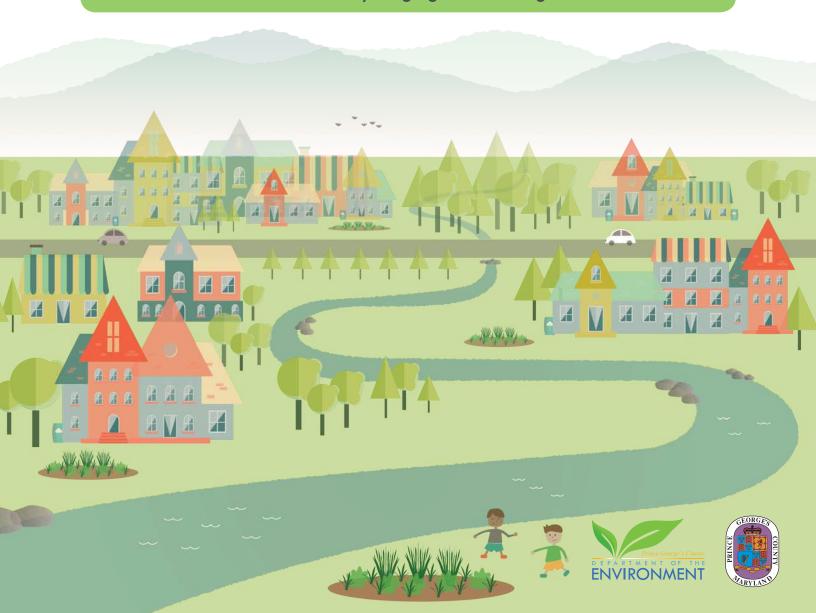
# THE CLEAN WATER PROGRAM GUIDEBOOK SERIES

for

Prince George's County's Municipalities

Building Effective Local Public Education and Community Engagement Programs



### **ACKNOWLEDGMENTS**

The Clean Water Program Guidebook Series for Prince George's County's Municipalities: Building Effective Local Public Education and Community Engagement Programs was developed by the Department of the Environment on behalf of all departments and agencies that participate in the Clean Water Program. We would like to extend a special thanks to all of the municipalities within Prince George's County that serve as a liaison between the public and governing bodies. We would also like to thank the Maryland Department of the Environment (MDE) and the U.S. Environmental Protection Agency's (EPA) Region 3 for the direction they provide.

The Clean Water Program involves the participation of the following County departments and offices:

- Department of the Environment
- Department of Permitting, Inspections and Enforcement
- Department of Public Works and Transportation
- Office of Central Services
- Maryland-National Capital Park and Planning Commission
- Office of Law
- Office of Information Technology
- Health Department
- Fire and Emergency Medical Services Department
- Soil Conservation District

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### **FOREWORD**

Polluted stormwater runoff poses the greatest threat to the health of Prince George's County's local waterways. Polluted runoff is not just the result of water carrying away fertilizers, pesticides and sediment from farm activities or from water discharged from facilities such as factories and sewage treatment plants. Rather, it is generated by all of us — a product of rainwater, snowmelt and even water from our garden hoses becoming contaminated as it moves over and through the ground due to the many actions we collectively take each day. This includes activities such as applying pesticides, fertilizing our lawns, leaving pet waste on the ground and even driving our cars. Each action on its own may seem to have a relatively small impact on water quality, but collectively, the impact is huge.

Making a few changes in our daily lives can significantly reduce the amount of pollutants we contribute to stormwater runoff. Changing behaviors in and around the home, at places of business or elsewhere in our communities requires making a change from pollution-generating behaviors to pollution-preventing behaviors. That requires education, enlightenment and new attitudes. When people know, understand and change how they do things, polluted runoff problems can be solved.

It is because of this that public education and community engagement are vital components of any successful stormwater management plan and are one of the core components of the County's Clean Water Program. Building effective local public education and community engagement programs also helps us meet our obligations under the Federal Clean Water Act.

This guidebook was written for those municipalities within the County that are required under the State general stormwater permit to incorporate public education and outreach and public involvement and participation into their local stormwater management programs. It offers advice on how town and city staff can maximize the effectiveness of their public education and community engagement plans to reduce polluted runoff in order to restore and protect our local waterways and, ultimately, the Chesapeake Bay. Doing so will help municipalities build on community capital (the wealth of interested citizens and groups) who help spread the message of stormwater pollution prevention, to undertake group activities that highlight storm drain pollution and to contribute volunteer community actions to restore and protect local water resources.



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## INTRODUCTION

Prince George's County's Clean Water Program facilitates County and municipal compliance with the Federal Clean Water Act. The program is broken into seven core components: Stormwater Management; Erosion and Sediment Control; Public Education and Community Engagement; Trash and Litter; Illicit Discharge Detection and Elimination; Property Management and Maintenance; and Clean Water Restoration.

