



MS4 Annual Report Highlights

July 1, 2023, to June 30, 2024

PowerPoint Presentation

Palmer Township
Northampton County
Pennsylvania
PAI: 132206

MS4 Annual Report Information

- The MS4 (Municipal Separate Storm Sewer Systems) reporting year is July 1, 2023, to June 30, 2024
- Report is due September 30, 2024
- WATERSHED NAMES: Lehigh River HUC # 02040106, Bushkill Creek (Delaware River) HUC # 02040105, and Schoeneck Creek HUC # 020401050303.
- CONTACT PERSON: Palmer Township MS4 Coordinator, Phone No. (610) 253-7191 ext 1130
- WEBSITE: www.palmertwp.com/stormwater.html
- The Annual Report is divided into 6 Minimum Control Measures (MCM's) listed on the next slide. The Highlights of the 2023-2024 Report are summarized in this PowerPoint Presentation.

MCM

(Minimum Control Measures)

- ◆ MCM #1 – Public Education and Outreach on Stormwater Impacts
- ◆ MCM #2 – Public Involvement/Participation
- ◆ MCM #3 – Illicit Discharge Detection and Elimination
- ◆ MCM #4 – Construction Site Storm Water Runoff Control (Northampton County Conservation District Responsibility)
- ◆ MCM #5 – Post-Construction Storm Water Management in New Development and Redevelopment.
- ◆ MCM #6 – Pollution Prevention/Good Housekeeping for Municipal Operations

MCM 1



PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS



MCM #1 Information



- ◆ Articles on storm water were provided in the Palmer Township Newsletter editions dated August 2023, November 2023, February 2024, and May 2024.
- ◆ Storm water pamphlets are available for residents and visitors at the Palmer Township Municipal Building near the receptionist's desk.
- ◆ Storm water information is available on Palmer Township's website: www.palmertwp.com/stormwater.html
- ◆ A display board detailing key points of the MS4 program was at Palmer Community Weekend August 15, 16, 17, and 18th, 2024. The display board included Pollutant Reduction Plan projects, illicit discharges and green infrastructure.
- ◆ An Express-Times newspaper notice (done in conjunction with Lower Nazareth Township, West Easton Borough and Wilson Borough) was published in the February 9, 2024, newspaper.
- ◆ Stormwater pamphlets and information were also available at the ESC Earth Day event on April 20, 2024, and the STC Arbor Day event on April 26, 2024.

MS4- History and Requirements

Most would agree that they want clean water, clean air, and a healthier planet for the next generation, but what are we doing to improve our quality of life in the long-term? While there are many different laws and regulations surrounding pollution and use of environmental resources, one federal program that is actively working to make a difference on the local level is the Municipal Separate Storm Sewer System (MS4) permit program. Although this permit program is an important step towards working together to keep our environment clean and healthy, the MS4 permit program is an unfunded state and federal mandate with increasing regulations every permit cycle, which is every five years. An unfunded mandate means that municipalities like Palmer Township are required to meet the permit regulations without any funding assistance, otherwise the Environmental Protection Agency (EPA) will issue a fine for non-compliance.



The US EPA regulates stormwater management through the National Pollutant Discharge Elimination System (NPDES) program to comply with the Clean Water Act originally passed in 1948. Each individual state administers permits to their municipalities to comply with state-specific requirements for water quality standards. In Pennsylvania, Palmer Township must follow the standards for surface waters described in Chapter 93 of the Pennsylvania Code. The focus of the permit is for municipalities to develop and implement a stormwater management program to educate residents about stormwater issues and reduce pollutants entering the streams and rivers in each municipality. Palmer Township recently renewed its MS4 permit for another five-year term to remain compliant with the MS4 program and avoid federal fines.

The permit requirements stipulate the minimum control measures, or MCMs, that must be met in each municipality's stormwater program to be compliant with the MS4 permit. These MCMs include public education and outreach, illicit discharge detection and elimination, construction stormwater management, and municipal operations. These MCMs set standards for minimum education requirements, details for erosion control on construction sites, stormwater



infrastructure inspections and maintenance, and record keeping for annual reports and any illicit discharges that may occur in the Township. Through the MS4 program, Palmer Township has been tasked with reducing water pollution within the Township and educating residents on stormwater management, and steps Palmer has taken to improve the MS4 program. Without any additional funds to pay employees, purchase equipment, or perform necessary maintenance, Palmer decided to form a stormwater authority to fund these mandated projects and pollutant reduction measures. For more

information on specific measures that Palmer Township takes to be MS4 compliant, and our stormwater authority, please visit the Township website: <https://palmertwp.com/stormwater.html>.

MS4 Article in the Palmer Newsletter (November 2023)

MS4 Article in the Palmer Newsletter (May 2022)

MS4 BMPs- Street Sweeping

Street sweeping is an important Best Management Practice (BMP) in Palmer Township because of how many benefits there are to using a street sweeper. Not only does street sweeping aesthetically make the neighborhood look better, but it also helps significantly reduce pollution from entering the storm sewer system. You will learn about how a sweeping machine works and why they are important to the MS4 program, not only in Palmer Township, but across the country.

