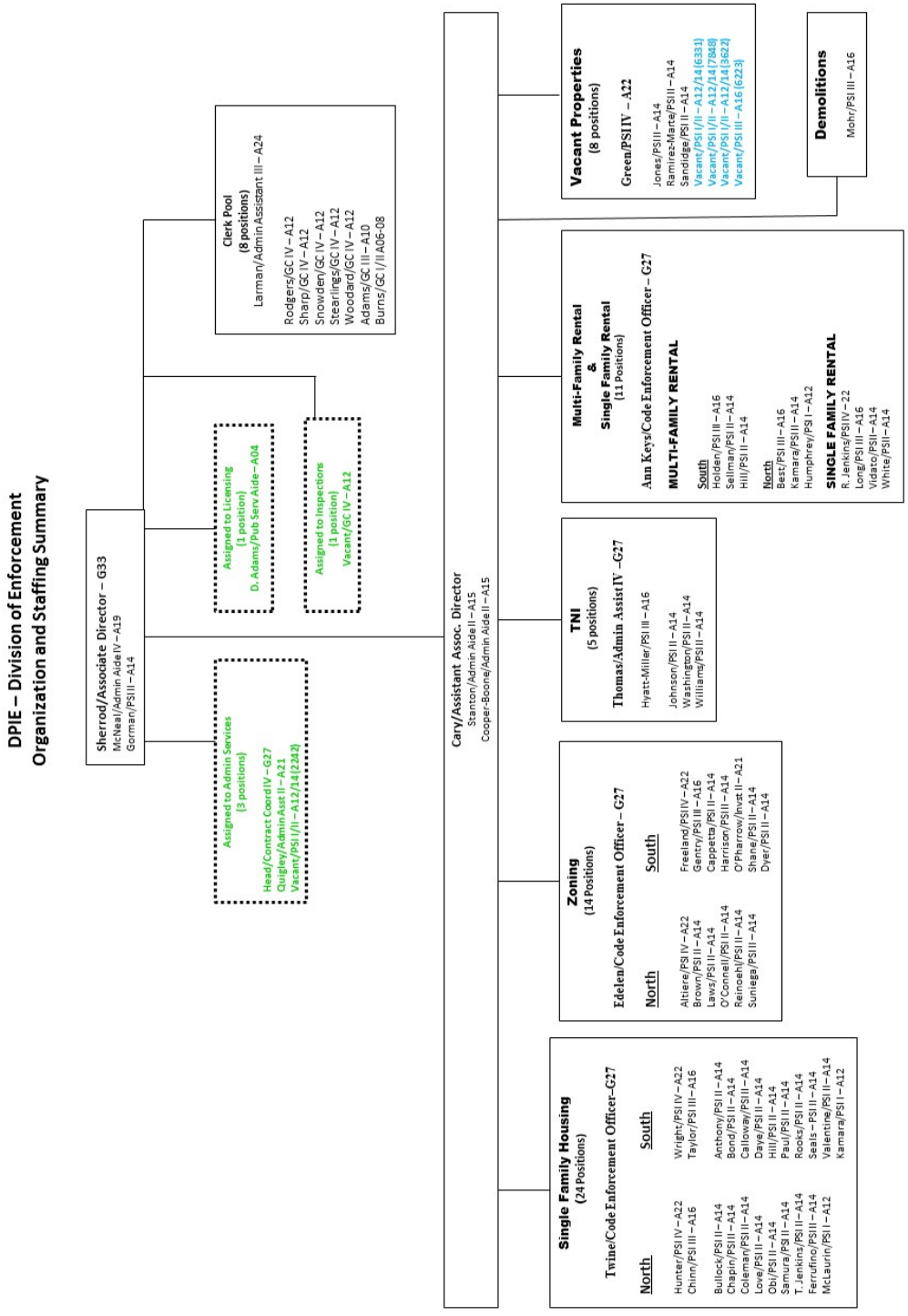

Figure A-14. Department of Permitting, Inspections and enforcement - Organization and Staffing Analysis Summary, Division of Enforcement

B. LEGAL AUTHORITY

Permit Condition Part IV. B: Prince George's County shall maintain adequate legal authority in accordance with NPDES regulations 40 CFR Part 122.26 throughout the term of this permit. In the event that any provision of its legal authority is found to be invalid, the County shall notify MDE within 30 days and make the necessary changes to maintain adequate legal authority. All changes shall be included in the County's annual report.

Response

In 1993, Prince George's County revised its "Grading, Drainage and Erosion Control" Ordinance to provide the County with adequate legal authority to directly perform the activities described in 40 CFR 122.26(d) (2) (i). Legal authority was recertified by our County Attorney in 1999, and was accepted by MDE.

Prince George's County continues to maintain adequate legal authority throughout the term of this NPDES MS4 Permit. There were no changes made during this reporting period to invalidate our legal authority.

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C. SOURCE IDENTIFICATION

1. STORM DRAIN SYSTEM

Permit Condition Part IV. C. 1: The storm drain system information shall be submitted annually for all County watersheds within the permit area in geographic information system (GIS) format with associated tables as required in PART V of this permit. Storm drain system information will include all infrastructure, major outfalls, inlets, and associated drainage areas delineated.

Response

For this reporting period the County is reporting 63,439 records for infrastructure (manhole, inlet, and outfall) points. Through consultants and internal production, the County has added 1,305 infrastructure points between December 19, 2014 and June 30, 2015 to the inventory. The County is reporting 59,250 pipes in FY 2015. The County has added 588 records to the pipe inventory in this reporting period. The County is reporting 5,021 outfall drainage areas in FY 2015.

Major outfalls and their associated drainage areas are also being reported per Attachment A of the NPDEs permit. The County is reporting 3,195 major outfalls and 1,271 major outfall drainage areas. In March, 2015, the County completed the conversion of outfall drainage areas from the old format to the latest ArcGIS, and associate these drainage areas to the outfall ID's. A complete SDI, point attributes and drainage area shapefiles are provided on DVD, Source Identification\Storm Drain System.

2. INDUSTRIAL AND COMMERCIAL SOURCES

Permit Condition Part IV. C. 2: The Industrial and Commercial Sources information shall be submitted annually for all County watersheds within the permit area in geographic information system (GIS) format with associated tables as required in PART V of this permit. The Industrial and Commercial Sources will include industrial and commercial land uses and sites that the County has determined have the potential to contribute significant pollutants.

Response

The County has achieved substantial progress in the creation of a Commercial and Industrial Polygon layer. The County and the Consultant developed a dynamic methodology for identifying and classifying parcels within the County that are used for commercial or industrial purposes and had exposure to stormwater. Property parcels were identified using dynamic queries that incorporate land use, BPRUC Codes, SIC Codes, and aerial imagery. The resulting parcels were then categorized according to the type of activity and whether or not this activity was exposed to stormwater. As of this report, the County and the Consultant have identified 1,371 parcels to be potentially included in the inventory. The County has received the final data delivery from the Consultant and is in the process of finalizing the task.

3. URBAN BEST MANAGEMENT PRACTICES (BMPS)

Permit Condition Part IV. C. 3: The Urban Best Management Practices (BMPs) information shall be submitted annually for all County watersheds within the permit area in geographic information system (GIS) format with associated tables as required in PART V of this permit. The Urban best management practices (BMPs) stormwater management facility data shall include outfall locations and delineated drainage areas.

Response

A total of 3,116 Urban BMPs (2,973 Developer and 143 CIP) were reported to MDE as part of the Impervious Area Baseline Assessment on May 20, 2015. This Urban BMPs inventory was current as of April 1, 2015. For this reporting period, the County is reporting an updated inventory as of June 30, 2015, that includes 3,070 Urban BMPs (2,947 Developer and 123 CIP). The 3,070 Urban BMPs include 27 stream restoration (STRE) projects. From May 1, 2015 to June 30, 2015, the County conducted a review of all BMPs in the County. During the review, the County discovered duplicate BMPs and BMPs in unregulated areas of the County that had also been counted. A total of 79 BMPs were removed as a result of the review. These duplicate records were from the BMPs that were either not inspected or had missing drainage area; therefore, removing them from the inventory did not affect the Impervious Area Baseline calculation. The updated urban BMP inventory added 19 new BMPs as New Development (NEWD), 2 new BMPs as Restoration (REST), and 3 new BMPs as Redevelopment (REDE). In addition, the inventory of water quality improvement projects was updated to reflect the 2 corresponding BMPs in Restoration (REST) and 3 BMPs as stream restoration (STRE). Using aerial imagery, the County discovered 4 BMPs that were not included in the inventory as of April 1, 2015. These BMPs were added to the inventory, and the County is continuing to digitize BMPs to support ongoing data reconciliation efforts.

In addition, a total of 30 BMPs were reclassified from New Development (NEWD) to Redevelopment (REDE,) based on Concept Approval GIS data from DPIE. More NEWD BMPs will be reclassified as REDE, as data reconciliation efforts continue. A complete dataset per Table B, Attachment A of the NPDES permit is provided on DVD, Source Identification\Urban BMP.

4. IMPERVIOUS SURFACES

Permit Condition Part IV. C. 4: The Impervious Surfaces information shall be submitted annually for all County watersheds within the permit area in geographic information system (GIS) format with associated tables as required in PART V of this permit. The Impervious surfaces dataset shall include public and private land use delineated; controlled and uncontrolled impervious areas based on, at a minimum, Maryland's hierarchical eight-digit sub-basins.

Response

The County has completed the analyses needed to report the impervious surfaces database. The MS4 regulated permit area and associated impervious area has been completed and a description of the methodology utilized and the geodatabase have been provided in the previous reporting. Using the updated BMP database, the County was able to produce the shapefiles required in Table C, Attachment A of the NPDES permit. The shapefiles are named for their corresponding Column Name consistent with Table C footnote 1 (GIS shapefile required). Each shapefile has the type of impervious acreage defined by the Description in Table C. A complete dataset is provided on DVD, Source Identification\Impervious Surfaces.

5. MONITORING LOCATIONS

Permit Condition Part IV. C. 5: The Monitoring Locations information shall be submitted annually for all County watersheds within the permit area in geographic information system (GIS) format with associated tables as required in PART V of this permit. The information shall include locations established for chemical, biological, and physical monitoring of watershed restoration efforts and the 2000 Maryland Stormwater Design Manual;

Response

The established chemical and biological, and physical monitoring locations for stormwater monitoring in the Black Branch watershed and watershed restoration monitoring in the Bear Branch watershed are provided on DVD, Source Identification\Monitoring Sites.

6. WATER QUALITY IMPROVEMENT PROJECTS

Permit Condition Part IV. C. 6: The Water Quality Improvement Projects information shall be submitted annually for all County watersheds within the permit area in geographic information system (GIS) format with associated tables as required in PART V of this permit. The information shall include projects proposed, under construction, and completed with associated drainage areas delineated.

Response

A total of 143 BMPs under Capital Improvements Projects (CIP) were reported to MDE as part of the Impervious Area Baseline Assessments on May 20, 2015. This inventory was current as of April 1, 2015. For current reporting period, the County is reporting an updated inventory as of June 30, 2015, that includes 123 BMPs. A total of 25 BMPs were removed from the April 1, 2015, inventory because a review of the data revealed duplicated records as a result of data reconciliation efforts. These duplicated records were from the BMPs that were either not inspected or had missing drainage area; therefore, removing them from the inventory did not affect the Impervious Area Baseline calculation. The updated inventory added 5 new BMPs as Restoration (REST) between April 1, 2015, and June 30, 2015. The location, drainage area shapefile, and description of each of the County's watershed water quality improvement projects are provided on DVD, Source Identification\Water Quality Improvement Projects.

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D. MANAGEMENT PROGRAMS

1. STORMWATER MANAGEMENT PROGRAM

Permit Condition Part IV. D. 1. a. (i): The County shall implement the stormwater management design policies, principles, methods, and practices found in the latest version of the 2000 Maryland Stormwater Design Manual. This includes complying with the Stormwater Management Act of 2007 (Act) by implementing Environmental Site Design (ESD) to the Maximum Extent Possible (MEP) for new and redevelopment projects.

Response

The County incorporated MDE's three phase comprehensive review for all new and redevelopment projects, in accordance with the processes established in the Prince George's County Stormwater Management Design Manual and the PGSCD Soil Erosion and Sediment Control-Pond Safety Reference Manual.

Permit Condition Part IV. D. 1. a. (ii): The County shall implement the stormwater management design policies, principles, methods, and practices found in the latest version of the 2000 Maryland Stormwater Design Manual. This includes tracking the progress toward satisfying the requirements of the Act and identifying and reporting annually the problems and modifications necessary to implement ESD to the MEP.

Response

As critical decisions on stormwater controls are taken at the Concept Plan approval phase, the County has given priority the development of a geodatabase to track stormwater implementation policy decisions, maintenance responsibility, watershed location, and types of BMPs at this stage of the development process. The geodatabase also has the capacity of tracking new and redevelopment activities to ensure that all projects evaluate ESD practices as a first option in controlling stormwater. A copy of the geodatabase is provided on DVD, Management Programs\Stormwater Management\ Development Program.

The geodatabase will provide the County with a tool to identify development trends and track progress in implementing ESD to the MEP. The County conducted an extensive analysis of stormwater controls approved at the Concept Plan stage of the development process, with a representative example of the type of data analysis possible provided in Table D-1.

Table D-1. Stormwater Management Concept Plan Approvals by Watershed

MDE 8-digit code	Watershed Name	Number of Plans	Disturbed Area (Acres)	Proposed Impervious Area (Acres)
02131103	Western Branch	83	2,808.76	954.64
02140205	Anacostia River	78	234.60	121.55
02140201	Potomac River U tidal	31	187.54	51.62
02140203	Piscataway Creek	25	220.86	70.82
02140201	Patuxent River upper	22	101.65	35.48
02140111	Mattawoman Creek	10	696.46	436.91
02140204	Oxon Creek	9	20.83	11.61
02131102	Patuxent River middle	5	85.78	13.19
02131101	Patuxent River lower	4	6.38	1.07

MDE 8-digit code	Watershed Name	Number of Plans	Disturbed Area (Acres)	Proposed Impervious Area (Acres)
02140108	Zekiah Swamp	1	0.11	0.03

Permit Condition Part IV. D. 1. a. (iii): The County shall implement the stormwater management design policies, principles, methods, and practices found in the latest version of the 2000 Maryland Stormwater Design Manual. This includes reporting annually the modifications that have been made or need to be made to all ordinances, regulations, and new development plan review and approval processes to comply with the requirements of the Act.

Response

The 2014 Stormwater Management Manual was introduced on October 14, 2014, to the County Council under Resolution CR-96-2014. This manual was subsequently adopted on November 12, 2014. In addition, the County is in the process of revising "Specifications and Standards for Highways and Bridges" and "Standard Details for Stormwater Management Construction" into a single document. The purpose of the revision is to compile all drainage details and standards into one document, update current standards and to remove design impediments to green street design and ESD to the MEP. DPW&T will work closely with DPIE, DoE, PGSCD, and M-NCPPC to ensure completeness of the project. The process will also entail legislative review and County Code adjustments. It is anticipated that the revisions will be completed during the FY 2016 reporting year.

Permit Condition Part IV. D. 1. b: Maintaining programmatic and implementation information including, but not limited to:

i. Number of Concept, Site Development, and Final plans received. Plans that are re-submitted as a result of a revision or in response to comments should not be considered as a separate project;
ii. Number of redevelopment projects received;
iii. Number of stormwater exemptions issued; and
iv. Number and type of waivers received and issued, including those for quantity control, quality control, or both. Multiple requests for waivers may be received for a single project and each should be counted separately, whether part of the same project or plan. The total number of waivers requested and granted for qualitative and quantitative control shall be documented.

Stormwater program data shall be recorded on MDE's annual report database and submitted as required in PART V of this permit.

Response

A summary of the stormwater controls approved during the concept plan approval phase in FY 2015 is provided below:

- 268 Concept Plans approved
- 1,525 BMPs associated with the 268 Concept Plan approvals, of which, 1,335 BMPs will be privately maintained and 190 will be publicly maintained
- 78 Site Development Plans reviewed
- 168 Final Plans reviewed
- 74 Redevelopment Projects
- 79 Stormwater Exemptions granted
- No waivers were requested and granted for qualitative and quantitative control

The development of the geodatabase will also be utilized to meet the internal reporting mandates of Subtitle 32 of the Prince George's County Code:

Sec. 32-201. Annual Report

Starting in 2013, the Department shall issue an annual report and analysis by December 31st to the County Executive and the County Council on the implementation of and compliance with the stormwater management provisions contained in this Division, including projects that received administrative waivers under Section 32-170 (d), incentives under Section 32-175 (e) and variances under Section 32-176.

As shown in Figure D-1, the mapping capabilities of the geodatabase also provide staff with an excellent tool for the required annual stormwater program reporting to the County Council.

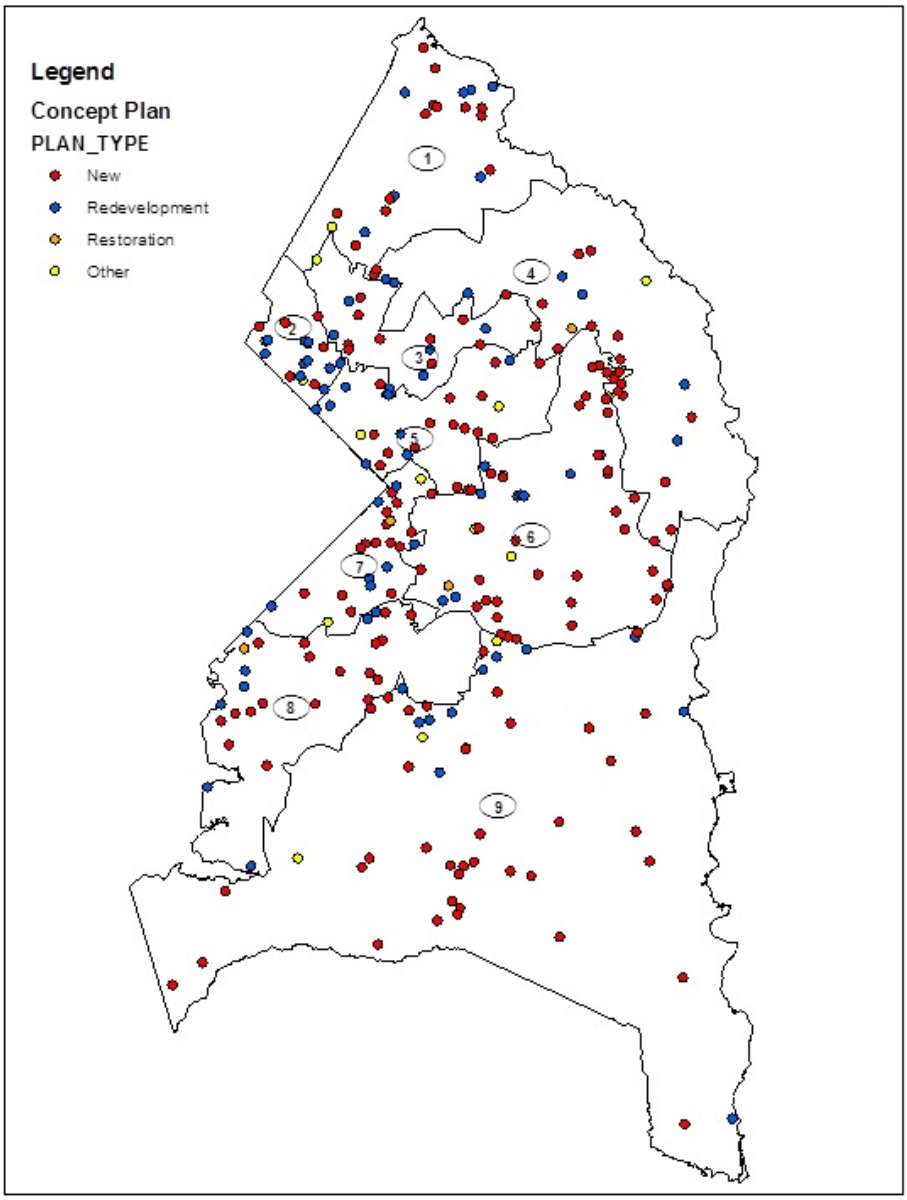

Figure D-1. Stormwater Management Concept Plan Approvals by Councilmanic Districts (July 1, 2014 – June 30, 2015)

Permit Condition Part IV. D. 1. c: The County shall maintain construction inspection information according to COMAR 26.17.02 for all ESD treatment practices and structural stormwater management facilities including the number of inspections conducted and violation notices issued by Prince George's County

Response

Inspections are performed within three districts. The total number of Site/Road inspectors for FY 2015 was twenty and they have performed a total of 7,343 stormwater inspections and have issued 24 violations during this reporting period. Staff within the Site/Road Inspections Section shall continue to perform routine and demand inspections, in an effort to gain full compliance with the approved plans and permits.

Permit Condition Part IV. D. 1. d: The County shall conduct preventative maintenance inspections, according to COMAR 26.17.02, of all ESD treatment systems and structural stormwater management facilities at least on a triennial basis. Documentation identifying the ESD systems and structural stormwater management facilities inspected, the number of maintenance inspections, follow-up inspections, the enforcement actions used to ensure compliance, the maintenance inspection schedules, and any other relevant information shall be submitted in the County's annual reports.

Response

As required in the Source Identification section, the county has concluded its analysis of BMPs inventory and the total number of BMPs in the County has decreased from 3,116 to 3,070. Table D-2 below shows what DoE reported in May 2015 response. From May 1, 2015, to June 30, 2015, DoE conducted a review of all BMPs in the County. During the review, DoE discovered duplicate BMPs and BMPs in unregulated areas of the County that had also been counted. The duplicated BMPs and unregulated BMPs were then deleted from the database, resulting in a decrease of 45 BMPs for this reporting period.

Table D-2. May 2015 Response for the Triennial BMP Inspection Schedule

Responsible Agency	Inspection Type	Triennial Inspection Schedule		
		FY 2016	**FY 2017**	**FY 2018**
DoE (KCI Consultants)	Catch up	155	155	155
	Regular Production Program	155	155	155
DPW&T (McCormick Taylor)	Catch up	84	84	84
	Regular Production Program	182	182	183
DoE Inspection Program	Catch up	372	372	373
	Regular Production Program	90	90	90
Total Catch up		***1,834***		
Regular Production Program		***1,282***		

Preventive Maintenance Inspections of Private Facilities

Department of the Environment is responsible for maintaining compliance of all the privately owned BMPs. For FY 2015, DoE performed a total 436 private BMP inspections. Out of the 436 inspections, 319 were catch up inspections and 117 were triennial inspections. DoE conducted 193 catch up inspections

and 115 triennial inspections. DoE's consultant conducted the remaining 126 catch up inspections and 2 triennial inspections. Table D-3 below shows these inspections. Out of the 117 triennial BMP inspections, 81 BMPs were in compliance. For the catch up BMPs, 161 BMPs were in compliance. Re-inspection of the BMPs that were not in compliance was conducted after June 30, 2015, and will be reported the next annual report. A detailed inspection list is provided on DVD, Management Programs \ Stormwater Management\Inspections \Private Facilities.

Preventive Maintenance Inspections of Public Facilities

Department of Public Works and Transportation is responsible for maintaining compliance of all the public owned BMPs. For FY 2015, DPW&T and consultant performed total 385 public BMP inspections that include 243 ponds and 142 other BMPs. A total of 91 pond inspections were performed by the consultant and rest were performed by County personnel. It should be noted that BMPs maintained by DPW&T are inspected for corrective actions. Once deficiencies are identified, corrective actions are taken on the spot by County personnel either by themselves or by issuing a task order to a contractor. Table D-3 below shows these inspections. A detailed inspection list is provided on DVD, Management Programs \ Stormwater Management\Inspections \Public Facilities.

Table D-3. BMP Inspections Performed in FY 2015

Programs	Items	Inspection Schedule
DoE's Consultants	Catch up	126
	Regular Production Program	2
DPW&T	Catch up	170
	Regular Production Program	215
DoE Inspection Program	Catch up	193
	Regular Production Program	115
Total Catch up		***489***
Regular Production Program		***332***
Total Inspections		***821***

With the inspections performed by DoE and DPW&T between May 1, 2015 and June 30, 2015, the target numbers as previously reported in the County's May 2015 response were reduced. In Table D-4, the target numbers were revised to show the County's new approach to meet triennial inspections for both existing and new BMPs.

Table D-4. Revised Total BMP Inspections Schedules as of June 30, 2015

Programs	Items	Triennial Inspection Schedule		
		FY 2016	FY 2017	FY 2018
DoE Consultants	Catch up	200	200	200
	Regular Production Program	200	200	200
DPW&T	Catch up	28	29	29
	Regular Production Program	236	236	237
DoE Inspection Program	Catch up	286	286	286
	Regular Production			

Programs	Items	Triennial Inspection Schedule		
	Program	72	72	73
Total Catch up		***1,544***		
Regular Production Program		***1,526***		

2. EROSION AND SEDIMENT CONTROL

Permit Condition Part IV. D. 2. a: The County shall implement program improvements identified in any MDE evaluation of the County's erosion and sediment control enforcement authority;

Response

In a letter dated April 13, 2015, MDE stated that delegation would be granted once the County has adopted and signed the ordinance updating the County's Erosion and Sediment Control program. The updated ordinance was approved under CB-36-2015 on June 23, 2015. The MDE received a signed copy of the Bill on August 4, 2015, from the County and granted the delegation of authority to the County effective through June 30, 2017.

Inspections are performed within three districts. The total number of Site/Road inspectors for FY 2015 was twenty and they have performed a total of 11,423 sediment control inspections and have issued 167 violations during this reporting period. Staff within the Site/Road Inspections Section shall continue to perform routine and demand inspections, in an effort to gain full compliance with the approved plans and permits.

Permit Condition Part IV. D. 2. b: The County shall conduct responsible personnel certification classes to educate construction site operators regarding erosion and sediment control compliance at least three times per year.

Response

"Responsible Personnel Certification" courses were scheduled by the Inspections Division. The advent of the on-line course hosted by the MDE had an effect, which resulted in no students registering for the class. MDE advised the Department, in an April 13, 2015 letter, that the on-line training offered by MDE will satisfy the County's MS4 permit obligations.

Permit Conditions Part IV. D:
2. c: Program activity shall be recorded on MDE's annual report database and submitted as required in PART V of this permit; and
2. d: Reporting quarterly, information regarding earth disturbances exceeding one acre or more. Quarters shall be based on calendar year and submittals shall be made within 30 days following each quarter. The information submitted shall cover permitting activity for the preceding three months.

Response

During the 2015 reporting period, Prince George's County reported a total of 110 projects with earth disturbances of one acre or more. The total earth disturbance for these 110 projects was 1,462.07 acres. Copies of the disturbed area databases forwarded to MDE throughout the year are provided on DVD, Management Programs\SEC\Disturbed Area.

3. ILLICIT DISCHARGE DETECTION AND ELIMINATION

Permit Condition Part IV. D. 3: Prince George's County shall continue to implement an inspection and enforcement program to ensure that all discharges to and from the MS4 that are not composed entirely of stormwater are either permitted by MDE or eliminated. Activities shall include, but not be limited to:

a. *Field screening at least 150 outfalls annually. Each outfall having a discharge shall be sampled using a chemical test kit. Within one year of permit issuance, an alternative program may be submitted for MDE approval that methodically identifies, investigates, and eliminates illegal connections to the County's storm drain system;*
b. *Conducting annual visual surveys of commercial and industrial areas as identified in PART IV.C.2 above for discovering, documenting, and eliminating pollutant sources. Areas surveyed shall be reported annually;*
c. *Maintaining a program to address and, if necessary, respond to illegal discharges, dumping, and spills;*
d. *Using appropriate enforcement procedures for investigating and eliminating illicit discharges, illegal dumping, and spills. Significant discharges shall be reported to MDE for enforcement and/or permitting; and*
e. *Reporting illicit discharge detection and elimination activities as specified in PART V of this permit.*

Response

During the fiscal year 2015, the County contracted with the Consultant to develop a field application tool in support of the Illicit Discharge Detection and Elimination (IDDE) program inspections. The field application was created to allow field inspectors to access County geographic information system (GIS) inventory of storm drains, best management practices, streets, property ownership, etc., facilitate recording of field data, and to automatically generate inspection reports.

Following completion of the field tool the Consultant performed the illicit discharge field screening. For the 2015 reporting year, field screening efforts focused primarily on the Anacostia Watershed.

The screening was conducted from January 2015 through June 2015, during which time 186 inspections were conducted at 152 outfalls. A two-person field crew visited each site following 72-hours of dry weather. The physical condition of each site was recorded on the tablet-based field inspection tool. If a dry-weather flow was present, a sample was taken and tested with a Hach chemical test kit. Tests were conducted for temperature, pH, ammonia, dissolved oxygen, turbidity, detergents, chlorine, copper, phenols, and fluoride. When a chemical test was conducted, and the results showed a high concentration for any contaminant, the site was retested after 4 hours but within 24 hours to verify the results.

The results of the chemical test performed were compared with the accepted statewide averages described in Dry Weather Flow and Illicit Discharges in Maryland Storm Drain Systems (MDE, 1997). Using the statewide averages, the 1997 study provides a threshold for each constituent, based on watershed land use. The results from the chemical tests performed during the 2015-reporting year were compared with this threshold to determine which results are considered abnormal for each constituent, and to make recommendations as to which storm drain systems should be investigated further as having possible illicit connections. Numerical thresholds for dissolved oxygen, turbidity, and fluoride are not published. The need for follow-up investigations based on these parameters was determined on a case-by-case basis. The thresholds used for the investigations are as follows:

- pH outside the range 5.5-8.5
- >0.5 ppm Detergents
- >0.4 ppm Chlorine

- >0.17 ppm Phenols
- >0.21 ppm Copper
- >1.0 ppm Ammonia

When a confirmed high concentration of a contaminant was found, field crews followed the stormdrain system upstream attempting to locate the source of the contamination. Additional tests at upstream structures were conducted as needed in an effort to track the contamination upstream to the source, especially where two or more systems converged.

All data collected during the illicit discharge screening was recorded in a database conforming to the MDE formatting requirements. This database is provided on DVD, Management Program\ IDDE.

The results show that, of the 186 inspections, 134 observed dry-weather flow. Of these, several had minor flow or conditions that did not allow for sampling; 72 chemical tests were performed. Structural concerns were noted during 34 inspections. Erosion was noted during 17 inspections. Deposits were noted during 108 inspections. Floatables were noted during 58 inspections. An odor was noted during 13 inspections. Color was noted during 6 inspections, and clarity issues were present during 15 inspections.

Commercial and Industrial Visual Surveys

Concurrent with the development of the field tool, the County developed a polygon layer that identified commercial and industrial areas. The County visited these polygons within the target area identified for the IDDE field screening (Anacostia Watershed), and performed inspections.

Within the commercial and industrial areas, field teams reviewed the drainage conditions, business practices, and overall site condition to determine if visual evidence of pollution was present that would not be detectable through the chemical tests. The County recorded suspicious practices found on commercial and industrial areas surrounding the 150 selected outfalls for IDDE inspections. Within the field inspection tool, commercial/industrial points were generated to indicate where specific violations were taking place and commercial/industrial polygons were verified, created, and attributed to track which areas were visually inspected.

A total of 53 commercial and industrial complexes were inspected over the course of the inspections. A total of 55 potential water quality concerns were identified. These included conditions such as stained pavement at fueling stations indicating past spills, leaking dumpsters, chemical barrels stored without cover, sediment runoff from a site, exposed salt piles, etc. The County is currently following up with the property owners to address these potential water quality concerns will report back with the status in the next report.

Investigation and Enforcement Program

The County utilizes the full enforcement authority authorized by the County Code to investigate and eliminate illicit discharges. The County Code assigns the authority and responsibility for responding to and eliminating illicit discharges by type, activity or location. For instance, enforcement actions associated with violations involving the improper storage of materials and/or dumping on private property are governed under the Zoning Ordinance and Housing and Property Codes. Environmental enforcement, including disturbed area, grading, sediment and erosion control, is authorized under

Subtitle 32. All these enforcement responsibilities fall within the authority of the Inspection and Enforcement Divisions of DPIE. The prevention of human exposure to sewage is administered by the Health Department (HD) in accordance with the On-Site Sewage Disposal Systems regulations and, the control of hazardous chemicals or substances is governed by the Fire Safety Code.

The Inspection and Compliance Section (ICS), within the SMD of DoE, receives complaint referrals through the County's Customer Call Center 311 system and maintains close communications with environmental organizations throughout the County. In this capacity, DoE staff received 24 complaints during this reporting period through the types of communication summarized in Figure D-2. Site investigations are performed on all incoming complaints with the exception of complaints that clearly fall within the purview of another agency, such as sediment and erosion control. To expedite a County response to those complaints, DoE staff immediately refers the investigation and corrective action, if warranted, to the responsible agency.