This guidebook is designed to help clarify and offer general direction on the municipality's role in addressing two of the core components:

- Public Education and Community Engagement
- Trash and Litter

This guidebook was written specifically with Prince George's County's municipalities in mind. It provides municipal leaders and staff with information on how to establish and implement an effective public education and community engagement program in your community.

This guidebook includes tips and ideas on how to build and grow your local program. It discusses how to tailor your program to local audiences and local issues (such as trash and litter) and emphasizes the importance of setting quantifiable, measurable goals. The guidebook also contains information on existing County programs and resources that are available to your community.

Building a strong public education and community engagement program will help your municipality fulfill two requirements, or Minimum Control Measures (MCM), of the 2003 State-issued general stormwater permit: public education and outreach on stormwater impacts (MCM #1); and public involvement and participation in program development and implementation (MCM #2).

By taking a collaborative approach to engage local residents, citizens and businesses, we can enhance our collective ability to transform our streams into valuable assets and keep our waters pollution-free.



Twenty-four of the County's twenty-seven municipalities are required to incorporate public education and community engagement into their stormwater management programs as part of our State general stormwater permit obligations. These twenty-four municipalities are as follows:

- Berwyn Heights
- Forest Heights
- Bladensburg
- Glenarden
- Bowie
- Greenbelt
- Brentwood
- Hyattsville
- Capitol Heights
- Landover Hills
- Cheverly
- Laurel
- College Park
- Morningside
- Colmar Manor
- Mount Rainier
- Cottage City
- New Carrollton
- District Heights
- New Carrollton
- Edmonston
- Riverdale Park
- Fairmount Heights
- Seat Pleasant

University Park

Eagle Harbor, North Brentwood and Upper Marlboro are presently excluded from this list because they do not meet the 1,000 minimum population threshold.

# BUILDING EFFECTIVE LOCAL PUBLIC EDUCATION AND COMMUNITY ENGAGEMENT PROGRAMS

# **Understanding the Issues** and Requirements

Polluted stormwater runoff has become a big problem both regionally and in Prince George's County. It impacts our streams and rivers, degrades our drinking water and places a great strain on our local economies.

Public education and community engagement programs play an essential role in reducing stormwater pollution. The daily activities of millions of people contribute significantly to polluted runoff. When water from rainstorms, melting snow or outdoor faucets runs off of hard surfaces such as buildings, driveways, yards and parking lots, it travels down the street and into the storm drain. Along the way it picks up contaminants such as fertilizer, pesticides, pet waste, litter and motor oil. From there, it flows into our waterways.

The need to address polluted stormwater runoff and change behaviors is real. Public education and community engagement are requirements of the Prince George's County's National Pollutant Discharge Elimination System Municipal Separate Storm Sewer Systems Discharge Permit (referred to as the Prince George's County stormwater permit). They're also required components of the State General Permit for Discharges from State and Federal Small Municipal Separate Storm Sewer Systems (referred to as the State general stormwater permit).

## Public Education and Community Engagement Requirements

A strong public education and community engagement program is one of the Clean Water Program's seven core components. As described in *The Clean Water Program Guidebook for Prince George's Municipalities: Roles and Responsibilities*, the Clean Water Program was established to facilitate local compliance with the County's and municipalities' stormwater permits for those areas where the County owns and maintains the storm drain system and facilities.

Any municipality covered by the State general stormwater permit must develop and implement a public education and outreach program and a public involvement and participation program. These are identified as the first two of six MCMs. MCM #1 and MCM #2 requires municipalities to incorporate a variety of activities and actions:

- Develop and implement a program to educate and engage community members on the need and methods to keep our water free from pollution, based on local issues and concerns.
- Achieve measurable improvements in the community's understanding of the problem and what can be done to solve it.
- Hold one or more volunteer restoration activities or stream cleanups a year.
- Record activities in coordination with the County in order to report back to the State annually on progress.

### Fast Fact.

Enforceable pollution limits were set on the amount of nitrogen, phosphorous and sediments that can enter the Chesapeake Bay watershed in 2010. In "federal-ease", these pollution limits are known as Total Maximum Daily Loads (TMDLs).

#### **Trash and Litter Requirements**

The State general stormwater permit does not specify that municipalities incorporate a trash and litter component in their public education and community engagement programs. What it does say is that these programs should target local pollution concerns and issues. For the 20 municipalities that lay partially or completely within the Anacostia watershed, trash is an issue.

In 2010, the EPA established a trash TMDL for the Anacostia watershed. The Prince George's County stormwater permit requires 170,268 pounds of trash to be removed from the watershed annually. Immediate action is not only pertinent for the County, but is also a municipal responsibility.

