



DALLAS AREA MUNICIPAL AUTHORITY

STORMWATER MANAGEMENT PROGRAM PUBLIC EDUCATION & OUTREACH PROGRAM

Dallas Area Municipal Authority
Luzerne County, Pennsylvania

101 Memorial Highway,
Shavertown, PA 18708

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CENTER FOR
**WATERSHED
PROTECTION**

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INTRODUCTION

The Dallas Area Municipal Authority (DAMA) has partnered with Dallas Borough, Dallas Township, and Kingston Township to help administer their Municipal Separate Storm Sewer System (MS4) programs.

Public Education and Outreach Programs (PEOP) are part of the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Stormwater Sewer System (MS4) Stormwater Management Program. The PEOP is required under the NPDES MS4 Permit, Minimum Control Measure (MCM) #1 Public Education and Outreach on Stormwater Impacts, Best Management Practice #1 Develop, implement and maintain a written PEOP. Each of the three municipalities that partner with DAMA have their own NPDES MS4 Individual Permits issued by the Pennsylvania Department of Environmental Protection (PA DEP):

- Dallas Borough NPDES Individual Permit PAG132234
- Dallas Township NPDES Individual Permit PAG132323
- Kingston Township NPDES Individual Permit PAG132218

The goal of the PEOP is to achieve measurable improvements in the target audience's understanding of the causes and impacts of stormwater pollution and the steps they can take to prevent it. The PEOP will be renewed annually and updated as necessary, providing a guide for:

- Distributing educational materials to communities;
- Conducting outreach activities about the impacts of stormwater discharges on water quality; and
- Providing actions for the public to reduce stormwater runoff pollutants.

Outreach, education and engagement of the public are essential and important elements of a successful MS4 program. Each resident and business owner/operator has a role in reducing stormwater impacts surrounding their home and/or business and each citizen has a voice in how their community should grow and develop in the future. By successfully identifying the stakeholder groups, distributing materials, and involving the public in local stormwater activities, DAMA and partner municipalities will educate the community and improve water quality.

TARGET AUDIENCES

The target audience groups for the PEOP include the public, all property owners, businesses, organizations and operators within DAMA's partner municipalities. Specific target audiences indicated by this program include residents, homeowners associations, students/student activity groups, community groups, environmental groups, businesses,

Borough officials and staff, utility companies, and contractors/developers. The public should be informed about the causes of stormwater pollution and its impacts on their community, as well as actions to take on their own properties to prevent stormwater pollution. Appendix A builds on the target audience groups outlined in the sections below, by identifying education topics and distribution methods for education materials specifically targeted at individual target audience groups.

RESIDENTS

DAMA oversees a combined total of 34.7 square miles, 8,379 housing units, and a population of 18,954 (as of the 2023 Census¹).

- Dallas Borough: 2.3 square miles. Population of 2,702, and 1,241 housing units.
- Dallas Township: 18.8 square miles. Population of 9,139, and 3,773 housing units.
- Kingston Township: 13.6 square miles. Population of 7,113, and 3,365 housing units.

Many of the residential lots in these areas are likely to be served by stormwater infrastructure such as subsurface pipes, curbed streets, and inlets. Residential education is necessary to make the connection between residential activities and behaviors and the impact on water quality. Residents of the three DAMA municipalities will be targeted for educational material that raises awareness about residential practices that can reduce stormwater runoff and pollution.

Specific residential outreach topics include:

- An understanding of stormwater runoff, how it is created, residential activities that affect water quality, and how the storm drain system functions.
- Best Management Practices regarding lawn maintenance, fertilizer and pesticide application, pet waste, vehicle maintenance including proper disposal of spent oil, discharge of pool water and application and storage of salt and other de-icers.

HOMEOWNERS ASSOCIATIONS/HOUSING COMPLEXES

Homeowners Associations (HOAs) and housing complexes are unique in that they act as individual governing entities smaller than the municipality they reside in. They provide an opportunity to more efficiently reach residents through HOA Board Meetings, newsletters, and neighborhood social media pages. HOAs and housing complexes are typically responsible for maintaining stormwater management facilities on their property and could benefit from the education and outreach associated with MS4 MCMs.

¹ US Census Bureau, Quick Facts, Luzerne County, Pennsylvania
(<https://www.census.gov/quickfacts/fact/table/dallastownship>)

Specific HOA and housing complex outreach topics include:

- Implementing green stormwater infrastructure on their properties and recognize the importance of environmental improvements to the community they serve.
- General workshops and trainings targeting topics such as rain barrels and/or rain gardens installation, pollution prevention, and stormwater BMP operations and maintenance.

SCHOOLS/STUDENT ACTIVITY GROUPS

The Dallas School District serves the DAMA municipalities of Dallas Borough, Dallas Township, and Kingston Township. The School District has four physical school locations and one online education system, serving approximately 2,500 students².