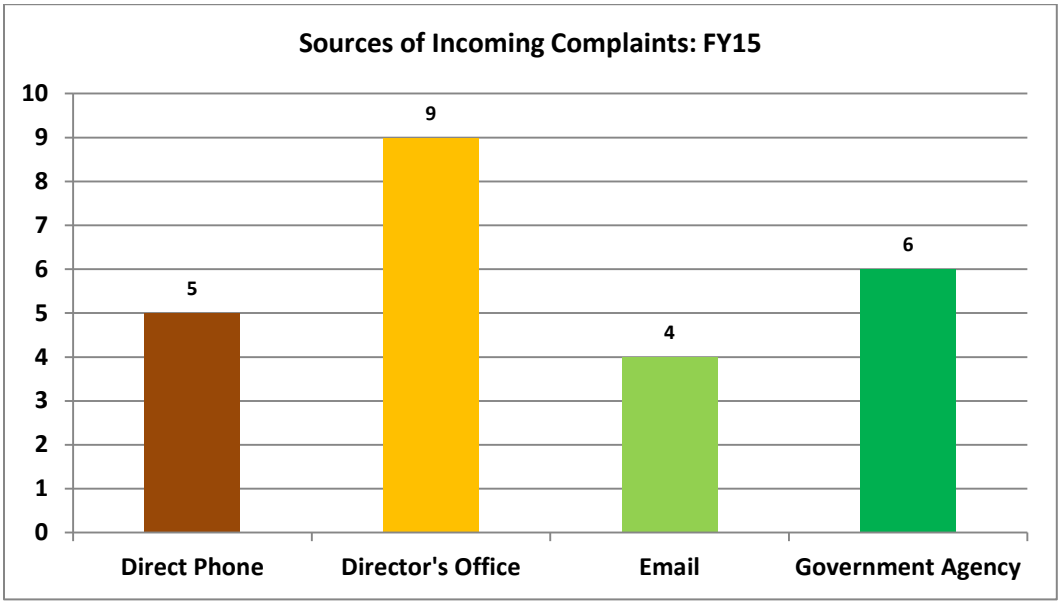

Figure D-2. Source of Incoming Complaints

Water quality infractions were field verified for 18 of the 24 investigations performed by DoE staff. Evidence of an illegal discharge or illicit connection to the storm drain system could not be located for the 6 remaining complaints. Of the 18 valid complaints identified, we were unable to locate the source for 3 complaints, 8 were referred to another agency for enforcement, and 7 were immediately corrected by the responsible party thereby eliminating the need for formal enforcement action.

Table D-5 provides a summary of enforcement actions taken by DoE to resolve valid water quality infractions. Table D-6 summaries the results of the water quality cases referred to other agencies for enforcement. Details of the complaint including the location of the sites are provided on DVD, Management Programs\ IDDE.

Table D-5. DoE Water Quality Violation Enforcement Actions

Category	No. of Investigations	Unable to Locate Source	No Problem Found	No. of Cases Resolved Voluntary	No. of Cases Referred/Referral Agency
Improper Disposal of Waste	2	0	1	1	N/A
Improper Use or Storage of Materials	1	0	0	0	(1) DPIE site
Sediments	7	3	0	0	(3) DPIE site, (1) Other
Sewage	2	0	1	1	N/A
Oil Spill	4	0	1	0	(3) MDE
Vehicle Maintenance	1	0	0	1	N/A
Vehicle Washing	4	0	0	4	N/A
SWM SD Public	1	0	1	0	N/A
Other	2	0	2	0	N/A
TOTAL	***24***	***3***	***6***	***7***	***8***

Table D-6. DoE Water Quality Violations Referred/Resolutions

Category	Cases Referred / Referral Agency	Case ID	Location: Lat, Long	Resolution
Improper Use or Storage of Materials	(1) DPIE site	223	39.099275, -76.848306	Resolved – DPIE issued a Notice of Violation and a $250.00 Civil Citation for sediment laden water runoff and other pollutants directly flowing off the property. DPIE required sediment controls be installed. The property owner installed a sediment trap in the rear corner of the property to eliminate sediment/pollutant runoff.
Sediments	(3) DPIE site	237	38.937600, -76.96286	Resolved – DoE inspector e-mailed the Code Enforcement Officer with DPIE's Site/Road Inspection Division to investigate the sediment in the roadway and the water line replacement work being done by WSSC. DPIE required sediment controls be installed. Sediment controls were installed by WSSC.
		245	38.917220, -76.911628	Resolved – DoE referred the case to DPIE's Site /Road Inspection Division to investigate the sediment in the County roadway. DPIE required sediment controls be installed. The property owner installed sediment controls on the property to eliminate sediment from leaving the property.
		247	38.934000, -76.89664	Resolved – DoE referred the case to the Code Enforcement Officer with DPIE's Site/Road Inspection Section to address sediment from an active construction site entering the storm drain system and discharging into the creek. DPIE issued an inspection notice to the contractor to repair the sediment

Category	Cases Referred / Referral Agency	Case ID	Location: Lat, Long	Resolution
				controls. The sediment controls were repaired by the contractor.
	(1) Other	240	38.945323, -76.971559	DoE inspector placed a service request with D.C.'s District Department of the Environment to require DC Water install sediment controls while water line replacement work is being done. Sediment entering D.C.'s storm drain system and flowing into the County's concrete channel. They responded back to DoE and they informed DoE that DC Water has installed sediment controls at inlet structures.
Oil Spill	(3) MDE	232	38.969292, -76.915995	Resolved – Forest Arnold with MDE's Oil Control Program was the first to investigate the site. DoE was later called about the fuel odor in the neighborhood. Mr. Arnold worked with the property owner and Petroleum Management Inc. for the cleanup of the fuel oil spill in the home. Fuel spill has been cleaned up.
		233	39.097579, -76.872295	Resolved – County's Fire Dept., HazMat Unit Black had contacted Jackie Ryan and Forest Arnold with MDE's Oil Control Program concerning a fuel oil spill in a home. Mr. Arnold required with the property owner hire an oil response contractor to clean up the oil spill. Fuel spill has been cleaned up.
		235	38.947102, -76.94155	Resolved – DoE inspector spoke to Jeff Wenck with MDE's Environmental Compliance concerning the status of his investigation regarding the diesel spill at a gas station. Mr. Wenck informed DoE that he investigated the site and saw no major diesel spill on the property. Mr. Wenck was also not able to determine if there are any problems with the fuel pumps automatic shut off system. No violation observed by MDE.

Environmental Engineering Program

The Prince George's County Health Department Environmental Engineering/Policy Program (EEP) responds to complaints about sanitary sewer overflows, failing septic systems, solid waste and hazardous materials spills/dumping that may impact the waters of the State. During this reporting period, the Health Department investigated 59 sites to assess threats to local streams and waters of the State from failing septic systems and public sewer overflows.

Understanding the need for more comprehensive reporting, and in response to MDE's IDDE program comments of the County's 2012 report, the Health Department has begun to capture and report mandated data to meet the permit conditions for the IDDE Program. Starting FY 2015, an Access database called NPDES DATA1 was created to catalog pertinent information including the nature of the complaint, the response to the complaint and any remedial action that was required. The database also identifies the latitude and longitude of the locations of the sewage overflows, illegal spills and dumping to aid in GIS mapping capabilities in the future.

Illegal Dumping and Spills

The DPW&T responds to illegal dumping that occurs along the public road right-of-way and responds by removing the debris within five working days of notification. During FY 2015, the County received over 2,000 citizen requests for illegal dumping removal through County's 311 system. For additional information on the County's road maintenance litter control program see page 70.

The Prince George's County Fire/Emergency Medical Services Department Hazardous Materials Division (HMD) is responsible for handling the initial response to all hazardous material spills within the County. Between July 1, 2014 and June 30, 2015, the Prince George's County Hazardous Materials Team (HAZMAT) responded to 387 calls for assistance. The number of responses per month is provided in Table D-7. In the table, the HAZMAT responses have been divided by: Fuel, CO, Hazmat, and Other.

Fuel indicates that the incident involved a response for a potential release of petroleum material. On calls involving release of petroleum materials the responsible party is put on notice that the release must be reported in accordance with Maryland State Law (COMAR 26.10) by contacting the Maryland Department of the Environment (MDE) within 2 hours of the release. This is done by issuance of a Correction Order to the responsible party. Additionally a Spill Report is completed and forwarded to MDE Emergency Response Division. This process provides the necessary notification to begin the regulatory process to ensure that these spills are handled in accordance with Maryland law. HAZMAT do not leave the scene until the hazard has been controlled, removed, or a third party has been contracted with to handle the release.

CO indicates that the incident involves the potential presence of Carbon Monoxide and the possibility of sick persons from exposure. Carbon Monoxide incidents typically require the use of atmospheric monitoring equipment to detect, locate, and quantify the presence of hazardous gases. Should these be detected the source of the release is typically secured to prevent the release of additional hazardous gas into the structure. Any hazardous gas detected is typically removed by natural or forced ventilation and the structure is not returned to the occupants until the atmosphere is rechecked. Should the source of the release be determined to be an appliance, the occupants may be issued a Correction Order to have the appliance serviced prior to use.

Table D-7. Hazmat Calls per Month

Month	No. of Hazmat responses	No. of Action Taken	Response Types				Resolved	Number of Cases Referred to MDE*
			Fuel	CO	Hazmat	Other		
July 2014	21	21	7	6	3	5	21	7
August 2014	43	43	14	6	22	1	43	14
September 2014	36	36	12	10	14	0	36	12
October 2014	50	50	11	14	23	2	50	11
November 2014	37	37	10	11	11	5	37	10
December 2014	28	28	5	12	9	2	28	5
January 2015	24	24	2	12	9	1	24	2
February 2015	20	20	3	10	7	0	20	3
March 2015	50	50	11	18	20	1	50	11
April 2015	27	27	10	7	8	2	27	10
May 2015	24	24	9	6	9	0	24	9

Month	No. of	No. of	Response Types				Resolved	Number of
June 2015	27	27	8	5	12	2	27	8
TOTAL	***387***	***387***	***102***	***117***	***147***	***21***	***387***	***102***

**Fuel responses are reported to MDE per Maryland State Law (COMAR 26.10)*

Hazmat indicates that the incident involves a response to a potential hazardous material other than petroleum. This could include materials from any of the nine DOT hazard classes. There are four levels of response, with resources dispatched in accordance with the potential hazard or quantity of material involved. In all cases the HAZMAT do not leave the scene until the hazard has been abated, controlled, removed, or a third party has been contracted with to handle the release.

Other indicates that hazardous materials units and personnel were utilized at emergency incidents or events to support operations and ensure the safety of personnel and the public. Typically these incidents require the use of atmospheric monitoring equipment or equipment to detect, identify and quantify unknown materials. Additionally units and personnel will be strategically placed at locations to decrease response times at high profile events such sporting events or political events within the County.

4. TRASH AND LITTER PROGRAM: ANACOSTIA TRASH TMDL

Permit Condition Part IV. D. 4. e: Report annually the progress toward implementing the trash reduction strategy. The report shall describe the status of trash elimination efforts including resources (e.g., personnel and financial) expended and the effectiveness of all program components including public education and outreach.

Response

In FY 2015, the County increased efforts to reduce the amount of litter in the Anacostia River. The most significant trash reduction projects in FY 2015 have been community cleanups and stream cleanups in the Anacostia River Watershed. Load reductions associated with these projects are described in more detail later in this report. In addition, the Prince George's County Council passed legislation to ban the use and sale of expanded polystyrene. This bill (CB-5-2015) was adopted on April 28, 2015. This bill supports efforts to reduce litter in the Anacostia River Watershed and countywide. The outreach and education provision of the bill goes into effect on January 1, 2016. All other provisions of the plan will take effect on July 1, 2016.

The County continues to operate a number of countywide trash reduction, litter reduction and recycling programs. The purposes of such programs is to raise awareness for the adverse impact of litter on the environment, encourage environmental stewardship through coordination of clean-up events and provide residents with services which encourage recycling and proper disposal of trash. Summaries of several programs and respective accomplishments are included in this reporting.

For FY 2015 reporting, the County undertook new and additional measures to help meet the MS4 permit goal to remove 170,682 pounds of trash per year. Such measures include performance of more community cleanups, several in-stream cleanups, increased outreach and education on litter prevention, passing of new legislation and initiation of a new plan for future county-wide litter blitzes that would help to reduce the amount of litter in the Anacostia River. The *Implementation Plan for the Anacostia River Watershed Trash Total Maximum Daily Load in Prince George's County* dated March 2015 indicated a milestone trash load reduction of 62,000 pounds for 2015. The County exceeded this milestone.

Cleanup Activities

Table D-8 outlines the enacted measures and shows the respective accounting for load reductions for the Anacostia River. The County plans to update and include this table in future MS4 annual reports to be submitted to MDE.

For some cleanup events that occurred in the Anacostia River Watershed, volunteers collected both point source trash conveyed through the MS4 and nonpoint source trash. A discount factor of 0.43 was applied to the total amount of trash collected for each such event to estimate the amount of trash that could be credited toward MS4 permit requirement of reducing 170,628 lb/yr of litter conveyed through the MS4. This factor is reflective of the ratio of the TMDL's MS4 WLA to total trash as follows: (MS4 WLA)/(WLA + LA) = 43%. The actual tonnages that were collected from volunteer community cleanups in FY 2015 have been discounted by 0.43.

The County secured the services of contractors to assist with stream cleanups in FY 2015. These contractors performed cleanups within the banks of streams and in surrounding park areas at various locations in the Anacostia River Watershed. Both point source and non-point source trash were collected. However, the contractors segregated these two types of trash and provided the County accounts of the point source trash collected at each project site. County staff inspected contractor's collections and work sites. No reductions were applied to the reported point source trash as collected by the contractors because such contractors were found to have abided by guidance given County staff on types of trash that is considered point source items and collected bottles were observed to be empty.

Plastic bottles are one of the most frequently collected items in stream and community cleanups. Persons picking up the bottles during cleanup activities do not consistently empty the collected bottles before placing such bottles in recycling bags. To account for the possibility that the total weight of collected trash might include the weight of water in partially full bottles, only a portion of the total trash weight is counted towards the annual MS4 waste load reduction.

Table D-8. Anacostia River Watershed Trash TMDL

Activity Category	Activity	Actual Amount of Trash Removed (tons)	Annual Load Reduction Counted (lbs)	Calculation Methodology
Community Cleanups	Berwyn Heights Volunteer Cleanup	14.7	9,102	Annual Load Reduction = Trash weight (tons) x (2000 lb/ton) x $(0.43)^1$ x (0.72)
	Cheverly Volunteer Cleanup	32.5	20,124	Same as above
	Bladensburg Waterfront Park	2.25	1,393	Same as above
	Lower Beaverdam Creek Volunteer Cleanup	8.83	5,467	Same as above
	Templeton Knolls	3.11	1,926	Same as above

Activity Category	Activity	Actual Amount of Trash Removed (tons)	Annual Load Reduction Counted (lbs)	Calculation Methodology
	Community Cleanup			
Stream Cleaning Services	Stream Clean Up	14.28	28,500	Annual Load Reduction = Trash weight (tons) x (2000 lb/ton) For cleaning services, the reported numbers reflect WLA trash
Legislation	Expanded Polyethylene (Styrofoam) Ban	N/A	N/A	On April 28, 2015 Prince George's County Council adopted CB-5-2015 which takes effect in FY 2017. How best to measure the effectiveness of this bill will be explored in FY 2016.
	TOTAL	***75.67 tons (151,300 lbs)***	***66,512 lbs***	

[1] *The coefficient of 0.43 represents the percentage of MS4 trash that makes up total trash and is computed as the ratio of the TMDL's MS4 WLA to the total trash load. The coefficient of 0.43 represents the proportion of total trash that may be attributed to litter coming from MS4 [i.e. 0.43 = (WLA)/(WLA+LA)]. Results of contractor- performed stream cleanups in FY 2015 revealed that bottles made up approximately 17% of trash by weight collected along streams in Northwest Branch and Lower Beaverdam Creek watersheds. Also, based on in-stream monitoring performed by MWCOG from 2011 to 2014, the County estimated the average percent of total weight that could be attributed to plastic bottles if partially full. The estimated average was determined to be 28%. To discount for weight of bottles that might be partially full of water, only 72 % (i.e. 1-0.28) of weight of the collected trash is counted.*

The results of in-stream monitoring performed by MWCOG from 2011 to 2014, are shown in Table D-9 and Table D-10. Using this data, it was determined that approximately 28% of the collected trash could be attributed to partially full water bottles. To discount for weight of bottles that might be partially full of water, only 72% (i.e. 1 – 0.28) of total weight of the collected trash is counted.

Table D-9. Stream Monitoring Data – Plastic Bottle Makeup, by volume, of Trash Mix

Year	Number of Surveys per Year	Total Number of Items	Total Number of Plastic Bottles	Percent Plastic Bottles
2011	2	1,569	263	16.8
2012	1	288	62	21.5
2013	2	725	136	18.8
2014	2	817	93	11.4

(Monitoring data was provided by MWCOG)

Table D-10. Stream Monitoring Data – Plastic Bottle Makeup, by Weight, of Trash Mix

Year	Number of Surveys per Year	Total Weight (g)	Total Plastic Bottle Weight (g)	Percent Weight Plastic Bottles
2011	2	292,713	15,731	5.4
2012	1	19,037	4,320	22.7
2013	2	93,158	8,300	8.9
2014	2	73,758	7,410	10.0

(Monitoring data was provided by MWCOG)

While the activities that are outlined in Table D-8 are specific to the Anacostia River Watershed, the County and volunteers performed litter removal and prevention activities in various areas of the County. These activities cannot be counted towards reducing the annual MS4 trash loads because the associated trash was either larger than point source items or the activities occurred outside of the Anacostia Watershed. Table D-11 shows the amount of litter collected through these activities.

Table D-11. Litter Removal and Prevention outside Anacostia Watershed

Activity	Watershed	Weight of collected trash (tons)
Town of District Heights community cleanup	Oxon Run	0.8
Annual Potomac River Cleanup - Hard Bargain Farm (general litter)	Piscataway	3.91
Annual Potomac River Cleanup Hard Bargain Farm cleanup (tires)	Piscataway	0.06
Annual Potomac River Cleanup Oxon Hill Farm	Oxon Run	0.0
Annual Potomac River Cleanup - Ft. Washington Marina	Broad Creek	1.36
Annual Potomac River Cleanup - National Colonial Farm	Oxon Run	3.21
Annual Potomac River Cleanup - Riverview Estates	Potomac	1.55
NAACP Youth Group Community Cleanup	Southwest Branch	0.5

In an effort to reduce incidents of illegal dumping, it is worthwhile to note that the County makes roll off containers available to communities upon request for many cleanup activities. A dumpster may be provided for individuals to dispose of trash that would not be picked-up as a part of regular trash pick-up service, thus reducing their likelihood of illegal dumping and stockpiling litter.

Comprehensive Community Cleanup Program

The Department of the Environment administers the *Comprehensive Community Cleanup Program.* This program is designed to revitalize, enhance, and help maintain unincorporated areas of the County. It also involves conducting 21 concentrated cleanups each year. Through this program, DoE, DPIE and DPW&T work with local civic and homeowner associations to provide a wide range of cleanup and maintenance services over a two-week period. Services provided by this program include bulky trash collection, the tagging and removal of abandoned vehicles, Housing Code/Zoning Ordinance violation surveys, storm drain outfall screening/sampling, roadside litter pick-up, tree trimming, and storm drain maintenance. A list of comprehensive community cleanup achievements during the reporting period is provided in Table D-12. Although the focus of the program is aesthetic improvement of communities, the provided services also benefit water quality by removing potential stormwater pollutants including the proper disposal of trash and debris from private property through a scheduled bulky trash pickup, the elimination of heavy metals and toxic substances by towing abandoned vehicles and reducing risks of pollutants being discharged into waterways through inlet cleaning. There are 90 active cleanups in the rotation, hence, a community is scheduled for comprehensive cleanup approximately every 4-years. Approximately 90 tons of bulky trash/litter were removed from communities in FY 2015 through this program.

Table D-12. Comprehensive Community Cleanup Achievements (07/01/14 - 06/30/15)

Community	Zoning Housing Code Enforcement		Bulky Trash		Vehicle Audit	
	Housing Code Violations Issued (No.)	Zoning Code Violations Issued (No.)	Tires Collected (No.)	Trash Collected (Tonnage)	Violations Issues (No.)	Vehicles Towed (No.)
Tantallon South	114	9	0	4.05	7	2
Birchwood City	69	4	0	1.00	5	4
Largo (Phase 1)	53	2	0	0.00	0	0
Largo (Phase 2)	17	1	0	4.58	0	0
Largo (Phase 3)	25	0	0	0.00	1	0
Murray Hill	12	2	0	0.00	0	0
Southlawn	37	5	1	3.75	3	1
Landover (formally Kentland/ Beaverdam Ests.)	31	10	0	3.60	17	2
Brookwood-Holloway/Marlboro South	13	4	1	7.20	4	0
Hillside (Phase 1)	80	0	1	2.00	5	0
Hillside (Phase 2)	128	0	3	4.52	7	4
8th Precinct/ Chillum	48	0	0	3.77	15	6
Hillcrest Hgts. (Phase 1)	27	3	0	5.10	0	0
Hillcrest Hgts. (Phase 2)	90	4	3	5.04	5	2
Hillcrest Hgts. (Phase 3))	61	2	2	3.70	5	1
Hillcrest Hgts. (Phase 4)	61	1	0	4.00	0	0
Lanham Station/Seabrook Park Ests.	31	3	1	9.39	22	9
Riverbend Estates	40	7	2	6.77	1	0
Villages of Lottsford/Legend Glen/ Glensford	13	0	6	4.80	4	4
Whitfield Gardens	14	0	11	9.01	12	6
Millwood –Waterford/ Fairfield Knolls	53	3	1	6.87	5	1
TOTAL	***1017***	***60***	***32***	***89.15***	***118***	***42***

Clean Up, Green Up

This program is sponsored by the County's Department of Public Works and Transportation (DPW&T), Office of Highway Maintenance. Groups across the County are encouraged to sign up and recruit volunteers to clean up the County on chosen dates in the Spring and Fall. The volunteers are provided with supplies of trash bags and gloves and sent to locations throughout the County to pick up trash. The event has been successful in cleaning several areas in a relatively short amount of time. The estimated trash capture for countywide cleanup activities in FY 2015 is 54.85 tons.

Roadside Cleanups

Multiple programs exist for trash cleanup of roadside areas. In addition to street sweeping, roadway cleanup is conducted by DPW&T employees, volunteers, inmates and the State Highway

Administration (SHA). Roadway collection programs include roadside cleanup on landfill approach roads, removal of litter from the County roadsides, Adopt-a-Road and Adopt-a-Median programs, removal of litter from non-roadside County property by DPW&T, and a community service program by Department of Corrections. In addition, the County is responsible for some non-roadside cleanups of trash, debris (including debris resulting from evictions) and abandoned items from properties and right-of-ways other than roadsides.

DPW&T uses a street sweeper on arterial, collector and industrial roadways in the County approximately eight times per year. Approximately 330 miles of roads are swept in the Anacostia watershed through the DPW&T program. DPW&T maintains data in a spreadsheet with the name of the road, the "from" and "to" designations to identify the portion of the road that was swept, curb miles and dates of separate sweeping cycles from Spring through Fall.

Between March 2015 and June 2015, a reported estimate of 1,253.98 tons of trash was associated with street sweeping and roadside cleanup as performed by the County. Because this tonnage is a result of a street sweeping and roadside litter removal program having the same frequency that was in effect before the 2010 trash TMDL was established and the types of materials included in the trash mix are not well defined at this point, the estimated tonnage has not been counted towards a reduction in the trash load for the Anacostia River.

The County is exploring opportunities to increase the frequency of street sweeping in the Anacostia River Watershed. With this increase in frequency, the County will demonstrate enhanced measures, which will be beyond those measures that were in effect before the 2010 Trash TMDL was approved, to effectively reduce the trash load on the Anacostia River. Once the expanded street sweeping program takes effect, the collected trash weight will be reported in the annual MS4 report.

Trash Monitoring Program

Per the approved September 2010 Anacostia Watershed Trash TMDL, Prince George's County is required by MDE and EPA to annually remove, or prevent, hundreds of tons of trash from potentially entering the Anacostia River. In order to accomplish this challenging task, it is critical that the County annually monitor both stream and land-based trash levels so as to better estimate load quantities, as well as implement cost-effective trash reduction measures. COG assists the County in determining stream and land-based trash levels, as well as identifying existing major trash hot spots. Monitoring data helps in the identification of targeted geographic sites. In addition, the identification of trash sources will further enable the County to specifically tailor trash education and outreach programs and better direct limited trash reduction resources to where they are most needed. Long-term monitoring is critical for assessing the effectiveness of both trash reduction and pollution prevention measures and initiatives so as to work towards the County's trash TMDL goals.

COG employs the MDE-approved Anacostia tributary trash surveying field check list for annually surveying 15 stream sites. See Figure D-3. Instream baseline trash surveys are performed twice per year (i.e., late spring/summer and early fall) and upstream/downstream coordinates are provided for each site. As part of the survey, the total number of trash items are recorded and catalogued according to 20 general types. In addition, at five of the sites, COG (twice per year) removes and weighs trash items from the first 250 feet of the survey reach. This task enables COG to develop a very reasonable estimate of general in-stream trash accumulation/loading rates. Also, precipitation data is obtained from the

nearest weather station. Stream by stream top trash item comparisons are graphically depicted. Photographic documentation of representative trash level conditions are also provided, and existing trash levels are mapped using GIS software.

Figure D-3. Anacostia TMDL-Related Trash Monitoring Locations

Education and Outreach on Litter

The County engaged in many education and outreach events aimed at schools and the general public. These events included activities for preventing litter at the source. Such activities sought to generally inspire good environmental stewardship while others stimulated understanding of the impacts of litter and through this understanding sought to foster better litter control. Informational topics include how to manage litter, how long littered items remain in streams and on land and information about upcoming recycling and cleanup events. Other outlets for information included printed flyers, brochures, promotions and newsletters.

In FY 2016, the County will evaluate and update our education materials and develop new materials to effectively communicate anti-litter messaging. DoE will continue to use various platforms including our website, social media and community events to share relevant information and outreach materials.

Storm Drain Stenciling

The Storm Drain Stenciling Program continues to raise community awareness and alert community members of the connection between our storm drains and the Chesapeake Bay. While the County's SWM program requires stenciling on all new developments, this program focuses on stencils as a means of educating the citizens in older communities built prior to stormwater regulations. The County purchases the paint, tools, and stencils used by the volunteers to stencil the "Don't Dump – Chesapeake Bay Drainage" message. In FY 2015, DoE worked with volunteers to stencil stormdrains in 10 areas throughout the County. Table D-13 provides a summary of the volunteer projects completed from July 1, 2014 through June 30, 2015.

Table D-13. Storm Drain Stenciling Summary

Date	Group	Number of Volunteers	Number of Inlets Stenciled
October 21, 2014	Ernest Just Middle School	30	12
November 5, 2014	Benjamin Stoddert Middle School	12	8
May 13, 2015	Prince George's Ballroom	Smith Center Green Sch.	6
June 5, 2014	Cora Rice Elementary School	8	6
May 9-16, 2015	Patuxent Elementary School Area	Sch. & Community Kids	20
May 20, 2015	Phyllis Williams Elementary Sch.	School Kids	8
May 23, 2015	Windbrook Community	Community Kids	19
May 23, 2015	Beltsville Community	Community Kids	15
June 5, 2015	Panorama Elementary School	School Kids	6
June 8, 2015	Millwood – Waterford Community	Community Group	58
TOTAL		***50+***	***158***

Recycling

Recycling campaigns spread information about recycling efforts, benefits of recycling and collection dates. The 2013 survey results show that Berwyn Heights, College Park, City of Greenbelt, M-NCPPC, AFF, KPGCB and DoE have established or assisted with recycling campaigns. These efforts include distribution of information, via flyers or other media, on upcoming events and the benefits of recycling.

Efforts also include hosting collection days, disseminating information and educating patrons. Some agencies or groups display information at these events.

KPGCB in partnership with Prince George's County Schools, holds green team sessions to support and offer resources for schools to become certified as Maryland Green Schools. Litter reduction is covered through presentations that address waste management. In addition, a platform is provided for speakers from various environmental groups to promote programs and grant opportunities, which will assist schools in accomplishing their environmental goals.

DoE Recycling Section and KPGCB participate in the Environmental Literacy Committee. This committee is organized by the William S. Schmidt Outdoor Education Center, a Prince George's County Public School entity which educates students, and supports schools and teachers by promoting Green School Certification. In addition, DoE Recycling Section and KPGCB also help by arranging speakers on litter management, recycling, and source control for events at which their attendance is requested.

For the reporting period from July 1, 2014, through June 30, 2015, DoE Recycling Section reports residential recycling tonnage at 40,026 tons and commercial recycling tonnage at 78,633 tons. Note that the commercial recycling tonnage is not inclusive of all commercial recycling with the County. It is reflective of what has been received at the Material Recycling Facility (MRF) and it also includes recyclable from out of State and out of County.

Tours of Facilities

Public education opportunities also include publications issued to residents and tours of County facilities including the Brown Station Road Landfill and Materials Recycling Facility. The intent of the tours and publications is to provide information about proper solid waste disposal, how and where the County's municipal solid waste is disposed, and the availability of services and convenience centers for disposal of items that might otherwise be illegally dumped. A list of tours to the recycling facility is provided in Table D-14.

Table D-14. Materials Recycling Facility Tours

Name of Participant	Tour Date
Alice Ferguson Foundation	July 2014
Prince George's County Interns	July 2014
DPW-District of Columbia Employees	July 2014
Episcapol High School	September 2014
The Sierra Club	September 2014
The Wheatley School	September 2014
Episicol High School	October 2014
Chinese Delegation	November 2014
Prince Georges County School Staff	November 2014
Eisenhower School for National Security	January 2015
Girl Scout Troop	January 2015
Recycling Town Hall Meeting	February 2015
Tall Oaks High School	March 2015
Tall Oaks High School	April 2015
University of MD	May 2015

Name of Participant	Tour Date
Paca Elementary School	May 2015
Dale Elementary School	May 2015
Center City Charter School	June 2015

Enforcement

Illegal Dumping Enforcement

The Enforcement Division of the DPIE conducts on-site inspections of residential, commercial and industrial properties to ensure they are properly maintained and in compliance with the County Code. The Division enforces the Housing and Property Maintenance codes for all residential dwellings, the Anti-Litter and Weed ordinances for undeveloped properties located outside of an incorporated municipality and the Zoning Ordinance for private properties.

Other related functions include:

- Regulating placement of signs on private property, and removing illegally posted signs in public rights-of-way
- Inspecting all residential dwellings to ensure that they are maintained in a safe and secure manner consistent with County Code
- Issuing licenses for all residential single-family rental properties

During FY 2014, the Enforcement Division conducted approximately 111,000 inspections/re-inspections to ensure Code compliance. In FY 2015 the number of inspections/re-inspections increased to 190,000. In FY 2015, DPIE issued 26,920 violation notices which included trash related complaints. The Division cleaned 1,040 vacant properties, through the Clean Lot Programs. The tons of trash from these vacant properties were disposed of by the contractors. The Division issued a total of 446 citations.

Alice Ferguson Foundation – Litter Enforcement Month

It is expected that heightened enforcement of littering laws will have a major impact on the reduction of trash accumulation in waterways. AFF has promoted the "Litter and Illegal Dumping Enforcement Month" in April for the past few years, and documented 348 citations, violations and other reports across Maryland, Virginia and the District for April 2014. The Prince George's County Police Department continues to be an active participate in the annual Litter and Illegal Dumping Enforcement Month program.

Styrofoam Ban Bill

On April 28, 2015, the Prince George's County Council adopted Council Bill CB-5-2015 which bans expanded polystyrene. Food service businesses will be prohibited from selling, using and providing food in expanded polystyrene food service products. However, the ban would not apply to pre-packaged soup and certain other pre-packaged food in expanded polystyrene containers that would be filled and sealed prior to receipt by a food service business. The ban would not apply to materials used to package raw, uncooked or butchered meat, fish, poultry, or seafood for off-premises consumption. Also, individuals will be prohibited from selling, offering to sell and using polystyrene loose fill packaging in the County. The bill takes effect on July 1, 2016.

Expanded polystyrene (Styrofoam) is frequently found in litter in our watersheds. Through the ban on Styrofoam and the bill's promotion of the use of compostable or recyclable disposable food service ware, the number of Styrofoam products in the trash and litter stream should decline. It is anticipated that CB-5-2015 will contribute to a reduction in the volume of litter that reaches our waterways.

FY 2016 goals

For FY 2016, the County will continue to perform stream cleanups, community cleanups and outreach and education. In addition, to improve our reduction efforts, the County proposes to install trash capture devices along one or more Anacostia River tributaries. In FY 2016, the process of identifying suitable and optimal sites for such devices will be initiated. All new activities and results of such activities will be reported in the next annual report.

Response to MDE Comments on 2014 Annual Report

In the letter dated May 28, 2015, MDE provided a review of the Prince George's County 2014 Annual Report for its National Pollutant Discharge Elimination System (NPDES) municipal stormwater permit 11-DP-3314 (MD0068284). MDE reviewed the plan entitled "Implementation Plan for the Anacostia River Watershed Trash Total Maximum Daily Load in Prince George's County," and acknowledged that the TMDL work plan, implementation timeline and public participation process have been incorporated into the strategy. MDE indicated that the submitted implementation plan represented a good initial effort. Also, MDE recognized the challenge of quantifying reductions from planned projects. It was recommended that the County demonstrate the impact of implemented projects through a trash monitoring program that includes elements described in MDE's 2014 *Trash Monitoring Guidance*. The County has an active trash monitoring program which is administered in partnership with the Metropolitan Washington Council of Governments (COG). Outfall and stream monitoring are performed under this program. A description of this program has been provided above.

In addition, the review of the 2014 annual report included a couple of editorial comments. It was indicated that the sub-title of the x-axis of the graph in Figure 2.4 was not shown on the page. Also, the reviewer indicated that characters in certain equations were not decipherable. These comments appear to pertain to formatting errors. Another copy of the implementation plan, which does not include such errors, is provided under DVD/Management Program/Trash TMDL folder.

5. PROPERTY MANAGEMENT AND MAINTENANCE

Permit Conditions Part IV. D. 5. a: Prince George's County shall ensure that a Notice of Intent (NOI) has been submitted to MDE and a pollution prevention plan developed for each County- owned municipal facility requiring NPDES stormwater general permit coverage. The status of pollution prevention plan development and implementation for each County-owned municipal facility shall be reviewed, documented, and submitted to MDE annually.