Anacostia-based municipalities should, at a minimum, do the following to meet the requirements of the State general stormwater permit:

- Incorporate trash and litter reduction education and awareness into local public education and community engagement activities.
- Record activities in coordination with the County in order to report back to the State annually on progress.

The State general stormwater permit also requires permit and program activity updates be submitted by affected municipalities on an annual basis.





The benefits of public education cannot be emphasized enough – even when it comes to government employees. In April 2013, the County launched its Second Nature Program to ensure that the concept of sustainability becomes "second nature" to County employees and their respective agencies. Every Tuesday, County employees receive sustainable tips via the Department of the Environment's twitter account.

### Fast Fact.

Nitrogen, phosphorous and sediments aren't the only pollutants of concern. Other enforceable limits, or TMDLs, exist for pollutants such as trash, bacteria, toxics and Polychlorinated Biphenyls (PCBs). It takes individual behavior change and proper practices to control such pollution.

# Keys to a Successful Program

#### It All Starts with a Plan

For those communities who have not already done so, developing a plan is an important first step to take. A public education and community engagement plan is a valuable tool for guiding local activities that help meet your municipal responsibilities. It helps to customize education, outreach and engagement efforts to various audiences within your community. It's also a required element of the State general stormwater permit.

#### **Build on Existing Programs**

If you have already established your own program, that's great. But, keep in mind that your municipality is required to assess the effectiveness of these programs. Make sure to familiarize yourself with what the County has to offer. The Clean Water Program has established a variety of effective public education and community engagement programs to raise public awareness of the issues and keep businesses and homes from contributing to stormwater pollution.

# **Team Up with the County and Other Municipalities**

The Clean Water Program encourages collaboration among all of the County's municipalities and communities. Together, we can develop and deliver consistent messages across boundaries, share access to media and stretch our resources further by sharing costs and staff times. The County also encourages collaboration with your neighbors that share audiences, geography, pollution problems or resources. There are plenty of entities out there to help along the way such as neighborhood groups, nonprofit organizations and civic organizations.

#### **Evaluate Your Effectiveness**

The State general stormwater permit requires municipalities to measure program effectiveness over time and implement changes as needed. You'll need to gauge the public understanding of polluted stormwater runoff issues and the behaviors that lessen the impacts from polluted stormwater runoff. Some measures can tell you more than others. It's important to develop an evaluation process before implementing a public education and community engagement program.

#### **HIERARCHY OF EFFECTIVE MEASURES**



#### **Document project activities:**



Count the number of *Rain Check Rebate Program* brochures distributed to residents, businesses and other organizations.



#### Gauge awareness and attitudes:



Determine the percentage of homeowners who know that overapplying pesticides and fertilizers pollute waterways.



#### **Evaluate behavior change:**

Determine the percentage of targeted businesses who keep dumpsters and other containers securely closed or store containers under cover in response to community campaigns.

### PREPARE YOUR PLAN

#### What Should the Plan Cover?

Planning sets the foundation for your public education and community engagement program. Your plan doesn't have to be lengthy, just thorough enough to help you:

- Identify specific goals such as improved litter prevention or the proper application of fertilizer.
- Identify target audiences and objectives for each such as residential, business or nonprofit audiences, further breaking these audiences down when needed.
- Develop and refine messages and engagement or distribution tools such as the benefits to reducing fertilization via newsletters.
- Select appropriate methods of evaluation such as determining the number of residents that apply for Rain Check Rebate Program cash rebates.

Did you know?

The State general stormwater permit is a good place to start when preparing your plan. The permit's appendices B and C provide guidance for appropriate best management practices and measurable goals, respectively.

#### What Are Your Goals?

Identifying the issues most significant to your community and the goals you expect to achieve through your public education and community engagement efforts will help target resources. Start by identifying the major pollutants and sources of concern for your community, and then establish potential goals for each. Review documents such as existing restoration or watershed plans, pollution reduction plans (for TMDLs) and community plans to

help pinpoint issues within your area. Utilize existing green teams or other groups to identify and prioritize the water pollution issues.

Once an audience has been identified for each, you may want to revisit and refine your goals even further. For example, you may want to prioritize goals for homeowners (such as proper management and disposal of oils, grease and auto fluids) and commercial audiences (such as routine maintenance and disposal practices in the restaurant and hospitality industry).