- Wycallis Primary Center (Elementary) at 2010 Conyngham Ave, Dallas, PA
- Dallas Intermediate School (grades 3-5) at 2000 Conyngham Ave, Dallas, PA
- Dallas Middle School (grades 6-8) at 2020 Conyngham Ave, Dallas, PA
- Dallas High School (grades 9-12) at 2030 Conyngham Ave, Dallas, PA

Schools, school clubs, and student activity groups such as Boy Scouts and Girl Scouts can be targeted for educational material and engagement activities related to stormwater management. Students of all ages can benefit from stormwater educational material such as worksheets, puzzles, and other engaging activities and materials to teach them how they can have a role in keeping local waterways clean.

In addition to the schools in the Dallas School District, Misericordia University is located within the community. The University has a College of Arts and Sciences with courses in biology, chemistry and environmental studies, among others. The University is served by DAMA and both the administration and students can benefit from stormwater education and outreach.

Working with grade-school students and university students provides access to a wider audience including teachers, parents and administrators who live in the surrounding communities.

COMMUNITY GROUPS

There are several community service organizations located within DAMA's partner municipalities. Community groups regularly bring people together and can be conduits for a wide distribution of information on the impacts of stormwater runoff. Local organizations focused on community outreach and community building share similar values for maintaining and improving the quality of local resources.

² Dallas School District, About the District (dallasd.com/about-the-district/)

The Back Mountain Memorial Library and Hoyt Library provide a central location to engage the community and share MS4 education and outreach materials. Examples of other local community service organizations include, but are not limited to:

- Back Mountain Chamber
- Dallas Lions Club
- Rotary Club of Dallas
- The Lands at Hillside Farms
- Tobyhanna Creek/Tunkhannock Creek Watershed Association (TC/TCWA)
- Anthracite Scenic Trails Association

Additional community groups include locally organized athletic groups, business groups, communities through places of worship, fire companies, senior services, and health support groups. Some of these community groups may exist through online platforms and social media groups, such as the Back Mountain Community Facebook page, which could offer an opportunity to spread stormwater management education and outreach through digital means. The TC/TCWA offers stormwater and watershed related educational articles, watershed maps, and volunteer opportunities and events on their website (<http://www.tctcwa.org/home.html>).

MUNICIPAL OFFICIALS AND STAFF

The DAMA municipalities of Dallas Borough, Dallas Township, and Kingston Township each own and maintain municipal offices and other buildings and properties. At each of these locations, there are opportunities to utilize proper operational practices to reduce impacts to stormwater runoff and waterways.

- Dallas Borough Municipal Office: 25 Main Street, Dallas, PA
- Dallas Township Municipal Office: 105 Lt. Michael Cleary Drive, Dallas, PA
- Kingston Township Administration: 180 East Center Street, Shavertown, PA

Specific outreach topics for municipal officials and staff include:

- Proper stormwater pollution prevention practices at municipal buildings and community parks to help maintain water quality and provide a positive example to the public.
- Operations and Maintenance of these facilities must comply with MCM #6 Pollution Prevention/Good Housekeeping requirements and practices as required in the MS4 permit.

BUSINESSES

Businesses include commercial, industrial, and retail establishments that sell goods and/or offer services. It is important to include businesses within the MS4 Program for

management and prevention of stormwater pollution as non-residential properties have features such as parking lots, building footprints, and other impervious surfaces that contribute to stormwater runoff.

Specific outreach topics for businesses include:

- **Businesses that deal with material handling and storage, equipment/vehicular maintenance and cleaning, or industrial processing should be targeted for education and outreach due to potential stormwater impacts from those related industries.**
- **Business and community groups such as Back Mountain Chamber and Back Mountain Community Partnership should also be considered for outreach and education.**

UTILITIES

DAMA is just one of the utility companies serving the public's water resources and solid waste needs of Dallas Borough, Dallas Township and Kingston Township. Utility companies for electricity, gas, etc. operate within the right-of-way of public roads where MS4 infrastructure is located. It is important for the crews completing improvements and/or maintenance to understand the potential for stormwater pollution during construction activities and know how to report an illicit discharge, which could quickly eliminate a significant pollution event. Providing stormwater education information and resources for utility companies working within DAMA municipalities can help strengthen the relationship between municipalities and utility companies and establish a path of communication for pollution prevention.

CONTRACTORS AND DEVELOPERS

Contractors and developers work directly on construction sites where pollution prevention activities are common. Contractors for construction activities manage stormwater pollution from their site through practices that control erosion and sediment, manage on-site stormwater, and other practices. There are opportunities to educate contractors through land development and building permit application processes that can inform contractors about pollution prevention before construction begins. This education provides awareness of potential stormwater pollution activities and encourages best practices on construction sites.

METHODS OF REACHING TARGET AUDIENCE

MS4 municipalities are required to distribute stormwater educational materials and/or information to at least two (2) groups of targeted audiences, noted above, utilizing a minimum of two (2) of the following distribution methods per year (or as described in Appendix A).

- Displays, posters, or signs;
- Social media posts;
- Newsletter articles;
- Pamphlets, booklets, fact sheets, or brochures;
- Radio, local cable television, or newspaper advertisements;
- Newspaper articles;
- Presentations, conferences, or meetings;
- Storm drain stenciling, stream clean-up, and/or educational events.