Response

The County continues to provide compliance assistance for County and Municipal owned industrial properties. Compliance assistance has taken the form of ensuring that each facility has 12-SW coverage and is moving towards implementing the permit through development and implementation of facility SWPPPs (Stormwater Pollution Prevention Plans).

Table D-15 displays the 19 industrial facilities that the Stormwater Management Division assists in the development and implementation of SWPPPs. This reporting year includes two additional facilities, The Missouri Avenue Convenience Center and the Prince George's County Yard Waste Facility. The status reports of the remaining facilities are continuing from previous fiscal year reports. The Missouri Avenue Convenience Center was in prior years the responsibility of the pollution prevention team at the Brown Station Road Sanitary Landfill. Yet, due to the site specific nature of 12-SW, the Department of the Environment permitted the Convenience Center separately. The Yard Waste Facility, currently holds an individual discharge permit that is in good standing with MDE, yet the Stormwater Management Division prefers to monitor SWPPP development and implementation at the Yard Waste Facility in order to expand oversight to all County owned industrial facilities.

This reporting year, the involvement of the Consultant, KCI Inc., assisting Prince George's County in meeting the MS4 Permit mandates, assisted in the industrial properties. The primary consultant, KCI along with the Low Impact Development Center, assisted the Stormwater Management Division in developing 12-SW SWPPPs for all municipal facilities. Additionally, 12-SW SWPPPs were developed for all County facilities under the review of the Stormwater management division. Prior to the development of all of the County SWPPPs, the KCI designed uniform site specific inspection reports, based on the meeting the goals of the 12-SW. Therefore, with the expertise of the Consultant, the facilities were assessed beginning in January 2015 using the guidelines of 12-SW even while SWPPP development was underway. Through setting perimeters early on, by the time all facilities developed their SWPPPs, the goals were clear among management, and implementation activities were already under way.

Table D-15. County and Municipal owned Industrial Properties

No.	Facilities
DoE	
1	Abandoned Vehicle Impound Lot
2	Brown Station Road Sanitary Landfill
3	Missouri Avenue Convenience Center
4	Material Recycling Facility
5	Prince George's County's Yard Waste Composting Facility
6	Sandy Hill Creative Disposal Project
OCS	
1	Park Central Vehicle Maintenance Facility
DPW&T	
1	Brandywine Facility
2	Ritchie Service Complex
3	Glenn Dale Facility
Municipal	
1	Town of Cheverly
2	City of College Park
3	City of District Heights
4	City of Greenbelt
5	City of Hyattsville
6	City of Laurel
7	City of New Carrollton

No.	Facilities
8	Town of Riverdale Park
9	City of Seat Pleasant

Table D-16 through Table D-35 detail the status of the County owned and municipal owned facilities during the 2015 fiscal year, ending at June 30, 2015. The achievements are a result of the quarterly inspections where the facility meets the compliance control measures. Areas for long term planning will be highlighted in the upcoming facility inspections where the facility managers and DoE discuss any problems, structural and procedural that are preventing meeting the control measure.

Fiscal year 2016 plans to improve upon the SWPPP development work and begin site specific trainings and corrective action meetings with Stormwater management and management of the County's Department of the Environment. These meetings are expected to communicate the goals of the County's MS4 Permit to the facilities and offer support for removing corrective actions.

DoE Facilities

Abandoned Vehicle Impound Lot

Staffs at the Abandoned Vehicle Impound Lot demonstrate good pollution prevention knowledge and regularly conduct good housekeeping procedures, facility inspections, and staff training. Facility staffs are currently responsible for BMP maintenance and an additional training will be conducted to support their BMP maintenance program through the inspection services of the Consultant. Table D-16 below shows the status of SWPPP implementation for this reporting period.

Table D-16. Abandon Vehicle Impound Lot - 2015 Status

Permit Number	County Contact
12SW0132	Mark Jenkins, Abandon Vehicle Section, DoE
Fiscal Year 2015 Achievements	
SWPPP: Submitted 12-SW SWPPP and began implementation activities Training: Conducted site specific facility training Good Housekeeping and Pollution Prevention: Inspection and housekeeping records are well documented. Including Police Department Auto Theft Lot.	
Long Term Planning	
Stormwater Management: Improve maintenance of channels and drainage ditches Discharge Monitoring: Train staff for proper discharge monitoring	

Brown Station Road Sanitary Landfill

The Landfill has accepted municipal waste since 1968. This year the Landfill continues to improve the controls at the material stockpile area and to increase monitoring and maintenance of the ponds receiving runoff from the active cells. Table D-17 below shows the status of SWPPP implementation for this reporting period.

Table D-17. Brown Station Road Sanitary Landfill - 2015 Status

Permit Number	County Contact
12SW0401	Roger Merritt, Associate Director, WMD, DoE

Fiscal Year 2015 Achievements
SWPPP: Submitted 12-SW SWPPP and began implementation activities Record Keeping& Inspection: Continued work with consultant to perform inspections Discharge Monitoring: Outlining consultant task for discharge monitoring
Long Term Planning
BMP Maintenance: Stormwater management facilities 3, under corrective action for sediment release; facilities 5, and 6 in need of maintenance for excess sediment and vegetation. Oil and Antifreeze Recycling: Under corrective action due to containers and drums exposed to stormwater. Equipment and Vehicle Wash: Wash water run off discharges to pond; environmentally compliant equipment was is under review. Training: Facility Specific Training

Missouri Avenue Convenience Center

The Missouri Avenue Convenience Center is one of the two convenience centers for residence living outside of the residential collection services. Trash, used oil and antifreeze, and various recycling is collected and transferred to the Brown Station Road Sanitary Landfill for disposal. As a satellite facility to the Brown Station Road Sanitary Landfill, the Convenience Center was not previously covered under 02SW. Therefore, 12SW is the first stormwater discharge permit regulating the Center's operations. The Convenience Center has 1 on site Laborer during all opening hours that is responsible for good housekeeping and assisting customers. Management and oversight of the facility is from the staff at the Brown Station Road Landfill. Table D-18 below shows the status of SWPPP implementation for this reporting period.

Table D-18. Missouri Avenue Convenience Center – 2015 status

Permit Number	County Contact
12SW2466	Roger Merritt, Associate Director, WMD, DoE
Fiscal Year 2015 Achievements	
SWPPP: Submitted 12-SW SWPPP and began implementation activities Record Keeping& Inspection: Performed Regular facility inspections in house and with consultant support. Discharge Monitoring: Outlining consultant task for discharge monitoring Spill Prevention and Countermeasures: Spill kits stocked and available on site for responding to incidents	
Long Term Planning	
Training: Facility specific training BMP Maintenance: Maintenance for Stormwater Management facility and inoperable collection and storage of run off from disposal containers Oil and Antifreeze Recycling: Remove collection tanks from exposure to stormwater, repair valves to prevent unauthorized release, and label tanks with a description of contents.	

Material Recycling Facility

The County's MRF is currently operated by Waste Management Inc. under their standards for environmental compliance. Continued work with the Consultant for inspection support and with the Stormwater Management to monitor SWPPP implementation. Table D-19 below shows the status of SWPPP implementation for this reporting period.

Table D-19. Materials Recycling Facility (DoE Facility) - 2015 Status

Permit Number	County Contact
12SW0132	Desmond Gladden, Contract Manager Recycling Team, Waste Management Division, DoE
Fiscal Year 2015 Achievements	
SWPPP: Submitted 12-SW SWPPP and began implementation activities Record Keeping: Good use of inspection forms for monitoring facility needs Good Housekeeping: Maintains a clean orderly facility. Began corrective action documentation in order to monitor progress in catch basin cleaning and debris removal. BMP Maintenance: Conducting and documenting regular maintenance of Oil Grit Separators in yard.	
Long Term Planning	
Training: Expand facility training and inspections utilizing consultant staff. Spill Prevention and Control: Improve material storage area with pallets and minimize exposure for tanks. Discharge Monitoring: Train staff for proper discharge monitoring	

Prince George's County's Yard Waste Composting Facility

The County's Yard Waste Composting Facility commonly known as "Western Branch" is permitted individually by MDE with the individual discharge permit NPDES MDE 0065111. The facility is owned by Prince George's County yet is operated by the Maryland Environmental Service who is responsible for environmental compliance. Western Branch is included in the Prince George's County's Property Management section. Table D-20 below shows the status of SWPPP implementation for this reporting period.

Table D-20. Prince George's County Yard Waste Composting Facility – 2015 status

Permit Number	County Contact
12SW0121	Roger Merritt, Associate Director, WMD, DoE
Fiscal Year 2015 Achievements	
SWPPP: Submitted 12-SW SWPPP and began implementation activities Record Keeping& Inspection: Performed Regular facility inspections in house and with consultant support. Discharge Monitoring: Continued monitoring under parameters of individual permit Spill Prevention and Countermeasures: Spill kits stocked and available on site for responding to incidents	
Long Term Planning	
Training: Facility specific training BMP Maintenance: Maintenance for Stormwater Management facility due to signs of continuing erosion at entrance Oil and Antifreeze Recycling: Remove collection tanks from exposure to stormwater, repair valves to prevent unauthorized release, and label tanks with a description of contents.	

Sandy Hill Creative Disposal Project

The Sandy Hill Landfill stopped accepting waste in year 2000. The landfill currently holds a 12-SW permit where the facility is being monitored for material storage and transfer (including leachate), pond maintenance, spill prevention and countermeasures. The Consultant assists in monitoring the facility progress under 12-SW permit same as like other County facilities. The following table presents the fiscal year's status. Table D-21 below shows the status of SWPPP implementation for this reporting period.

Table D-21. Sandy Hill Creative Disposal Project (DoE Facility) - 2015 Status

Permit Number	County Contact
12SW0132	Paula Burr, Administrative Specialist Project Management Section, WMD, DoE
2015 Achievements	
SWPPP: Submitted 12-SW SWPPP and began implementation activities Spill Prevention and Control: Contractor has placed appropriate spill kits Discharge Monitoring: Outlined consultant task for discharge monitoring	
Long Term Planning	
Training: Expand facility training and inspections utilizing consultant staff. Stormwater Management: Improvements in pond maintenance for all 4 stormwater management ponds.	

OCS Facility - Park Central Vehicle Maintenance Facility

The Office of Central Services is working towards compliance to the 12-SW Permit. Outfall monitoring has begun in coordination with the new SWPPP. Table D-22 below shows the status of SWPPP implementation for this reporting period.

Table D-22. Park Central Vehicle Maintenance Facility (OCS Facility) - 2015 Status

Permit Number	County Contact
12SW0132	Richard Hilmer, Fleet Administrator Facilities Operation and Management Division, OCS
2015 Achievements	
Staff Education and Training: Performed annual site training. Records kept on site. Discharge Monitoring: Conducting quarterly discharge monitoring Stormwater Management: Performed maintenance of O/G separator, dry pond maintained and functioning properly	
Long Term Planning	
Material Storage: Continue monitoring storage of drums to reduce exposure	

DPW&T Facilities

DPW&T continues to move forward in the development of SWPPP for three facilities. The new SWPPP's will focus on high risk areas which were previously identified in need of BMP improvements. The focus areas include: the vehicle and equipment washing area, material stockpiles and off site erosion. During this reporting period, DPW&T anticipates working closely with the consultant in achieving greater control and to meet new regulatory controls under the 12-SW mandates.

Table D-23. DPW&T Facility Overview

DPW&T Facility Name	Main Function(s)	Usage Duration	Activities
Brandywine Facility	Material Storage/Services for North County	Year Round	Crew Dispatch for South County
Ritchie Service Complex	Snow Event Response Materials Storage Main Maintenance Depot	Year Round	Equipment Maintenance, Road Crew Dispatch, Materials Storage, OHM Headquarters
Glenn Dale Facility	Material Storage/Services for North County	Year Round	Crew Dispatch for North County

Table D-24 through Table D-26 show the status of SWPPP implementation for each DPW&T Facilities.

Brandywine Facility

Table D-24. Brandywine Facility (DPW&T) - 2015 Status

Geodatabase fields	Records	Geodatabase reference
MUNI_FACILITIES_ID	PG15MUN000002	MDE primary ID (unique Table ID)
MD_NORTH	115984.957096	
MD_EAST	413980.08548	
FACILITY_NAME	Pr. Geo. County Dept. of Public Works - Brandywine	MDE Name on registration
FACILITY_TYPE	Maintenance Facility	
GP_NUMBER	12-SW	MD Industrial Permit Number
NOI_NUM	12SW1223	Unique NOI registration Number Narrative File: Brandywine SWPPP Cert
QRT_INSP	No	(reason for no Visual Monitoring in general comments)
LAST_INSP_DATE	00/00/0000	
QUARTER	none	
SWPPP	yes	Narrative file: SWPPP Brandywine
SWPPP_TRAINING	19	# of personnel trained Narrative file:
ANNUAL_REVIEW	yes	Narrative File: Brandywine_Annual_QC Inspection
PERMIT_NUM	11-DP-3314	11 digit MDE Permit Number?
GEN_COMMENTS	Quarterly Visual Inspections was not possible during the second quarter due to the frequency and the timing of rainfall events. Evening thunderstorms prevents our ability to capture and test runoff within the first 30 minutes of a storm. Two storm samples will be captured during the third quarter to make up for the inability to monitor during the second quarter. Routine Facility Inspections were conducted and the actions taken to respond to deficiencies are provided in the body of the reports. Training is held in small groups on specialized subjects. In the summer of 2014 11 staff was trained and 19 were trained in the spring summer of 2015.	Narrative reports provided: Quarterly reports (KCI with updates Brandywine 03_12-15-Inspection Brandywine 12_10_14_Inspection Brandywine_05-07_15_Inspection

Ritchie Service Complex

Table D-25. Ritchie Service Complex (DPW&T) - 2015 Status

Geodatabase fields	Records	Geodatabase reference
MUNI_FACILITIES_ID	PG15MUN000003	
MD_NORTH	132498.735736	
MD_EAST	412299.733193	
FACILITY_NAME	Prince George's County DPW& Transportation	
FACILITY_TYPE	Maintenance Facility	
GP_NUMBER	12-SW	MD Industrial Permit Number
NOI_NUM	12SW0521	Unique NOI registration Number Narrative File: Ritchie 12-SW Registration
QRT_INSP	No	(see general comment for reason)
LAST_INSP_DATE	00/00/0000	
QUARTER	none	
SWPPP	yes	Narrative file: SWPPP Ritchie
SWPPP_TRAINING	234	# of personnel trained Narrative File: Ritchie Training Rosters
ANNUAL_REVIEW	yes	Narrative File : Ritchie Service Complex Annual QC Inspection
PERMIT_NUM	11-DP-3314	11 digit MDE Permit Number?
GEN_COMMENTS	Quarterly Visual Inspections was not possible during the second quarter due to the frequency and the timing of rainfall events. Evening thunderstorms prevents our ability to capture and test runoff within the first 30 minutes of a storm. Two storm samples will be captured during the third quarter to make up for the inability to monitor during the second quarter. Routine Facility Inspections were conducted and the actions taken to respond to deficiencies are provided in the body of the reports. Training is held in small groups on specialized subjects. In the summer of 2014 136 staff was trained and 234 were trained in the spring summer of 2015. (.PDF of training rosters attached) Countywide awareness was done through the DPW&T newsletter. (.pdf attached)	Narrative Files: Ritchie 03_20_15_Routine Inspection Ritchie 05_20_15_Routine Inspection Ritchie 12_09_14_Routine Inspection
PERMIT_NUM	11-DP-3314	11 digit MDE Permit Number?

Glenn Dale Facility

Table D-26. Glenn Dale Facility (DPW&T) - 2015 Status

Geodatabase fields	Records	Geodatabase reference
MUNI_FACILITIES_ID	PG15MUN000001	MDE primary ID (unique Table ID)
MD_NORTH	146967.015725	
MD_EAST	415663.679643	
FACILITY_NAME	PG County Public Works – Northern Avenue	MDE Name on 12-sw registration
FACILITY_TYPE	Maintenance Facility	
GP_NUMBER	12-SW	MD Industrial Permit Number
NOI_NUM	12SW1222	Unique NOI registration Number - Narrative File Glenn Dale SWPPP Cert
QRT_INSP	No	Reason for lack of quarterly Visual Inspection described in general comments
LAST_INSP_DATE	00/00/0000	
QUARTER	none	
SWPPP	yes	Narrative file SWPPP Glenn Dale.pdf
SWPPP_TRAINING	18	# of personnel – trained: Narrative File Glenn Dale Training Rosters
ANNUAL_REVIEW	yes	Narrative file [Glenn Dale Annual_QC_Inspection.pdf]
PERMIT_NUM	11-DP-3314	11 digit MDE Permit Number?
GEN_COMMENTS: 7317 Northern Avenue Glenn Dale MD 20769	Quarterly Visual Inspections was not possible during the second quarter due to the frequency and the timing of rainfall events. Evening thunderstorms prevents our ability to capture and test runoff within the first 30 minutes of a storm. Two storm samples will be captured during the third quarter to make up for the inability to monitor during the second quarter. Routine Facility Inspections were conducted and the actions taken to respond to deficiencies are provided in the body of the reports. Training is held in small groups on specialized subjects. In the summer of 2014 16 staff was trained and 18 were trained in the spring summer of 2015. (.PDF of training rosters attached)	Narrative reports provided: Quarterly reports (KCI with updates and training rosters. Glenn_Dale_05_20_15_Routine Inspection Glenn Dale 03_13_15_Routine Inspection Glenn Dale 12_11_14_Routine Inspection

Municipal NPDES General Industrial Discharge Permit Status

The following list the permit status of the nine Prince George's County municipalities with 12-SW Industrial Permit coverage. Table D-27 through Table D-35 show the status of SWPPP implementation for each municipalities.

Town of Cheverly

Table D-27. Town of Cheverly DPW - 2015 Status

Permit Number	County Contact
12SW0197	Juan Lois Torres, Department of Public Works Director
2015 Fiscal Year Achievements	
• Submitted 12-SW SWPPP and began implementation activities • Began washing truck in contained area discharging to septic tank (See Attachment x) • Regular maintenance of O/G separator • Records kept of inspections and maintenance activities • Use of absorbent materials and booms at yard inlets • Submitted financial request for salt dome and overhead covers • Completed Employee Training • Participated in the concept plans developed by Low Impact Development.org to develop stormwater management BMPs • Discharge Monitoring from Outfall #1 resulted in no visible forms of pollution	
Long Term Planning	
• Structural Perimeter controls to protect adjacent property and stream • Minimizing Exposure of stored material	

City of College Park

Table D-28. City of College Park DPW – 2015 Status

Permit Number	County Contact
12SW2148	Steve Halpern, City Engineer
2015 Fiscal Year Achievements	
• Submitted 12-SW SWPPP and began implementation activities • Record's kept of routine facility inspections • Labelled the public Used Oil Recycling Center Tanks • Reduced Exposure for the facility used oil tanks • Completed SWPPP Training with Safety Training • Participated in the concept plans developed by Low Impact Development.org to develop stormwater management BMPs	
Long Term Planning	
• Enhance sediment control for composting area • Improve accessibility in order to begin Discharge Monitoring	

City of District Heights

Table D-29. City of District Heights DPW - 2015 Status

Permit Number	County Contact
12SW2141	Angela Barnhill-Love, Administrative Assistant
2015 Fiscal Year Achievements	
• Submitted 12-SW SWPPP and began implementation activities	

• Records kept of routine facility inspections • Outfall #2 repaired to begin discharge monitoring • Discharge Monitoring resulted in no visible forms of pollution • Eliminated oil recycling center due to housekeeping and exposure risk • Eliminated non-compliant equipment wash • Completed SWPPP Training • Increased trash services in order to promote housekeeping in yard and in the Town • Stenciled yard drain "Do Not Dump" • Participated in the concept plans developed by Low Impact Development.org to develop stormwater management BMPs
Long Term Planning
• Develop BMPs for surface flow. • Investigate unknown storm drain connections

City of Greenbelt

Table D-30. City of Greenbelt DPW - 2015 Status

Permit Number	County Contact
12SW2145	Luisa Robles, Sustainability Coordinator
2015 Fiscal Year Achievements	
• Submitted 12-SW SWPPP and began implementation activities • Upgraded Used Oil Recycling Station to include overhead covering, labeling, and closed containers • Records kept of routine facility inspections • Discharge Monitoring from Outfall #1 resulted in no visible forms of pollution • Removed old drums and storage containers from yard • Performing inspections and maintenance of 4 bio retention facilities all are operating effectively • Completed SWPPP Training	
Long Term Planning	
• Vehicle and Equipment wash that drains to sanitary sewer • Increase accessibility to Outfall #2 in order to begin Discharge Monitoring • Completing SPCC Plan for fuel tank	

City of Hyattsville

Table D-31. City of Hyattsville DPW - 2015 Status

Permit Number	County Contact
12SW2150	Leslie Riddle, Public Works Director
2015 Fiscal Year Achievements	
• Submitted 12-SW SWPPP and began implementation activities • Purchased overhead structure for used oil recycling facility – installation planned for end of calendar year 2015 • Request for proposals in progress for stormwater retrofit to the yard • Removed excess abandoned vehicles from property	

Long Term Planning
• Determine method for visual discharge monitoring

City of Laurel

Table D-32. City of Laurel DPW - 2015 Status

Permit Number	County Contact
12SW1841	Antonius Hallmark, Project Inspector
2015 Fiscal Year Achievements	
• Submitted 12-SW SWPPP and began implementation activities • Completed SWPPP Training • Changed Procedures to wash all equipment including dump trunks in environmentally compliant wash bay that discharges to sanitary sewer • Records kept of routine facility inspections • Completed SPCC Plan for fuel tank	
Long Term Planning	
• Properly Maintain structural BMPs – Stormceptor and Oil/Grit Separator • Upgrades to Used Oil Recycling Center to Reduce Exposure • Determine method for Visual Monitoring Discharge	

City of New Carrollton

Table D-33. City of New Carrollton DPW - 2015 Status

Permit Number	County Contact
12SW2144	Bernard Cochran, Public Works Director
2015 Fiscal Year Achievements	
• Submitted 12-SW SWPPP and began implementation activities • Records kept of routine facility inspections • Participated in the concept plans developed by Low Impact Development .org to develop stormwater management BMPs • Good housekeeping methods employed for salt dome and heavy equipment	
Long Term Planning	
• Address restoration requirements of 12-SW. • Conduct SWPPP Training • Researching financial feasibility of vehicle wash connection to sanitary sewer and overhead cover for fueling station • Stenciling no dumping at curb inlet	

Town of Riverdale Park

Table D-34. Town of Riverdale Park DPW - 2015 Status

Permit Number	County Contact
12SW2146	Leonard Addison, Public Works Director

2015 Fiscal Year Achievements
• Submitted 12-SW SWPPP and began implementation activities • Continued maintenance and functionality of rain garden • Participated in the concept plans developed by Low Impact Development .org to develop stormwater management BMPs • Records kept of routine facility inspections • Continued good housekeeping in public used oil and recycling center • Completed SWPPP Training
Long Term Planning
Continue developing pollution prevention practices.

City of Seat Pleasant

Table D-35. City of Seat Pleasant DPW - 2015 Status

Permit Number	County Contact
12SW2141	Johnny Thompson, Administrative Assistant
2015 Fiscal Year Achievements	
• Good P2 knowledge. • Staff training in July on P2 and SWPPP development. • Participated in the concept plans developed by Low Impact Development Center to develop stormwater management BMPs • Records kept of routine facility inspections • Completed SWPPP Training • Removed abandon vehicles and began disposal of unwanted material	
Long Term Planning	
• Improve perimeter controls. • Reduce run on from adjacent properties. • Repair yard inlet • Improve material storage and good housekeeping • Proper Spill Prevention techniques	

Permit Conditions Part IV. D. 5. b: The County shall continue to implement a program to reduce pollutants associated with maintenance activities at County-owned facilities including parks, roadways, and parking lots. The maintenance program shall include these or MOE approved alternative activities:

i. Street sweeping;
ii. Inlet inspection and cleaning;
iii. Reducing the use of pesticides, herbicides, fertilizers, and other pollutants associated with vegetation management through increased use of integrated pest management;
iv. Reducing the use of winter weather deicing materials through research, continual testing and improvement of materials, equipment calibration, employee training, and effective decision-making; and
v. Ensuring that all County staff receives adequate training in pollution prevention and good housekeeping practices.

The County shall report annually on the changes in any maintenance practices and the overall pollutant reductions resulting from the maintenance program. Within one year of permit issuance, an alternative maintenance program may be submitted for MOE approval indicating the activities to be undertaken and associated pollutant reductions.

Response

Street Sweeping

The County's street sweeping operations were limited to selected arterial, collector, and industrial streets, with service to residential subdivision streets provided on a request only basis. The street sweeping data collected for the arterial and industrial streets is recorded in two seasonal cycles, with 3 months of data recorded for each cycle. During the reporting period, 1848.20 curb miles were swept. The street sweeping database for the 2015 reporting year is provided on DVD, Management Programs\Road Maintenance\Street Sweeping.

The OHMD is in the process of evaluating the street sweeping program to improve program tracking, capture water quality efficiencies and report programmatic achievement for alternative BMP watershed restoration credit reporting. As the first step in the analysis, the roads serviced during this reporting period have been mapped on an overlay of the 8-digit watersheds, as shown in Figure D-4. This information will be used to improve water quality efficiencies and potentially shift roads swept to more sensitive watersheds. Programmatic improvements also under consideration include the following:

- Consider servicing less roads and increasing the frequency in order to achieve full level of credit. MDE requires roadways be swept a minimum of 2 times per month for a full credit. Currently we are servicing roads about once a month.
- Shift services roads to sensitive watersheds such as Anacostia to help address the Trash Total Maximum Daily Load (TMDL).
- Add additional road sweeping in sensitive watersheds.
- Using ArcGIS, link all cycle data to the map and attribute table. This will improve documentation for NPDES reporting and eliminate double entry in a separate excel spreadsheet.

Recognizing that the street sweeping program's mission was not originally for NPDES MS4 water quality credit, a further analysis of the costs involved and the benefit derived for targeting the program needs to be fully evaluated.

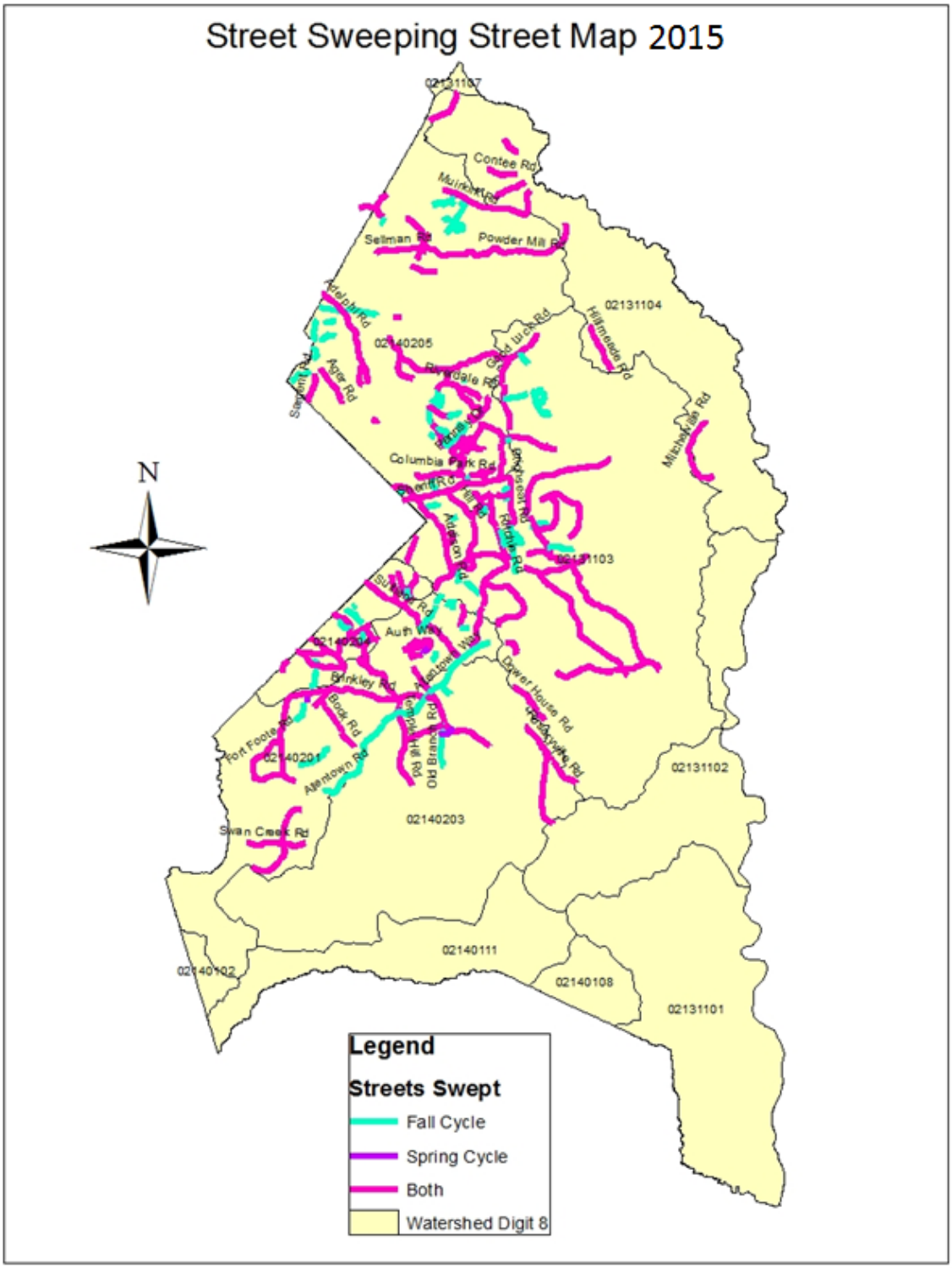

Figure D-4. Roadways Served - Countywide Street Sweeping Program

Strom Drain Maintenance: Inlet, Storm Drain, and Channel Cleaning

Typically, every storm drainage inlet located within the 21 communities annually served by the CCCP is inspected and cleaned. During this reporting period 67 storm drain structures and 22,054 linear feet of storm drain network pipes were cleaned.

The SDMD is also responsible for major channel maintenance. There are 69 major channels which were inspected and cleaned/cleared on a three year cycle. During this reporting period, maintenance was performed on 18,268 linear feet of concrete channel and 16,542 linear feet of earthen channel.

Unpaved Shoulder Maintenance

The OHMD administers road maintenance programs to eliminate standing water, enhance green space, and reduce herbicide usage. Roadside vegetation is primarily maintained mechanically with herbicide use restricted to the spraying sidewalk joint and monolithic concrete median areas. Herbicide was applied by licensed contractors in accordance with contractual application rates. Litter crews utilize small equipment to cut the grass around guardrails, and roadside shoulders are mowed in a six-week cycle during the growing season (March 15-October 15). Limited herbicide applications have reduced the potential for distillates and toxins to migrate into the aquatic ecosystem.

Litter Control

The County maintains an aggressive litter control and collection program along County maintained roadways. The litter service schedule is based on historical collection data, where the most highly littered roadways are serviced as often as 24 times per year. In general, major collector and arterial urban roadways are serviced weekly with rural roadsides served at least once per month. Locations of the litter pickup routes are shown in Figure D-5. During the reporting period, the County received over 2,000 citizen requests for illegal dumping and litter removal through the County's 311 system. Illegal dumping in the right-of-way is removed within five working days of notification. As a result of these efforts, approximately 1,395.57 tons of debris and solid waste were removed from County roadways during this reporting period. A Litter Control Operations Report and Illegal Dumping Report are provided on DVD, Management Programs\Road Maintenance\Roadside Litter.

Snow and Ice Control Program

To determine when the application of de-icing materials is warranted, including pre-treatment applications, the Snow and Ice Removal Program depends heavily upon information from temperature probes, weather forecasts, Accuweather subscription service, and individuals monitoring the road conditions. Temperature probes embedded in the roadways gage pavement temperatures and provide key information used to determine an appropriate treatment for snow and ice control.

Salting and pretreatment application was utilized for 17 events with 41,499.25 tons of salt used at a cost of $2,592,408.09. Salt tonnage includes the 2015 winter snow season within the reporting period. In an effort to reduce the amount of salting necessary and ensure safety to the traveling public during adverse conditions, pretreatment was extensively utilized. Pretreating roadways essentially eliminates the first swath of salt treatment thus reducing the salt usage by 232.2 tons. Figure D-6 provides a graphic display of roadways in the deicing plan. OHMD plans to use this information as a tool to reevaluate where sensitive watersheds may warrant limited salt application.

DPW&T implemented the following operational activities to help manage and reduce salt application:

- Replacement of older equipment with newer, better functioning spreaders and hoppers.
- Eliminated long standing salt/sand stockpiles from the Ritchie Yard. While covered properly with a tarpaulin system, the EPA 2011 audit cited runoff emanating from the source. The removal of this pollutant source was identified as a goal in the NPDES Compliance Action Plan (CAP). The sand/salt combination was applied to the roadways during storm events that necessitated treatment. The amount of sand/salt combination amounted to 6,084.50 tons.
- Reinitiated a pretreatment de-icing program to help reduce salting application on arterial roadways.
- Continued training of equipment operators in the proper application and loading of salt.

The County continues to reevaluate its salt management plan in an effort to reduce unnecessary salt application and spillage, and to support this effort, the County developed a "Prince Georges County Salt Application Management Plan" last year. Patterned after the Maryland State Highway Administration guidelines, the plan takes into consideration all aspects of salt management. A copy of the salt management plan is included with the County's on-site SWPPP documentation.