There are two different types of street sweepers, one uses mechanical brooms and sprays water onto the road to dislodge any dirt or debris off the streets. Then the rotating brooms sweep it together to be removed on a conveyor belt so any material can be properly disposed of. The other type of street sweeper relies on air jets to remove stuck on dirt or grime from the street, then the truck picks it up with a vacuum system on the underside of the vehicle. Studies have shown that more advanced sweeping technology like the air jet sweepers works more efficiently than typical mechanical broom sweepers to clean roadways. This may be because air jet street sweepers do not require water, which may cause some particles or contaminants to be stuck on the road.

The impacts of street sweeping reach far beyond the street that is cleaned. When townships like Palmer use street sweepers to clean debris off the roads it reduces hazardous materials from reaching the storm drain or being left on the street to eventually wash into the storm sewer. This is one of the reasons why the EPA has determined street sweeping to be a Best Management Practice for MS4 programs across the country. Street sweeping also reduces contaminants like motor oil from poisoning aquatic life. Not to mention, a clean street gives the

right impression to visitors, and to longtime residents as well! For more information on Palmer Township's MS4 program and how you can reduce stormwater pollution at home, please visit www.palmertwp.com/stormwater.html.

Pictures above and to the left closely resemble the models of street sweepers Palmer Township currently uses.



MS4 - Public Works Site BMPs- Infiltration Basins



Palmer Township utilizes many different Best Management Practices, or BMPs, in locations and sites across the Township. You have learned about the Charles Chrin Community Center Site in another article, as well as wash bays at the Public Works building and the ecological filter at Mill Race Park. The BMP of focus for this article are the three infiltration basins at the Public Works/Public Utilities (PW/PU) site.

These infiltration basins are important to the MS4 program and stormwater management system because the design of the basin allows water from the PW/PU site to be filtered naturally through the soil and ultimately recharge the groundwater supply. This plays a huge role in reducing the amount of pollution discharged from the stormwater system into our creeks and rivers. There are other functions of the infiltration basins that also benefit the stormwater system of Palmer.

One of the other functions that helps maintain a healthy ecosystem is the permanent rip-rap outlet protection at three discharge pipes from the infiltration basins. Large rocks act as outlet protection as well as energy dissipators to reduce flow velocity and prevent any erosion or scouring caused by water flowing out of the basins. One of the main goals is to prevent any erosion of embankments or berms to ensure that the infiltration basins work properly for as long as possible to improve water quality and safety. These infiltration basins also have water quality inlets and manholes in strategic locations across the site to allow debris in water, like sand or silt, to settle out of the flow and give township employees access to remove any floating debris or sediment that may have found its way into the stormwater system.

Lastly, one of the safety features of the infiltration basins that most basins are required to have are emergency spillways. If you recall the ecological filter article, the spillway at Mill Race was rock lined to filter water before reaching Bushkill Creek. While these emergency spillways for the infiltration basins are not lined with a layer of rock, they still have an important function. If there is ever too much water for the infiltration basins to collect, water would flow out of the emergency spillway before flowing anywhere else and causing bank erosion. This allows Palmer Township to somewhat control where the stormwater ends up ensuring not only employee safety at the PW/PU site but also ensuring resident safety. To keep any unwanted animals or visitors out of the basins, there is a fence around the perimeter of the three basins with a gate.



To learn more about what you can do at home to help Palmer Township keep its stormwater clean, visit palmertwp.com/stormwater.html for more information.

MS4 Article in the Palmer Newsletter (February 2024)

Palmer Township Website on Stormwater

[Departments](#)[News](#)[Contact](#)[General Info](#)[Alerts](#)[Calendar](#)[Stormwater](#)[Stormwater Fee](#)[Stormwater FAQs](#)[Stormwater Projects](#)[MS4 Updates](#)[Resources](#)[Flood Zone Map](#)[Stormwater Authority
\(PTSA\)](#)[Forms & Documents](#)[Departments](#)

MS4 Updates

- [MS4 Annual Report](#)
- [MS4 Resource Guide](#)

The Municipal Separate Storm Sewer System (MS4) program was developed in response to the adoption of the Federal Clean Water Act and is administered through the Environmental Protection Agency (EPA). In Pennsylvania, the state Department of Environmental Protection (PA DEP) manages municipalities with MS4 permits and those with waivers. These agencies oversee overall MS4 compliance through the National Pollutant Discharge Elimination System (NPDES) permitting program. Palmer Township successfully renewed its' MS4 permit in 2023 which is valid for the next five (5) years.

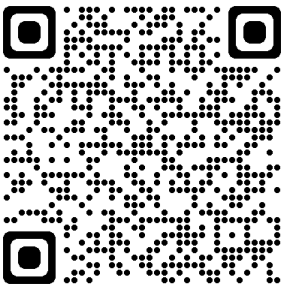
The MS4 permit is a federal and state mandated permit that



Updated Stormwater Department pages on the Township website

MCM 1: Public Education and Outreach on Stormwater Impacts.