DAMA and the municipalities of Dallas Borough, Dallas Township, and Kingston Township partner together to reach target audiences in their respective jurisdictions. There are several methods each entity may utilize to reach audiences including websites, newsletters, mailing inserts, bill stuffers, presentations, public meetings, displays, printed materials, and handouts at local events.

DAMA reaches residents and businesses in their service area through their Stormwater webpage, social media presence and monthly billing. DAMA assists their partnering municipalities to fulfill MCM #1 PEOP goals by providing stormwater education materials outlined in this program. Each municipality is required to show they made a direct effort to distribute the educational material to target audiences.

WEBSITES

Websites are a useful tool for sharing stormwater management information with the public. They provide a central location to post digital brochures and/or pamphlets, newsletters, presentations, meeting recordings, and resource links. For municipalities without a dedicated stormwater webpage, a link to the DAMA Stormwater webpage shall be provided. Tables 1, 2, 3 and 4 outline the contents of the stormwater management webpages for DAMA, Dallas Borough, Dallas Township, and Kingston Township as well as website improvement goals for each.

Table 1: Dallas Area Municipal Authority (DAMA)

The DAMA Stormwater webpage (damaonline.org/about-stormwater) includes general information about stormwater, the MS4 program, Municipal MCM requirements, Stormwater Fee information, illicit discharge explanation and hotline number, and additional online resources. The website also contains a "Frequently Asked Questions" page to explain the role of DAMA in assisting its partnering municipalities reach their MS4 program goals.

WEBSITE IMPROVEMENT GOALS

- DAMA collects a stormwater fee to assist Dallas Borough, Dallas Township, and Kingston Township administer their MS4 programs. In addition to explaining how the stormwater fee is calculated, it may be useful for DAMA to highlight actions and projects funded by these fees including education materials, events, MS4 programs, inspection actions and projects.
- As DAMA produces education material to include with monthly billing, digital versions of these resources can be shared on the website or shared to partnering municipalities for them to post.
- Include a calendar or schedule of events for stormwater-related activities hosted by DAMA on the website.
- Utilize the Illicit Discharge Hotline webpage to help educate the public on examples of illicit discharges. Elaborate on the list of illicit discharge examples by including images and/or links to additional information on illicit discharge detection and pollution prevention practices.

The DAMA Stormwater Management webpage and additional resources links will be reviewed annually and updated as necessary.

Table 2: Dallas Borough

The website for Dallas Borough contains information on stormwater management and a link to DAMA through their Sewer, Garbage and Recycling webpage (dallasborough.org/services/sewer-garbage-recycling/). The Borough does not have a designated Stormwater webpage.

WEBSITE IMPROVEMENT GOALS

- Provide clarification of to elevate the visibility of stormwater management as an important topic to the Borough.
- As DAMA produces education material for their partnering municipalities, the Borough can post digital versions of these materials to their website.
- Update the Borough calendar with stormwater events such as public meetings where stormwater will be discussed. Provide a link to the DAMA calendar to keep the public informed.
- Share the Illicit Discharge Hotline (570-696-1133 ext. 314) on the Borough website. Information from DAMA's Illicit Discharge Hotline webpage can be used as a guide to provide illicit discharge information on the Borough's website. Considering providing information on illicit discharge detection and pollution prevention practices.
- The Borough may consider providing links to past MS4 Annual Reports on their website.

The Dallas Borough webpage and additional resources links will be reviewed annually and updated as necessary.

Table 3: Dallas Township

The Dallas Township website has a webpage dedicated to information on the MS4 program (dallastwp.org/ms4-storm-water/) which contains a digital stormwater brochure, "What is an MS4?" educational video, stormwater presentations, and various links to important documents including the DAMA Pollutant Reduction Plan (PRP), MS4 Annual Reports, and MS4 written programs. This stormwater webpage also provides information to residents about plan revisions, public comment periods, and public meetings as they relate to stormwater management topics. To measure interaction with the stormwater webpage, there is a site views counter at the bottom of the page.

WEBSITE IMPROVEMENT GOALS

- As DAMA produces education material for their partnering municipalities, the Township may consider posting digital versions of these materials to their website.
- Ensure that the Township calendar is kept up to date with stormwater events such as public meetings where stormwater will be discussed. A link to the DAMA website and/or calendar can also help keep the public informed.
- Share the Illicit Discharge Hotline (570-696-1133 ext. 314) on the Township website. Information from DAMA's Illicit Discharge Hotline webpage can be used as a guide to provide illicit discharge information on the Township's website. Considering providing information on illicit discharge detection and pollution prevention practices.

The Dallas Township MS4 webpage and associated links will be reviewed annually and updated as necessary.

Table 4: Kingston Township

The Kingston Township website has a webpage dedicated to the MS4 program (kingstontownship.com/municipal-separate-stormwater-system-ms4/) which contains a link to the DAMA PRP, link to the DAMA Stormwater webpage, an MS4 presentation, and stormwater brochure.