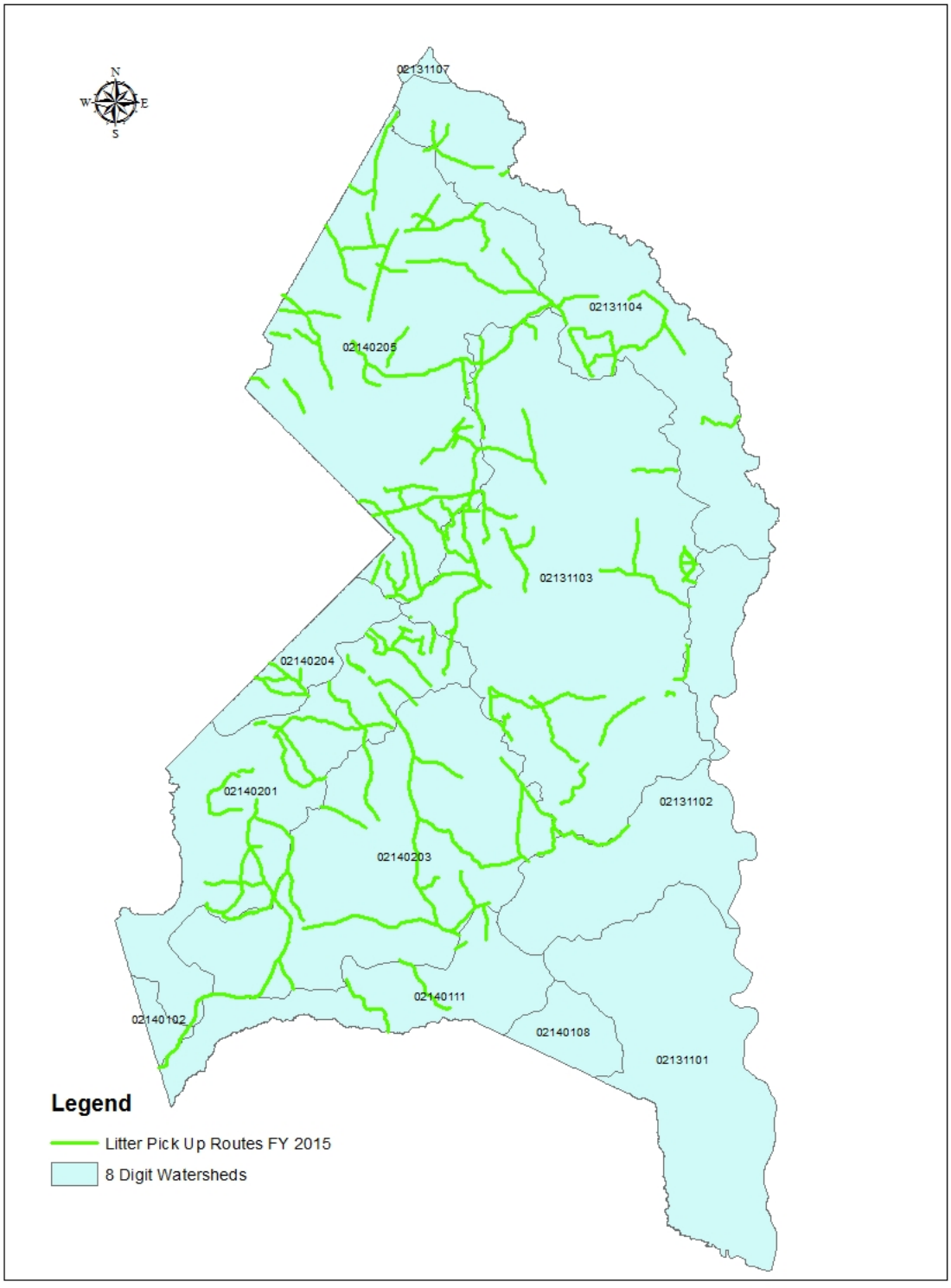

Figure D-5. Litter Pick Up Routes

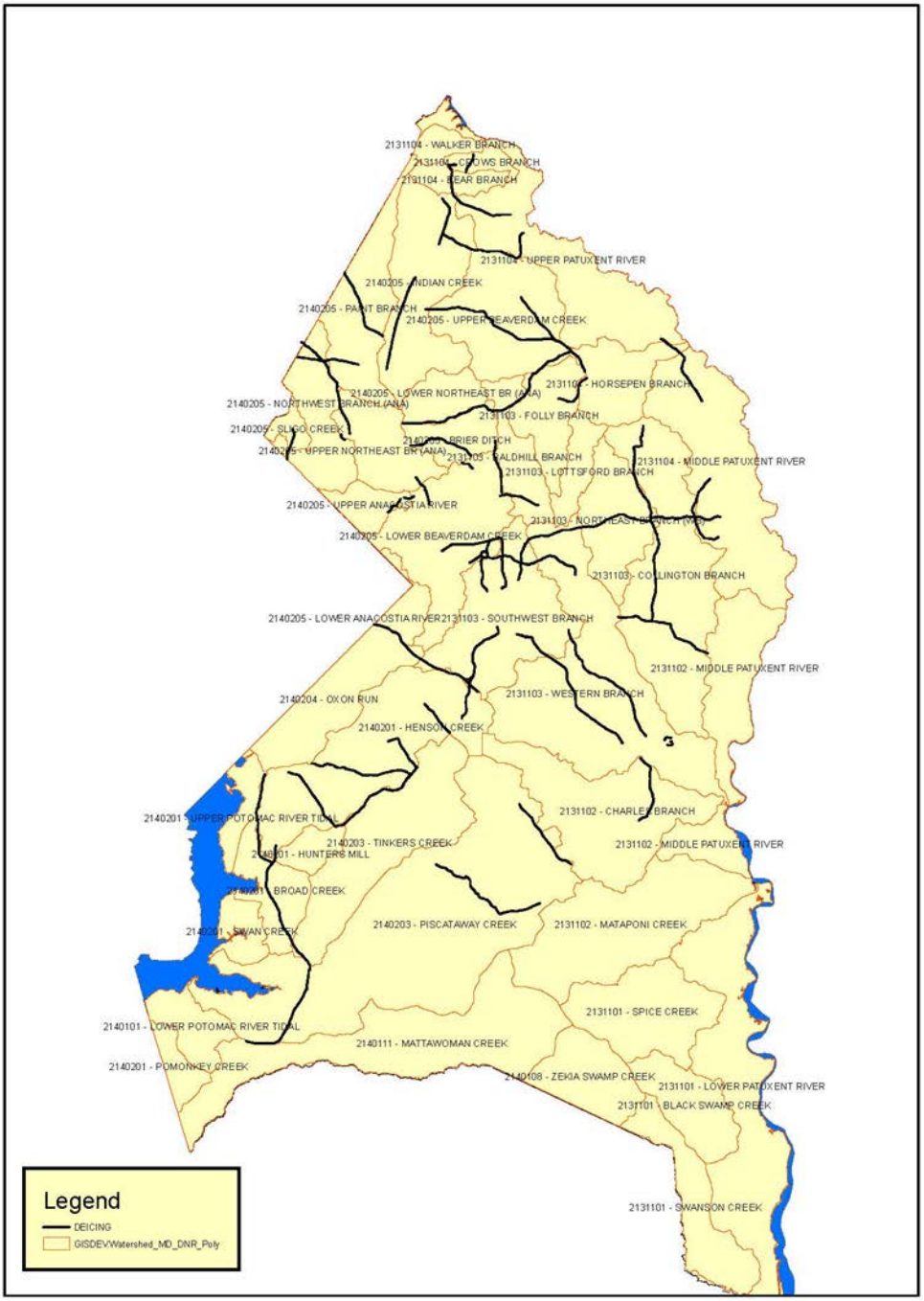

Figure D-6. Snow and Ice Control Program - De-Icing Application Map

6. PUBLIC EDUCATION

Permit Condition Part IV. D. 6. a: Prince George's County shall maintain a compliance hotline or similar mechanism for public reporting of water quality complaints, including suspected illicit discharges, illegal dumping, and spills.

Response

CountyClick 311 is Prince George's County's main source of government information and access to non-emergency services through a call center. Citizens may also utilize alternative forms of communication for lodging water quality complaints, such as through email or by direct call. More information regarding the investigation and enforcement actions taken to resolve water quality complaints is provided under Environmental Engineering program on page 43.

Permit Conditions Part IV. D. 6. b: The County shall continue to implement a public outreach and education campaign which provide information to inform the general public about the benefits of:

i. Increasing water conservation;
ii. Residential and community stormwater management implementation and facility maintenance;
iii. Proper erosion and sediment control practices;
iv. Increasing proper disposal of household hazardous waste;
v. Improving lawn care and landscape management (e.g., the proper use of herbicides, pesticides, and fertilizers, ice control and snow removal, cash for clippers, etc.);
vi. Residential car care and washing; and
vii. Proper pet waste management.

Response

DoE seeks every opportunity to promote environmental awareness, green initiatives, and community involvement to protect our natural resources and promote clean and healthy communities. As human behavior is a significant source of stormwater pollution, the County provides a vast array of volunteer opportunities and services to control pollutants at the source, prevent stormwater pollution, and restore watersheds. The County also integrates water quality outreach as a vital component of watershed restoration projects.

During the reporting year, DoE hosted 317 environmental events that provided information or discussed benefits of one or more categories described in the bulleted items of the permit condition (e.g. A, B, C…) above. In addition to our extensive environmental public participation programs, which are primarily targeted to the County's adult population, DoE is also committed to the environmental education of our youth. An overview of the outreach events and participants is provided in Table D-36.

Table D-36. 2015 DoE Outreach Activities

Activity - Event	Satisfy Permit Condition Type[1]	Event Date	Host Agency	Number of Volunteers	Number of Attendees
Inter-governmental Litter Work Group	A,B,C,D,E	7/8/2014	DoE/SID	1	20
Adopters Reunion	G	7/14/2014	DoE/AMD	2	40
Environmental Action Council	B	7/16/2014	DoE/SMD	2	40

Activity - Event	Satisfy Permit Condition Type[1]	Event Date	Host Agency	Number of Volunteers	Number of Attendees
Greenbelt Farmer's Market Greenbelt Aquatic Fitness Center	A	7/20/2014	DoE/SID/SMD	1	73
Partnership Activity Hall Laurel Police Department	B	7/23/2014	DoE/SID/SMD	1	12
Patuxent elementary School	A, C	7/24/2014	DoE/SID/SMD	1	20
20th Annual Thingamajig	D	7/24/2014	DoE/WMD	1	250
DoE Office Building	B	7/24/2014	DoE/SID/SMD	1	16
MRF Tour	D	7/31/2014	DoE/WMD	1	14
2014 Colmar Manor Sustainability Day Colmar Manor town Hall	A, C, E	8/16/2014	DoE/SID/SMD	2	30
Gore Systems Meeting-MES	D	8/19/2014	DoE/WMD	1	
Meeting with Larry Coffman and Team - White House outreach; Prince George's County P3 Model	B	8/19/2014	DoE/DO	2	35
Environmental Action Council	A,B,D,E	8/20/2014	DoE/WMD	1	17
Turning Rebates into "Green Gold" Montgomery County Extension Office	A, C, E	8/20/2014	DoE/SID/SMD	1	77
Langley Park Back to School Jam	A,C, E	8/23/2014	DoE/SID	2	300
MD State Fair	E	8/28/2014	DoE/SID	1	
County Fair	A, C	9/4/2014	DoE/SID/SMD	2	337
County Fair	A,B,C,D,E,F,G	9/4/2014	DoE/WMD	1	
County Fair	A,B,C,D,E,F,G	9/5/2014	DoE/WMD	2	500
County Fair	A,B,C,D,E,F,G	9/6/2014	DoE/WMD	4	300
NBC Shredding Event	D	9/6/2014	DoE/WMD	15	2000
County Fair	A,B,C,D,E,F,G	9/7/2014	DoE/WMD	2	300
Mighty Healthy Pet	G	9/7/2014	DoE/AMD	3	25
Horizon Estates Community Preserve Clubhouse	B	9/9/2014	DoE/SID	2	15
Community Partners meeting	A,B,C,D,E,F,G	9/10/2014	DoE/DO	10	200
MES Tour	E	9/10/2014	DoE/WMD	1	10
MRF Tour	D	9/10/2014	DoE/WMD	1	

Activity - Event	Satisfy Permit Condition Type[1]	Event Date	Host Agency	Number of Volunteers	Number of Attendees
Riverbend Est. Neighborhood Assoc.	D	9/10/2014	DoE/WMD	1	
Bark in the Park	G	9/13/2014	DoE/AMD	1	4
Clean Water Clear Choices: Stormwater Audit - Mt. Rainier Nature center	A, B	9/13/2014	DoE/SID/SMD	2	28
Crunchies Pet Foods	G	9/13/2014	DoE/AMD	3	25
Red Cross Pet First Aid & CPR Class	G	9/13/2014	DoE/AMD	1	12
Stormwater Audit Workshop	B	9/13/2014	DoE/SMD	2	25
Riverbend Est. Neighborhood Assoc.	E, D,	9/15/2014	DoE/WMD	1	
CKAR Business Town Hall Meeting (English)	A,B,D,E,F	9/16/2014	DoE/SID	1	30
Introduction To Fostering	G	9/17/2014	DoE/AMD	2	n/a
CKAR Business Town Hall Meeting (Spanish)	A,B,D,E,F	9/18/2014	DoE/SID/SMD	1	20
Chamber of Commerce Award	D,E	9/19/2014	DoE/WMD	1	
Clean Water Clear Choices: Rain Barrel Demonstration Davis hall	A,B,C	9/20/2014	DoE/SID/SMD	2	22
Clippers Canine Café	G	9/20/2014	DoE/AMD	3	25
Rain Barrel Demonstration	A,B,C	9/20/2014	DoE/SID/SMD	1	20
Pet Value	G	9/21/2014	DoE/AMD	1	45
Beautification Award Dinner Newton White mansion	E,C	9/24/2014	DoE/SID	2	170
Beautification Awards Ceremony	A,B,D,E	9/24/2014	DoE/WMD	2	35
MRF Tour	D,E	9/24/2014	DoE/WMD	1	
Green Forum for Bowie Principals	D,E	9/26/2014	DoE/WMD	2	50
College Park Day	A,B,E,G	9/27/2014	DoE/SID/SMD	2	29
Hispanic Festival Lane manor Park	A,D,E,G	9/27/2014	DoE/WMD	2	50
Port Towns Bladensburg Water Park	A,B,C,D,E,F,G	9/27/2014	DoE/SID/SMD	4	225

Activity - Event	Satisfy Permit Condition Type[1]	Event Date	Host Agency	Number of Volunteers	Number of Attendees
2nd Annual Adopter's Reunion Event	G	9/28/2014	DoE/AMD	29	29
Alice Ferguson Foundation	B,C,D,E,F,G	9/30/2014	DoE/WMD	2	25
Lecture-Choosing the Right Landscape Baden Library	A,C,E	10/1/2014	DoE/SID	1	5
Collective Empowerment Conference First Baptist Church of Glenarden	A,B,C	10/3/2014	DoE/SID	2	40
Lecture—Trees for the Home Gardener	A,B,E	10/4/2014	DoE/SID	1	5
Cheverly Green Homes Tour	A	10/5/2014	DoE/SID	2	50
Mighty Healthy Pet	G	10/5/2014	DoE/AMD	2	35
Envirothron Prince George's outdoor Center	A,E	10/8/2014	DoE/SID	1	20
Green Team	D	10/8/2014	DoE/WMD	5	150
Delta Dogs Event	G	10/9/2014	DoE/AMD	13	500
Crunchies Pet Foods	G	10/11/2014	DoE/AMD	2	35
Edmonston Days	A,B,C,D,E,F	10/11/2014	DoE/SID	2	43
Colmar Manor Town Council	A	10/12/2014	DoE/SID	2	17
Extension Open House	A,B	10/13/2014	DoE/SID	1	5
Fall Festival - Animals	G	10/14/2014	DoE/AMD	2	65
Environmental Action Council	B	10/15/2014	DoE/SMD	2	40
Forest Height Town Council	A	10/15/2014	DoE/SID	2	13
County Executive Listening Session Charles Flowers High School	A,B,D,E,F,G	10/16/2014	DoE/SID/WMD	1	15
Samuel Massey Elementary School- Career Day	A,B,C,D,E,F	10/16/2014	DoE/AMD	2	250
Petco	G	10/18/2014	DoE/AMD	4	35
Maryland Trade Show	A	10/21/2014	DoE/SID	2	115
Obama Elementary School	A,B,C,D,E,F	10/22/2014	DoE/AMD	2	20
THE ALTERNATIVE COMPLIANCE PROGRAM KICK OFF AND RIBBON CUTTING CEREMONY	A,B,C	10/22/2014	DoE/SID/SMD	7	50

Activity - Event	Satisfy Permit Condition Type[1]	Event Date	Host Agency	Number of Volunteers	Number of Attendees
Joint Andrew Air Force Base Fall Festival Manning Table	A,B,C,E	10/25/2014	DoE/SID	1	200
County Council Session		10/28/2014	DoE/DO	1	250
Fall Festival	A,B,C,D,E,F	10/28/2014	DoE/AMD	4	35
BIO Cycle East Coast Conf. Tour	A,B,D,E	10/29/2014	DoE/DO	2	45
Field of Greens Community Garden	A,E	10/29/2014	DoE/SID	2	29
sustainable Maryland Prince George's Green Team Summit	A,B,C	10/29/2014	DoE/SID	3	25
Environmental Law Class w/Brent Bolin	A,B,C,D,E,F,G	10/30/2014	DoE/SID	1	120
Maryland Farms Condos Shelter Awareness Meeting	G	11/1/2014	DoE/AMD	3	15
Mighty Healthy Pet	G	11/2/2014	DoE/AMD	2	45
Hyattsville Post Office	A,B,C,D,E,F	11/4/2014	DoE/AMD	1	n/a
9th Potomac Watershed Trash Summit	A,B,C,D,E,F,G	11/7/2014	DoE/SID/SMD	3	150
Alice Fergusson-trash Summit	A,B,C,D,E,F,G	11/7/2014	DoE/DO	2	250
St. Ambrose Catholic School - Pet Ownership Presentation/Tour	G	11/7/2014	DoE/AMD	1	9
Trash Summit University of Maryland	D	11/7/2014	DoE/WMD	3	110
Behnke's Fall Craft Show	A,B,C,E	11/8/2014	DoE/SID	2	88
University of MD Fraternity - Tour and Dog Walking	G	11/9/2014	DoE/AMD	2	27
District 1 Community Meeting	A,B,C,D,E,F	11/12/2014	DoE/AMD	2	50
MBE University & Prince George's County Conference & Expo College Park Marriott	A,B,D,E,F	11/12/2014	DoE/SID/WMD	2	35
WIP Public Meeting	B	11/12/2014	DoE/SMD	1	24
Camp Spring Civic Assoc. Meeting	A,B,C,E,G	11/13/2014	DoE/SID/WMD	1	45
MES Tour	E	11/13/2014	DoE/WMD	1	4

Activity - Event	Satisfy Permit Condition Type[1]	Event Date	Host Agency	Number of Volunteers	Number of Attendees
MDE Rethink Sculpture Contest	D	11/14/2014	DoE/AMD	2	150
E-Cycling Event	D	11/15/2014	DoE/WMD	5	
FDA Recycle Day Event	A,B,C,D,E,F	11/18/2014	DoE/SID	1	75
FDA Recycles Day	D,E	11/18/2014	DoE/WMD	1	300
Environmental Action Council	B	11/19/2014	DoE/SMD	2	40
Tantallon Citizens Association	A,B,C,D,E,F,G	11/19/2014	DoE/AMD	2	40
Clippers Canine Café	G	11/20/2014	DoE/AMD	2	20
College Park Recycling Program Meeting	D	11/21/2014	DoE/WMD	2	25
Suitland and Temple Hills Fall Festival BAIB Farmers market Iverson Mall	B	11/22/2014	DoE/SMD	2	35
Greenbelt Farmer's Market	A,B	11/23/2014	DoE/SID/SMD	2	40
Chinese Delegation w/Neil Weinstein	B,C	11/24/2014	DoE/SMD	2	25
City of Hyattsville Council	A	12/1/2014	DoE/SID	1	25
District 3 Coffee Club	A,B	12/3/2014	DoE/SID	1	30
Sierra Club Clean Water Town Hall Meeting	A,B,C,D,E,F,G	12/4/2014	DoE/SMD	1	30
PRINCE GEORGE'S Clean Water Town Hall Meeting Prince Georges County Ballroom	A,B	12/4/2014	DoE/SID	1	57
Collective Empowerment Conference First Baptist Church of Glenarden	A,E	12/5/2014	DoE/SID	2	35
E-Cycling Event	D	12/6/2014	DoE/WMD	5	365
Community Partners meeting	A,B,C,D,E,F,G	12/9/2014	DoE/DO	10	200
Anacostia Trash Public Meeting Capitol Heights Elementary	B,C,D	12/10/2014	DoE/WMD	4	7
Recycling Tour	N/A	12/10/2014	DoE/WMD	2	17
Choose Clean Water Coalition's Annual Meeting	A,B,C,D,E,F,G	12/11/2014	DoE/SMD	1	50

Activity - Event	Satisfy Permit Condition Type[1]	Event Date	Host Agency	Number of Volunteers	Number of Attendees
All I want for Christmas is you	G	12/14/2014	DoE/AMD	2	30
Anacostia Trash Public Meeting	B,C,D	12/17/2014	DoE/WMD	4	21
Environmental Action Council	A,B,D,E	12/17/2014	DoE/SID/SMD	2	40
Bring in 2015 for $20.15	G	1/1/2015	DoE/AMD	2	25
Bradbury/Boulevard Heights Civic Association	A,B,C,D,E,F	1/5/2015	DoE/SID	2	31
Volunteer Orientation	G	1/5/2015	DoE/AMD	1	6
Cedar Haven Dumpster Meeting	D,E	1/8/2015	DoE/DO	2	30
Crunchies Pet Foods	G	1/10/2015	DoE/AMD	2	50
The PULSE Television Show Interview w/CTV, CTV Office	B,C	1/16/2015	DoE/DO	1	1000
Clippers Canine Café	G	1/17/2015	DoE/AMD	2	30
Volunteer Orientation	G	1/17/2015	DoE/AMD	1	7
Dog Treat Making Party	G	1/18/2015	DoE/AMD	2	11
Prince George's Chamber of Commerce	A,B,C	1/22/2015	DoE/SID	2	8
Adoption event	G	1/24/2015	DoE/AMD	2	35
Hyattsville Civic Assoc. Meeting	A,B,C,D,E,F	1/27/2015	DoE/AMD	2	30
Keep America Beautiful National Conference, Omni Shoreham, Washington, DC	A,B,C,E	1/27/2015	DoE/WMD	8	200
District 4 Coffee Club Oxen Hill	A,B	1/28/2015	DoE/SID	2	51
The Horizon Estates Post Development Drainage Meeting	C	1/29/2015	DoE/DO	1	10
Feline Frenzy	G	1/30/2015	DoE/AMD		25
Staff Favorites	G	2/1/2015	DoE/AMD	2	30
Composting Facility tour with Baltimore City Western Branch, Upper Marlboro, Maryland	E,C	2/2/2015	DoE/WMD	1	5

Activity - Event	Satisfy Permit Condition Type[1]	Event Date	Host Agency	Number of Volunteers	Number of Attendees
District III Coffee Circle	A,B,C,D,E,F	2/4/2015	DoE/AMD	4	25
Prince George's County Civic Federation Meeting	A,B,C,D,E,F,G	2/5/2015	DoE/DO	30	30
Beltsville District 6 Coffee House Laurel Senior Center	A,B,C,E	2/5/2015	DoE/SID	1	22
Prince George's Civic Federation	B	2/5/2015	DoE/SID	2	20
Volunteer Orientation	G	2/5/2015	DoE/AMD	2	13
Volunteer Orientation	G	2/7/2015	DoE/AMD	2	10
Pet First Aid/CPR conducted by American Red Cross	G	2/8/2015	DoE/AMD	1	15
District 5 Coffee Club Colony South Hotel	A,B,C,D,E,F	2/11/2015	DoE/SID	1	56
Horizon Hills Estate Community meeting	A,B,C,D,E,F	2/11/2015	DoE/SID	3	30
Riverdale Community litter control and removal meeting	B,C,D,E,F,G	2/12/2015	DoE/SID	1	10
Drainage Issue	B,C	2/12/2015	DoE/SID	3	18
Horizon Estates Post Dev Drainage Meeting	B,C	2/12/2015	DoE/DO	5	20
Paws for Love	G	2/12/2015	DoE/AMD	1	30
District IV Coffee Circle	A,B,C,D,E,F	2/18/2015	DoE/AMD	2	30
Riverdale Park " Indoor" Farmers Market	A,B,C,E	2/18/2015	DoE/SID	1	80
CM Glaros District 3 Event	A,B	2/19/2015	DoE/DO	2	40
School Assessment - Score Four	E	2/19/2015	DoE/SID	2	30
Greater 202 Coalition Meeting	A,B,C,D,E,,	2/23/2015	DoE/SID	2	80
Volunteer Orientation	G	2/24/2015	DoE/AMD	1	8
MNCPPC Community Meeting/Central Avenue Connector	A,B,C,D,E,F	2/26/2015	DoE/DO	2	40
Adoption event	G	2/28/2015	DoE/AMD	2	38
Bladensburg High School	D	2/28/2015	DoE/WMD	3	125
Feline Frenzy	G	2/28/2015	DoE/AMD	4	20
Gazette; Interview	D	2/28/2015	DoE/DO	1	

Activity - Event	Satisfy Permit Condition Type[1]	Event Date	Host Agency	Number of Volunteers	Number of Attendees
Introduction to Fostering	G	2/28/2015	DoE/AMD	3	10
Library Series	E	2/28/2015	DoE/SID	1	15
Feline Frenzy	G	3/1/2015	DoE/AMD	4	30
CTV Studio Interview	D	3/2/2015	DoE/DO	1	
Tour of Western Branch Georgetown University Visitors	E	3/2/2015	DoE/WMD	2	8
Clippers Canine Café	G	3/7/2015	DoE/AMD	2	23
Electronics Recycling - Bladensburg High School	D	3/7/2015	DoE/WMD	2	125
Volunteer Orientation	G	3/7/2015	DoE/AMD	1	8
Sheehy Ford	G	3/8/2015	DoE/AMD	2	20
Princess Garden Pkway/Hickory Hill Neighborhood Association Meeting	D,E	3/10/2015	DoE/WMD	2	25
Library Lectures	A,B,C,E	3/14/2015	DoE/SID	1	8
Spring 2015 Prince George's County Master Gardeners Basic Training Class 4-H center	A,B,C	3/16/2015	DoE/SID	2	25
Tour of Materials Recycling Facility (MRF)	D	3/16/2015	DoE/WMD	1	6
Piscataway Drive Project Information Meeting	B,C	3/18/2015	DoE/DO	1	30
Tour of Materials Recycling Facility (MRF)	D	3/18/2015	DoE/WMD	1	7
Tour of Materials Recycling Facility (MRF)	D	3/19/2015	DoE/WMD	1	6
Behnke's Spring Open House	A,B,C,E	3/21/2015	DoE/SID	1	126
Adoption event	G	3/22/2015	DoE/AMD	4	30
PGCC Clean Water class	A,B	3/23/2015	DoE/SID	1	24
Library Lectures Baden Library	A,B,C,E	3/24/2015	DoE/SID	1	15
Envirothron Training	A,E	3/25/2015	DoE/SID	1	30
Library Lectures	A,B,C,E	3/25/2015	DoE/SID	1	12

Activity - Event	Satisfy Permit Condition Type[1]	Event Date	Host Agency	Number of Volunteers	Number of Attendees
Master Gardner - Integrated Pest Management	E	3/25/2015	DoE/SID	1	25
Volunteer Orientation	G	3/25/2015	DoE/AMD	1	5
Chamber of Commerce	E	3/26/2015	DoE/SID	1	5
Adoption event	G	3/28/2015	DoE/AMD	2	50
Community Forklift Garden Party	B,E	3/28/2015	DoE/SID	2	143
Introduction to Fostering	G	3/28/2015	DoE/AMD	2	10
Library Lectures	A,B,C,E	3/28/2015	DoE/SID	1	25
Daisy Scouts of First Baptist Church of Glenarden	A,B,C,D,E,F	3/29/2015	DoE/AMD	1	65
Theta Tau Fraternity adoption event	G	3/29/2015	DoE/AMD	1	18
Master Gardner -Types of Pesticides and their Usage	E	3/30/2015	DoE/SID	1	25
Tour of Materials Recycling Facility (MRF)	D	3/30/2015	DoE/WMD	1	15
Carole Highlands Elementary School, Career Day	A,B,C,D,G	3/31/2015	DoE/SID	2	154
Prince George's County Police District III Coffee Circle	A,B,C,D,E,F,G	4/1/2015	DoE/SID	1	60
Community Partners	D	4/1/2015	DoE/SID	1	150
Community Partners meeting	G	4/1/2015	DoE/AMD	4	250
Community Partners Meeting	D	4/1/2015	DoE/DO	15	200
Feline Frenzy	G	4/1/2015	DoE/AMD	2	20
Pet Ownership	G	4/3/2015	DoE/AMD	2	25
Tour of Western Branch - Smithsonian Institution	E	4/3/2015	DoE/WMD	1	2
Community Forklift	A,E	4/4/2015	DoE/SID	2	35
Bowie Green	A,B,C,D,E,F,G	4/5/2015	DoE/DO	2	200
Master Gardner -Lawn Management	A,B,E	4/6/2015	DoE/SID	1	25
Volunteer Orientation	G	4/7/2015	DoE/AMD	1	7
Master Gardner - Baywise/Composting	A,B,E	4/8/2015	DoE/SID	1	25
Volunteer Orientation	G	4/9/2015	DoE/AMD	1	12

Activity - Event	Satisfy Permit Condition Type[1]	Event Date	Host Agency	Number of Volunteers	Number of Attendees
Bowie Green Expo Kenhill Center	A,B,C,E	4/11/2015	DoE/SID	1	57
Health Fair	G	4/11/2015	DoE/AMD	2	50
Adoption event	G	4/12/2015	DoE/AMD	1	15
Bowie Green Expo Kenhill Center	A,B,C,D,E,F,G	4/12/2015	DoE/SID	2	100
CM Glaros/District 3 Town Hall	A,B,C,D,E,F,G	4/15/2015	DoE/DO	2	40
County's State of the Economy Breakfast	A,B,D,E,F,G	4/16/2015	DoE/SID	2	127
John Hanson French Immersion School	A,B,C,D,E,F	4/17/2015	DoE/SID	2	192
Stormwater audit and assessment of stormwater projects	A,B,C	4/17/2015	DoE/SID	1	2
Interfaith Partner Coalition Workshop	A,B,D,E,D,E,F,G	4/18/2015	DoE/SID	1	12
Mount Rainier Nature Center	E,G	4/18/2015	DoE/SID	1	10
Mt. Rainer/MNCPPC	A,B,C,D,E,F	4/18/2015	DoE/DO	5	300
Daisy Fields Community	G	4/20/2015	DoE/AMD	2	50
Chesapeake Bay Summit; MPT	A,B	4/21/2015	DoE/DO	1	100
The Reserve Community HOA	A,B,C,D,E,F,G	4/21/2015	DoE/SID	1	24
Tour of Western Branch - Georgetown University	E	4/21/2015	DoE/WMD	2	6
Presentation at Tall Oaks High School	A,B,C,D,E,F	4/22/2015	DoE/SID/WMD	4	60
Tall Oaks High School	A,B,C	4/22/2015	DoE/SID	1	60
WMAL Radio Interview	E	4/22/2015	DoE/DO	1	
Earth Day Event - Food & Drug Administration	A,B,D,E	4/23/2015	DoE/WMD	1	250
FDA	A,B,C,E	4/23/2015	DoE/SID	1	182
Pentagon DoE Outreach	A,B,C,D,E,F,G	4/23/2015	DoE/DO	1	400
Port Towns Quarterly Meeting Presentation	A,B,C,E	4/23/2015	DoE/SID	1	20
Arbor Day	A,B,C,E	4/24/2015	DoE/SID	25	300

Activity - Event	Satisfy Permit Condition Type[1]	Event Date	Host Agency	Number of Volunteers	Number of Attendees
Career day	A,B,D,E,G	4/24/2015	DoE/DO	60	60
DoE Arbor Day Event Ft. Washington Forest elementary	A,E	4/24/2015	DoE/DO	30	30
Tour of Western Branch - Washington Nationals	E,E	4/24/2015	DoE/WMD	1	4
Anacostia Watershed Society; Earth Day	B,C,D,E,F,G	4/25/2015	DoE/DO	12	50
AWS Cleanup at Templeton Knolls	B,C,E	4/25/2015	DoE/SID	1	25
Bladensburg Marina	A,B,C,D,E,F,G	4/25/2015	DoE/SID	5	125
CCCC Cool Branch Elementary	A,E	4/25/2015	DoE/SID	6	30
Dogs Playing for Life	G	4/25/2015	DoE/AMD	2	45
Earth Day - Bladensburg	A,B,C,D,E,F	4/25/2015	DoE/SID	1	171
East Riverdale Civic Association	A,B,C,D,E,F	4/25/2015	DoE/SID	15	35
Lower Beaver dam Civic Assoc.	A,B,C,D,E,F	4/25/2015	DoE/SID	179	2327
Maryland day	G	4/25/2015	DoE/AMD	4	100
Prince George's Leadership Girls Mentoring Group	G	4/25/2015	DoE/AMD	4	20
Princeton Elementary School	A,B	4/25/2015	DoE/SID	1	52
Town of Forest Heights	A,B,C,D,E,F	4/25/2015	DoE/SID	15	40
Bowie Citizens for Local Animal Welfare	G	4/26/2015	DoE/AMD	2	40
Adoption event	G	4/27/2015	DoE/AMD	2	40
Dr. Henry A. Wise High School's Leo Club	G	4/27/2015	DoE/AMD	1	5
Better Bladensburg Block By Block initiative	A,B,C,E	4/29/2015	DoE/SID	1	12
Responsible Pet Ownership Presentation, Shelter Tour and Treat-Making Session with Girl Scouts	G	5/1/2015	DoE/AMD	1	17
Adoption event	G	5/2/2015	DoE/AMD	2	30
Green Man Festival	A,B,C,D,E,F	5/2/2015	DoE/DO	2	300