Palmer Township must create a stormwater education program to distribute educational materials and conduct outreach activities related to the impacts of stormwater discharges and how the public can aid in the process of pollutant reduction. Required Best Management Practices (BMPs) include developing and maintaining an education program, developing, and maintaining a target audience group list for education in the Township, publish educational articles in Township newsletters, local newspapers, and Township websites, and flyers and other display boards at community events to educate residents on stormwater impacts.



Palmer Community Days Display 2024

Palmer Township - MS4



PRP Projects

The Pollutant Reduction Plan for Palmer requires the Township to reduce sediment entering waterways by 195,000 pounds. These projects must be completed by May 2028 to comply with the MS4 permit.



Green Infrastructure

These are nature-based solutions for stormwater runoff in urban areas. Rain gardens, bio-retention, and green roofs are a few examples. Picture above from Mill Race Park basin.



Illicit Discharge

Any runoff that is not composed entirely of stormwater.



Inlets

Storm inlets can be the first entry point for pollution, both intentional and unintentional.



Get Involved

Find out how you can help improve stormwater in your neighborhood!

MCM 2



PUBLIC INVOLVEMENT/PARTICIPATION (PIP)

MCM #2 Information

- ◆ The Palmer Township Environmental Steering Committee (ESC) held an Earth Day event on April 20th, 2024. Residents came to learn more about stormwater, participate in a cleanup in Fairview Park, and purchase native plants through Penn State Extension.
- ◆ Efforts were underway by Palmer ESC to involve students, scouts and residents with a volunteer program to attach emblems to storm sewer inlets. These efforts are following a township-wide inlet survey.
- ◆ Bushkill Stream Conservancy (BSC) continues to be a partner for Township projects including riparian buffer planting and Earth Day participation.
- ◆ Information about storm water runoff is available at the receptionist's desk at the Palmer Township Municipal Building.
- ◆ Website information and links are provided on the Palmer Township webpage. (www.palmertwp.com/stormwater.html)

Palmer ESC Earth Day 2023

Celebrate
Palmer Township
Earth Day 2024

with the Palmer Township
Environmental Steering Committee

Saturday April 20th, 2024

10 AM - 2 PM

Fairview Park - 3501 Fairview Ave, Easton

Join your neighbors to see how you can help preserve
our township, our state and our planet.

Presentations

10 AM: Bee Nice

Pollinators help farmers produce our food
and make our gardens richer and more
beautiful.

11 AM: Stash the Trash

Plastics are entering our food and water.
Reducing our waste stream can prolong
the life of our landfills; avoiding the
questions of where to place new ones and
how to pay for them.

Noon: Slow the Flow

Stormwater is causing pain and expense
to Palmer residents. Find out about ways
to minimize both while improving your
property and budget.

Ongoing Events

Native Plant Sale

Local plants will be available to beautify
your yard and garden. Master Gardeners
from the Penn State Extension will offer
advice and answer questions.

EVs and Owners

Battery Electric Vehicles are in our future.
Discuss expense, charging and range with
people who have lived with them for years.

Preservation Groups

Find out about hikes, nature walks and
opportunities for volunteering.

Trail, Road and Park Clean-up

Fairview Park and other spaces will be
cleaned by volunteers. Come early to help.
For more information, contact:
earthstewardsofpalmer@gmail.com.



Palmer STC Arbor Day



ARBOR DAY
April 26, 2024

Bushkill Stream Conservancy (BSC)



- ◇ Bushkill Stream Conservancy's mission is to advance the conservation and enhancement of the Bushkill Creek watershed.
- ◇ BSC does this by sponsoring education programs, public outreach, environmental research and restoration of streams.
- ◇ They also partner with Jacobsburg Environmental Education Center to educate the public and protect biodiversity of the Bushkill Creek.



- BSC's recent project is focused on 1.9 miles of the Bushkill Creek between Tatamy and Palmer. Goals are to increase public access and awareness as well as mitigate effects of development in the area. Maintenance for tree and meadow planting is ongoing with BSC members and volunteers.



Inlet Emblem Program

- ❖ Township employees conducted a township wide survey last permit year to determine how many inlets need to be relabeled. Palmer ESC is still working with volunteers to reattach emblems in phases across the township.
- ❖ Metal fish plates were installed in pre-cast inlet tops by the Palmer Township Public Works Department on previous storm sewer projects.
- ❖ Future Palmer Township Storm Sewer Projects are required to install metal fish plates on all new inlets as shown in the Palmer Township Standard Specifications and Construction Details.



Duracast Emblem for Inlet



Metal Emblem for Inlet ("Fish Plate")

Palmer Township Inlet Emblems



MCM 3

ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E)

MCM #3 Information

- ◆ Storm sewer outfalls/swales were inspected for illicit discharges within Palmer Township during the reporting year. No illicit discharges were found. There are 82 known storm sewer outfalls/swales within Palmer Township.
- ◆ Typically, approximately 25% of storm sewer outfalls/swales are inspected each year, about 20-30 outfalls.
- ◆ Inspections are performed, recorded on an inspection sheet, photographed and catalogued by the MS4 Coordinator. Pictures of a few typical outfalls are included in this PowerPoint.
- ◆ A spreadsheet is attached to this presentation and lists when the outfalls/swales were inspected and known remaining outfalls/swales.
- ◆ A note was added to the Township's webpage describing what an illicit discharge is and what to do when one is found.
- ◆ The locations of the storm sewer outfalls and swales are provided on a Palmer Township topographic map. The map is available for review upon request at the Palmer Township Municipal Building.