WEBSITE IMPROVEMENT GOALS

- Kingston Township has a dedicated page for their MS4 program. The webpage provides a copy of the DAMA PRP and links to DAMA Stormwater website, an information flyer, stormwater presentation and public meeting notice. Consider posting graphics or explanatory text to share stormwater education material.
- As DAMA produces education material for their partnering municipalities, the Township may want to post digital versions of these materials to their website.
- Ensure that the Township calendar is kept up to date with stormwater events such as public meetings where stormwater will be discussed. A link to the DAMA website and/or calendar can also help keep the public informed. Ensure that all links to websites are up to date.
- Share the Illicit Discharge Hotline (570-696-1133 ext. 314) on the Township website. Information from DAMA's Illicit Discharge Hotline webpage can be used as a guide to provide illicit discharge information on the Township's website. Considering providing information on illicit discharge detection and pollution prevention practices.
- The Township may consider providing links to past MS4 Annual Reports on their website.

The Kingston Township MS4 webpage and associate links will be reviewed annually and updated as necessary.

SOCIAL MEDIA

Social media can be a useful tool for municipalities and stormwater organizations to reach audiences online. Regular posts and online interactions are important in maintaining an online presence. Social media outlets can be useful in documenting shared resources as well as post interactions. DAMA, Dallas Borough, Dallas Township and Kingston Township all have Facebook pages and a summary of each is provided.

- The DAMA Facebook page (facebook.com/DallasAreaMunicipalAuthority) posts information on stormwater pollution prevention, community compost collection, and shares links and posts from DAMA partnering municipalities. Figure 1 and Figure 2 are examples of stormwater educational posts shared on the DAMA Facebook page.
- Dallas Borough Facebook page (facebook.com/p/Dallas-Borough) occasionally posts stormwater related topics and events such as Yard Waste and Recycling Schedule, Spring Cleanup Announcement, information on snow removal, and notices of public meetings. The Borough Facebook page also shares links and information to DAMA events.
- Dallas Township Facebook page (facebook.com/dallastownship/) posts videos of public meetings, shares notifications of township events, and shares digital versions of the Township Newsletter.
- The Kingston Township Facebook page (facebook.com/KingstonTwp) posts Monthly Township Newsletters (which occasionally contain stormwater-related information), public meeting agendas, and information on other community events.



Dallas Area Municipal Authority

January 16 · 🌐

...

After battling salt and grime on our Pennsylvania roads, rinsing off your car is important—but it's equally crucial to protect our local waterways. Opt for commercial car washes or unpaved surfaces to ensure harmful chemicals don't pollute our rivers and streams. Learn more about our stormwater management program. <https://ow.ly/Fa8b5OUFyyw>

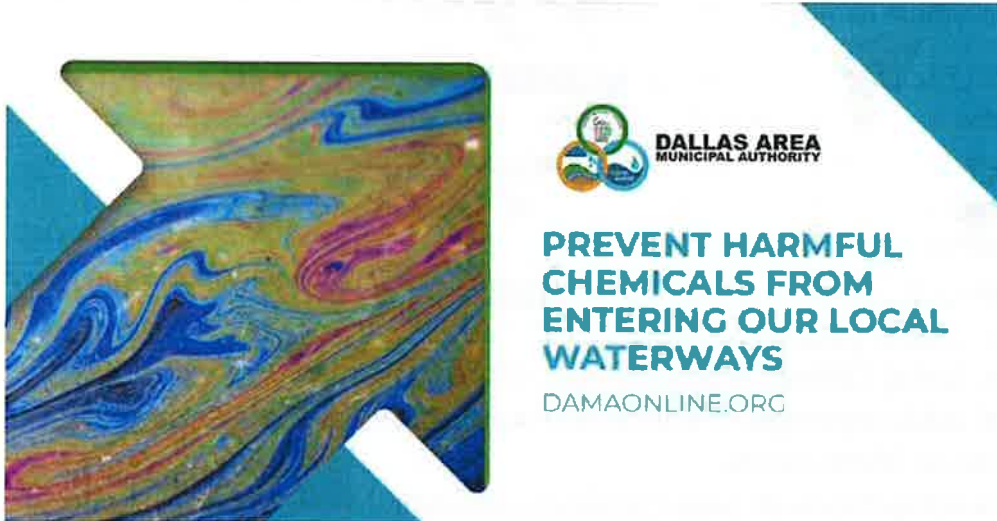


Figure 1: DAMA Prevent Harmful Chemicals Education Post



Dallas Area Municipal Authority

December 26, 2024 · 🌐

...

Pets are wonderful companions, but their waste can pose a threat to water quality if not handled properly. 🐾 Remember to pick up after your furry friends during walks or visits to parks. By doing so, you're not only being a responsible pet owner but also helping to minimize the risk of stormwater pollution.



Figure 2: DAMA Pick Up After Pets Education Post

Table 5 provides recommendations for social media improvement goals.