Activity - Event	Satisfy Permit Condition Type[1]	Event Date	Host Agency	Number of Volunteers	Number of Attendees
Community Forklift	A,B,C,E,D	5/4/2015	DoE/SID	1	22
Bowie Environmental Advisory Committee - Bowie City Hall	B,D,E	5/6/2015	DoE/WMD	1	10
WSSC Children Festival	A,B,C,D,E	5/6/2015	DoE/SID	2	328
Responsible Pet Ownership Presentation	G	5/7/2015	DoE/AMD	4	128
WSSC Children Festival	A,B,C,D,E	5/7/2015	DoE/SID	1	442
Career day	A,B,C,D,G	5/8/2015	DoE/DO	100	100
Career Night	A,B,C,D,G	5/8/2015	DoE/DO	100	100
Mattaponi Elementary School	A	5/8/2015	DoE/SID	1	48
Greenman Festival	A,B,C,D,E,F	5/9/2015	DoE/SID	2	144
Volunteer Orientation	G	5/9/2015	DoE/AMD	4	7
Greenman Festival	A,B,C,D,E,F	5/10/2015	DoE/SID	2	130
Keep Prince George's Beautiful	A,B,C,E	5/13/2015	DoE/SID	1	100
Tour of Western Branch	E	5/13/2015	DoE/WMD	1	2
Be kind to Animals Contest	G	5/14/2015	DoE/AMD	4	35
Riverdale park Farmers Market	A,B,C,D,E	5/14/2015	DoE/SID	1	30
Adoption event	G	5/17/2015	DoE/AMD	1	25
Career Day	G	5/18/2015	DoE/AMD	1	100
Clean Water Management Group	A,B	5/18/2015	DoE/DO	2	50
Hillantrae Homeowners Association Meeting	G	5/18/2015	DoE/AMD	2	15
Career Day Presentation at Gwynn Park Middle School	G	5/19/2015	DoE/AMD	1	100
Green Summit	A,B,C,D,E,F,G	5/19/2015	DoE/DO	25	300
Responsible Pet Ownership at Andrew Jackson Career Academy	G	5/22/2015	DoE/AMD	2	140
Responsible Pet Ownership at Kenmoor Elementary School	G	5/26/2015	DoE/AMD	2	150
Volunteer Orientation	G	5/26/2015	DoE/AMD	1	6

Activity - Event	Satisfy Permit Condition Type[1]	Event Date	Host Agency	Number of Volunteers	Number of Attendees
Responsible Pet Ownership at Glenridge Elementary School	G	5/27/2015	DoE/AMD	2	130
Tour of Western Branch	E	5/28/2015	DoE/WMD	4	110
Tour of Western Branch	E	5/28/2015	DoE/WMD	2	50
Career Day Presentation at John Hanson French Immersion School	G	5/29/2015	DoE/AMD	1	120
Tour of Western Branch	E	5/29/2015	DoE/WMD	2	18
Rabies Clinic	G	5/30/2015	DoE/AMD	4	300
Interfaith Partner Coalition Workshop	A,B,C,E	5/31/2015	DoE/SID	1	9
Feline Frenzy	G	6/1/2015	DoE/AMD	2	20
Petsmart	G	6/2/2015	DoE/AMD	2	25
District III Coffee Circle	A,B,C,D,E,F	6/3/2015	DoE/AMD	50	50
Responsible Pet Ownership Presentation	G	6/3/2015	DoE/AMD	4	120
Clean Water Partnership Meeting	A,B	6/4/2015	DoE/SID	1	13
Responsible Pet Ownership Presentation	G	6/4/2015	DoE/AMD	4	120
Volunteer Meeting	G	6/4/2015	DoE/AMD	2	13
Career Day	G	6/5/2015	DoE/AMD	45	45
Adopt-A-Thon	G	6/6/2015	DoE/AMD	4	45
Behnke's Garden party	A,B,C,E	6/6/2015	DoE/SID	2	99
Bowie Fest Allen Pond	A,B,C,D,E,F,G	6/6/2015	DoE/DO	2	350
Brentwood Day	A,B,C,D,E,F,G	6/6/2015	DoE/DO	2	150
Tree for the Home Gardner - South Bowie library	A,B,E	6/6/2015	DoE/SID	1	10
Fleischman's Village HOA	D	6/9/2015	DoE/DO	1	17
Responsible Pet Ownership and Tour for Girl Scout Troop for Bronze Award Project	G	6/10/2015	DoE/AMD	1	16
Traveras Town Hall	A,B,C,D,E,F	6/11/2015	DoE/DO	50	50
Council Member Taveras Town Hall Meeting - Northwestern High School –	A,B,C,D,E,F,G	6/12/2015	DoE/SID	1	50

Activity - Event	Satisfy Permit Condition Type[1]	Event Date	Host Agency	Number of Volunteers	Number of Attendees
Delegate Walkers Community Day	A,B,C,D,E,F	6/13/2015	DoE/DO	2	200
Health, Environmental Education and Awareness Day	A,B,C,D,E,F	6/13/2015	DoE/SID	2	100
Patuxent Nursery Daylily Days	E	6/13/2015	DoE/SID	1	10
Rabies Clinic	G	6/13/2015	DoE/AMD	2	40
Responsible Pet Ownership and Tour for Girl Scout Troop for Bronze Award Project	G	6/13/2015	DoE/AMD	2	14
Riverdale Health & Community Picnic	A,B,C,D,E,F	6/13/2015	DoE/DO	100	100
Tour of Western Branch - Chesapeake Foundation	E	6/13/2015	DoE/WMD	2	15
Volunteer Orientation	G	6/13/2015	DoE/AMD	1	8
Interfaith Partner Coalition Workshop	A,B,C,E	6/14/2015	DoE/SID	1	20
Greenbuild Host Committee on CE Behalf	A,B,C,E	6/18/2015	DoE/DO	2	25
Lehman's Annual Town Hall	A,B,C,D,E,F,G	6/18/2015	DoE/DO	75	75
Edmonston Day	A,B,C,D,E,F	6/20/2015	DoE/DO	2	150
Maryland Recyclers Network Conference/SWANA - Linthicum Maryland	D	6/25/2015	DoE/WMD	3	170
Petsmart	G	6/29/2015	DoE/AMD	2	40
Volunteer Orientation	G	6/29/2015	DoE/AMD	1	7
Environmental Education Kenmore elementary School	B,F,G	2/25/15	DoE/SID	2	12
Anacostia Trash Public Meeting	B,C,D	012/03/2014	DoE/WMD	4	17
The Great CATbury Hunt	G	3/30-4/11/2015	DoE/AMD	4	30
Total				***1235.16***	***26,119***

[1]*Permit Conditions:*

- *A. Increasing water conservation;*
- *B. Residential and community stormwater management implementation and facility maintenance;*
- *C. Proper erosion and sediment control practices;*
- *D. Increasing proper disposal of household hazardous waste;*

E. Improving lawn care and landscape management (e.g., the proper use of herbicides, pesticides, and fertilizers, ice control and snow removal, cash for clippers, etc.);
F. Residential car care and washing; and
G. Proper pet waste management.

During these events, the information was provided to the general public and interested parties about various incentive based programs that are designed for reducing storm water pollution through direct or indirect means. These programs are discussed below in details.

Rain Check Rebate Program

Prince George's County is committed to improving the quality of life for its communities by promoting green solutions to stormwater runoff. The *Rain Check Rebate Program* allows property owners to receive rebates for installing Rain Check approved stormwater management practices. Homeowners, businesses, and nonprofit entities (including housing cooperatives and churches) can recoup some of the costs of installing practices covered by the program.

Per County Bill CB-86-2014 changes were made to the Rain Check Rebate Program to entice property owners to participate in the Program. First, the maximum lifetime rebate allowable to County property owners (residential projects) was increased from $2,000 to $4,000. Second, non-profit organizations are now eligible to receive a rebate prior to construction with an approved application and an authorized property owner agreement. Third, the amount of the rebates was modified. Fourth, homeowner associations, condominium associations, civic associations are now eligible for up to maximum lifetime rebate of $20,000 per property.

The County has promoted the Program and these enhancements through subject specific outreach at a variety of venues including but not limited to farmers markets, civic and homeowner associations and festivals as well as general events. The EnviroScape has proven to be an invaluable tool in illustrating the impact of stormwater on water quality and the benefits of stormwater practices.

Figure D-7. DoE using the EnviroScape to teach children about stormwater at the WSSC Children's Water Festival

In addition, Sustainable Initiatives Division launched a new program, Stormwater Audits to help educate and promote active participation in reducing stormwater impacts. It is hands on training to educate homeowners on how to evaluate their own homes to utilize green practices to beautify their yards, save money, and reduce the impact of stormwater. They learn about which of the Rain Check Rebate practice may be applicable to their situation and how to apply.

The County has continued to use the brochures listed below to promote the *Rain Check Rebate Program* to raise stormwater pollution awareness and educate the residential, business, and industrial sectors on rebates available to them for installing approved stormwater BMPs. These brochures provide a brief and informative overview of a specific practice and provide helpful, non-technical information on BMPs, including how they improve Prince George's water resources. The County may use one or more of these materials, depending on the event audience, to promote stormwater awareness and

environmental stewardship. Materials also include links to resources for audiences seeking additional information or more detailed advice.

Green Roofs: Benefit You & Your Community

Cisterns: Benefit You & Your Community

Pavement Removal: Benefit You & Your Community

Rain Barrels: Benefit You & Your Community

Permeable Pavement: Benefit You & Your Community

Rain Gardens: Benefit You & Your Community

Urban Tree Canopy: Benefit You & Your Community

Rain Check Rebate Program

Water Conservation

As the public water supply utility for Prince George's County, the WSSC is lead agency tasked with educating the general public on water conservation issues. A major focus of WSSC's outreach campaigns is to promote pollution prevention as a means to protect our regional drinking water reservoirs. An overview of WSSC's outreach events, with a complete listing of community events, tours, and programs, is available for viewing at: https://www.wsscwater.com/outreach.

Additionally, WSSC is committed to providing students with educational information and experiences, and can provide a speaker for classroom or after-school programs (K-12). A variety of topics are available, including health benefits to drinking water, water conservation, and careers in the water industry. WSSC also provides science fair judges and presenters for career days.

WSSC's 2015 customer outreach included 74 classroom presentations in Prince George's and Montgomery counties, 41 environmental stewardship opportunities (planting trees, picking up trash, removing invasive weeds along the Patuxent watershed and teaching groups about water and water conservation) involving more than 500 people, participation in 133 local community events, wastewater treatment plant tours and two other large-scale WSSC-sponsored events. WSSC's community outreach events are focused on promoting an understanding of the importance of water and environmental stewardship, educating customers on ways they can reduce their impact on the local watershed as well as the Chesapeake Bay and promoting careers in the water industry.

Adopt-A-Road

WSSC and its business partners adopted Sweitzer Lane in the Bear Branch watershed through the County's Department of Public Works and Transportation (DPW&T) Adopt-A-Road/Median Program. WSSC partnered with local businesses, individuals, its employees and retirees to help foster a sense of pride in their community by volunteering to aid in the upkeep of Sweitzer Lane.

Earth Month Clean-Ups

During Earth Month 2015, WSSC hosted cleanups of eight of its watershed properties in Montgomery and Howard counties, organizing the help of local residents, community groups and students to clean trash from the shoreline and surrounding wooded areas of the recreational sites.

WSSC hosted a special community cleanup in Laurel in the area along the Patuxent, behind Home Depot, on April 18, 2015. Volunteers are from Home Depot and the Hillman Entrepreneurs Program, a scholarship and educational program for students from the University of Maryland, Prince George's Community College and Montgomery College with a goal to "support, develop, and graduate ethical leaders who want to energize and give back to their local communities." This special event is coordinated in partnership with the City of Laurel, including the Police Department, the City Administrator's Office, the Mayor's Office and local retailers Home Depot, Jerry's Subs and Pizza and the Dutch Country Farmers Market.

Trout in the Classroom

WSSC worked with the Maryland Department of Natural Resources and the nonprofit, Trout Unlimited, to stock the river with indigenous fish and ensure that robust populations of native and wild cold-water fish thrive in Patuxent River. Through Trout Unlimited's "Trout in the Classroom" program, WSSC sponsored 10 trout releases with over 400 school children from Prince George's and Montgomery counties. The children raise the trout in their classrooms, learning about the importance of trout in our waterways, and personally release the young fish into the Patuxent River on WSSC properties. WSSC staff were on hand to educate the children about indigenous fish in the river, how the river benefits fish and human life, and how important the river and reservoirs are to their daily life.

Annual Children's Water Festival

On May 6 and 7, 2015 WSSC sponsored the tenth anniversary of the Children's Water Festival, a two-day event for 700 fourth graders. Each day, the students learned about environmental stewardship with approximately 12 hands-on learning activities focused on water, the Chesapeake Bay, wetlands, human health and aquatic life. This event was held on the grounds of Brighton Dam. Prince George's County Executive Rushern Baker attended the event and showed his excitement in a number of tweets throughout the day, including "Enjoying a gorgeous day with @WSSCWaterNews at the 10th Anniversary of the Children's Water Festival. Water=Life!" Of the 700 attendees, approximately 640 were from Prince George's County.

Led by WSSC program staff, and in partnership with local agencies such as DoE, students took part in thirteen hands-on activities about drinking water, wastewater, wetlands, the water cycle, aquatic life, human health and the value of water. For example, Bucket Brigade, an obstacle course, challenges children to accumulate 70 gallons of water, the amount of water each person uses per day. The challenge forced students to rethink how much water they use on a daily basis. The Hydrologic Game involved all 700 students in a Jeopardy-style competition that helped the youngsters learn and discuss how water is a limited resource, how everyone uses water, and how we can conserve water.

Can the Grease

Fats, Oil and Grease (FOG) contribute to more than 40 percent of sanitary sewage overflows (SSO). SSOs can discharge into storm drains and creeks causing a potential health and environmental hazard. WSSC partners with the Restaurant Association of Maryland to help the food service industry understand the problems associated with FOG discharges. Business owners are provided assistance in managing FOG correctly through the use of BMPs.

WSSC has a Can the Grease initiative that targets restaurants, citizens, and community groups. WSSC has also developed a number of brochures and fliers such as "Don't Let Sewer Back-Ups Happen to You," "Fat-Free Sewers," "Can the Grease," and "Ponga La Grasa en una Lata" as well as a PowerPoint for community groups. Copies of these materials can be obtained at https://www.wsscwater.com/canthegrease

Sewer Science Program

Sewer Science is a hands-on program designed to educate high school students about wastewater treatment and careers at the WSSC. Through a random drawing, students from Gwynn Park High School were selected to participate, and visited the Parkway Wastewater Treatment Plant on April 15, 2015. In a laboratory setting, they created a replica of a wastewater treatment plant that includes the stages of the treatment process: primary sedimentation, biological treatment, and secondary sedimentation. The day concluded with a tour of the plant.

Stormwater Management Facility Maintenance

Pilot Pond Community Program

The Office of Project Management (OPM) of DPW&T is working in a partnership with the Neighborhood Design Center (NDC) and residential communities in a pilot pond community program. DPW&T is responsible for all publicly-owned Surface Water Management Facilities (SWMFs) with storm drain maintenance being the Department's largest operational function. Recognizing the opportunity to leverage limited resources and improve the overall management of the County ponds, DPW&T developed a Pilot Pond Community Program with several communities. The program addresses the limited functionality and poor aesthetics of our older ponds and works to improve water quality and make publicly-maintained SWMFs more of a community amenity. The key points of the program are:

- DPW&T would perform a detailed inspection of the existing facility and perform all required functional improvements to bring the facility to design standards and, as part of the program, retain this responsibility.
- DPW&T would provide a Landscape Architect to work with the community to develop an aesthetically pleasing and technically compliant plan to improve the pond and aesthetics of the surrounding area.
- DPW&T would both contract for and pay for these aesthetic improvements.
- Community would execute a binding agreement/memorandum of understanding (MOU) with the County to perform all non-functional maintenance on the pond to include grass cutting, trash and litter pick up, as well as maintenance of all installed landscaping, hardscaping, or street furniture.

This program was started in 2010. The NDC continued to assist DPW&T in resolving common landscaping problems around SWMFs including removing of invasive plants, clearing of outfall debris, and addressing of algal blooms.

BMP Inspection Program for Private SWMF

The County is cognizant that the successful implementation of the Preventative Maintenance Inspection Program requires extensive outreach to the regulated community, as property owners may be unaware of the legal responsibility for BMP inspection and maintenance. As needed, program outreach materials, including the Your Business Connection to the Bay: Simple Steps to Protect Our Waterways are sent to property owners to educate them of their private BMP maintenance responsibilities. One-to-one outreach is also conducted with property owners or their representative during the inspection process. To further emphasize the need for compliance, the County provides property owners and on-site managers with a written assessment of the inspection results and a compliance schedule.

Household Hazardous Waste

The *Household Hazardous Waste and Electronics Recycling brochure* promotes the proper disposal of chemicals and hazardous waste and eCycling opportunities available to County residents. The brochure, both in English and Spanish, stresses the importance of safe disposal of hazardous waste and opportunities for recycling unwanted electronic devices. The County maintains a permanent Household Hazardous Waste Acceptance Site, open and free-of-charge to County residents, at the Brown Station Road Sanitary Landfill (BSR) in Upper Marlboro. The County contracts with Care Environmental Corporation, a licensed hazardous waste disposal company, to ensure the proper handling and disposal of all hazardous materials collected at the site. Additionally, the County continues to provide a "front door" waste pickup service option for elderly or disabled residents who qualify for this free service. Approximately 4,722 vehicles dropped off hazardous and electronic waste this reporting year. A summary of the materials collected are listed below:

- 111.16 tons of electronics;
- 61,332 gallons of liquid household hazardous waste; and
- 26.52 tons of solid household hazardous waste.

Lawn Care and Landscape Management

Prince George's Master Gardeners Program

The Maryland Master Gardener Program was started in 1978 as a means of extending the horticultural and pest management expertise of University of Maryland Extension Service (UMES) to the general public. The program is designed to train volunteer horticultural educators for UMES – the principal outreach education unit of the University of Maryland (UM). Participants receive 40-50 hours of basic training from UM professionals in return for volunteering within their community, teaching Marylanders how to manage sustainable landscapes.

Prince George's Master Gardeners are a part of the Maryland Bay-Wise Program offered by the UMES. This program takes a holistic approach to cleaning the Bay and promotes better water quality

through smarter gardening with stormwater management, composting, water efficiently, fertilize wisely, mulching and composting, recycle yard waste, IPM, emphasize native plantings, protect the waterfront. The County's Master Gardeners teach citizens and residents ways to decrease the amount of toxins, nutrients, and sediments that flow into our streams and the Chesapeake Bay. Prince George's County recognizes and demonstrates the importance of this program by funding the Master Gardener Coordinator's position at UMES. The talents and skills of the Master Gardener Coordinator are used to instruct new recruits, coordinate and lead workshops and plant clinic classes, and coordinate and lead community education and outreach programs. A list of the lectures and workshops related to stormwater management and water quality are listed below for this permit year:

- Instruction to 22 Master Gardener Interns on Basic Bay-Wise Landscape Management Program on April 8th
- 28 Master Gardeners took the 3 day Advance Bay-Wise Landscape Management Course and became Certified on June 13th
- 5 Master Gardener's residential homes received the Bay-Wise Landscape Certification
- BayWise Presentation at Community Forklift Garden Party on March 28th
- BayWise Display at Behnke's Garden Party on June 6th

Edible Demonstration Garden at Prince George's DPW&T D'Arcy Road Facility

The Edible Demonstration Garden located at the DPW&T D'Arcy Road Facility provides County employees and local residents contact with nature. The natural setting of the garden is ideal for environmental education and horticulture programs whose goals are to demonstrate that an edible landscape is sustainable, affordable, and productive.

The 'edible garden,' sometimes referred to as a learning landscape, uses Bay-Wise landscaping practices that focus on water quality. As gardeners we can contribute to a cleaner local waterway by adhering to the following environmentally-sound landscaping approaches:

- Feed the soil and fertilize wisely
- Water efficiently
- Plant wisely
- Recycle yard waste
- Manage garden pests with Integrated Pest Management (IPM)
- Protect the soil with mulch or cover crops
- Control stormwater runoff

Neighborhood Design Center (NDC)

The NDC, a local non-profit located in Riverdale, is an important partner in many County initiatives. They furnish pro-bono design and planning services to a wide variety of individuals, organizations, and low-to-moderate income communities. Their goal is to involve the entire community in the development and implementation of initiatives and projects designed to revitalize neighborhoods. NDC develops plans for parks, playgrounds, gardens, and community plantings, including wetland and rain gardens, reforestation projects, and median and shade tree plantings. Collectively, these efforts have increased the County's green space, reduced stormwater runoff, and improved water quality through the creation of natural systems to cleanse stormwater runoff. These street trees designed by the

Neighborhood Design Center and planted by subcontractors to DPWT, in FY 2015, play a significant role in stormwater management by reducing the amount of stormwater runoff that enters the storm drain system. The trees serve as miniature reservoirs to control stormwater runoff at the source and in the community. The leaves and branches of the tree divert and absorb rainwater, decreasing the amount of water that reaches the ground, and allowing the water to slowly soak into the soil. Street trees have demonstrated value in reducing runoff and mitigating the costs of stormwater management.

Below is the summary of the major partnership projects completed during this reporting year.

Prince George's County: Arbor Day Planting

NDC provided the landscaping plans for the Arbor Day Celebration held at Fort Washington Forrest Elementary School in Clinton, Maryland.

Prince George's County: Department of Housing CDBG Grant Funded Community Design projects (Community Design Works)

NDC works with municipalities, as well as nonprofit, community, civic, and homeowner associations to provide conceptual design services to low-moderate income (including TNI) areas in the county. Of the 35 projects in FY 2015, at least four included recommendations for increasing tree canopy, eight of them included recommendations for use and education on other Stormwater management BMP's, and twenty two projects included volunteer engagement as relates to landscape improvements including native plants, landscape maintenance and environmental education.

Action Guides

NDC is currently developing a series of outreach and engagement guides for distribution at public events, forums, and workshops. Currently, there are four guides available: How to Plant a Tree, How to Design a Pollinator Garden, How to Identify Weeds, and How to Winterize Your Home.

Prince George's County: Department of Public Works and Transportation (Stormwater Ponds)

NDC works with community, civic, and homeowner associations to promote DPW&Ts Stormwater Pond Retrofit and Beautification Program which addresses pond improvements and aesthetics; DPW&T performs functional maintenance on ponds and NDC designs aesthetically-pleasing landscaping plans for the ponds; in exchange, the associations take on the responsibility of landscape maintenance and agree to contact the county for any functional maintenance required.

Prince George's County: Department of Public Works and Transportation (Right Tree, Right Place Program [Bradford Pear Tree Replacement Program])

The Right Tree, Right Place Program [Bradford Pear Tree Replacement Program] is a risk management program developed to systematically remove and replace dead, dying, and high risk street trees in the county many of which were Bradford Pears. The program continues to be well received by those who enjoy the aesthetic and environmental benefits of street trees, and NDC field's dozens of calls each week with requests for trees, tree removal, and clarification of work being performed in communities. (See Table D-37 for trees replaced within TNI areas, Figure D-9 for the project area, and Table D-38 for number of trees planted since program inception).

Prince George's County: Department of Public Works and Transportation (Clean Up Green Up)

NDC works with schools, community, civic, and homeowner associations to increase beautification, tree canopy and volunteerism in the county. NDC provides outreach, education and design services to over 80 groups throughout the county who participate in DPWT's CUGU program annually.

Prince George's County: Department of Environment (Arbor Day Every Day and Tree Releaf Program)

NDC provides landscape design services in support of DOE's Arbor Day Every Day and Tree ReLeaf Programs, focused on increasing project participation and success particularly in inner beltway, TNI and low-moderate income areas. The program provides outreach, engagement, and design in order to increase the tree canopy at schools and in neighborhoods.

Figure D-8. Left: Woodmore South community meeting and RTRP presentation; Center: Newly planted Okame Cherry trees on Parkside; Right: New Sugar Maple street trees installed from NDC designs, at Mallard Drive

These street trees designed by the Neighborhood Design Center and planted by subcontractors to DPWT, in FY 2015, play a significant role in stormwater management by reducing the amount of stormwater runoff that enters the storm drain system. The trees serve as miniature reservoirs to control stormwater runoff at the source and in the community. The leaves and branches of the tree divert and absorb rainwater, decreasing the amount of water that reaches the ground, and allowing the water to slowly soak into the soil. Street trees have demonstrated value in reducing runoff and mitigating the costs of stormwater management.

Table D-37. FY 2015 Right Tree Right Place in TNI areas

TNI	Number trees
Langley Park	214
Kentland -Palmer Park	339
Total FY 2015	***588***

Table D-38. Right Tree, Right Place Program Tree Replaced (2011-2015, Includes TNI Areas)

NPDES Year	Trees Planted (approximate)
July 1 – October 31, 2011	1,400
November 1, 2011 – October 31, 2012	4,500
November 1, 2012 – December 31, 2013	4,300

NPDES Year	Trees Planted (approximate)
January 1, 2014 – July 01, 2014	5,300
July 1, 2014—June 30, 2015	5,157
TOTAL	***20,657***

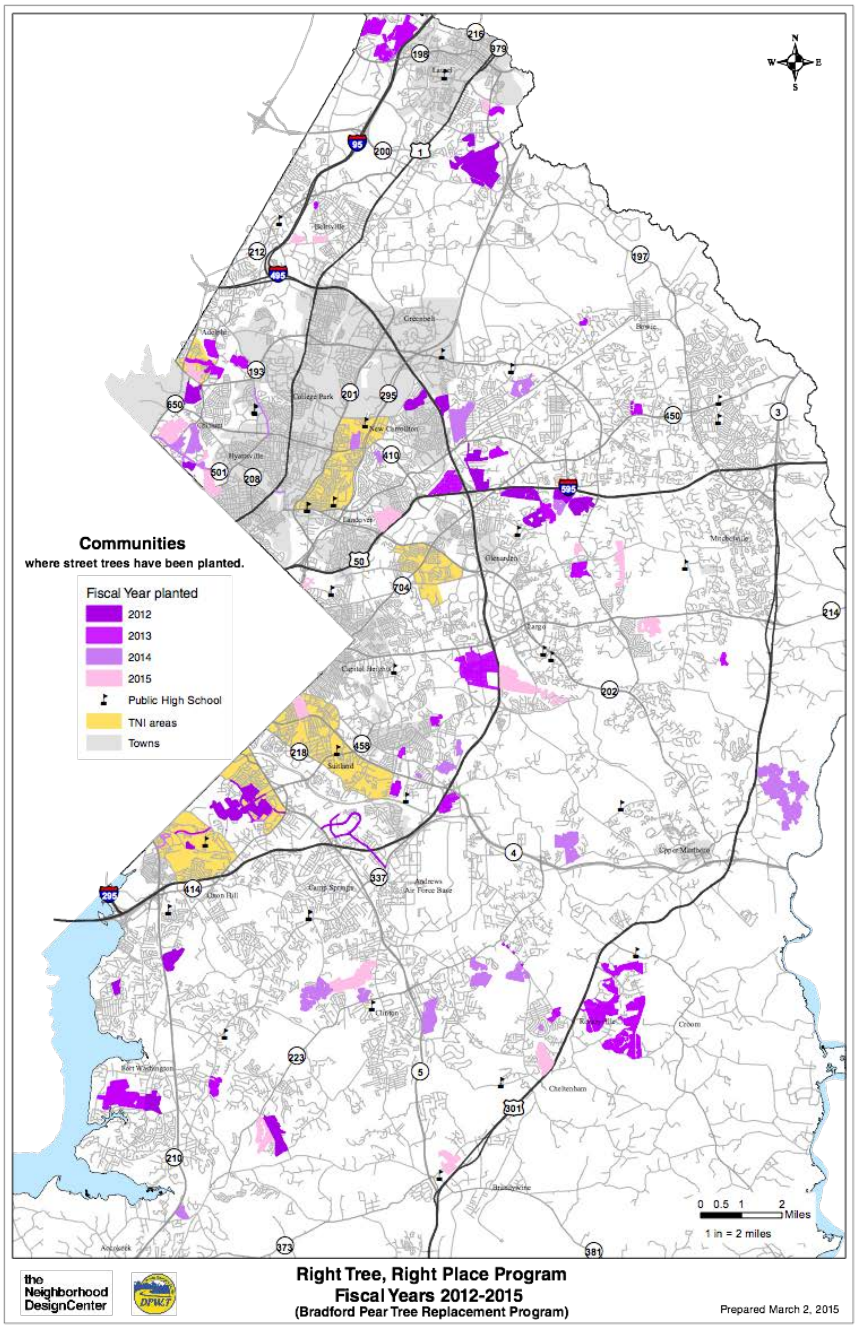

Figure D-9. Right Tree, Right Place Program Project Areas

Arbor Day

The annual Prince George's County Arbor Day celebration was held on April 24, 2015 at Fort Washington Forest Elementary School in Forestville. During the celebration, the Honorable Rushern L. Baker, III, County Executive, who was represented by Adam Ortiz, Director of Prince George's County's Department of the Environment accepted the County's 31th consecutive Tree City USA Award on behalf of Prince George's County. Horace Henry, Southern Region Urban and Community Forestry Coordinator, Maryland Department of Natural Resources (MD-DNR), presented the award to the Director.

After the presentation ceremony, the ceremonial Arbor Day tree was planted by invited dignitaries and honored guests. The Prince George's County Beautification Committee, staff from DoE, DPW&T, OCS, MD-DNR Forest Service, M-NCPPC, NDC, PGSCD, PGCC TeamBuilders Academy students and Prince PGCPS helped each class plant 116 trees – one for each class in the school. An additional 583 trees were planted on school grounds, making a total of 699 trees planted which helped to make Longfields Fort Washington Forest a "green" school. A tree planting plan is presented in Figure D-10.

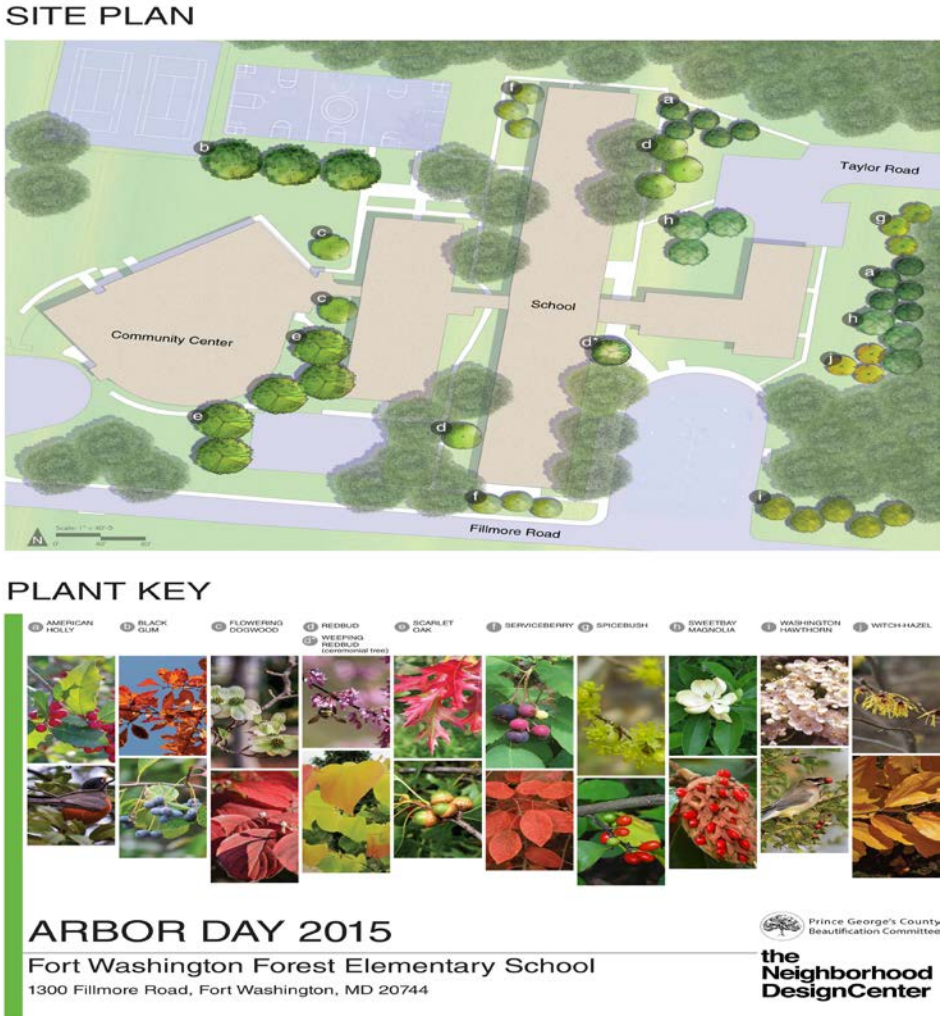

Figure D-10. Arbor Day Planting Detail (Provided by NDC)

Prince George's Beautification Committee

This year marked the 43rd anniversary of the Prince George's County Beautification Committee, an all-volunteer organization dedicated to honoring the landscaping efforts of those in the community who make a difference. The annual Beautification Awards Ceremony recognizes excellence in gardening and landscape design. Entries are judged using the National Garden Clubs, Inc. Standards for Evaluating Landscape Design, rating on first impression, suitability of design to purpose, design, implementation, sustained maintenance, and final impression. This year the Committee recognized over 66 individuals and organizations during an event held at the Newton White Mansion.