#### **SAMPLE EXERCISE:** Identify Local Issues and Goals

#### **Nutrients and Sediments**

#### Issues

Excess runoff to storm drains

Improper/excess fertilizer use

#### Goal(s)

- ► Reduce/eliminate runoff
- Increase Rain Check Rebate
   Program participation
- Greener lawn care; reduced fertilization

#### Oils, Grease and Auto Fluids

#### Issues

Auto maintenance/repair and oil and grease management

#### Goal(s)

 Proper management and disposal

#### **Trash and Litter**

#### Issues

Illegal dumping and illicit discharges into storm drains

#### Goal(s)

- Reduce/eliminate waste into the Anacostia
- Increase recycling participation

#### Other Pollutants (e.g., pathogens)

#### Issues

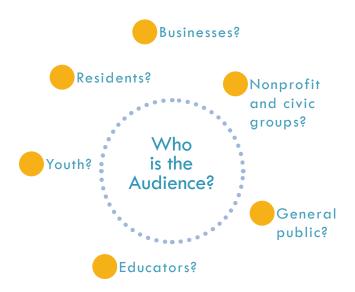
Pet waste left on lawns

#### Goal(s)

Improve pet waste management

#### Who is the Audience?

Good question! A solid understanding of community context is necessary to determine what behavior changes and actions to address, and how best to convey information and engage stakeholders. Who makes up your community? Are citizens a certain age, marital status or income level? What languages do they speak? Where are they most likely to engage in polluting behaviors? What about businesses? Do your issues and goals differ based on the audience (e.g., residential versus commercial)? What type of communication is best? Consider whether a particular audience would benefit from a different or more targeted approach.



**SAMPLE ACTIVITY:** Brainstorm Objectives and Related Actions for Residential Audiences

#### Nutrients and Sediments

#### Objective: Encourage green lawn/landscape care

**Actions/Products/Strategies** 

- Distribute information on natural lawn care
- Create a green lawn care slogan/awareness campaign
- Educate residents on proper use of chemicals

#### Objective: Promote the Rain Check Rebate Program

**Actions/Products/Strategies** 

- Distribute Rain Check Rebate Program information
- Host Rain Check Rebate Program stormwater audit workshops

#### Objective: Establish a tree planting program

#### **Actions/Products/Strategies**

- Enact campaign on the importance of trees and connect with the County to host a workshop
- Distribute information on Tree ReLEAF grant and Arbor Day is Every Day Program
- Develop a tree advisory board
- Cultivate a community forestry program
- Apply for a Tree ReLEAF grant

#### Oils, Grease and Auto Fluids

#### Objective: Encourage conscientious car care

**Actions/Products/Strategies** 

- Distribute brochures on car care and the environment
- Provide outreach to youth groups encouraging eco-friendly car wash fundraising events

#### Trash and Litter

#### **Objective: Reduce litter**

**Actions/Products/Strategies** 

- Distribute educational information on the harm litter causes when it remains in the water
- Plan regular stream and street litter cleanup events
- Connect with the County to host a storm drain stenciling event

#### Other Pollutants (e.g., pathogens)

#### Objective: Encourage pet waste management

**Actions/Products/Strategies** 

- Implement a pet waste educational program
- Establish pet waste stations in targeted locations and provide outreach

# What are the Objectives and Strategies?

Once audiences are defined, refine your goals and identify objectives for the groups you intend to engage and the different steps it will take to ensure a greater awareness of the problem and move individuals to take action. Start by brainstorming a list of potential objectives and related actions/products for various audiences that will help your municipality reach its intended goals. Consider what each audience needs to know to make an impact. Should property owners retrofit their property to reduce stormwater runoff? Do pet owners need to clean up after their dogs? Do local restaurants dispose of grease properly? Do you want landscaping companies to more selectively apply pesticides or fertilizers? Is there a need for training?

Attitude surveys, public meetings and listening sessions can all be helpful in determining how best

to connect clean water to the things that matter to your audience. Stakeholder forums or dialogues with watershed organizations or a local green team can provide important insight from seasoned practitioners who have worked with these audiences in your community for some time. These groups can be valuable, effective partners for sharing messages and encouraging action.

Once your group has identified and refined a list of strategies, agree upon an appropriate timeline to guide implementation and measure effectiveness. Create a timeline that is consistent with the time frame of your State general stormwater permit. In the exercise below, the goal of increasing lawn and landscape care practices is revisited and objectives are established for residential and commercial audiences over a five-year time frame.

**SAMPLE ACTIVITY:** Refine Objectives and Strategies and Establish an Implementation Timeline to Increase Awareness of the Impacts of Fertilizer and Encourage Green Lawn Care Practices

#### **Audience: Residential**

Objective: Increase the number of residents who fertilize less and follow environmentally safe landscaping practices

#### **Actions/Products/Strategies**

- Rain Check Rebate Program campaign [Years 1-5:
   Distribute brochures and conduct County workshops]
- Residential storm drain markings [Year 1: Develop & Implement; Years 2-5: Implement]
- Educational information on the Maryland Lawn
   Fertilizer Law via the web and newsletters [Year 1:
   Develop & Implement; Years 2-5: Implement]
- Interpretive signage where fertilizers are sold
   [Year 2: Develop; Year 3: Pilot; Year 4-5: Store Feedback]
- Green lawn care slogan/awareness campaign [Year 3: Develop; Years 4-5: Implement]