Table 5: Social Media Improvement Goals

- Regularly share information and events related to stormwater management and water quality on social media to raise awareness for these topics online.
- Tag targeted groups (DAMA, partnering municipalities, community organizations, business organizations, etc.) in social media posts to encourage more views and engagement.
- Provide informative social media posts geared towards seasonal stormwater practices to raise awareness on these topics.
- Encourage other business and community groups that organize stormwater or watershed related events to share their posts on the DAMA social media page to help spread awareness and potentially garner more interest in such events.
- When creating stormwater posts related to target audiences, link to their social media pages or websites to reach the intended audience and encourage post interaction.
- Dallas Borough, Dallas Township and Kingston Township should include educational material or links to materials published on the DAMA social media page.

PUBLICATIONS

Even with the rise of social media, printed materials and other publications can be effective methods of public education. Printed materials include brochures, flyers, posters, billboards or articles in a local newspaper or newsletter. Publications can be distributed through placing printed materials in community meeting places (i.e. library, municipal offices), through mailing inserts, or handouts at community events. Educational materials may also be published through online formats and distributed through email mailing lists, etc. Information can contain illicit discharges detection and elimination information, notice of outfall or BMP inspections, general information about the Stormwater Management Program, and/or upcoming stormwater-related events.

As part of the DAMA municipal partnership, DAMA will provide Dallas Borough, Dallas Township and Kingston Township with stormwater education materials for distribution. Current distribution methods include:

- DAMA periodically distributes printed stormwater education materials in monthly DAMA Sanitary Sewer and Solid Waste bills.
- Dallas Township and Kingston Township have newsletters that are published online to their websites and shared to their social media pages monthly.

Table 6 lists goals to improve how stormwater management information is shared through printed and online publications.

Table 6: Publications Improvement Goals

- Dallas Township and Kingston Township should consider including stormwater education material in their newsletters.
- Utilize municipal mailing lists to reach out to distribute stormwater management education materials to members of the community.

PERFORMANCE MEASURES

To measure the success of the PEO and evaluate the overall effectiveness of public education and outreach efforts, DAMA and its partnering municipalities should consider utilizing performance measures, including but not limited to:

- Circulating a survey;
- Tracking interactions with websites and social media pages;
- Evaluating the accuracy of illicit discharge detection and reporting; and
- Tracking attendance at stormwater events.

SURVEY

Providing a stormwater survey to the public and/or specific target audiences can offer valuable insights into how well the education and outreach program is working. A survey can be circulated by mail, posted on a municipal or DAMA website, through an email distribution list, or completed in person at a public event or meeting. Consider timing a survey to coincide with recent educational campaigns. Offering a survey, such as in Table 7, allows DAMA and/or partnering municipalities to engage with residents and receive feedback and suggestions on the program.

Table 7: Sample Survey Questions

Multiple Choice Sample Questions (answers in blue):

1. What is stormwater? Select all that apply.
 - a. Rain, snow, snow-melt from a natural storm event.
 - b. Water from a precipitation event that soaks into the ground, runs off natural and man-made surfaces, and/or flows into storm sewers and other drainage facilities.
 - c. Runoff that may carry pollutants such as fertilizers, bacteria, sediment, or road salt into drainage facilities and waterways.
 - d. **All of the above**
2. Where do you think stormwater goes after it enters a storm drain? Select all that apply.
 - a. **A sewage/wastewater treatment facility**
 - b. **A separate stormwater treatment facility**
 - c. **Nearby fields and yards**
 - d. **Nearby lakes and streams**
3. What are potential causes of stormwater pollution? Select all that apply.
 - a. **Excess lawn fertilizer**
 - b. Using a dishwasher
 - c. **Leaves and litter in a storm drain**
 - d. **Oil from vehicles and mechanical equipment**
4. What is an illicit discharge? Select all that apply.
 - a. When a stormwater sewer pipe backs water up onto a street.
 - b. **When a spill of oil, paint, or other chemicals enters a storm drain, pipe or ditch.**
 - c. **Any discharge to a municipal storm sewer that is not composed entirely of stormwater.**
 - d. A natural stream flowing close to a stormwater sewer pipe outfall.
5. How did you learn about stormwater?
 - a. I have not learned about stormwater
 - b. Borough or Township website, newsletter, or Facebook page
 - c. Dallas Area Municipal Authority (DAMA) website or Facebook page
 - d. School/Student Activity Group
 - e. News story online or in print
 - f. Through a non-profit watershed organization or volunteer activity
 - g. Other: _____

Short Answer Sample Questions:

6. What type of stormwater-related information are you interested in learning more about?
7. What type of workshop or event relating to stormwater management, pollution prevention, or water quality are you interested in attending?
8. Are there specific locations where you have experienced stormwater issues in your neighborhood?