Each year a County School is chosen for the Arbor Day Celebration by the Beautification Committee. This year, Arbor Day was celebrated on April 24th at Ft Washington Forest Elementary School where 69 trees and shrubs were planted at the school to help with stormwater runoff.

Tree ReLeaf Grant Program

The *Tree ReLeaf Grant Program* is a countywide program that provides up to $5,000 to civic, neighborhood, community and homeowner organizations, schools and libraries to plant native trees and shrubs in public or common areas. A municipality can receive up to $10,000 for plantings. The program requires a 50-percent match which in turn provides a hands-on opportunity for applicants to learn how to properly plant and care for trees and shrubs. Currently, $25,000 has been approved for trees and shrubs going in the ground this fall.

The Tree ReLeaf Program was revamped and re-launched in 2014. The COPE Section of DoE, in partnership with the City of College Park, kicked-off the re-launch of the program on May 29, 2014 at the intersection of 54th Avenue and Navahoe Street in College Park. In the 2014 -2015 planting season over 300 trees were planted by six applicants (see Table D-39). The University of Maryland planting was unique in that it was an edible food forest designed to complement the existing community garden. The planting was at the Field of Greens Community Garden in Riverdale, Maryland.

Table D-39. 2014-2015 Tree ReLeaf Program

Applicant	Number of Trees
University of Maryland	70
Lake Arbor Homeowner Association	64
Windsor Green Homeowner Association	114
City of Mt. Rainier	50
City of New Carrolton	74
Town of University Park	18

Arbor Day Every Day

In the spring of 2015, DoE launched Arbor Day Every Day. Arbor Day Every Day Program seeks to increase the number of native trees and shrubs planted in Prince George's County. The Program educates students on the everyday importance of trees, empowers them to enhance their community and provides funds/trees for planting projects. Schools interested in applying to the Arbor Day Every Day Program should: (1) submit Intent to Apply form; (2) schedule a consultation with the Program Coordinator; (3) submit a Program Application. DoE works with the schools to develop the planting plan and post-planting maintenance plan.

The first schools were Beacon Heights Elementary and Benjamin Foulois Creative and Performing Arts Schools. A total of 46 trees were planted.

Permit Conditions Part IV. D. 6. c: Provide information regarding the following water quality issues to the regulated community when requested:

i. NPDES permitting requirements;
ii. Pollution prevention plan development;
iii. Proper housekeeping; and
iv. Spill prevention and response.

Response

In early spring 2015, the DoE initiated publication of Clean Water Program Guidebook series for the regulated communities in general and in particular for municipalities to: 1) understand the role and responsibilities for implementing strong effective local storm water programs and 2) build effective local public education and community engagement programs. The guidebook provides information on following:

- County and State NPDES permit requirements,
- Associated roles and responsibilities of the County and municipalities and examples,
- Resources for incorporating various required elements into a local stormwater management program.
- Public Education and community engagement
- Trash and Litter

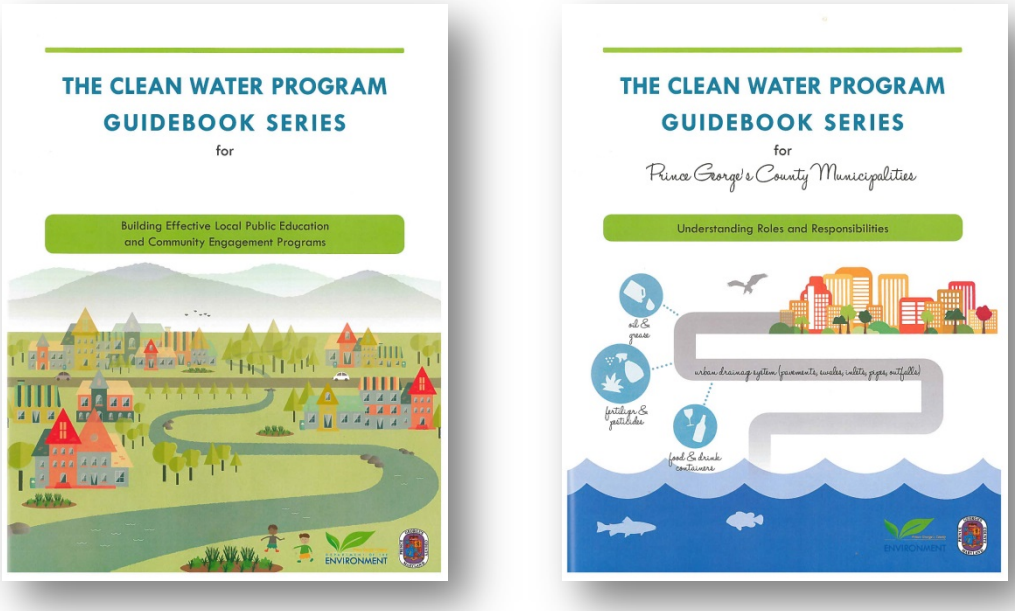

Figure D-11. The Clean Water Program Guidebook Series

Litter Control, Recycling, and Composting

Litter Control

Storm Drain Stenciling

This information has been provided on page 52.

Neighborhood/Community Cleanups

The Neighborhood Cleanup Program, facilitated by DoE, assists communities in cleanup efforts to control litter. Active participation in the cleanup of a local neighborhood, park, road, street, or pond removes potential stormwater pollutants and builds community pride. Many participating groups further enhance and beautify their areas by planting trees, sowing seeds, weeding, watering, and mowing grass. A list of community participation projects and an estimate of the tonnage of trash collected is provided in Table D-40.

Table D-40. Volunteer Neighborhood Cleanup Summary (July 01, 2014 - June 30, 2015)

Project Date	Volunteer Group	Tons of Trash
10/18/14	William Wirt Middle School	2.0
March 18 & 19 2015	Leaders Forever College Students from Midwest Town of Cheverly	32.45
04/11/15	AFF Potomac River Cleanup	10.09
04/11/15	Town of Berwyn Heights	14.7
04/25/15	Anacostia Watershed Society: Earth Day	18.34
06/15/15	BHM Contractors	9.8
06/15/15	Bizybee Professional Staffing	4.46
06/28/15	NAACP Youth - Walker Mill Driver/Shady Glen	0.5
TOTAL		***92.34***

Comprehensive Community Cleanup Program (CCCP)

The CCCP is designed to revitalize, enhance, and help maintain unincorporated areas of the County. DoE and DPW&T work with local civic and homeowner associations to provide a wide range of cleanup and maintenance services over a two-week period. Services provided by this program include bulky trash collection, the tagging and removal of abandoned vehicles, Housing Code/Zoning Ordinance violation surveys, storm drain outfall screening/sampling, roadside litter pick-up, tree trimming, and storm drain maintenance. Although the focus of the program is aesthetic improvement of communities, the County services provided also benefit water quality by removing potential stormwater pollutants including the proper disposal of trash and debris from private property through a scheduled bulky trash pickup, the elimination of heavy metals and toxic substances by towing abandoned vehicles and removing potential pollutants from being discharged into waterways through inlet cleaning. The programmatic achievements are summarized in Table D-41.

Table D-41. Comprehensive Community Cleanup Achievements (July 01, 2014 - June 30, 2015)

Community	Zoning Housing Code Enforcement		Bulky Trash		Vehicle Audit	
	Housing Code Violations Issued (No.)	Zoning Code Violations Issued (No.)	Tires Collected (No.)	Trash Collected (Tonnage)	Violations Issues (No.)	Vehicles Towed (No.)
Tantallon South	114	9	0	4.05	7	2
Birchwood City	69	4	0	1.00	5	4
Largo (Phase 1)	53	2	0	0.00	0	0
Largo (Phase 2)	17	1	0	4.58	0	0
Largo (Phase 3)	25	0	0	0.00	1	0
Murray Hill	12	2	0	0.00	0	0
Southlawn	37	5	1	3.75	3	1
Landover (formally Kentland/ Beaverdam Ests.)	31	10	0	3.60	17	2
Brookwood-Holloway/Marlboro South	13	4	1	7.20	4	0
Hillside (Phase 1)	80	0	1	2.00	5	0
Hillside (Phase 2)	128	0	3	4.52	7	4
8th Precinct/ Chillum	48	0	0	3.77	15	6
Hillcrest Hgts. (Phase 1)	27	3	0	5.10	0	0
Hillcrest Hgts. (Phase 2)	90	4	3	5.04	5	2
Hillcrest Hgts. (Phase 3))	61	2	2	3.70	5	1
Hillcrest Hgts. (Phase 4)	61	1	0	4.00	0	0
Lanham Station/Seabrook Park Ests.	31	3	1	9.39	22	9
Riverbend Estates	40	7	2	6.77	1	0
Villages of Lottsford/Legend Glen/ Glensford	13	0	6	4.80	4	4
Whitfield Gardens	14	0	11	9.01	12	6
Millwood –Waterford/ Fairfield Knolls	53	3	1	6.87	5	1
TOTAL	***1,017***	***60***	***32***	***89.15***	***118***	***42***

Recycling

The WMD of DoE administers County services and programs to reduce solid waste, including recycling, composting, and hazardous materials recovery and disposal. The County continues to host countywide recycling events, as listed in Table D-42 to shred documents and dispense free mulch recycled from Christmas trees. These events offer residents of the County an opportunity to conserve natural resources, save energy, and reduce the amount of waste going to the landfill, all positive actions that help to protect the environment.

Table D-42. Countywide Waste Reduction Participation Events (July 01, 2014 - June 30, 2015)

Name of Event (Participant)	Date of Event	No. of Participants
20th Annual Thingamajig	July 24, 2014	250
Western Branch Tour	January 21, 2015	4
Western Branch Tour	January 23, 2015	28
Keep America Beautiful Conference	January 27, 2015	200
Composting Facility Tour	February 2, 2015	5
Western Branch	February 3, 2015	5
Western Branch	February 6, 2015	1
Western Branch	February 12, 2015	3
Western Branch	February 27, 2015	45
Bladensburg High School	February 28, 2015	125
Tour of Western Branch	March 2, 2015	8
Electronics Recycling	March 7, 2015	125
Tour of Western Branch Georgetown University	March 2, 2015	8
Electronics Recycling-Bladensburg High School	March 7, 2015	125
Prince Garden Parkway / Hickory Hill Neighborhood Assoc. Meeting	March 10, 2015	25
Tour of MRF	March 16, 2015	6
Tour of MRF	March 18, 2015	7
Tour of MRF	March 19, 2015	6
Tour of MRF	March 30, 2015	15
Tour of Western Branch	April 3, 2015	2
Tour of Western Branch	April 21, 2015	6
Earth Day Event	April 23, 2015	250
Tour of Western Branch	April 24, 2015	4
Mulch Giveaway	April 25, 2015	805
Bowie Environmental Advisory	May 6, 2015	10
Tour of Western Branch	May 13, 2015	2
Tour of Western Branch	May 28, 2015	110
Tour of Western Branch	May 28, 2015	50
Tour of Western Branch	May 29, 2015	18
Tour of Western Branch	June 13, 2015	15
Prince George's Chamber of Commerce	June 25, 2015	200
Maryland Recyclers Network	June 25, 2015	170

Single-Stream Recycling

The County's single stream recycling program is heavily promoted through direct mail, press releases, newspaper advertisements, displays, and speaking engagements. The County's MRF processes glass bottles and jars, plastic containers, aluminum, steel, bi-metal cans, and newspaper from 171,255 residences served by the residential curbside single-stream recycling program and merchants (commercial sector). Today, the County's MRF is operating with the latest state-of-the-art equipment to accommodate single-stream recycling, processing over 119,000 tons annually.

An educational single-stream recycling display is housed at the MRF and can travel to community events, public libraries and office buildings throughout the County. Tours of the MRF are open to the public, schools, and recycling coordinators, educating over 2,000 individuals annually.

County Office Recycling Program (CORP)

On October 1, 2011, the CORP began single-stream recycling in County offices. An outreach campaign was developed to educate employees on the transition from dual-stream to single-stream collection and increase the amount of recycling collected from County offices. The CORP, which has been in existence since 1990, now serves 88 local County offices; all locations are serviced on a regular pickup schedule. All forms of paper and commingled materials are collected from these facilities by a County contractor. On average 22.6 tons of recyclables are collected monthly with 9 locations also recycling toner cartridges. Nearly 1 ton of toner cartridges are recycled annually through a contract with Recycling Ink.

Source Reduction & Recycling

The Source Reduction – Stop Waste Before it Starts brochure, available in English and Spanish, provides tips for reducing waste at home, in the yard, and in the office. The brochure also promotes the use of reusable bags rather than non-biodegradable plastic shopping bags. In order to reinforce their recycling and source reduction message, Recycling Section (RS) staff regularly distributes outreach materials, gives presentations, and offers giveaways at community and other special events. Additionally, plastic bags are now banned from yard waste collection. Instead, the public will utilize paper yard waste bags, which can be composted or re-used. Furthermore, plastic bags other than transparent clear liners are banned from the recycling program as this material is not captured through or by the Materials Recycling Facilities processing equipment. A public outreach campaign was conducted to inform the public to return plastic bags to participating stores for recycling and to utilize reusable bags to avoid plastic disposal bags altogether.

Business Recycling and Source Reduction

Businesses play an important role in the County recycling programs with approximately one-half of the solid waste stream coming from the business sector. Businesses also account for two-thirds of the County's current recycling rate. The Recycling Section is enforcing mandatory recycling laws that went into effect in 2014 for the commercial sector and multi-family properties.

RS staff assists in the development and implementation of successful source reduction plans and recycling programs. The types of assistance may include site visits for identifying waste that can be recycled, matching interested businesses with local mentors who have successful recycling programs, or providing technical assistance needed to start up a recycling program. Additionally, DoE has hired three inspectors to enforce CB-87-2012 mandates.

Composting

Food Scraps

During FY 2015 reporting period, the County has been piloting food scrap composting utilizing GORE® Cover System technology, diverting more than 4,400.49 tons of food scraps from the landfill into 100% organic compost.

Yard Waste

The Western Branch Yard Waste Composting Facility (aka Western Branch), operated by the Maryland Environmental Service (MES), accepts yard waste from approximately 171,255 households in the County. The yard waste composting program, including the Christmas tree recycling, diverts a significant tonnage of materials from our solid waste stream, as shown in Figure D-12. Leafgro® is sold to the nursery trade, with the revenue generated from the sale returned to the County to offset the cost of the composting operation. A new product derived from food and yard waste has been trademarked and is being sold as LeafGro Gold.

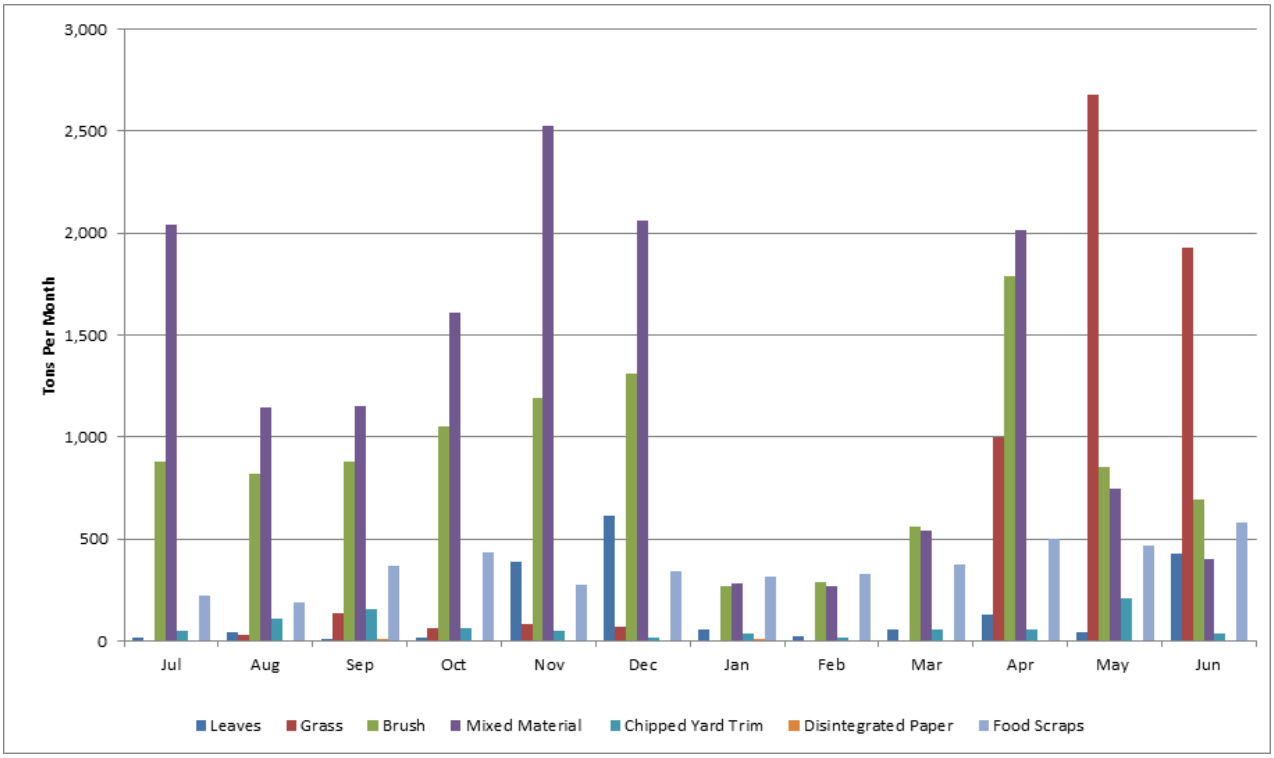

Figure D-12. Yard Waste Composting - Fiscal Year 2015

Car Care, Mass Transit, and Alternative Transportation

Each year, vehicles release hundreds of tons of harmful emissions into the air we breathe. As atmospheric deposition of nitrogen in the region is a significant source of pollutants, carpooling, vanpooling, bicycling, and using mass transit helps to reduce emissions and protect both air and water quality. Sharing a ride, taking public transportation, and bicycling means fewer vehicles on the road, making the commute to work smoother, quicker, less expensive, easier, and cleaner for everyone. DPW&T provides many services to the residents of Prince George's County, as described below.

Ride Smart

The Ride Smart Commuter website, a service of DPW&T, is designed to provide commuters and employers in Prince George's County with a comprehensive list of transportation solutions available throughout the Washington Metropolitan Area.

Ride Matching Network

The County continues to participate in the Commuter Connections Ride Matching Network, a free carpool/vanpool match service available to persons living and/or working in the County. This service is part of a network of Washington Metropolitan commuter transportation organizations and is coordinated by Metropolitan Washington Council of Governments (MWCOG).

Biking to Work

Literature on biking to work in the Washington Metropolitan Area is produced by Commuter Connections and the Washington Area Bicyclist Association. This guide, written for employers and employees, promotes cycling as a healthy, clean, quiet, economical, and fun way to get to work. The County annually participates in the regional "Bike to Work Day" activities. In Spring 2015, the County installed bicycle racks on all of TheBus fixed-route vehicles to continue supporting residents, visitors and employees who choose to bike in the County.

Prince George's County Vanpool Subsidy Program

Since the startup period for a new vanpool is the most difficult time, any qualifying individual who starts a new vanpool is eligible to receive a generous startup subsidy from the County. This program assists residents seeking to start a new vanpool with startup costs and assistance with finding passengers. This three-month subsidy program covers 100% of the first month's vehicle rental fee (not to exceed $700), 50% of the second month's vehicle rental fee (not to exceed $350), and 25% of the third month's vehicle rental fee (not to exceed $175). A County Rideshare Coordinator is also available to assist groups in forming a vanpool and maintaining ridership.

Park and Ride

Prince George's County in partnership with the state of Maryland and private parking lot owners maintains 13 free park and ride fringe parking lots, conveniently located throughout the County. These lots provide ideal locations for meeting a carpool, vanpool, or for connecting with TheBus, Metrobus or other local transit systems. The 13 lots are:

1. Bowie Fringe Parking: MD Route 197 and Northview Drive
2. South Laurel: MD Route 197 and Briarcroft Lane
3. Montpelier: MD Route 197 and Brock Bridge Road
4. Clinton Fringe Parking: MD Route 5 and Woodyard Road
5. Equestrian Center: MD Route 4 in Upper Marlboro
6. Fort Washington: MD Route 210 and East Swann Creek Road
7. Oxon Hill Fringe Parking: MD Route 210 and Oxon Hill Road
8. Beltway (I-494/I-95): I-95 and the Capital Beltway
9. Laurel Fringe Parking: Sandy Spring Road and Van Dusen Road
10. Accokeek Fringe Parking: MD Route 373 and MD Route 210
11. Bowie Market Place: MD Route 450 and Stoneybrook Drive
12. Capital Plaza Mall: MD Route 450 and Baltimore-Washington Parkway
13. Penn Mar Shopping Center: Donnell Drive and Marlboro Pike

Metrorail

Operated by the Washington Metropolitan Area Transit Authority, (WMATA) Metrorail currently serves 91 stations throughout the Washington Metropolitan Area, much of it underground. The system intersects at various points, along 117 miles of track, making it possible for passengers to travel anywhere on the system. Currently, 15 Metrorail stations are located in the County providing access and convenient to all County residents. The County is one of WMATA's Compact Jurisdictions and subsidizes the cost of all WMATA Bus and Rail service provided in Prince George's County. County Transportation staff work cooperatively with WMATA to plan and enhances existing and future public transit services to complement the County Executive's and Council Member goals to meet the transportation needs of Prince George's County residents, visitors and employees.

TheBus, CALL-A-BUS, and CALL-A-CAB

TheBus is Prince George's County's public transit system. Schedule information is available through the Internet at www.princegeorgescountymd.gov orwww.NextBus.com. Area specific transit guides offer comprehensive information on public transportation, including transit options. As a part of a Washington Metropolitan Area TIGER Grant, our regional partners have installed several real-time information displays at bus stops in the region. In Prince George's County CEIDS technology was installed at bus shelters along Walker Mill Road, Silver Hill Road, and Iverson Street in December 2014 as a part of a regional effort. Ridership for the 28 fixed-routes of transit service provided by TheBus for FY 2015 is approximately 3.7 million passengers. In Spring 2016 patrons will be able to see all of TheBus transit stops on Google ® Maps.

The County also provides a demand response, curb-to-curb service Call-A-Bus, a complementary ADA/Paratransit, curb-to-curb service. Service is available to all residents of Prince George's County who are not served by or cannot use existing bus or rail services. However, priority is given to senior and persons with disabilities. Persons with disabilities must provide their own escort, if needed. Service animals are allowed for the visually impaired.

The Taxicab Licensing Section of the Office of Transportation (formerly in the Department of Environmental Resources) licenses over 2,800 taxicab operators to provide fee-based services to residents and visitors in the County. A subsidy service provided by the County via Maryland state grants is the Call-A-Cab coupon service for seniors and disabled patrons. This program enables seniors and disabled patrons to purchased reduced-price taxicab coupons.

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E. RESTORATION PLANS AND TMDL

1. WATERSHED ASSESSMENTS

Permit Conditions Part IV. E. 1:
a: By the end of the permit term, Prince George's County shall complete detailed watershed assessments for the entire County. Watershed assessments conducted during previous permit cycles may be used to comply with this requirement, provided the assessments include all of the items listed in PART IV.E.1.b. below. Assessments shall be performed at an appropriate watershed scale (e.g., Maryland's hierarchical eight or twelve-digit sub-basins) and be based on MDE's TMDL analysis or an equivalent and comparable County water quality analysis; and
b: Watershed assessments by the County shall:

i. Determine current water quality conditions;
ii. Include the results of a visual watershed inspection;
iii. Identify and rank water quality problems;
iv. Prioritize all structural and nonstructural water quality improvement projects; and
v. Specify pollutant load reduction benchmarks and deadlines that demonstrate progress toward meeting all applicable stormwater WLAs.

Response

Prince George's County, population 871,233 (2011 Maryland State Data Center), is located in the south-central portion of Maryland with a geographic area of 498 square miles, 487 square miles of land and 11 square miles of water. A major drainage divide bisects the County in a north-south direction, with approximately half of the County draining in an easterly direction to the Patuxent River, and the remaining half of the County draining in a westerly direction to the Potomac River. Lands draining to the Patuxent River are primarily located in the County's rural tier and, with the exception of the Western Branch watershed. A map of the County's major watersheds is shown in Figure E-1.

As required by the permit, the County will continue to evaluate its watersheds and will include the following,

- Current water quality conditions;
- Results of a visual watershed inspection;
- Identify and rank water quality problems;
- All structural and nonstructural water quality improvement projects prioritization; and
- Pollutant load reduction benchmarks and deadlines that demonstrate progress toward meeting all applicable stormwater WLAs.

The County intents to use recently developed local TMDL plans as the source of data for this assessment, for watersheds that have no TMDL the County will perform a cursory watershed evaluation using watershed characterization and biological monitoring. To fulfil this requirement, the County plans to submit this analysis by the end of the permit term in January 2, 2019. The County looks forward to meet with MDE to discuss this plan before finalizing.

2. RESTORATION PLANS

Permit Condition Part IV. E. 2. a. Para 1: Within one year of permit issuance, Prince George's County shall submit an impervious surface area assessment consistent with the methods described in the MDE document "Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated, Guidance for National Pollutant Discharge Elimination System Stormwater Permits" (MDE, June 2011 or subsequent versions). Upon approval by MDE, this impervious surface area assessment shall serve as the baseline for the restoration efforts required in this permit.

Response

The County revised its Impervious Area Baseline Assessment that was submitted with the 2014 annual report. The revised assessment along with the supporting documents was submitted to MDE on May 20, 2015. On July 17, 2015, the MDE approved the Impervious Area Baseline Assessment.

Permit Condition Part IV. E. 2. a. Para 2: By the end of this permit term, Prince George's County shall commence and complete the implementation of restoration efforts for twenty percent of the County's impervious surface area consistent with the methodology described in the MDE document cited in PART IV.E.2.a. that has not already been restored to the MEP. Equivalent acres restored of impervious surfaces, through new retrofits or the retrofit of pre-2002 structural BMPs, shall be based upon the treatment of the WQv criteria and associated list of practices defined in the 2000 Maryland Stormwater Design Manual. For alternate BMPs, the basis for calculation of equivalent impervious acres restored is based upon the pollutant loads from forested cover.

Response

The GIS reconciliation during this reporting period has enabled the determination of the County's Impervious Area Baseline. The Impervious Area Baseline represents 6,105 acres to be restored by the end of the current permit term. This was determined from the 20-percent impervious restoration requirements of the Impervious Area Baseline Assessment for the fourth generation NPDES permit. To meet this requirement by the end of the permit term, the County would need to restore approximately 1,500 acres annually from this time onward. The County has the following strategies to help achieve this goal:

Programs	Impervious Acreage (acres)
Corvias Solutions[1]	2,006
CIP	2,099
Street Sweeping[2] (4 sweepers, 0.13 EIA[3]/acre)	2,000
TOTAL	***6,105***

[1]*Clean Water Partnership consultant for the implementation of the clean water retrofit program.*
[2]*Street sweeping calculations are based on 4 sweepers covering 12 miles per day per sweeper. Assuming 250 working days per year, each sweeper will cover 3,000 miles a year. The 3000 miles will translate into 567 equivalent impervious acres assuming 12 feet swept width.*
[3]*Equivalent Impervious Area*

The reconciled data can now be queried to determine restoration progress on an annual basis through the as-built year field. Using this method, 626 acres had already been restored as of April 1, 2015, in the County. These restoration acres were accounted for in the Impervious Area Baseline Assessment that was submitted to MDE on May 20, 2015. Between April 1, 2015, and end of this reporting period, (June 30, 2015), the County further restored approximately 35 acres through CIP in three watersheds (Table E-1). A complete list of these projects is provided in an excel file on DVD, Restoration Plans and TMDL \Restoration Plans \Current Restoration Work.

Table E-1. Impervious Acres Restored as of June 30, 2015, per Watershed through CIP

Watershed Code	Watershed Name	Number of Projects	Impervious Acres Restored (Impervious Acres)	Cost ($)*K
2131103	Western Branch	2	1.62	$484
2140201	Potomac River Upper Tidal	4	17.4	$1,276

Watershed Code	Watershed Name	Number of Projects	Impervious Acres Restored (Impervious Acres)	Cost ($)*K
2140205	Anacostia River	4	16.3	$1,478
TOTAL		***10***	***35.32***	***$3,238***

**K (cost in thousands of dollars)*

The types of BMPs utilized are bioretention, stream restoration and stabilization, bioswales, permeable pavers, and rain gardens. Based on CIP projects in various stages of planning, the Table E-2 shows the anticipated impervious acres treated through the currently planned project list. A complete list of these projects is provided in an excel file on DVD, Restoration Plans and TMDL \Restoration Plans \Current Restoration Work.

Table E-2. Summary of the Project under Planning, Design, or Construction during FY 2015

Watershed Code	Watershed Name	Number of Projects	Impervious Acres Restored (Impervious Acres)	Cost ($)*K
2131103	Western Branch	4	174	$3,280
2131104	Patuxent River Upper	3	77	$4,602
2140201	Potomac River Upper Tidal	2	8.4	$1,545
2140203	Piscataway Creek	8	39	$3,833
2140204	Oxon Creek	1	6	TBD
2140205	Anacostia River	14	122	$3,867
TOTAL		***32***	***426.4***	***$17,130***

**K (cost in thousands of dollars)*

In addition to the CIP projects mentioned above, the County is planning to implement the water quality practices identified in the Anacostia Restoration Plan (ARP) through its Clean Water Partnership. Currently, these site locations are being investigated for suitability of installing structural BMPs. Table E-3 shows the expected impervious acres treatment and associated costs for these projects which provide approximately treatment for over 8,000 impervious acres. A complete list of APR projects are provided in an excel file and saved on DVD, Restoration Plans and TMDL\Restoration Plans\Project Under Planning.

Table E-3. Projected Impervious Acres Restoration per Watershed for Meeting the 20-percent Restoration Goal by the End of Permit Term.

Watershed Code	Watershed Name	Number of Projects	Expected Impervious Acres Restoration (Impervious Acres)	Cost ($)*K
2131103	Western Branch	12	60	$5,384
2131104	Patuxent River Upper	1	1	$122.5
2140205	Anacostia River	1,305	8,274	$929,380
TOTAL		***1,318***	***8,334***	***$934,887***

**K (cost in thousands of dollars)*

In addition to the projects listed above, approximately 4 acres of impervious area restoration is expected through Prince George's County Stormwater Stewardship grant program. Details of this program are provided on page 121.

Permit Condition Part IV. E. 2. b: Within one year of permit issuance, Prince George's County shall submit to MDE for approval a restoration plan for each stormwater WLA approved by EPA prior to the effective date of the permit. The County shall submit restoration plans for subsequent TMDL WLAs within one year of EPA approval. Upon approval by MDE, these restoration plans will be enforceable under this permit. As part of the restoration plans, Prince George's County shall:

i. Include the final date for meeting applicable WLAs and a detailed schedule for implementing all structural and nonstructural water quality improvement projects, enhanced stormwater management programs, and alternative stormwater control initiatives necessary for meeting applicable WLAs;

ii. Provide detailed cost estimates for individual projects, programs, controls, and plan implementation;

iii. Evaluate and track the implementation of restoration plans through monitoring or modeling to document the progress toward meeting established benchmarks, deadlines, and stormwater WLAs; and

iv. Develop an ongoing, iterative process that continuously implements structural and nonstructural restoration projects, program enhancements, new and additional programs, and alternative BMPs where EPA approved TMDL stormwater WLAs are not being met according to the benchmarks and deadlines established as part of the County's watershed assessments.

Response

To address all TMDLs with stormwater WLAs that impact County water bodies, a total of six separate restoration plans were developed and presented to the State in January 2015. These six plans and the stormwater pollutants they address are given in Table E-4.

The County received MDE comments on its restoration plans in May 2015 and has begun the process of addressing these comments. It is anticipated that all of the comments will be addressed satisfactorily to both parties in the coming months and new revised restoration plans will be submitted to the State by early 2016. The anticipated significant revisions to the restoration plans include the following:

- Revise the proposed annual stream restoration targets in the Anacostia watershed to more reflect previous annual restoration efforts,
- Revise the proposed annual street sweeping targets and anticipated load reductions in the Anacostia watershed,
- Document clearly that a load reduction gap exists for Total Nitrogen in the Anacostia watershed upon full implementation of restoration activities,
- Revise certain values in the plans to ensure consistency in each plan and perform various editorial changes, and
- Provide more detailed explanation on the County's Watershed Treatment Model (WTM) that establishes the baseline conditions.

The County has begun to initiate various restoration activities that are outlined in its restoration plans. The Clean Water Partnership (formerly called the Private Public Partnership) has begun the process of identifying suitable retrofit sites and developing concept design plans. Similarly, the County's CIP is continuing to implement projects throughout the County and has retrofit projects in the planning stages that cover over 500 acres of impervious area. The County has also begun the process of identifying suitable streets for initiating an enhanced street sweeping program that meets MDE established minimum requirements for pollutant load reductions and impervious acre credits. The

County plans to have this program in place by 2017 and have it provide an annual impervious acre credit of approximately 2,000 acres.