◆ Pictures of storm sewer outfalls from inspections for illicit discharges





MS4 OUTFALL FIELD SCREENING REPORT



BACKGROUND INFORMATION

Permittee Name: Palmer Township	NPDES Permit No.: PAI-132206
Date of Inspection: 	Outfall ID No.: B-1
Land Uses in Outfall Drainage Area (Select All): <input type="checkbox"/> Industrial <input type="checkbox"/> Urban Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Open Space <input type="checkbox"/> Other: 	Latitude: 40° Longitude: 75° Dry Weather Inspection? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Date of Previous Precipitation: Amount of Previous Precipitation: in Inspector Name(s): Were Photographs Taken? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Are Photographs Attached? <input type="checkbox"/> Yes <input type="checkbox"/> No

OUTFALL DESCRIPTION

TYPE	MATERIAL	SHAPE	DIMENSIONS	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input checked="" type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other <input type="checkbox"/> Other	Diameter: 16 in	<input type="checkbox"/> In Water <input type="checkbox"/> With Sediment
<input type="checkbox"/> Open Channel	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-Rap <input type="checkbox"/> Other	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other	Depth: in Top Width: in Bottom Width: 	

Dry Weather Flow Present at Outfall During Inspection? ☐ Yes ☒ No (If No, skip to Certification Section)

Description of Flow Rate: ☐ Trickle ☐ Moderate ☐ Significant ☒ N/A

DRY WEATHER FLOW EVALUATION

Does the dry weather flow contain color? ☐ Yes ☐ No If Yes, provide a description below.

Outfall/
Swale
Inspection
Form
Example

Notice added to Palmer Township's storm water website.



- ◆ **Protect Palmer Township and Downstream Environment From Illicit Discharges To Storm Sewer System**
- ◆ Illicit discharges include dry weather flows from storm water outfalls and swales along stream banks or a significant volume of an unusual looking or odorous discharge from a storm water outfall during wet weather.
- ◆ If an illicit discharge is found, do not investigate further; this material may be harmful to your health and safety. Immediately notify the Palmer Township Public Services Department at 610-253-7191 from 8:30 a.m. to 4:30 p.m. weekdays; and, after hours, a message can be left at the Northampton County non-emergency phone number 610-330-2200.
- ◆ Some examples of illicit discharges are automotive fluids (antifreeze, used motor oil, brake fluid, fuel, etc.), concrete slurry, paint products and solvents.



MCM 4



CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

MCM #4 Information

- ◆ The Northampton County Conservation District (NCCD) performs reviews and approvals of Erosion & Sediment Control Plans and NPDES Plans within Palmer Township.
- ◆ Pre-construction meetings and field inspections are performed by the NCCD.
- ◆ Notice of Violations (NOV) and other compliance letters are also sent by the NCCD.
- ◆ NOVs are sent to the Developer/Contractor/Permit Holder and a copy is sent to Palmer Township for tracking and inclusion in the Annual Report.
- ◆ The pamphlet “Don’t Let Storm Water Run Off With Your Time and Money!” is given to Developers, Contractors and Builders by the Palmer Township Planning and Permitting Offices.
- ◆ Other construction stormwater information can be found using the links on the Township’s webpage.

Notice of Violations List

Maintained by Palmer Township

NORTHAMPTON COUNTY CONSERVATION DISTRICT
EROSION AND SEDIMENT CONTROL PLAN
NOTICE OF VIOLATIONS
PALMER TOWNSHIP, PA
2023-2024

NUMBER	PROJECT NAME/ RESPONSIBLE PARTY	NCCD # NPDES#	DATE SENT OUT	RECEIVING STREAM	COMMENTS
1	Palmer Elementary School David Piperato, Superintendent Skepton Construction Inc. (Co-permittee)	Cty-24-17-1-86 PAD480042	7/11/2023	Bushkill Creek	Site still under construction, failure to maintain E&S controls, damaged storm sewer pipe carrying runoff
2	Chrin Commerce Center Charles Chrin Real Estate Trust	Cty-30-03-1-32 PAD480095	7/27/2023	Bushkill Creek Schoeneck Creek	Failure to maintain E&S BMPs
3	Palmer Point Apartments Palmer Point OE, LLC Grace Industries (co-permittee)	Cty-24-18-1-74 PAD480081	8/24/2023	Bushkill Creek	Previous violation not satisfactorily addressed.
4	ECB-Land Recycling File Michael S. Fleck	Facility ID-870123 Remediation-56656	10/18/2023	Bushkill Creek	PA DEP letter to homeowner for heating oil spill violating 402 of Clean Stream Law
5	Palmer Elementary School Tracy Piazza, Superintendent Skepton Construction, Inc. (co-permittee)	Cty-24-20-1-29 Cty-24-23-1-64 PAD480042	12/13/2023	Bushkill Creek	Failure to implement/maintain BMPs Failure to temp. stabilize and control runoff
6	Carson Lot 100/200 Carson Van Buren LLC Livengood Excavators Inc. and ARCO Design Build	Cty-24-22-1-120 PAC480164	12/29/2023	Schoeneck Creek	Continued violation, cannot find record of first inspection, follow up scheduled for 12-Jan-24
7	Lot L8SE3 14 6 034 Pattersen Renssealer LP	N/A	5/17/2024	Bushkill Creek	No NPDES permit, builders constructing homes on individual lots

Don't Let Storm Water Run Off With Your Time and Money!