Yes/No Sample Questions (Circle Yes or No):

9. Have you interacted with the Borough/Township/DAMA Stormwater Management webpage? (Yes / No)
10. Have you seen advertisements for stormwater activities and events posted on the Borough/Township/DAMA website or Facebook page? (Yes / No)

11. Do you know the difference between a Storm Sewer System and a Sanitary Sewer System?
(Yes / No)
12. Are you interested in learning more about how to protect water quality in your community?
(Yes / No)

WEBSITE/SOCIAL MEDIA VIEW TRACKER

A website tracker can be a useful tool for measuring the effectiveness of the stormwater education and outreach program by providing insights into how visitors are engaging with the program's online content. A view tracker tracks the number of visitors, page views, and/or sessions on a website. When there is an increase in website traffic after certain outreach campaigns or activities, this may indicate that the public is engaging with online resources.

- Dallas Township currently utilizes a view counter on their MS4 webpage which tracks total page views and daily page views.
- DAMA, Dallas Borough and Kingston Township may consider adding similar webpage view trackers to their websites.

DAMA and its partnering municipalities all have social media pages. Each of the Facebook pages measure interactions with posts through likes, shares, and comments. DAMA and its partnering municipalities can utilize these tools to assess if educational posts are successfully reaching audiences and measure their reactions. Targeting other related organizations through tagging posts can increase the amount of traffic to educational posts.

EVENT ATTENDANCE

Tracking event attendance provides insight into how well the PEOP is engaging the community, raising awareness of stormwater issues, and inspiring action. Event attendance is closely related to MCM#2, Public Involvement and Participation.

EDUCATIONAL MATERIAL SOURCES

Educational materials will be developed or obtained to increase the public's knowledge of stormwater issues and the practices that can be applied. Educational materials should address one or more of the MS4 six MCMs:

1. Public Education and Outreach
2. Public Involvement and Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Stormwater Runoff Control

5. Post-Construction Stormwater Management in New Development and Redevelopment
6. Pollution Prevention and Good Housekeeping

DAMA provides its partnering municipalities with stormwater education materials, however, there are additional organizations that offer resources for stormwater education. Table 8 provides a list of these organizations that provide stormwater educational information available for download on their websites.

<i>Table 8: Organizations with Stormwater Education Material</i>	
Organization Name	Website
Alliance for the Chesapeake Bay	https://www.allianceforthebay.org/
Chester County, PA	https://www.chescoplanning.org/MuniCorner/eTools/69-StormwaterBMPs.cfm
Chesapeake Stormwater Network	https://chesapeakestormwater.net/
Dallas Area Municipal Authority	https://damaonline.org/about-stormwater/
Environmental Protection Agency (EPA)	http://epa.gov
Luzerne County, PA	https://www.luzernecounty.org/301/Stormwater-Management-Plan
Tobyhanna Creek/Tunkhannock Creek Watershed	http://www.tctcwa.org/educationpage.html
Pennsylvania Department of Environmental Protection (PA DEP)	https://www.dep.pa.gov/Business/Water/CleanWater/StormwaterMgmt/Stormwater/MCM/Pages/default.aspx
Penn State Extension, Master Watershed Steward Program	https://extension.psu.edu/programs/watershed-steward

STORMWATER EDUCATION TOPICS

The education and outreach program should provide a wide variety of stormwater related topics to educate the public on the impacts of their behaviors and actions on water quality. Each target audience will require a specific topic of interest unique to their needs. Table 9 provides some general stormwater education topics for target audiences including the basics of stormwater, the NPDES MS4 permit, and how audiences can participate in stormwater topics. Additional targeted stormwater education and outreach topics are included in Appendix A.

Table 9: General Stormwater Topics

- The importance of clean stormwater to individual residents, the connection to local waterbody health and overall watershed health, along with the harmful effects of pollution.
- An overview of the NPDES MS4 permit.
- Local water quality pollutants generated from common behaviors (i.e., fertilizer use, litter, pet waste, motor oil, leaves, swimming pool discharges, etc.)
- Pollution reduction practices to address local pollutants (i.e., limit fertilizer use, prevent leaves from entering storm drains, proper trash and motor oil disposal, pet waste clean-up, etc.)
- Common Stormwater Best Management Practices (BMPs), such as basins, pervious pavement, subsurface infiltration beds, vegetated swales, rain gardens, downspout disconnection, wet ponds, etc.
- Stormwater BMPs that are easy to implement on residential properties:
 - Rain gardens to promote increased water filtration and infiltration;
 - Rain barrels to collect and reuse rainwater.
 - Disconnection of rooftop downspouts to vegetated area

ANNUAL GOALS

Dallas Borough, Dallas Township and Kingston Township are required to complete specific goals annually to meet the Minimum Control Measure #1 MS4 permit requirements. The MS4 permit requirements and minimum annual goals for compliance are provided in Table 10.