Plan Development

The overall goals of the restoration plans are to:

- Improve watershed health, including hydrology, water quality, and habitat, using a balanced approach that minimizes negative impacts.
- Support compliance with regional, state, and federal regulatory requirements.
- Increase awareness and stewardship within the watershed, including encouraging policy makers to develop policies that support a healthy watershed.

Each plan listed in Table E-4 present an overall strategy to manage urban stormwater and limit the amount of pollutants reaching the County's water bodies. The plans include a methodology to calculate pollutant load productions from different urban land types along with anticipated pollutant load reductions from a variety of restoration activities. Using an iterative approach, the plans develop an optimal mix of restoration activities that are implemented to different levels of efforts to attain the necessary stormwater WLA across all County watersheds. Finally the plans provide an implementation timeline that accounts for the estimated costs of implementing and maintaining restoration activities and the county's available funding sources. For each pollutant, the implementation timeline estimate an end date for when its stormwater WLA is anticipated to be met assuming full implementation of restoration activities. Given the uniqueness of this effort, the plans offer an adaptive management option to allow changes, as required, when more information about the effectiveness of implementation strategies of the restoration activities are better known.

Table E-4. Prince George's County Restoration Plan Reports

Report Plans 2014	Pollutants
Restoration Plan for the Anacostia River Watershed	Nitrogen, Phosphorous, Sediment, BOD, Bacteria
Implementation Plan for the Anacostia River Watershed Trash TMDL	Trash
Restoration Plan for the Mattawoman Creek Watershed	Nitrogen, Phosphorus
Restoration Plan for the PCB-Impacted Water Bodies*	PCBs
Restoration Plan for the Piscataway Creek Watershed	Bacteria
Restoration Plan for the Upper Patuxent River and Rocky Gorge Reservoir Watersheds	Phosphorus, Sediment, Bacteria

** PCB-impacted water bodies include County portions of Anacostia River, Mattawoman Creek, Piscataway Creek, and Potomac River.*

Restoration Activities

A variety of restoration activities are being implemented, which include both on-the-ground BMP and programmatic initiatives. On-the-ground BMP practices include ESD practices such as permeable pavements, disconnection of rooftop runoff, and micro-bioretention, and structural BMPs such as infiltration practices and wet ponds. On-the-ground BMP projects consist of both retrofits of older stormwater management facilities for better removal of pollutants and installation of new facilities. Various programs exist in the County that are utilized to install structural BMPs on both public and private lands. Some of these programs are:

- Stormwater Management Program,
- Clean Water Partnership (CWP) program,
- Rain Check Rebate Program,
- Countywide Green/Complete Streets program,
- Alternative Compliance Program, and
- Prince George's County Stormwater Stewardship Grant Program

Programmatic initiatives consist of enhancing programs to promote tree planting, domestic and urban animal control, pet waste pickup, and residential/commercial lawn care education amongst other programs. These involve an expanded public outreach campaign to inform the public of ways they can contribute to the restoration of the local watersheds. The County will initiate and strengthen various County programs to support these initiatives.

The key revenue sources that will provide funding for the restoration programs are from the County's CIP, the stormwater ad valorem tax, and the Clean Water Act fee. In addition to these, grants from federal, state, and other sources will be pursued and are expected to be an essential contribution for funding of restoration activities.

Stormwater Management Program

Restoration activities under Stormwater Management Program within this reporting year are discussed in details on page 33.

Clean Water Partnership (CWP) Program

In March 2015 the Master Program Agreement (MPA) was executed with Corvias Solutions for the initiation of work described in the Master Agreement. During the period of April through June 2015 the following activities and accomplishments were made during the period as described below.

Initial Planning, Scope Development, and Site Selection- The Program was formally initiated and the Clean Water Partnership (CWP) commenced defining and documenting processes to manage the Program including developing a site selection process and methodology that would define, articulate, quantify, and prioritize sites to achieve the goals and objectives of the Program of retrofitting 2,000 acres. These initial steps will carry-forward through-out the program's subsequent planning phases for the development of detailed scope, requirements, and design for the execution of construction in future months. Moreover, these activities included facilitated workshops/program implementation meetings with subject matter experts and stakeholders to discuss and define requirements including defining functional and performance requirements for BMPs; quality requirements; assumptions and constraints; business rules; and development of acceptance criteria.

Social and Economic Development- During this period the Social and Economic Development Plan was developed for submission and approval by the County. In addition, various activities were initiated in support of the CWP including the End Time Harvest Ministries (ETHM); Collaboration with SD3; Proposals for Strom Water instruction for Contractors and Workforce Development

Community Outreach:

Faith Based Community – Engagement with the Faith based community has been best exhibited through our work of the Alternative Compliance Program, an elective partnership between Prince

George's County and qualified 501(c) nonprofit organizations and tax-exempt faith-based organizations to improve County water quality by reducing and treating stormwater runoff. To date, the CWP team has met with 2-3 churches per month, listening to their stormwater concerns, and creating a concept that is both cost efficient and functional to that specific church's needs. In some cases, several rounds of meetings were held to perfect the concept. Community Volunteer Engagement - The CWP team members participated in the 25th Annual Anacostia Watershed Society's (AWS) Earth Day Clean-up. Corvias employees, alongside teaming partners, Maryland Environmental Services and Soltesz, worked with students, business leaders and other members of the community cleaning neighborhoods, parks, streams, and the Anacostia River. For the second year in a row, the team strapped up their mud boots and trampled through the wooded trails seeking and removing buried trash and other harmful debris.

Students Enrichment – End Time Harvest Ministries (ETHM), a Prince George's County based non-profit, was built on empowering youth through various educational, social and economic life skills. In summer 2015, the CWP supported a program in which the ETHM students learned of the importance of stormwater management and were trained in its various components. Over the course of 6 weeks, 46 students went to work mitigating stormwater runoff by building and sustaining bio-retention cells and rain gardens, and installing rain barrels. These students not only learned about the work processes of stormwater management but also how the environment impacts the health of their communities.

Non-profits, County agencies and Local Business Outreach – The CWP initiated its efforts to "formally meet the community" and therefore participated in various in and around the County including conducting program overview presentations, speaking on panels, and networking, and local and regional conferences to engage the community.

Sample of Contractor Outreach Efforts:

- Maryland Department of Transportation Application Assistance Workshop
- Prince Georges County Community College Stormwater Symposium
- MBE University and Prince Georges County Conference and Expo
- Prince Georges County Procurement Outreach w/SD3
- Blue Book Fed Ex Field
- Prince Georges Chamber of Commerce Green Committee Speaker
- Prince Georges Chamber of Commerce Small and Minority Business Meeting
- Purple Line Contactor Event and Vendor Fair MTA
- Urban watershed Restoration Course Speaker
- NCCER Build your own Future Initiative
- BBI Business Match Up (Speed Dating)
- Energy Sustainably at University of Maryland University College

Rain Check Rebate Program

Since Prince George's County initiated the Rain Check Rebate Program back in 2013, the program has become a great incentive for County property owners interested in installing approved stormwater management practices on their properties. Many of the property owners in this County are interested in helping to minimize stormwater runoff and prevent stormwater pollution in our waterways, but lacked the funding to install BMP practices on their property to help with stormwater runoff and stormwater pollution. The program provides eligible applicants the opportunity to receive rebates for

installing approved stormwater management practices. Homeowners, businesses, homeowner associations, condominium associations, multi-family dwellings, and nonprofit entities (including housing cooperatives and faith-based institutions) can recoup some of the costs of installing practices covered by the program. To ensure the continued success of this program, public outreach events are conducted to promote the adoption of endorsed stormwater management practices and gain maximum participation by the property owners in the County. Another incentive for property owners to participate in the Rain Check Rebate Program is they are eligible for a fee reduction credit on the Clean Water Act Fee located on their tax bill for installing stormwater management practices on their property. Table E-5 identifies the overall performance of the program in 2015.

In July of 2014, DOE partnered with the Chesapeake Bay Trust (CBT) to begin administering the functions of public education and outreach, administration and operation of grant-funded stormwater management water quality improvement projects, and dedicated resources for applicant guidance and support on applications, BMP selection and installation practices. With CBT's efforts, DoE has seen an increase in the programs participation by property owners.

DoE also partnered with the Low Impact Design Center and conducted a Contractors Certification Program. The program provided an opportunity for professional landscapers and other green businesses to attend and complete a non-credit training program in non-structural BMP selection, installation, and maintenance practices. The training course was held in the 2014 fall semester and 2015 spring semester at the Prince George's County Community College. The program provides a list of "qualified contractors" to property owners looking for services under the Rain Check Rebate Program, at the same time supporting the County's Jobs First Act in developing and promoting local business development and job growth.

On November 19, 2014, under Council Bill CB-86-2014, County Council adopted legislation amendments to the Rain Check Rebate Program. The legislation amendments increased the rebate rates and residential rebate ceiling from $2,000 to $4,000 to promote increased participation. With the rebate increase, we have seen a large jump in residential applications. More information on the Rain Check Rebate program is provided on DVD, Restoration Plans and TMDL\Rain Check Rebate.

Table E-5. Rain Check Rebate Performance

Projects	Number of Applications Received	Number of Applications Denied	Number of Applications Approved	Total Amount of Rebate Approved
Rain Barrels	27	6	21	$2,394.98
Rain Gardens	9	1	8	$10,240.45
Permeable Pavement	6	0	6	$11,372.00
Pavement Removal	13	1	12	$16,888.00
Urban Tree Canopy	19	1	18	$9,643.09
Cisterns	4	1	3	$2,950.00
TOTAL	***78***	***10***	***68***	***$53,488.52***

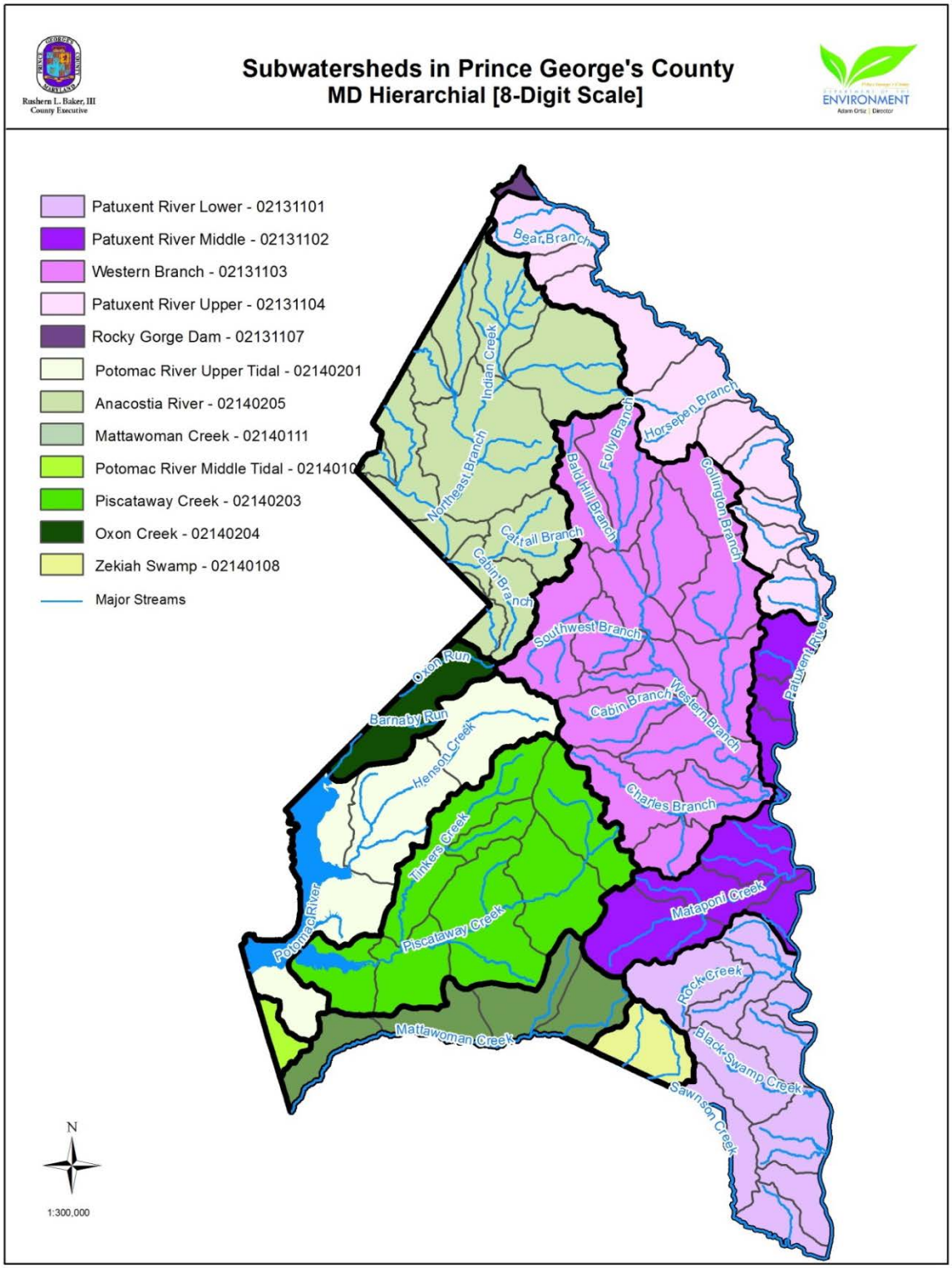

Figure E-1. Major Watersheds

Rushern L. Baker, III
County Executive

FY2015 Rain Check Rebate Program
Program Performance Summary

ENVIRONMENT
Adam Ortiz | Director

	COUNTY	Breakout by District								
	TOTALS	Dist. 1	Dist. 2	Dist. 3	Dist. 4	Dist. 5	Dist. 6	Dist. 7	Dist. 8	Dist. 9
Total Number Applications Received	127	18	38	20	4	17	5	6	9	10
Total Number Applications Denied	15	3	1	0	1	3	0	0	4	3
Total Number Applications Approved	68	10	23	12	3	4	5	1	5	5
Total Number Applications In Process	44	5	14	8	0	10	0	5	0	2
Total Amount of Rebate Approved	$56,235	$7,387	$23,959	$5,499	$2,518	$3,750	$2,270	$294	$3,708	$6,850

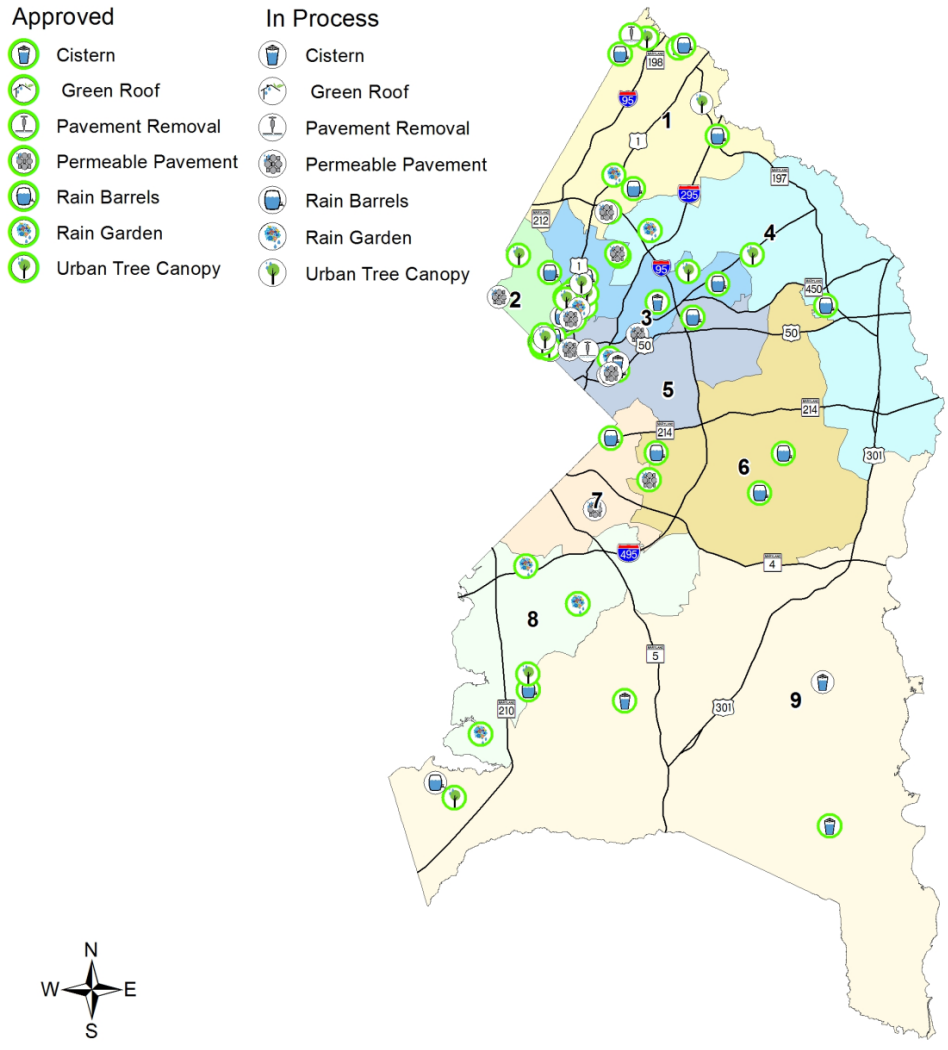

Figure E-2. Rain Check Rebate Performance

Countywide Green/Complete Streets Program

DPW&T initiated a Countywide Green/Complete Streets Program during the 2011 reporting year as a strategy for addressing mounting MS4 and TMDL treatment requirements. The program seeks out opportunities to incorporate stormwater control measures, environmental enhancements, and community amenities within the DPW&T Capital Improvement Projects. The types of enhancements that are being evaluated include low impact design, tree shading, ESD in the right-of-way, energy efficient lighting, and the utilization of recycled materials. The County is developing a document that allows for green infrastructure incorporation into street retrofits and newly designed roadways. The document proposes techniques for a "road diet," including reducing the right-of-way width and existing impervious surfaces, roadway grade changes to allow center flow to medians, and BMPs to improve water quality.

An evaluation of the County's standard roadway cross-sections and details was also conducted to identify where existing roadway standards could be modified. DPW&T has initiated the process of examining where the Standard Street Section and Standard Details need revision and updating to increase the opportunity for water quality BMP incorporation within the right-of-way. DPIE is spearheading a committee to determine how new development can manage the stormwater generated from roadway areas within the right-of -way and remove impediments.

The first Green/Complete Street project to be constructed is the Ager Road project. This project will use vegetated swales (bio-swales and bio-filtration), inlet filtration devices, modular wetlands, outfall protection, and stream restoration within the right-of-way to address TMDL load reductions. In addition to the green components of the project, the design incorporates linked pathways for pedestrians, bus shelters, street furniture, light-emitting diode (LED) lighting, and integrated bike lanes, making this a true Green/Complete Street. DPW&T's OEPM has incorporated Green/Complete Street design elements into additional highway and bridge projects. A spreadsheet of Green/Complete Streets currently in various stages of development is provided on DVD, Restoration Plans and TMDL.

The Green/Complete Street projects are implemented as retrofits to existing roadways and present a multitude of challenges. Typically, retrofitting existing roadways requires utility and infrastructure relocation, citizen involvement and perception, and regulatory compliance. Due to the complexity of a typical green/complete street project, the projected timeframe for completion from inception to construction may take 5 years. Wherever feasible, projects will incorporate new SWM BMPs to provide treatment for legacy roadways when roadway maintenance includes major reconstruction.

Alternative Compliance Program

Alternative Compliance is a unique partnership between Prince George's County and qualified tax-exempt religious organizations or other 501(c) nonprofit organizations to improve water quality in the County's waterways by reducing and treating stormwater runoff. Nonprofits who participate in Alternative Compliance are eligible to receive a reduction in their Clean Water Act Fee by choosing one or more of the following options:

Option 1: Provide Easement – (50% fee reduction)

Property owner agrees to provide to the County a *Temporary Right-of-Entry Agreement* and *Temporary Construction Easement* for the County to install stormwater best management practices (BMPs) on the property owned by the organization.

AND

To continue receiving the 50% impervious area fee reduction credit, property owner is required to sign a *Maintenance Agreement* and continuously maintain the installed BMPs which are subjected to a tri-annual inspection by the Department of the Environment.

Option 2: Outreach and Education – (25% fee reduction)

Property owner agrees to take part in the County's education and outreach campaign to encourage other property owners as well as members of their organization to participate in the County's *Rain Check Rebate Program* to contribute toward the restoration and protection of the County watersheds.

AND/OR

Property owner agrees to host County's representative to organize and/or conduct annually one (1) of the following activities.

- On-site trash Pick-up event
- On-site recycling and better waste management
- Host a Rain Check Rebate Program
- Plant at least five (5) trees on site *(trees provided through the county "Rain Check Program")*

Option 3: Green Care and Good Housekeeping - (25% fee reduction)

Property owner agrees to use lawn management companies* that are certified in the proper use and application of fertilizers in connection with their landscaping and lawns.

** Companies must be listed in the Maryland Department of Agriculture's searchable pesticide database under the appropriate license category (http://www.kellysolutions.com/md/pesticideindex.htm)*

AND/OR

Property owner agrees to good house-keeping practices for ensuring clean lots and pledges at least three (3) of the following activities

- Reduce or eliminate fertilizer and pesticide use and application.
- Conserve water and use water-saving landscape practices.
- Establish and maintain healthy vegetative cover on the grounds of their property.
- Keep their site clean by regularly sweeping up trash and debris.
- Responsibly manage common chemicals used and stored on their property, and to properly dispose of hazardous products or materials.
- Practice proper pollution prevention measures.

Note: Under options 2 and 3, the organization agrees to conduct the selected activity on an annual basis in order to continue reduction the fee reduction credit

As of June 30, 2015, DoE have received and processed 125 applications from qualified Faith Based Organizations and have conducted about 30 site visits to discuss BMP conceptual planning with property owners. DoE have formed Clean Water Partnership (CPW) with Corvias and many local firms to implement Option 1 by designing, building and maintaining BMP facilities for a 30 years period. Also a public website is being developed to allow Option 2 and Option 3 participant to self-report the yearly activities/event that they have undertaken in order to for DoE to keep monitoring and accessing the

impact theses activity on the environment and to keep engaging and educating the community about clean water issues.

Prince George's County Stormwater Stewardship

The Prince George's County Department of the Environment (DoE) and the Chesapeake Bay Trust (Trust) provided the Prince George's County Stormwater Stewardship grant program in FY 2015. The collaborative Stormwater Stewardship Grant Program encouraged on-the-ground restoration activities that reduce nutrient and sediment pollution and community education activities that engage Prince George's County neighborhoods, faith-based organizations, non-profits, and residents in the restoration and protection of local rivers, streams, parks, and other natural resources. This grant program is funded by the Clean Water Act Fee and administered by the Chesapeake Bay Trust.

The Stormwater Stewardship Grant Program sought proposals in two specifics areas: water quality projects that achieve nutrient and/or sediment reduction (funding from $20,000 - $200,000 was available for each project); and engagement projects that aim to involve residents in efforts to improve local watersheds ($5,000 - $50,000 was available per project). Non-profit organizations, community associations, civic groups, and faith-based organizations were encouraged to apply, as well as municipalities, higher educational institutions, and public agencies.

The Request for Proposal was announced in July 2014, the deadline for applications was September 18, 2014, the applications were reviewed and recommended to fund or decline by the Technical Review Committee, and awards were announced in December 2014. The grant program received 26 applications that requested $2,079,374. In total, $1,050,000 was awarded through 13 projects. The projects that were funded in the FY 2015 grant program include on-the-ground efforts such as rain gardens, bioretention practices, and impervious pavement removal as well as outreach campaigns related to green workforce development and stormwater management. Finally, the FY 2015 grants included 8 water quality projects (many of these incorporate citizen engagement aspects also) and 5 citizen engagement projects that focus on education and outreach efforts.

The FY 2015 grants are underway and on track to meet the outreach and restoration outcomes proposed. The Trust works with each grantee throughout the process and provides quarterly status reports to DoE that detail each grantee's progress and funds expended. A few examples of project progress include:

Town of Landover Hills (CBT grant #12732, $126,578) will install rain gardens, a bioretention swale, and use permeable pavers as a decorative walkway with the New Hope Academy who will incorporate the stormwater project as part of their education lessons. This project submitted full designs to DPIE and will begin construction in the next few months.

The Low Impact Development Center, LLC (CBT grant # 12733, $55,895) installed all seven of the Rain Check Rebate practices at Behnke's Nursery in Beltsville, Maryland. This project is complete and already attracting new applicants to the Rain Check Rebate program for Do It Yourself gardens and landscapers that visit the nursery.

The Neighborhood Design Center (CBT grant #12750, $79,308) is working with the City of Hyattsville, the Town of Riverdale Park, Kenmoor Middle School, Gwynn Park High School, Eleanor Roosevelt High School, the Hamptons HOA, and Southern Friendship Missionary Baptist Church to provide stormwater

support. This support has included, to date, five design and engagement workshops and compiling each community's vision into a design and development plan that they can use to implement projects.

Table E-6 includes the FY 2015 grant program awarded. Also, a brief description for each grant award is provided in the bulleted list below Table E-6.

Table E-6. Grant Awarded Through the First Solicitation (FY 2015) of the Stormwater Stewardship Grant Program

Grant #	Title	Applicant	Type of Grant	Proposed Impervious Acreage Treated (acres)	Award Amount
12726	Prince George's Green Clean Water Education and Outreach	Alice Ferguson Foundation	Outreach		$23,836.00
12727	District Heights Rain Garden	City of District Heights	Water Quality	0.30	$34,862.00
12732	Landover Hills Community Rain Gardens	Town of Landover Hills	Water Quality	0.76	$126,578.00
12733	Behnke Nurseries Rain Check Rebate Demo	Low Impact Development Center, Inc. (The)	Water Quality	0.06	$55,895.00
12734	Track 2 Citizen Engagement - Treekeepers of Forest Heights	Town of Forest Heights	Outreach		$49,794.00
12735	National Capital Region - Watershed Stewards Academy	Anacostia Watershed Society	Outreach/Water Quality	0.12	$48,000.00
12736	Track 1 Water Quality - Narragansett Pkwy & Muskogee St Stormwater Treatment and Outreach Project	City of College Park	Water Quality	0.53	$66,180.00
12738	Track 1 Water Quality Buddy Attick Park Parking Lot Stormwater Management Demonstration and Water Quality Treatment Project	City of Greenbelt	Water Quality	0.95	$187,700.00
12741	Track 2 Pheasant Run HOA Stormwater Awareness Projects	Pheasant Run Home Owner's Association, Inc.	Outreach		$11,730.00
12742	Faithful Stewards Restoring Watersheds -	Alliance for the Chesapeake Bay	Outreach		$25,000.00

Grant #	Title	Applicant	Type of Grant	Proposed Impervious Acreage Treated (acres)	Award Amount
	Track 2 Citizen Engagement				
12747	Track 1 Water Quality - SOMA and The Empowerment Institute	The Empowerment Institute	Water Quality	0.47	$152,145.00
12750	Track 2: Stormwater Savvy: Transforming Community Vision into Implementable Design	The Neighborhood Design Center	Outreach		$79,308.00
12751	Track 1 & 2: Improving Water Quality with Stormwater BMPs and Education at Alice Ferguson Foundation's new Potomac Watershed Study Center	Alice Ferguson Foundation	Outreach/Water Quality	0.61	$188,972.00
TOTAL				***3.80***	***$ 1,050,000.00***

Grants approved in December 2014 include:

1. Alice Ferguson Foundation, $23,836: This grant funds the development of a clean water educational course for citizens who are interested in obtaining stormwater management jobs.
2. City of District Heights, $34,862: This grant will support the design and installation of a highly visible rain garden to allow the area to better handle stormwater runoff while promoting green infrastructure.
3. Town of Landover Hills, $126,578: Funding through this project will install rain gardens, a bioretention swale, and permeable pavers as a centerpiece in a community park.
4. The Low Impact Development Center, Inc., $55,895: This project will provide a highly visible demonstration area for the seven stormwater practices promoted by Prince George's County's Rain Check Rebate Program.
5. Town of Forest Heights, $49,794: This grant will train a team of high school students to water, weed and mulch 500 street trees as well as educate homeowners about the benefits of trees on their own properties.
6. Anacostia Watershed Society, $48,000: This grant will educate and train residents in watershed protection issues and empower them to design and implement projects that prevent stormwater runoff and engage additional community members.
7. City of College Park, $66,180: This project will treat stormwater flowing from roadways and demonstrate the use of bioretention, tree planting, and tree boxes for improved stormwater management.

8. City of Greenbelt, $187,700: This project will include the redesign, retrofit, and treatment of impervious surface, replacing it with low impact development techniques and environmental site design practices.
9. Pheasant Run Home Owner's Association, Inc., $11,730: This grant will fund a citizen engagement campaign focused on erosion, stormwater runoff, and pet waste reduction. Alliance for the Chesapeake Bay, $25,000: This initiative will include workshops to educate faith leaders on stormwater runoff and provide tools to help congregations overcome technical and financial obstacles to project implementation.
10. The Empowerment Institute, $152,145: This grant will remove 20,000 square feet of existing asphalt and replace it with stormwater facilities with native plants to help filter and store rain water.
11. Neighborhood Design Center, $79,308: Funding will assist community groups, small municipalities, schools, and faith based organizations with creating a comprehensive plan for how they can retain and treat stormwater on their property, rather than having it flow into storm drains and local waterways.
12. Alice Ferguson Foundation, $188,972: This grant includes construction of a rooftop rainwater collection system and cistern, rain garden and bioswale as well as educational programming for students, teachers, and Prince George's County residents.

3. PUBLIC PARTICIPATION

Permit Conditions Part IV. E. 3: Prince George's County shall provide continual outreach to the public regarding the development of its watershed assessments and restoration plans. Additionally, the County shall allow for public participation in the TMDL process, solicit input, and incorporate any relevant ideas and program improvements that can aid in achieving TMDLs and water quality standards. Prince George's County shall provide:

a. Notice in a local newspaper and the County's web site outlining how the public may obtain information on the development of watershed assessments and stormwater watershed restoration plans and opportunities for comment;
b. Procedures for providing copies of watershed assessments and restoration plans to interested parties upon request;
c. A minimum 30 day comment period before finalizing watershed assessments and stormwater watershed restoration plans; and
d. A summary in each annual report of how the County addressed or will address any material comment received from the public.

Response

In mid-July, 2014, two public meeting were held during the initial development phase of the restoration plans. They broadly presented the County's vision and method to develop the plans. The draft restoration plans were finalized in October 2014. At that time the plans were posted online for public review and comment. The County finalized all plans and submitted them to MDE for review and approval on January 2, 2015 as required by it's the County's MS4 permit.

Looking forward DoE is partnering with the CBT to leverage CBT's experience and expertise with public education and outreach, administration and operation of grant-funded stormwater management water quality improvement projects, and dedicated resources for applicant guidance and support on applications, BMP selection and installation practices. DoE looks to guide CBT efforts to increase program participation through continued emphasis on residential property owners and focused outreach and participation with our commercial, industrial, municipal, and non-profit property owners.

DoE will also evaluate Rain Check Rebate integration opportunities with the Public Private Partnership (P3) contract. Opportunities may include communitywide outreach to install eligible rebate practices, perform energy audits, and install green energy practices (i.e., solar systems) and maintenance operations.

Additionally, DoE is partnering with the Low Impact Design Center to implement a Contractors Certification Program. The program will provide opportunity for professional landscapers and other green businesses to attend and complete a non-credit training program in non-structural BMP selection, installation, and maintenance practices. DoE is working with the Low Impact Design Center and Prince George's County Community College to implement the course during the fall of 2014. This program will provide a list of "qualified contractors" to property owners looking for services under the Rain Check Rebate Program, at the same time supporting the County's Jobs First Act in developing and promoting local business development and job growth.

To enhance the program, promote increased participation, and expanded opportunities to community oriented projects, DoE is considering the following program enhancements:

- Increased rebate rates (promote stronger incentive for higher cost/higher yield practices such as pavement removal, and permeable pavement installation);
- Increased residential rebate ceilings (promote multiple single property project installations); and
- Allow "common area" properties (homeowner and civic associations to participate with Rebate Program) to take advantage of larger scale treatment opportunities. DoE will work with Council on legislative amendments as necessary to implement recommended revisions.

4. TMDL COMPLIANCE

Permit Condition Part IV. E. 4: Prince George's County shall evaluate and document its progress toward meeting all applicable stormwater WLAs included in EPA approved TMDLs. An annual TMDL assessment report with tables shall be submitted to MDE. This assessment shall include complete descriptions of the analytical methodology used to evaluate the effectiveness of the County's restoration plans and how these plans are working toward achieving compliance with EPA approved TMDLs. Prince George's County shall further provide:

a. *Estimated net change in pollutant load reductions from all completed structural and nonstructural water quality improvement projects, enhanced stormwater management programs, and alternative stormwater control initiatives;*
b. *A comparison of the net change in pollutant load reductions detailed above with the established benchmarks, deadlines, and applicable stormwater WLAs;*
c. *Itemized costs for completed projects, programs, and initiatives to meet established pollutant reduction benchmarks and deadlines;*
d. *Cost estimates for completing all projects, programs, and alternatives necessary for meeting applicable stormwater WLAs; and*
e. *A description of a plan for implementing additional watershed restoration actions that can be enforced when benchmarks, deadlines, and applicable stormwater WLAs are not being met or when projected funding is inadequate.*

Response

During the reporting period, through constructed restoration BMPs, the County has achieved an estimated annual load reductions of TN around 228 lbs., TP around 183 lbs., and TSS around 334 tons in three major watersheds from a total of 35.3 acres of impervious restoration (Table E-7).