What the Construction Industry Should Know About Storm Water In Our Community

The construction industry plays an important role in improving our community's quality of life by not only providing new development, but also protecting our streams and rivers through smart business practices that prevent pollution from leaving construction sites.

Storm water runoff leaving construction sites can carry pollutants such as dirt, construction debris, oil, and paint off-site and into storm drains. In our community, storm drains carry storm water runoff directly to local creeks, streams, and rivers with no treatment. Developers, contractors, and homebuilders can help to prevent storm water pollution by taking the following steps:

1. Comply with storm water permit requirements.
2. Practice erosion control and pollution prevention practices to keep construction sites "clean."
3. Conduct advanced planning and training to ensure proper implementation on-site.

The remainder of this fact sheet addresses these three steps.

Storm Water Permit Requirements for Construction Activity

Planning and permitting requirements exist for construction activities. These requirements are intended to minimize storm water pollutants leaving construction sites.

- Pennsylvania's Erosion and Sediment Pollution Control Program (25 Pa. Code, Chapter 102) requires Erosion and Sediment Control Plans for all earth disturbing activities.
- The National Pollutant Discharge Elimination System (NPDES) Permit Program (25 Pa. Code, Chapter 92) requires that construction activities disturbing greater than one acre submit a Notice of Intent for coverage under a general NPDES permit.

Knowing your requirements before starting a project and following them during construction can save you time and money, and demonstrate that you are a partner in improving our community's quality of life. For more information about these programs, contact your local county conservation district office or the Department of Environmental Protection.

Erosion Control Practices:

- Perimeter controls (e.g. silt fence)
- Sediment traps
- Immediate revegetation
- Phased, minimized grading
- Construction entrance
- Protection of streams and drainage ways
- Inlet protection



What is Storm Water?

Storm water is water from precipitation that flows across the ground and pavement when it rains or when snow and ice melt. The water seeps into the ground or drains into what are commonly called storm sewers. These are the drains you see at street corners or at low points on the sides of streets. Collectively, the draining water is called **storm water runoff**.



An Ounce of Prevention

Rain that falls onto construction sites is likely to carry away soil particles and other toxic chemicals present on construction sites (oil, grease, hazardous wastes, fuel). Storm water, if not properly managed, carries these pollutants to streams, rivers, and lakes. Erosion and sediment control practices can serve as a first line of defense,

Pollution Prevention Practices:

- Designated fueling and vehicle maintenance area away from streams.
- Remove trash and litter.
- Clean up leaks immediately.
- Never wash down dirty pavement.
- Place dumpsters under cover.
- Dispose of all wastes properly.

minimizing clean up and maintenance costs, and the impacts to water resources caused by soil erosion during active construction. Erosion controls can reduce the volume of soil going into a sediment control device, such as a sediment trap, therefore, "clean out" frequencies are lower and maintenance costs are less. When possible, divert water around the construction site using berms or drainage ditches.

In addition, use pollution prevention and "good housekeeping measures" to reduce the pollution leaving construction sites as well. This can be as simple as minimizing the pollution source's contact with rainwater by covering it, maintaining a "clean site" by reducing trash and waste, and keeping vehicles well maintained.

The Best Laid Plans

Plans such as erosion and sediment control plans and storm water pollution prevention plans are important tools for outlining the erosion control and pollution prevention practices that you will use to manage storm water runoff prior to breaking ground. Developing good plans allows for proper budgeting and planning for the life of the project. Proper installation and maintenance of erosion and storm water controls is essential to a plan that works. Training for on-site staff helps to ensure the proper installation and maintenance of erosion controls and pollution prevention practices. Inspect controls and management techniques regularly to ensure they are working, especially after storm events. If polluted storm water is leaving the site, you may need to repair or add additional storm water controls.



The Bigger Storm Water Picture

Your community is preventing storm water pollution through a comprehensive storm water management program. This program addresses storm water pollution from construction, but it also deals with new development, illegal dumping to the storm sewer system, and municipal operations. It will also continue to educate the community and get everyone involved in making sure the only thing that storm water contributes to our streams is . . . water! Contact your community or the Pennsylvania Department of Environmental Protection for more information about storm water management.

Available in the Municipal Lobby for permit applicants, residents, and developers.

Pennsylvania Association of Conservation District's:
<http://www.pacd.org/default.html>

Pennsylvania Handbook of Best Management Practices for Developing Areas:
http://www.pacd.org/products/bmp/bmp_handbook.html

Storm Water Manager's Resource Center:
<http://www.stormwatercenter.net>

Pennsylvania Department of Environmental Protection:
<http://www.dep.state.pa.us>



Northampton County Conservation District (NCCD)

More Questions?