Audience: Commercial (Lawn care professionals, golf courses and other businesses)

Objective: Increase the number of businesses that follow environmentally safe landscaping practices

#### **Actions/Products/Strategies**

- Rain Check Rebate Program and Alternative
   Compliance Program campaigns [Years 1-5: Distribute information and establish demonstrations]
- Education on the Maryland Lawn Fertilizer Law and lawn care professionals certification requirements via the web and newsletters [Year 1: Develop & Implement; Years 2-5: Implement]
- Outreach to commercial property owners, golf course owners and other non-residential owners of land with large areas of turf [Year 2: Develop; Year 3: Develop & Implement; Years 4-5: Implement]
- Interpretive signage where fertilizers are sold [Year 2:
   Develop; Year 3: Pilot; Years 4-5: Store Feedback]

#### Did it Work?

Determine how to define the success of your outreach and engagement efforts before they start. Understanding the extent of the program's impact will help to evaluate those efforts to decide which activities to continue and which might need retooling.

Each activity in your plan may require its own metric. The most useful metrics provide real insight as to the impact of an activity. Consider what change(s) you would expect people to experience as a result of encountering your program. For those that are educational in nature, consider what you think someone should know after encountering the program. For those that are intended to change behaviors, consider what behavioral changes a participant would be more or less likely adopt.

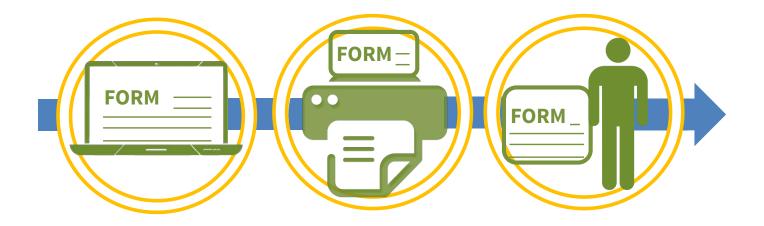
Think about how to collect information. Determine if focus groups, community meetings, participant surveys/evaluation forms, community surveys or latent data collection would be helpful. The latter refers to utilizing reporting forms that ask for program-related information, such as school recycling volumes, County waste records or workshop registration forms. Keep lists or databases with information about the people or groups who came into contact with the program.

#### **SAMPLE PLAN MATRIX:** Year One Strategies – Residential Audiences

**GOAL:** Increase awareness of residential runoff from lawn care practices and encourage behaviors that reduce pollution in local waters

#### Objective: Encourage green lawn/landscape care

Actions/Products/ Strategies	Measurable Indicators	Time Frame (Month/Date)	Responsible Parties	Necessary Resources	Status/ Comments
Implement storm drain stenciling/inlet marking program to help residents make the connection between individual behaviors and healthy waters	Yearly: # of storm drains marked; # of residential door hangers left Year 5: Survey to evaluate effectiveness of outreach messages	Town and County to design volunteer storm drain marking and door hanger project (1/15) 1st round of storm drain markings (5/15 - 8/1)	Public Works Director, Town Administrator and Green Team	Staff time: 40 hours Green Team: 50 hours Volunteers: 4 hours per volunteer per event	Public Works to identify optimal storm drains in residential areas; Town Administrator to coordinate with County; Green Team to coordinate volunteers
Adapt information from existing County brochure and Maryland's Lawn Fertilizer Law on fertilizer application to send through newsletters and via web	Yearly: # of newsletters sent; # of web hits before and after Year 5: Survey to evaluate effectiveness of outreach messages	Obtain County brochure (2/1) Refine text/ information (2/15) Establish web link (3/1) Send newsletter in spring (4/1) and summer (8/15)	Green Team and Web Staff	Web Staff time: 25 hours Green Team: 40 hours	Town Administrator to see if this can be coordinated with the County or neighboring municipalities



#### **Recordkeeping and Reporting**

All twenty-four of the Prince George's municipalities covered under the State general stormwater permit are required to keep records of program activities for the length of time the permit is active and for three years after. The permit requires permittees to submit annual narrative summaries. The same is true for those municipalities that must comply with additional stormwater permits. These include those with municipal public works yards that must report back on their industrial stormwater pollution prevention activities as required by an industrial activity stormwater discharge permit.

Annual reports are a good place to summarize and evaluate the results of your public education and community engagement program and to take stock of what is working and what is not. Data gathered throughout the year should be used to answer critical questions such as:

What is the current status in meeting stormwater goals and the State general stormwater permit requirements?