Table E-7. Load Reduction Achieved as of June 30, 2015, per Watershed through CIP

Watershed Code	Watershed Name	Number of Projects	Load Reduced			Cost ($)*K
			TN (lbs/year)	TP (lbs/year)	TSS (tons/year)	
2131103	Western Branch	2	12	9	16	$484
2140201	Potomac River Upper Tidal	4	91	79	144	$1,276
2140205	Anacostia River	4	125	95	174	$1,478
TOTAL		***10***	***228***	***183***	***334***	***$3,238***

**K (cost in thousands of dollars)*

The types of BMPs utilized are bioretention, stream restoration and stabilization, bioswales, permeable pavers, and rain gardens. Based on CIP projects in various stages of planning, the Table E-8 shows the anticipated load reductions through the currently planned project list.

Table E-8. Projected Load Reduction by the Permit Term per Watershed through Projects under Planning, Design, or Construction

Watershed Code	Watershed Name	Number of Projects	Load Reduced			Cost ($)*K
			TN (lbs/year)	TP (lbs/year)	TSS (tons/year)	
2131103	Western Branch	4	900	155	51	$3,280
2131104	Patuxent River Upper	3	399	94	77	$4,602
2140201	Potomac River Upper Tidal	2	42	32	56	$1,545
2140203	Piscataway Creek	8	223	82	108	$3,833
2140204	Oxon Creek	1	45	41	74	TBD
2140205	Anacostia River	14	702	125	60	$3,867
TOTAL		***32***	***2311***	***529***	***426***	***$17,130***

**K (cost in thousands of dollars)*

The above load calculations are performed using the guidance reported in "Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated" document from MDE (August 2014). The generated loads are computed using the CBWM version 5.3.2 values for urban impervious and urban pervious loads.

In addition to the CIP projects mentioned above, the County is planning to implement the water quality practices identified in the Anacostia Restoration Plan (ARP) through its Clean Water Partnership.

Currently, these site locations are being investigated for suitability of installing structural BMPs. Table E-9 shows the expected load reductions and associated costs for these ARP projects which provide approximately treatment for over 8,000 impervious acres.

Table E-9. Projected Load Reduction per Watershed by the End of Permit Term.

Watershed Code	Watershed Name	Number of Projects	Load Reduced				Cost ($)*K
			TN (lbs/year)	TP (lbs/year)	TSS (tons/year)	Bacteria (MPNB/yr)	
2131103	Western Branch	12	944	96	24	36,027	$5,384
2131104	Patuxent River Upper	1	12	1.66	0.48	438	$122.5
2140205	Anacostia River	1,305	80,650	9,225	2,245	2820,715	$929,380
TOTAL		***1,318***	***81,607***	***9,323***	***2,274***	***2857,180***	***$934,887***

**K (cost in thousands of dollars)*

The County is in the process of revising its restoration plans per MDE comments and will re-submit the plans in early 2016. Specific restoration milestones will be specified in those plans that future restoration activities can be measured against. The restoration activities completed in the first half of 2015 will also be reflected in the plans. A complete list of CIP and ARP projects is provided on DVD, Restoration Plans and TMDL\TMDL.

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F. ASSESSMENT OF CONTROLS

Permit Condition Part IV. F: Assessment of controls is critical for determining the effectiveness of the NPDES stormwater management program and progress toward improving water quality. The County shall use chemical, biological, and physical monitoring to assess watershed restoration efforts, document BMP effectiveness, or calibrate water quality models for showing progress toward meeting any applicable WLAs developed under EPA approved TMDLs identified above. Additionally, the County shall continue physical stream monitoring in the Black Branch watershed to assess the implementation of the latest version of the 2000 Maryland Stormwater Design Manual.

Response

As part of its stormwater management activities, Prince George's County (the County) has developed a long-term, multi-objective monitoring program that also satisfies monitoring requirements for the countywide NPDES MS4 permit. Since June 2007, the County has conducted chemical, physical, and biological monitoring in the Bear Branch Watershed to assess watershed improvement as the result of several restoration retrofits and other environmental improvement efforts. The County also conducts physical monitoring in the Black Branch Watershed (BBW) to determine the effectiveness of its stormwater management practices for stream channel protection. Complete annual reports of monitoring with supporting documents for Bear Branch and Black Branch are provided in their respective folders on DVD, Assessment of Controls.

1. WATERSHED RESTORATION ASSESSMENT

Permit Condition Part IV. F. 1: The County shall continue monitoring the Bear Branch watershed, or, select and submit for MDE's approval a new watershed restoration project for monitoring. Monitoring activities shall occur where the cumulative effects of watershed restoration activities can be assessed. One outfall and associated in-stream station, or other locations based on a study design approved by MDE, shall be monitored.

Response

The County completed its eighth full year of chemical and physical monitoring and its ninth year of biological and physical surveys in the Bear Branch watershed. The locations of the chemical, biological and physical monitoring stations are shown in Figure F-1.

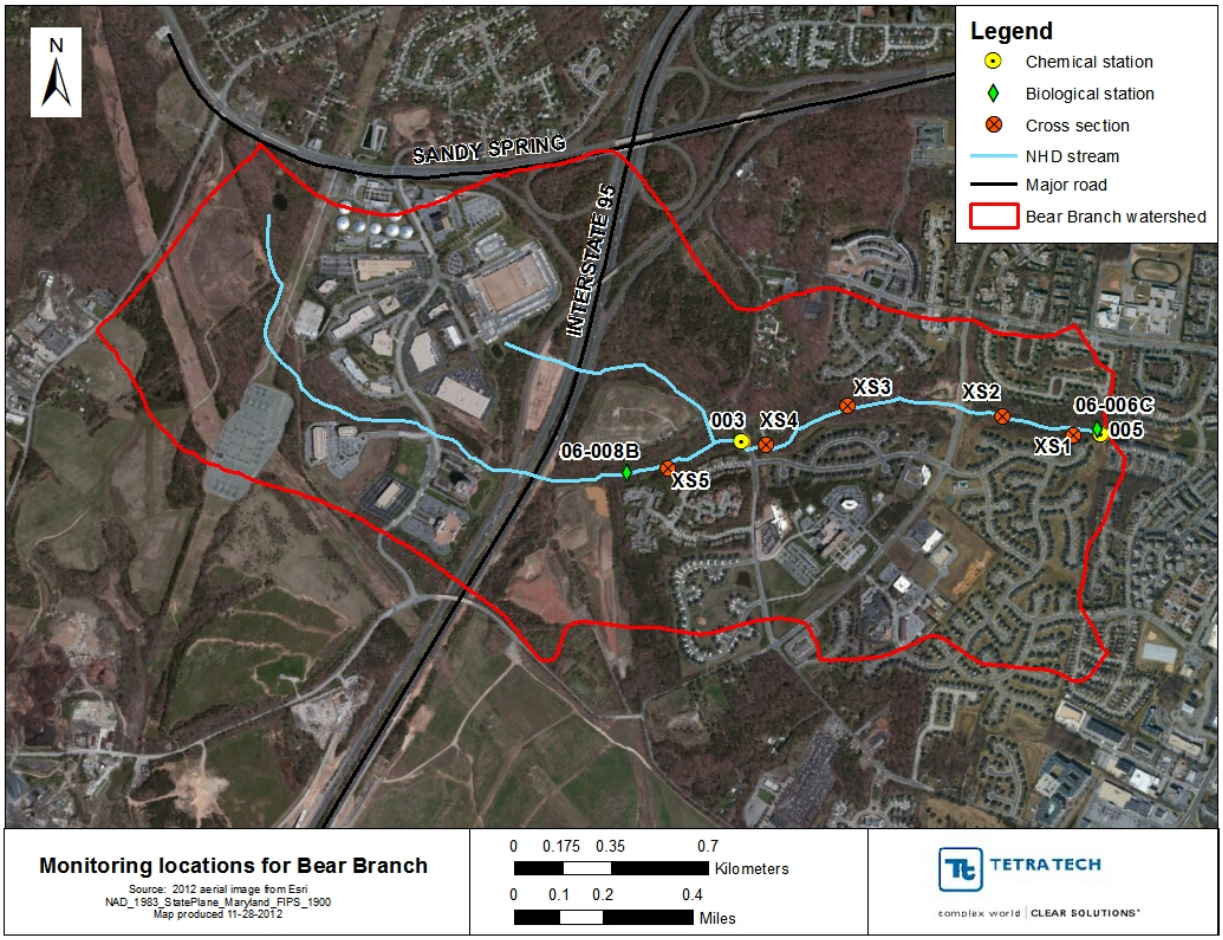

Figure F-1. Bear Branch Monitoring Locations

Chemical Monitoring

Permit Condition Part IV. F. 1. a. (i): Twelve (12) storm events shall be monitored per year at each monitoring location with at least two occurring per quarter. Quarters shall be based on the calendar year. If extended dry weather periods occur, baseflow samples shall be taken at least once per month at the monitoring stations if flow is observed.

Response

Chemical monitoring was performed at monitoring stations listed in Table F-1 below:

Table F-1. Chemical Monitoring Locations

Station	Station Type	Location	Drainage Area (acres)	Latitude	Longitude
003	In-stream	East of Contee Road	659	39.09023	-76.88478
005	In-stream	200 feet behind the end of Chapel Cove Drive	1,089	39.09044	-76.86980

At station 003, four quarterly baseflow samples, eleven (six complete) stormflow samples, and five (one complete) baseflow samples in lieu of a stormwater sample were collected. Due to dredging at Laurel Lakes, station 005 had fewer samples: three quarterly baseflow samples, eight (four complete) stormflow samples, and six (three complete) baseflow samples in lieu of a stormwater sample. Dry-weather baseflow samples are collected quarterly and during extended periods of dry weather. If no measurable precipitation occurs for 72 hours before sampling, discharge is considered to be baseflow (USEPA 1999 and 2009a). Sampling events at each monitoring stations are provided in Table F-2 below.

Table F-2. Chemical Monitoring Sampling Events

Sample month	Station 003 (in-stream)				Station 005 (in-stream)			
	Wet weather		Dry weather		Wet weather		Dry weather	
	Param. set 1	Param. set 2	In lieu of storm samples	Qtr'ly	Param. set 1	Param. set 2	In lieu of storm samples	Qtr'ly
July	X	X			X	X		
August	X	X		Q	X	X		Q
September	X		B2		X		B2	
October	X		B2		X		B2	
November	X	X		Q	X	X		Q
December	X	X			X	X		
January	X				X			
February	X	X					B1,B2	
March	X		B2	Q	X		B2	Q
April			B1, B2				B1, B2	
May	X		B2				B1, B2	
June	X	X		Q				

Notes: *X = sample collected;* ***Param. set 1*** *= parameters typically collected through automatic sampling: TKN, NO_3/NO_2, TSS, Cu, Zn, Pb, TP, BOD_5, hardness, total phenols;* ***Param. set 2*** *= parameters typically collected through manual sampling:* E. coli, *TPH;* ***B1*** *= manual baseflow sample collected in lieu of storm samples for Param. set 1;* ***B2*** *= manual baseflow sample collected in lieu of storm samples for Param. set 2; Q = quarterly baseflow sample collected.*

Permit Condition Part IV. F. 1. a. (ii): Discrete samples of stormwater flow shall be collected at the monitoring stations using automated or manual sampling methods. Measurements of pH and water temperature shall be taken

Response

Storm samples were collected manually and with automated sampling equipment. Baseflow samples were collected manually. Stream stage, pH, and temperature have been measured continuously at stations 003 and 005 since June 15, 2007, when the monitoring stations relocated to the Bear Branch watershed.

Permit Condition F1 a. (iii): At least three (3) samples determined to be representative of each storm event shall be submitted to a laboratory for analysis according to methods listed under 40 CFR Part 136 and event mean concentrations (EMC) shall be calculated for:

- *Biochemical Oxygen Demand (BOD_5)*
- *Total Kjeldahl Nitrogen (TKN)*
- *Nitrate plus Nitrite*
- *Total Lead*
- *Total Copper*
- *Total Zinc*

Total Suspended Solids
Total Petroleum Hydrocarbons (TPH)
E. coli or enterococcus
Total Phosphorus
Hardness

Response

Three one-liter bottles were collected manually from the automated samplers, placed on ice and held at 4 degrees Celsius (°C) until delivery to the laboratory. The Samples were delivered to a laboratory for analysis of metals (copper [Cu], lead [Pb], and zinc [Zn]), 5-day biological oxygen demand (BOD_5), nitrate plus nitrite (NO_3/NO_2), total Kjeldahl nitrogen (TKN), total phosphorus (TP), total phenols, total petroleum hydrocarbons (TPH), *Escherichia coli (E. coli)*, and hardness.

For *E. coli* and TPH, grab samples were collected because of the need for specialized containers and, in the case of E. coli, a short holding time. If possible, these grab samples are collected during the same storm event as samples collected by the automated samplers. Occasionally, it is not possible to collect grab samples at the same time as automated samples because of safety concerns associated with storm events that occur overnight or have hazardous conditions. If grab samples cannot be collected at the same time as automated samples, they are collected for another storm event that same month.

Table F-3 presents the required parameters analyzed and the analytical procedure. Microbac Laboratories, Inc., in Baltimore, Maryland, analyzed the samples. Hardness was added for the 2013–2014 monitoring year because it is expected to be a required monitoring parameter in the next MS4 permit for the County. Please see results of the analysis on page 18 in the report titled "Prince George's County, Maryland—Long-Term Stormwater Monitoring Program—Bear Branch" saved on DVD, Assessment of Controls\Bear Branch.

Table F-3. Monitoring Parameters

Parameter	EPA method	Holding time at 4 °C	Project reporting limit	Units
Copper (Cu)	EPA 200.8/6020	6 months	1	µg/L
Lead (Pb)	EPA 200.8/6020	6 months	1	µg/L
Zinc (Zn)	EPA 200.8/6020	6 months	5	µg/L
BOD_5	SM (20) 5210B	48 hours	2–5	mg/L
NO_3/NO_2	EPA 353.2	28 days	0.05–0.1	mg/L
TKN	SM (20) 4500N-org/NH3-G	28 days	0.1	mg/L
TP	EPA 365.1	28 days	0.01	mg/L
TSS	SM (20) 2540D	7 days	2	mg/L
E. coli	SM (20) 9221F	6 hours	2	MPN/100 mL
TPH	EPA 1664A	28 days	5	mg/L
Total phenols	EPA 420.1	28 days	0.01	mg/L
Hardness	SM (20) 2340 C	28 days	1.0	mg $CaCO_3$/L
pH	EPA 150.1	In-stream measurement	--	
Temperature	EPA 170.1	In-stream measurement	--	°C

Notes: µg/L = micrograms per liter; mg/L = milligrams per liter; MPN/100 mL = most probable number per 100 milliliters.

Permit Condition Part IV. F. 1. a. (iv): Continuous flow measurements shall be recorded at the in-stream monitoring station or other practical locations based on the approved study design. Data collected shall be used to estimate annual and seasonal pollutant loads and reductions, and for the calibration of watershed assessment models. Pollutant load estimates shall be reported according to any EPA approved TMDLs with stormwater WLAs.

Response

Both (003 and 005) chemical monitoring stations are equipped with an auto sampler (ISCO 4220), which uses a pressure transducer to continually measure depth of water (stream level) and initiate the collection of storm event samples. The auto sampler contains data loggers that store the level, pH, and temperature data for the station. Data are downloaded at least monthly with a rapid transfer device for later processing and analysis in the office.

Each auto sampler is programmed with a unique stream stage point so that stream-level rise in response to a storm event will cause the flow meter to activate the sampler and begin sample collection. Stream stage activation levels are unique for each station and are periodically changed to ensure adequate storm sampling. Changes in the flow meter programming are made during extended dry periods and to account for seasonal fluctuations.

Stage data are analyzed to determine total baseflow and stormflow volumes during the monitoring period. Stage is recorded at 5-minute intervals. Stage-to-flow rate conversions are made using rating curves. The curves involve power functions, developed through regression analysis, that relate measured stage-to-flow relationships. To date, 43 stage-to-flow measurements have been taken at station 003 and 42 measurements at station 005. It should be noted that there were less stage relationships taken in 2015 at station 005 due to the downstream dam and the dredging operation. The data are plotted, and a relationship between stage and flow is determined. That relationship is then used to calculate the flow at the monitoring stations for subsequent use in determining EMCs.

For both chemical monitoring stations, individual EMCs by parameter and storm are computed by flow-weighting the concentration data obtained at discrete points using the following equation:

$$\frac{C_r Q_r + C_p Q_p + C_f Q_f}{Q_r + Q_p + Q_f}$$

Where,

C is the concentration of each sampled parameter;

Q is the instantaneous discharge at the time of the sample; and r, p, and f indicate the discrete sample—rising limb, peak, and falling limb, respectively.

EMCs are reported to MDE in a yearly database submission. The EMCs are used in calculating the loading rates. Total seasonal pollutant loads are estimated for stormflow and baseflow by applying the median storm EMCs to unmeasured flows. Those values are then divided by total drainage area, and summed to determine total annual loads.

Biological Monitoring

Permit Condition Part IV. F. 1. b. (i): Benthic macroinvertebrate Samples shall be gathered each Spring between the outfall and in stream stations or other practical locations based on an approved study design;

Response

Monitoring was performed in spring 2015 in the Bear Branch watershed. Two assessment locations were surveyed as listed in the Table F-4 below. One station is upstream of station 005 (station 06-006C) and about 90 feet upstream of the confluence of Bear Branch and Laurel Lake. The newer station (station 06-008B) is on the mainstem of Bear Branch northeast of the end of Bonnet Lane, upstream of Contee Road, and approximately 250 meters downstream of I–95.

Table F-4. Locations of Sampling Stations

Station	Location	Area (acres)	Latitude/longitude
06-006C	Corner of Chapel Cover Road and Dover Court, ≈ 90 feet upstream of outfall on right bank upstream of Laurel Lake	989	39.09052 / –76.87026
06-008B	Bonnet Lane on northeastern end	394	39.089125 / –76.88988

Permit Condition Part IV. F. 1. b. (ii): The County shall use the EPA Rapid Bioassessment Protocols (RBP), Maryland Biological Stream Survey (MBSS), or other similar method approved by MDE.

Response

The method used is a modification of EPA's Rapid Bioassessment Protocols (RBP) III for use in the Coastal Plain physiographic region in which the County resides. A 100-meter reach of channel was assessed using the 20-jab method. In this method, 20 one-meter sections of stream are sampled using a D-frame net with a mesh size of 600 micrometers. Sampling is distributed throughout the available physical habitat (e.g., undercut banks, riffles, snags) in rough proportion to its occurrence within the assessment reach. Organisms collected are preserved in 95 percent ethyl alcohol and returned to the laboratory for identification. Sample identification results are recorded as a list of taxa (a unit of biological classification) and numbers of individuals of each (counts).

Benthic macroinvertebrate samples collected in the spring were assessed using the Maryland Department of Natural Resources MBSS' B-IBI (Southerland et al. 2005). The MBSS Coastal Plain index consists of seven metrics scored 1, 3, or 5 and then averaged for a final score of 1–5. A higher score is closer to reference conditions, and a lower score is indicative of impairment (Table F-5).

Table F-5. Narrative and Numeric Assessments Ratings for the Biological Indices B-IBI (MBSS)

Narrative assessment	Index score
Good	4.0–5.0
Fair	3.0–3.9
Poor	2.0–2.9
Very poor	1.0–1.9

Physical Monitoring

Permit Condition Part IV. F. 1. c. (i): A geomorphologic stream assessment shall be conducted between the outfall and in stream monitoring locations or in a reasonable area based on an approved study design. This assessment shall include an annual comparison of permanently monumented stream channel cross-sections and the stream profile

Response

Stream physical condition is assessed using longitudinal profile data, cross-section analysis, and geomorphic characterization. These assessments are completed each year in the fall. August 2014 was the eighth year the County performed a geomorphologic assessment in the Bear Branch watershed. The next assessment will be in August 2015.

A longitudinal profile was measured from just downstream of station 005 to approximately 6,586 feet upstream. The survey was performed at the station during 2014 which was the eigth year. A benchmark was established in 2007 and used as a common reference datum to relate elevation data collected previously to this year's measurements. Throughout the profile, the elevations and locations of the thalweg were surveyed using a total station data collector.

Five monumented cross sections were installed in the assessment area in the Bear Branch watershed (Table F-6). Four cross sections (XS-1 through XS-4) are between station 003 and station 005, and one cross section (XS-5) is farther upstream. The cross sections were monumented with 0.5-inch rebar topped with orange survey caps. Engineering flagging also was hung near the ends of each cross section. All cross sections were tied into the longitudinal profile.

Table F-6. Location of Five Monumented Cross Sections

Cross section	Longitude				Latitude			
	Deg.	Min.	Sec.		Deg.	Min.	Sec.	
XS-1	76	53	14.774	W	39	5	23.021	N
XS-2	76	53	1.609	W	39	5	24.333	N
XS-3[a]	76	52	40.440	W	39	5	29.820	N
XS-4	76	52	26.601	W	39	5	27.835	N
XS-5	76	52	15.293	W	39	5	25.806	N

[a] *Relocated for the 2009 survey. Rebar monuments were replaced in 2011 because of stream restoration construction.*

Particle size was estimated near each cross section, along an assessment reach length of approximately 20–24 bankfull channel widths. In addition, an attempt was made to identify a geomorphological feature that corresponds to a channel-forming (bankfull) discharge so that a Rosgen Level II classification could be made. Finally, an analysis of bank erosion potential was made using methodologies described in Rosgen (1996). Vertical stability was being tracked via the thalweg profile and by locating the presence of nick-points as indicators of headcutting processes.

Permit Condition Part IV. F. 1. c. (ii): A stream habitat assessment shall be conducted using techniques defined by the EPA's "Rapid Bioassessment Protocol for use in Streams and Rivers," or other similar method;

Response

Concurrent with biological sample collection, a qualitative, visual-based assessment of habitat quality was performed in the assessment reach. Habitat scores were from the USEPA Rapid Bioassessment Protocols (RBPs) (Barbour et al. 1999) for low-gradient streams. The assessment consisted of ten physical habitat parameters visually assessed and assigned scores of 0–20. The resultant value (0–200) was then compared to the reference condition (168) and assigned a narrative description (Table F-7).

Table F-7. Narrative and Numeric Assessments Ratings for the RBP Physical Habitat Quality

Narrative assessment	Index score
Comparable	≥ 151
Supporting	126–150
Partially supporting	101–125
Non supporting	0–100

The ten physical habitat parameters evaluated, include epifaunal substrate / available cover, pool substrate characterization, pool variability, sediment deposition, channel flow status, channel alteration, channel sinuosity, and three parameters that are evaluated on a 0-10 scale separately for each bank of the stream. The three parameters that look at each bank are bank stability, vegetative protection, and riparian vegetative zone width. Collectively, the combined scores for the metrics yield a total score for the reach that allows for comparison to optimal habitat conditions in the same physiographic region.

Permit Condition Part IV. F. 1. c. (iii): A hydrologic and/or hydraulic model shall be used (e.g., TR-20, HEC-2, HSPF, SWMM, etc.) in the fourth year of the permit to analyze the effects of rainfall; discharge rates; stage; and, if necessary, continuous flow on channel geometry.

Response

As required by the permit, a hydrologic and/or hydraulic model will be used in the fourth year of the permit to analyze the effects of rainfall; discharge rates; stage; and, if necessary, continuous flow on channel geometry.

Permit Condition Part IV. F. 1. d: For the annual data submittal the County shall describe in detail its monitoring activities for the previous year and include the following:

I. EMCs submitted on MDE's long-term monitoring database as specified in PART IV. A.2.d. below;
II. Chemical, biological, and physical monitoring results and a combined analysis for the Beaverdam Creek or other approved monitoring locations; and
III. Any requests and accompanying justifications for proposed modifications to the monitoring program.

Response

A full analysis of the monitoring protocol and results are provided in the Bear Branch monitoring report, *Prince George's County, Maryland—Long-Term Stormwater Monitoring Program —Bear Branch Annual Report 2015,* included on DVD, Assessment of Controls\Bear Branch. This report and the attached chemical long-term monitoring database meet the reporting requirements. Please review the sections of the report that meets the permit conditions as described below in the Table F-8.

Table F-8. Permit Condition Compliance Summary List

Condition	Report section	Page
1(a)(i) Storm Event Sampling Frequency	3.1.2	6
1(a)(ii) Storm Event Sampling Procedure	3.1.2	6
1(a)(iii) Parameters Requiring EMC Calculations	3.1.3	7
1(a)(iv) Continuous Flow Monitoring	3.1.4	8
1(b)(i) Biological Sampling Locations	3.2.1	12

Condition	Report section	Page
1(b)(ii) Biological Sampling Method	3.2.1	12
1(c)(i) Geomorphological Stream Assessment Location and Methods	3.3.2	13
1(c)(ii) Stream Habitat Assessment	3.2.2	13
1(c)(iii) Hydrologic and Hydraulic Modeling	--	--
1(d)(i) Reporting EMCs on MDE's Database	--	--
1(d)(ii) Results and Analysis of Monitoring Data	4.0	17
1(d)(iii) Proposed Modifications to the Monitoring Program	--	--

2. STORMWATER MANAGEMENT ASSESSMENT

Permit Condition Part IV. F. 2. a: The County shall continue to monitor the Black Branch watershed or select and submit for MDE's approval a new watershed restoration project for determining the effectiveness of stormwater management practices for stream channel protection.

Response

Prince George's County began monitoring the Black Branch Watershed (BBW) and a small tributary of the BBW (Tributary 1) in 2001, using physical, hydrologic, and hydraulic methods. The County discontinued the chemical monitoring program along Tributary 1 in March 2008. Biological monitoring, just below the confluence of Tributary 1 and Black Branch, was discontinued after 2007. The County continued with its physical monitoring at the Black Branch Watershed (BBW) and Tributary 1, which are conducted between August and September each year.

Permit Condition Part IV. F. 2. b: Physical stream monitoring protocols shall include an annual stream profile and survey of permanently monumented cross-sections in Black Branch to evaluate channel stability in conjunction with the residential development of Oak Creek Club;

Response

To monitor and compare changes in channel geometry, 14 permanently monumented cross sections (named MS1 through MS9 along the Black Branch and T1 through T5 along the Tributary 1) were surveyed (Figure F-2). The entire Black Branch mainstem was surveyed from its confluence with Collington Branch for approximately 2.2 miles upstream to slightly beyond the uppermost cross sections. The overall channel slope of the Black Branch mainstem was 0.31 % and has not changed over the past year. The predominant channel type of the cross sections in the mainstem is type G (four cross sections). Type G channels are relatively narrow entrenched channels (i.e., entrenchment ratio less than 1.4 and width-to-depth ratio less than 12). It should be noted that cross-section MS1 has been scoured so much that it cannot be used for the classification. The predominant channel type of the cross sections in the tributary is type B. Type B channels are typically moderately entrenched (i.e., entrenchment ratios between 1.4 and 2.2 with width-to-depth ratios greater than 12).

Permit Condition Part IV. F. 2. c: Physical stream monitoring protocols shall include a comparison of the annual stream profile and survey of the permanently monumented cross-sections with baseline conditions for assessing areas of aggradation and degradation; and

Response

Each year since 2001, the BBW was evaluated to determine whether any significant changes to the physical conditions of the BBW had occurred since conducting the baseline evaluation. The mainstem and Tributary 1 in the BBW were evaluated in 2014 to determine whether any significant changes to the physical conditions of the BBW had occurred since it was last evaluated in 2013. The results are presented in 2014 Black Branch Geomorphic Report for 2014 and 2013 with comparison to the base year of 2001. The report is provided on DVD, Assessment of Control\ Black Branch.

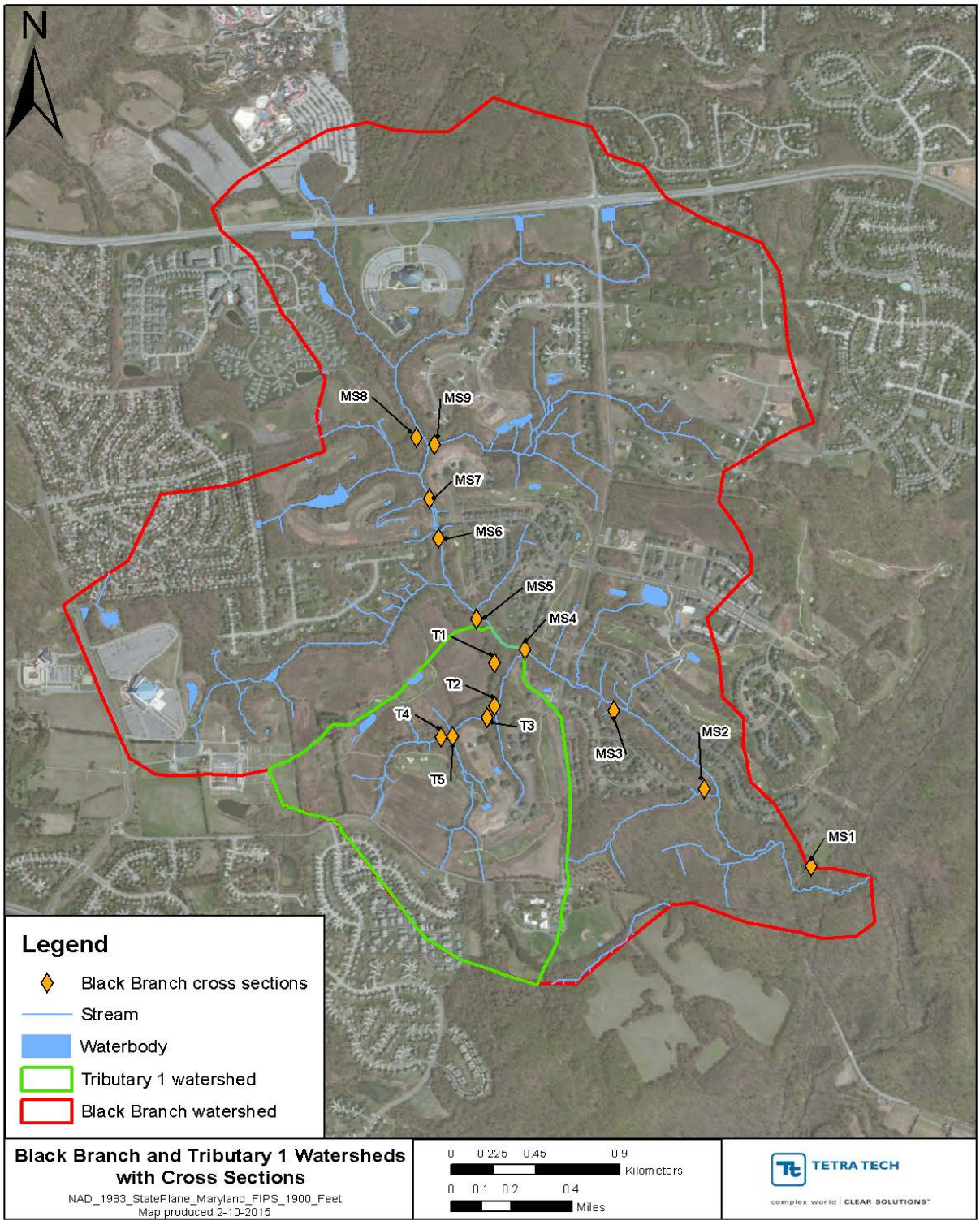

Figure F-2. Locations of Cross Sections in BBW and Tributary 1 Watershed

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G. PROGRAM FUNDING

Permit Conditions Part IV. G:

1. *Annually, a fiscal analysis of the capital, operation, and maintenance expenditures necessary to comply with all conditions of this permit shall be submitted as required in PART V below.*
2. *Adequate program funding to comply with all conditions of this permit shall be maintained. Lack of funding does not constitute a justification for noncompliance with the terms of this permit.*

Response

Stormwater Management Fund

With enactment of State legislation in spring 1987, the Prince George's County SWM District (a special taxing district) was formed on July 1, 1987. The mission of the County's SWM Program is to minimize flooding, maintain water quality, and protect natural resources by controlling, regulating, and managing stormwater runoff associated with urban development and land use activities.

The services, responsibilities, and functions provided by Prince George's County's SWM Program include the following:

- Administering the County's SWM Ordinance, including reviewing and approving SWM concepts and design plans, studying floodplain limits, and granting waivers to the Ordinance.
- Performing detailed assessments of existing water quality with the assistance of private consultants.
- Securing grant funding to further the goals and objectives of our watershed restoration program.
- Preparing design plans and overseeing the construction of regional SWM facilities and water quality control projects.
- Performing water quality investigations in support of eliminating illegal connections to the County's storm drain system.
- Assisting our 22 Phase II municipalities with general Permit compliance.
- Performing floodplain studies and regulating the uses within the delineated floodplain areas.
- Preparing State-mandated monitoring reports on the County's SWM program activities.
- Inspecting construction of private SWM systems (primarily water quality basins and infiltration devices) outside of public rights-of-way.
- Periodically reinspecting private SWM systems outside of public rights-of-way.
- Enforcing applicable regulations for the maintenance of private SWM systems outside of public rights-of-way.
- Maintaining and operating publicly owned SWM systems and flood control facilities.

Watershed Protection and Restoration Fund

Effective July 1, 2013, the County established a Watershed Protection and Restoration (WPR) Program in accordance with the provisions of House Bill (HB) 987. County legislation considered for adoption by the County Council established the authority and agency responsibilities needed to administer the WPR program. Through the establishment of a new stormwater remediation fee, the

County will be able to meet its long term regulatory WIP II and NPDES State and federal mandates for water quality improvement through restoration.

In FY 2015, compensation increases 8% over the FY 2014 budget due to the funding of vacancies. Fringe benefits increase 8% over the FY 2014 budget due to increases in compensation. Operating expenses increases 89.9% over FY 2014 due to operational contracts for the County's mandated rebate program.

The operating budgets, including all maintenance activities, of the County's SWM program are summarized on DVD, Program Funding.