If you have more questions regarding how erosion control is enforced, or questions about stormwater management during the construction phase, please reach out to NCCD for more information.

Contact

- ◇ 14 Gracedale Ave, Nazareth, PA 18064-9211
- ◇ Open Monday thru Friday 8am-4pm
- ◇ (610) 829-6279
- ◇ northamptoncd@northamptoncd.org
- ◇ www.northamptoncounty.org/CTYADMN/CONSVCPages/default.aspx





MCM 5

POST CONSTRUCTION STORM WATER MANAGEMENT IN
NEW DEVELOPMENT AND REDEVELOPMENT

MCM #5 Information

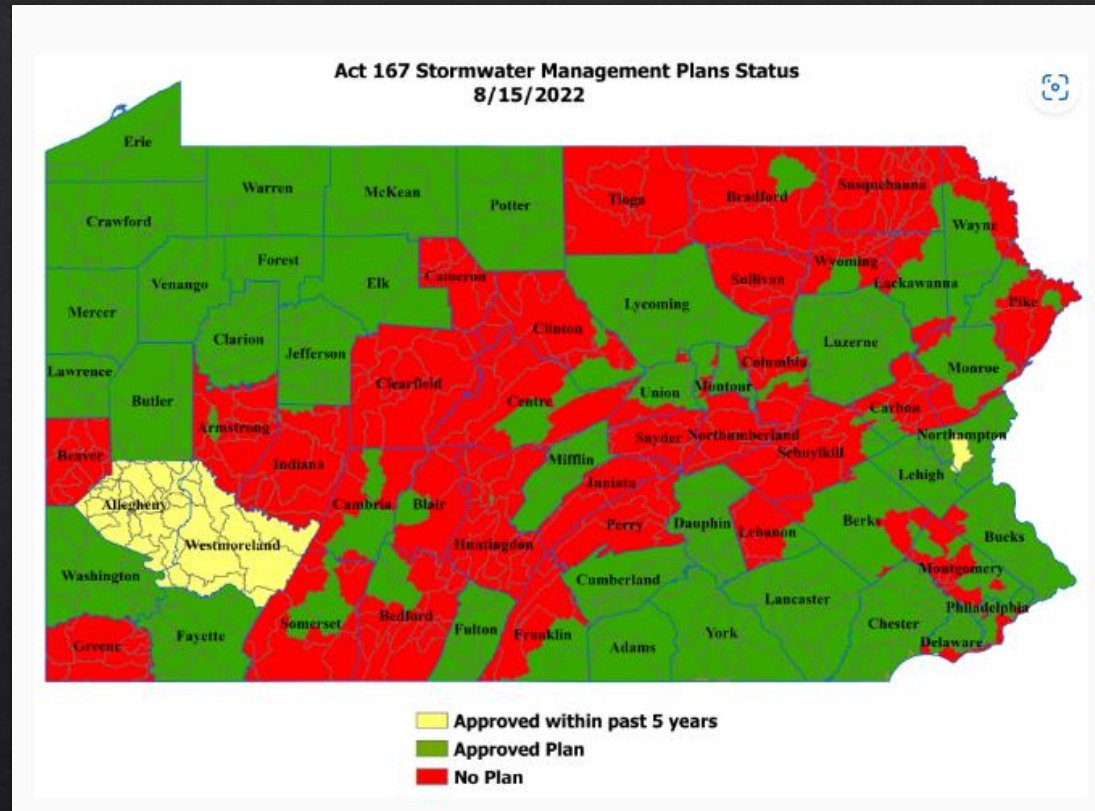
- ◆ Prior to the construction of any subdivision or land development improvements the design requirements for post-development storm water controls are reviewed and approved by the Lehigh Valley Planning Commission and the Township Engineer pursuant to Township Ordinances 158 and 165, and the DEP approved Act 167 Plan.
- ◆ Final inspection of the constructed storm water conveyance and detention facilities is done by the Township Engineer to ensure compliance with the approved storm water management reports and plans.
- ◆ A Township topographic map with inlet numbers and locations is available at the Palmer Township Public Services Department.
- ◆ The Palmer Township Public Works Department provides maintenance and repairs to the existing Township owned storm water collection and conveyance facilities within Township street rights-of-way.
- ◆ The Palmer Township Parks Department provides maintenance and repairs to the existing storm water detention facilities located on properties owned by the Township.