- What are the estimated load reductions and other benefits of best management practice(s) implementation?
- What are the operation and maintenance costs associated with program implementation?
- How do the costs of program implementation relate to water quality changes?
- What stormwater program changes are necessary to meet the stated goals?

This information is invaluable when the stormwater permit is renewed at the end of five years, as continuation of a stormwater permit typically requires each permittee to submit a summary of past stormwater management plan activities with the permit renewal application that describes how water quality goals are being achieved.

# BUILD PARTNERSHIPS TO ACHIEVE GOALS

#### **Identify Opportunities**

Consider what opportunities exist to coordinate with the County or other interested municipalities before finalizing your plan. Partnerships have many advantages, including providing access to resources (such as staff); increasing effectiveness, efficiency and public influence; allowing for creativity and innovation; and improving communication. The County has a number of established and growing programs designed to allow the County and its municipalities to meet their requirements under the Federal Clean Water Act.

Building partnerships within your community can help lend credibility to your effort when delivering messages or seeking funding. Green teams and watershed organizations are obvious suspects, but consider engaging other partners as well. Civic and religious organizations, youth groups, neighborhood associations, business groups, educational entities and media outlets can all be effective partners.

#### **Connect with the County**

#### Clean Water, Clear Choices Program

The Clean Water, Clear Choices Program is a series of hands on, do-it-yourself classes and workshops that increase residents' knowledge of best management practices. Participants learn how to manage and reduce stormwater pollution around the home and receive information on seven best management practices for reducing polluted runoff. These include rain barrels, rain gardens, pavement removal, urban tree canopy, cisterns, permeable pavement and green roofs. In September 2014, the Department of the Environment and the City of Mount Rainier hosted the first ever two-hour

program event at the Mount Rainier Nature Center. Participants learned how to manage and reduce stormwater pollution around their homes. Contact the Department of the Environment to see about hosting a *Clean Water, Clear Choices* workshop or class in your community.

#### Rain Check Rebate Program

The Rain Check Rebate Program allows property owners to receive cash rebates for installing Rain Check Rebate Program 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 and reduce their Clean Water Act fee. The County has a variety of materials that your community can utilize to raise awareness and increase participation. Contact the Department of the Environment for more information.

#### **Alternative Compliance Program**

The County's *Alternative Compliance Program* allows tax-exempt religious and nonprofit organizations to receive reductions to their Clean Water Act fee by implementing one or more activities. These include:

- Allowing the County to install best management practices on their property.
- Agreeing to take part in specific outreach and education efforts to encourage others to change behaviors and implement best management practices on their own.
- Implementing specific sustainable good housekeeping techniques.

The County has identified hundreds of potential facilities that may be eligible for this program, has received numerous applications and is actively working with current applicants to implement sustainable practices on their properties. Contact the Department of the Environment for information on how to engage tax-exempt religious and nonprofit organizations in your community.

#### **Stormwater Stewardship Grant Program**

The Stormwater Stewardship Grant Program was created in 2014 to encourage on-the-ground restoration activities that reduce nutrient and sediment pollution and increase community education activities. Its purpose is to engage Prince George's County neighborhoods, faith-based organizations, nonprofits and residents in the restoration and protection of local rivers, streams, parks and other natural resources. The program is a partnership between the Department of the Environment and the Chesapeake Bay Trust. Contact the Department of the Environment or visit the Chesapeake Bay Trust website for information on how and when to apply.

#### **Tree Planting Funding and Assistance**

Several programs exist to provide communities with technical assistance and/or funding for tree planting events. The Department of the Environment's *Tree* 



Volunteers at the Epiphany Episcopal Church in Forestville, MD, participated in the County's Fourth Annual Clean Up, Green Up event in 2014. Source: Epiphany Episcopal Church.

ReLEAF Grant Program provides funds to community groups (up to \$5,000) and municipalities (up to \$10,000) for planting native trees and shrubs in public or private common areas.

#### Clean Up, Green Up and Right Tree, Right Place Programs

The Department of Public Works and Transportation oversees volunteer tree plantings in public spaces in the spring and fall of each year. Through its *Clean Up, Green Up Program,* thousands of trees are planted and tons of litter are collected annually. The nonprofit Neighborhood Design Center provides planning and design assistance for community plantings and supports the County's goal of increasing its urban



Tree ReLEAF kickoff in College Park, MD - May 29, 2014. The City was one of the first municipalities to participate in the County grant program.



A voluntary storm drain stenciling/inlet marking project reminds members of your community that nothing but rainwater should enter the storm drains.

tree canopy. Using Neighborhood Design Center's *Right Tree, Right Place Program* model, the County replaces high-risk street trees with street trees that will thrive in urban as well as suburban landscapes.

#### **Volunteer Neighborhood Cleanup Program**

Many of the municipalities in Prince George's County already organize/participate in stream cleanup events and litter campaigns on an annual basis. The Department of the Environment can help neighborhood groups, local businesses and nonprofits to coordinate their community-sponsored neighborhood and stream cleanups.