Table 10: Permit Requirements and Compliance Goals

PERMIT REQUIREMENTS	MINIMUM COMPLIANCE GOAL
<p>BMP #1 Develop, implement, and maintain a written PEOP.</p>	<p>Dallas Area Municipal Authority (DAMA) has a written PEOP that is reviewed annually and revised as necessary.</p>
<p>BMP #2 Develop and maintain lists of target audience groups.</p>	<p>DAMA has a target audience list that is reviewed annually and updated as necessary (concurrently with PEOP revisions).</p>
<p>BMP #3 The permittee shall annually publish at least one issue of a newsletter, pamphlet, flyer, or website article that includes general stormwater educational information, a description of the Borough’s Stormwater Management Program (SWMP), and information about the Borough’s stormwater management activities.</p>	<p>Each municipality will publish a minimum of one (1) of the following items annually:</p> <ul style="list-style-type: none"> • Stormwater educational pamphlets/flyers; • A stormwater article on the municipal website or newsletter; and • Maintain and update content on the stormwater management pages of municipal websites and the DAMA website. <p>Municipalities should also maintain communication with DAMA, the County Conservation District, and Tobyhanna Creek/Tuckhannock Creek Watershed Association to help secure educational information shared by organizations to the broader community.</p>
<p><i>Municipalities may go above and beyond the minimum compliance goal of one (1) publication annually by utilizing additional methods, above, and/or by publishing multiple newsletter articles, etc.</i></p>	
<p>BMP #4 Distribute stormwater educational materials and/or information to the target audiences using a variety of distribution methods. The permittee must utilize at least two distribution methods annually.</p>	<p>Municipalities will distribute stormwater information to target audiences through two (2) of the following methods:</p> <ul style="list-style-type: none"> • Posters hung in the municipal building; • Flyers/pamphlets for distribution in the municipal building; • Informational brochures shared through DAMA mail-outs, • Through the municipality’s website; • Newspaper advertisements and newsletters; and • Through the partnership with DAMA, who publishes numerous stormwater educational materials on their social media, etc.

Table 10: Permit Requirements and Compliance Goals

PERMIT REQUIREMENTS	MINIMUM COMPLIANCE GOAL
<i>Municipalities may go above and beyond the minimum compliance goal of two (2) distribution methods annually by utilizing additional methods, above, and/or by publishing multiple newsletter articles, etc.</i>	

ANNUAL ACCOMPLISHMENTS

Each municipality (Dallas Borough, Dallas Township, and Kingston Township) is required to submit an Annual MS4 Status Report on the Stormwater Management Program to Pennsylvania Department of Environmental Protection (PA DEP) by September 30th of each permit year. The Annual MS4 Status Reports should be made available to the public by request at each Municipality's Office Building. The PEOP accomplishments will be reported each year in the Annual MS4 Status Reports.



**DALLAS AREA
MUNICIPAL AUTHORITY**

APPENDIX A EDUCATION TOPICS & DISTRIBUTION METHODS

Dallas Area Municipal Authority

Luzerne County, Pennsylvania

101 Memorial Highway,
Shavertown, PA 18708

April 2025



**CENTER FOR
WATERSHED
PROTECTION**

Center for Watershed Protection, Inc.
11711 East Market Place, Suite 200, Fulton, MD 20759
www.cwp.org

APPENDIX A. STORMWATER EDUCATION AND OUTREACH TOPICS AND DISTRIBUTION METHODS BY TARGET AUDIENCE GROUP	
RESIDENTS	<p>EDUCATION TOPICS</p> <ul style="list-style-type: none"> - Function of storm sewer systems, where they drain, etc. - Negative impacts of dumping substances or materials on waterways - Common pollutants information and basic pollution prevention - Best management practices for lawn fertilization - Pet waste management - Swimming pool dewatering - Car washing - Winter salt application - Illicit Discharge reporting - Rain barrels and rain gardens <p>DISTRIBUTION METHODS</p> <ul style="list-style-type: none"> - Include stormwater information in new homeowner's packet and stormwater bills. - Share information via the Dallas Area Municipal Authority (DAMA) website and social media page - Share information with the participating municipalities of Dallas Borough, Dallas Township and Kingston Township to post on their websites, social media pages, and in their newsletters. - Share flyers, brochures, and/or informational posters to the participating municipalities so they can post in their municipal offices or on public bulletin boards, at the library, etc.
HOMEOWNERS ASSOCIATIONS	<p>EDUCATION TOPICS</p> <ul style="list-style-type: none"> - Pollution Prevention - Stormwater best management practices (BMP) operations and maintenance. - Residential pollution prevention education topics (see above). <p>DISTRIBUTION METHODS</p> <ul style="list-style-type: none"> - Distribute educational materials directly to Home Owner Associations (HOAs) that can be communicated at their Board Meetings. - Share stormwater management content with HOAs so that they can share it directly through their community social media. - Offer publications, pamphlets, flyers to be posted in HOA community spaces.
SCHOOLS/STUDENT ACTIVITY GROUPS	<p>TARGET GROUPS</p> <ul style="list-style-type: none"> - Wycallis Primary School for students grade 2 and under - Dallas Intermediate School - Dallas Middle School - Dallas High School - School clubs, activity clubs, school community groups, and Boy Scouts and Girl Scouts.