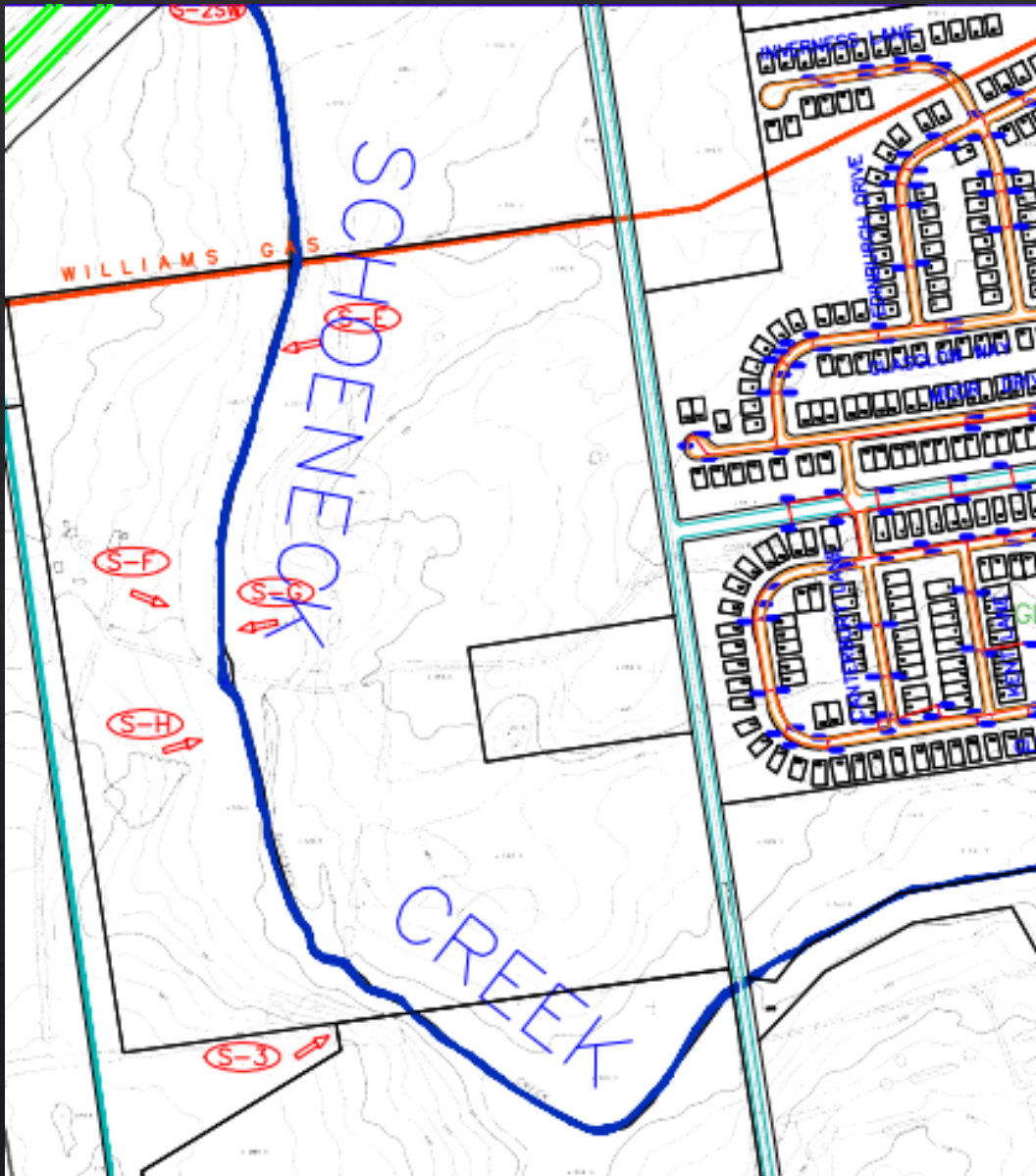
What is Act 167?

- ◇ County level plan
- ◇ How to improve watershed
- ◇ Large scale
- ◇ County Submission
- ◇ Not approved=more review

For more information, please visit DEP's website:

<https://www.dep.pa.gov>

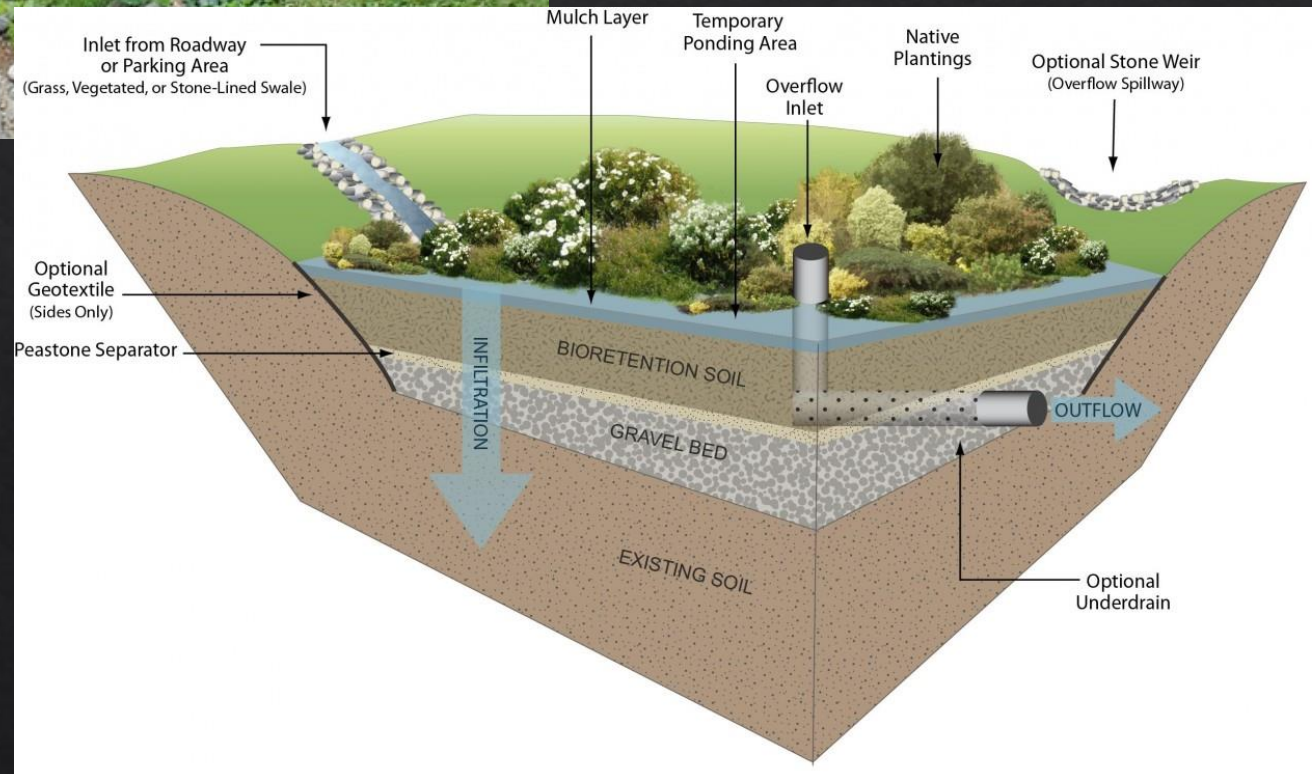




Palmer
Township
Topographic
Map with Inlet
Numbers And
Outfall
Locations



Examples of post-construction storm water management



Examples of Township owned detention basins:
Left- wet detention basin at the Charles Chrin Community Center
Right- Hobson Street dry detention basin.



MCM 6



POLLUTION PREVENTION/GOOD HOUSEKEEPING MEASURES



MCM #6 Information

- ◆ The detention basin inspection and maintenance program was continued.
- ◆ Inlets, outfalls/swales, and detention basin locations have been assigned identification labels. Labels are based on the river/creek where they are located and are numbered for closed pipes while swales are lettered (Ex: B-1, S-2WSW, L-D)
- ◆ Inlets in newly accepted subdivisions are being located and added to Township GIS map.
- ◆ Inlet cleaning and street sweeping programs were continued.
- ◆ The Township Public Works Departments and Police Department employees were provided with MS4 training in June 2024.
- ◆ The Township will train new or transferred employees and update new procedures as necessary to all Public Works and Parks employees.
- ◆ The Township is working on a required Pollutant Reduction Plan (PRP) to address specific concerns, like siltation, for each waterway. Projects are currently in planning phases for the Hobson Street Basin and Schoeneck Creek Stream Restoration.

Example of Township Owned BMP Inspection Form

INSPECTION INSTRUCTIONS:

- Each BMP requires a separate inspection form.
- A photo of each BMP is required with the inspection form.
- Before and after photos for BMPs requiring maintenance.
- Complete the checklist that corresponds with the specific BMP.

CHECKLIST:

Condition	Maintenance Required When:	Requires Maintenance Yes, No or N/A	Maintenance Performed Yes or No
GENERAL CONDITION			
Trash and debris	Trash and debris >1 CF/1,000 SF (one standard size garbage can) Visual evidence of dumping	No	No
Poisonous vegetation and noxious weeds	Poisonous or nuisance vegetation or noxious weeds: Morning Glory, English Ivy, Reed Canary Grass, Japanese Knotweed, Purple Loosestrife, Blackberry, Scotch Broom, Poison Oak, Stinging Nettle or Devil's Club	No	No
Rodent holes	Any evidence of rodent holes if facility is acting as a dam or berm, or any evidence of water piping through dam or berm holes	Yes	No



Examples of Wash Bay Facilities

Truck wash bay facilities at the Public Works and Utilities garage. They use oil/water separator tanks at the Public Works Building, the Parks Building and both fire stations.



Palmer Township Operation and Maintenance

Recently updated manual for
Township Public Works
Operations and Inventories

OPERATIONS AND MAINTENANCE MANUAL FOR PALMER TOWNSHIP, NORTHAMPTON COUNTY, PENNSYLVANIA

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Further Information

- ◆ Please contact the Palmer Township Public Services Department for additional information on the MS4 program. Phone Number: (610)-253-7191
- ◆ Additional information can be obtained from the links on the important websites slide. These websites can also be accessed through the Township web page using the resources tab on the stormwater page.

Just Remember You Can Help Protect
Our Streams!



Important Web Sites

www.palmertwp.com/stormwater.html

<https://www.dep.pa.gov/Business/Water/CleanWater/StormwaterMgmt/Pages/Be-Stormwater-Smart-.aspx>

www.bushkill.org

<https://www.lvpc.org/water-resources.html>

www.epa.gov/npdes/stormwater

www.northamptoncounty.org/CTYADMN/CONSVL/Pages/default.aspx

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