#### **Volunteer Storm Drain Stenciling Program**

Storm drain stenciling/inlet marking with the "Don't Dump - Chesapeake Bay Drainage" message helps raise community awareness and alert community members of the connection between storm drains and the Chesapeake Bay. While new development projects are required to stencil or mark storm drains, the County's program is intended to reach citizens in older communities (i.e., communities built before stormwater regulations went into effect). The County can help your municipality design a storm drain stenciling/inlet marking project that can be

accomplished with any size team or age group. Storm drain stenciling/inlet marking on all municipal property is a great starting point to increasing community awareness. Contact the Department of the Environment to learn more.

#### **Slam Dunk the Junk Program**

Successful litter control is an ongoing effort within Prince George's County. The Department of the Environment is currently developing an anti-littering outreach and stewardship campaign that focuses on removing existing litter and preventing future incidents of littering through measurable behavior changes. The County and municipalities can benefit each other by developing a common, shared message.

#### **Connect with Other Municipalities**

Your municipality may also be able to strengthen its program and reduce implementation costs by collaborating with neighboring municipalities with similar issues and goals. More than likely, your municipality is already engaged with neighboring municipalities on a variety of efforts.

# County Program Contacts



#### **Prince George's Department of the Environment**

Contact the	Sustainable	<u>Initiatives</u>	<b>Division</b>	at (3	301)	883-5834	for	information	on	the	follov	ving
programs:												

- ☐ Arbor Day Every Day
- ☐ Clean Water, Clear Choices
- ☐ Slam Dunk the Junk
- ☐ Tree ReLEAF
- Voluntary Storm Drain Stenciling
- Volunteer Neighborhood Cleanup

Contact the <u>Stormwater Management Division</u> by calling (301) 883-3638 for general information on stormwater permit requirements as well as the following programs:

- Alternative Compliance
- Rain Check Rebate
- Stormwater Stewardship Grants



# **Prince George's Department of Public Works and Transportation**

Contact the Office of Highway Maintenance at (301) 499-8523 or the <u>Neighborhood Design Center</u> at (301) 779-6010 for information on the following programs:

- ☐ Clean Up, Green Up
- ☐ Right Tree, Right Place

### **GLOSSARY OF TERMS**

**Best Management Practice** – A structural or nonstructural device designed to temporarily store or treat urban stormwater runoff in order to help protect receiving water quality and control stormwater quantity and provide other amenities.

**Cistern** – A cistern is a sealed tank used to collect and store rainwater that flows from a rooftop for exterior uses, such as landscape irrigation and car washing. Cisterns are generally larger than rain barrels and can collect water from multiple downspouts. Their capacity ranges from 100 gallons to several thousand gallons. Capturing rainwater in a cistern is one of seven projects eligible for a rebate under the County's *Rain Check Rebate Program*.

**Clean Water Act** – The Federal environmental law governing water pollution. The law regulates the discharge of pollutants into the nation's surface waters, including streams, lakes, rivers, wetlands, and coastal areas. (See EPA resources and the text of the law).

**Green Roof** – A green roof is a low-maintenance, vegetated roof system that stores rainwater in a lightweight, engineered soil. The stored water is taken up by the plants on the rooftop and released back into the atmosphere through evaporation. As a result, compared to a conventional rooftop of the same area, much less water runs off of a green roof. Installing a green roof is one of seven projects eligible for a rebate under the County's *Rain Check Rebate Program*.

Illicit Discharge – Any discharge to a nearby storm drainage system that is not composed entirely of stormwater, except for discharges allowed under a NPDES permit or waters used for certain emergency situations. Phase II MS4s are required to develop a program to detect and eliminate these illicit discharges. This primarily includes developing a

storm sewer system map, an ordinance prohibiting illicit discharges, a plan to detect and address these illicit discharges and an education program on the hazards associated with illicit discharges.

#### Municipal Separate Storm Sewer System (MS4) -

The system of storm drains, gutters, pipes, streams or ditches used to carry surface and stormwater from surrounding lands to local waterways. These can be owned and operated by a state, city, town, borough, county, parish, district, association or other public body.

Minimum Control Measures – This refers to the six measures that Phase II NPDES permittees are required to implement to reduce stormwater pollution. These include: public education and outreach; public involvement and participation; illicit discharge detection and elimination; construction site runoff control; post-construction runoff control; and pollution prevention and good housekeeping.

National Pollutant Discharge Elimination System (NPDES) – The portion of the Clean Water Act which requires point source dischargers to obtain permits (see Section 402 of the Clean Water Act). In the State of Maryland, these permits are administered by MDE.