APPENDIX A. STORMWATER EDUCATION AND OUTREACH TOPICS AND DISTRIBUTION METHODS BY TARGET AUDIENCE GROUP	
	<p>EDUCATION TOPICS</p> <ul style="list-style-type: none"> - General information on watersheds and local waterways. - Function of storm sewer systems, where they drain, etc. - Common pollutants information and basic pollution prevention. - Pet waste management. <p>DISTRIBUTION METHODS</p> <ul style="list-style-type: none"> - Distribute educational material to the school/district website and school newspapers. - Field trips and/or outdoor classroom activities. - Club and student participation in stormwater events hosted by DAMA and/or other stormwater volunteer events and activities.
COMMUNITY GROUPS	<p>TARGET GROUPS</p> <ul style="list-style-type: none"> - Back Mountain Community Partnership - Back Mountain Chamber - Dallas Lions Club - Rotary Club of Dallas - The Lands at Hillside Farms - Dallas Public Library - Locally organized athletic groups, business groups, community groups and services, fire companies, senior services, etc. <p>EDUCATION TOPICS</p> <ul style="list-style-type: none"> - Refer to Residential Education Topics, above. <p>DISTRIBUTION METHODS</p> <ul style="list-style-type: none"> - Invitation and participation in watershed cleanups - Share stormwater management content with community groups so it can be shared directly to their community social media pages - Offer publications, pamphlets, flyers to be available at group events.
MUNICIPAL OFFICIALS AND STAFF	<p>EDUCATION TOPICS</p> <ul style="list-style-type: none"> - Proper operation and maintenance practices at municipal facilities to reduce potential pollution (Pollution Prevention and Good Housekeeping principles from MS4 Minimum Control Measure #6) - MS4 general information - Illicit Discharge reporting - Inform municipal staff when changes or reviews are made to stormwater programs and plans - <p>DISTRIBUTION METHODS</p> <ul style="list-style-type: none"> - Provide municipalities with a link to updated stormwater programs and plans through email.

APPENDIX A. STORMWATER EDUCATION AND OUTREACH TOPICS AND DISTRIBUTION METHODS BY TARGET AUDIENCE GROUP	
	<ul style="list-style-type: none"> - Share updates to stormwater regulations with staff members and municipal officials using email or printed publication in office spaces. - Invite DAMA and municipal staff to attend stormwater training events and webinars. - Share stormwater information on the DAMA website. - Post flyers, brochures, and/or informational posters for the public at DAMA and partnering municipal offices.
BUSINESSES	<p>TARGET GROUPS</p> <p>Including but not limited to businesses that conduct:</p> <ul style="list-style-type: none"> - Materials handling and/or materials storage (i.e. garden centers, topsoil distribution, landscape maintenance companies, tire recycling); - Equipment/vehicular maintenance and cleaning (i.e. car washes, pressure washing companies, auto-motive/equipment repair) - Industrial processing (i.e. fabricators, manufacturers) - Pet boarding and/or grooming - Businesses operating with large impervious surfaces (roof area, parking lots) - Businesses operating near water resources or near stormwater infrastructure - Dallas Community Partnership
	<p>EDUCATION TOPICS</p> <ul style="list-style-type: none"> - General watershed information and storm sewer systems including where they drain, etc. - Impacts of cleaners, chemicals, and other types of process liquids from businesses on waterways and the storm sewer system - Impacts that sediment and other materials have on waterways and the storm sewer system - Pollution prevention practices - Stormwater best management practices (BMP) operations and maintenance - Winter salt application - Illicit Discharge reporting
	<p>DISTRIBUTION METHODS</p> <ul style="list-style-type: none"> - Target similar businesses or industries with stormwater material specific to their practices and potential for pollution. - Share pamphlets, brochures, other printed publications directly to businesses. - Include stormwater information in new business packet, stormwater bills, and/or other business-related mail. - Businesses can support municipal and/or watershed group efforts by displaying posters, distributing handouts, sponsoring stormwater events, etc.
UTILITIES	<p>TARGET GROUPS</p> <ul style="list-style-type: none"> - DAMA staff, electricity, and gas utility companies

APPENDIX A. STORMWATER EDUCATION AND OUTREACH TOPICS AND DISTRIBUTION METHODS BY TARGET AUDIENCE GROUP	
	<ul style="list-style-type: none"> - Other utility companies that frequently work in and/or service Dallas Borough, Dallas Township, and Kingston Township <p>EDUCATION TOPICS</p> <ul style="list-style-type: none"> - Illicit discharge reporting - General stormwater and pollution prevention educational material <p>DISTRIBUTION METHODS</p> <ul style="list-style-type: none"> - Maintain communication with other utility companies that frequently serve the area - Share information and notify of updates to plans, programs, and illicit discharge reporting systems
CONTRACTORS/ DEVELOPERS	<p>EDUCATION TOPICS</p> <ul style="list-style-type: none"> - Refer to Business Education Topics, above. <p>DISTRIBUTION METHODS</p> <ul style="list-style-type: none"> - Provide the participating municipalities with material to educate contractors throughout the building permit, preconstruction, and land development processes. - Share information through the DAMA website and social media page. - Share information with participating municipalities so they can post on their websites, social media pages, and to newsletters. - Update the DAMA Stormwater Management webpage as necessary.