**Nutrient** – A substance that provides food or nourishment, such as usable proteins, vitamins, minerals or carbohydrates. Fertilizers, particularly phosphorus and nitrogen, are the most common nutrients that contribute to the depletion of oxygen in water. Phosphorous and nitrogen are both pollutants of concern within Prince George's County and the Chesapeake Bay watershed.

Pavement Removal – Pavement removal is the replacement of impervious surfaces, such as asphalt and concrete, with grass or native plants or with permeable pavement. Instead of seeping through the soil (infiltrating) and replenishing groundwater, rainfall that falls on driveways, sidewalks and other impervious surfaces rapidly accumulates in the form of stormwater runoff, which often contains pollutants (sediment, chemicals, pet waste, trash, etc.). Large spans of impervious areas are associated with increased stream bank erosion and decreased water quality. Removing impervious pavement is one of seven projects eligible for a rebate under the County's *Rain Check Rebate Program*.

Permeable Pavement - Permeable pavement allows stormwater to slowly seep through (infiltrate), reaching the soil and replenishing the groundwater below the surface. A variety of permeable pavement materials are available. These include interlocking pavers, porous asphalt, pervious concrete and manufactured grass pavers. Interlocking pavers consist of precast blocks (primarily brick or concrete) that are aligned in such a way that water is able to pass through the void between successive blocks. Grass pavers are a type of open-cell paver made of concrete or plastic, in which the cells are filled with soil and planted with turf. Replacing impervious pavement with permeable pavement is one of seven projects eligible for a rebate under the County's Rain Check Rebate Program.

Pollutants of Concern – A pollutant that is reasonably expected to be present in stormwater runoff based on the source and nature of the runoff, affecting the designated uses of the receiving water (as defined by the State of Maryland for Prince George's County). This includes pollutants where a TMDL has been developed and a waste load allocation (WLA) assigned.

Prince George's County's Municipal Separate
Storm Sewer Systems Discharge Permit – Also
referred to as the "County stormwater permit."
This NPDES Phase I permit was first issued to
Prince George's County in 1993 and regulates
the discharge of stormwater from the County's
MS4 into waters of the United States. The County
stormwater permit has been reissued three times
since (in 1999, 2004 and 2014). Each generation of
stormwater permits has required increasingly more
actions to be taken to reduce stormwater runoff.

Rain Barrel – Rain barrels are containers used to collect a portion of the rainwater that flows from your rooftop. This water can be stored for uses such as watering your lawn or garden. Rain barrels are not for storing drinking water or water for use inside your home. Rain barrels reduce the amount of runoff and pollutants reaching local streams by capturing water from downspouts that would otherwise discharge onto a paved surface. Typical components of a rain barrel include a hose connection at the outlet, a screen trap to filter out downspout debris at the inlet and an overflow outlet. Capturing rainwater in a rain barrel is one of seven projects eligible for a rebate under the County's *Rain Check Rebate Program*.

Rain Garden – A rain garden is a planted shallow depression that uses water-tolerant native plants and landscaping to soak up stormwater flowing from downspouts or hard (impervious) surfaces, such as your driveway, patio or sidewalk. Rain gardens allow water to slowly seep into the ground, reducing the amount of water that flows directly into the nearest storm drain, stream or river. Rain gardens typically consist of an absorbent soil mix, a mulch layer and plants such as shrubs, grasses and flowering plants. Installing a rain garden is one of seven projects eligible for a rebate under the County's *Rain Check Rebate Program*.

#### State General Permit for Discharges from Small Municipal Separate Storm Sewer

**Systems** – Also referred to as the "State general stormwater permit." This general NPDES Phase II permit covers discharges from approximately 60 designated cities and towns in Maryland with populations greater than 1,000.

**Stormwater** – The water that runs off surfaces such as rooftops, paved streets, highways and parking lots. It can also come from hard grassy surfaces such as lawns, playing fields, gravel roads and parking lots.

Total Maximum Daily Load (TMDL) – A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards. Water quality standards identify the uses for each waterbody; for example, drinking water supply, contact recreation (swimming), aquatic life support (fishing) and the scientific criteria to support that use. Clean Water Act Section 303 establishes the water quality standards and TMDL programs.

**Urban Tree Canopy** – The area of leaves and branches that create shade under the tree(s). Tree planting projects help to reduce stormwater runoff in urban areas. Tree leaves, branches, stems and roots catch falling rain, filter out pollutants and absorb stormwater. Planting a tree is one of seven projects eligible for a rebate under the County's *Rain Check Rebate Program*.

**Waterbody** – Refers to any water designated as "Waters of the United States," including wetlands.

**Watershed** – The land area, or catchment, that contributes water to a specific waterbody. All the rain or snowmelt that falls within this area flows to the waterbodies as surface runoff in tributary streams or as groundwater.