

LOWER MAKEFIELD TOWNSHIP



STORMWATER MANAGEMENT MS4 PROGRAM OVERVIEW 2022 UPDATE



Presented By Township Engineer:
Andrew Pockl, PE, CFM

MS4 : Municipal Separate Storm Sewer System:

Stormwater conveyance system from impervious surfaces to local waterways



Permit Requirements

Minimum Control Measures (MCM)

- ▶ MCM 1 - Public Education and Outreach
- ▶ MCM 2 - Public Involvement and Participation
- ▶ MCM 3 - Illicit Discharge Detection and Elimination
- ▶ MCM 4 - Construction Site Runoff Control
- ▶ MCM 5 - Post Construction Stormwater Management
- ▶ MCM 6 - Pollution Prevention & Good Housekeeping
- ▶ Pollution Reduction Plan
- ▶ PCMs - Pollution Control Measures

What's New for 2022?

- ▶ MCM 1 - Township Continues to Post Stormwater Related Information on Social Media
- ▶ MCM 2 - This presentation allows us to comply with permit requirements
- ▶ MCM 3 - SWM Ordinance must be consistent with the DEP 2022 Model Ordinance by September 30.
- ▶ MCM 6 - O&M Plan Updated Annually starting in 2018



Lower Makefield Township
April 24 at 8:00 PM · 🌐

- ☁️ Why Should I Consider Flood Insurance?
- 🏠 I Have Homeowners/Renters Insurance. Am I Already Covered?
- 🌊 How Can I Buy Flood Insurance?
- 👤 What Should I Know About Private Insurance?
- 💧 What Should I Know About Surplus Lines Insurance?

Fi... See more

Steps you and your family can take to be ready for flooding:

- 💧 **Know your flood risk**
- 💧 **Research and purchase flood insurance**
- 💧 **Take a household inventory**
- 💧 **Store important documents**

PEMA

What's New for 2022?

- ▶ Permit Approved in February 2022
 - ▶ General Permit Expires 2023 - Extension Expected
 - ▶ 100 Outfalls Inspected (Approx. 25% of the Township)
- ▶ PCMs - Pollution Control Measures
 - ▶ Investigation Ongoing - Completed by End of Year
 - ▶ Animal Waste Protection - Done



☐ § 79-10 **Animal defecation on public and private property restricted.**

No person having possession, custody or control of any domestic animal shall knowingly or negligently permit any dog, cat or horse to commit any nuisance upon any gutter, street, driveway, curb or sidewalk in the township or upon the floors or stairways of any building or place frequented by the public or used in common by the tenants or upon the outside walls, walkways, driveways, alleys, curbs or stairways of any building abutting on a public street or park or upon the grounds of any public park or public area or upon any private property other than the property of the owner of such animal.

☐ § 79-11 **Disposal of animal feces.**

Any person having possession, custody or control of any dog, cat or horse which commits a nuisance in any area other than the private property of the owner of such animal shall be required to immediately remove said feces from such surface and either:

- A. Carry same away for disposal; and/or
- B. Place same in a nonleaking container for deposit in a trash or liter receptacle.

Approved Pollution Reduction Plan

- ▶ Reduction Plan to be Executed by 2027

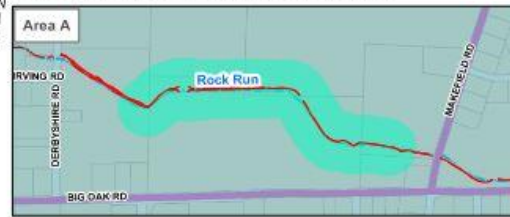
General Permit expires in 2023, renewal may come with increased requirements (e.g. reductions) so it is important to not delay any stormwater initiatives.

- ▶ Approved BMPs to be Implemented

- ▶ Streambank Restoration at Charles Boehm MS
- ▶ Porous Paving Parking Lot at 5 Mile Woods
- ▶ Regional Detention Basin Retorfits

MS4 PRP PROPOSED BMP OPTIONS

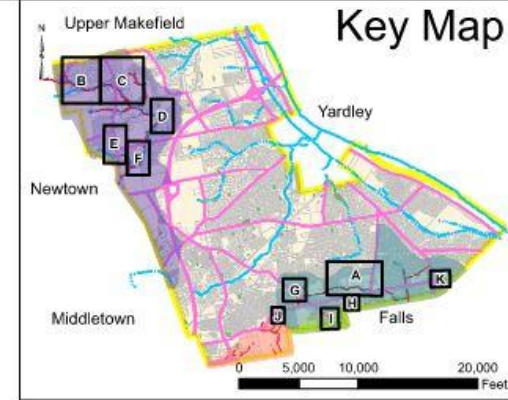
Charles Boehm Middle School Streambank Restoration



Pervious Pavement



Basin Retrofit



Lower Makefield Township Bucks County, PA

Legend

- Rock Run Streams-Siltation Impaired
- Queen Anne Streams-Siltation Impaired
- Core Creek Streams-Siltation Impaired

- StreamBank Restore
- Proposed PRP Basins
- Proposed PRP Pervious Pavement
- Basins, Wetpools & Lakes

Impaired Watersheds

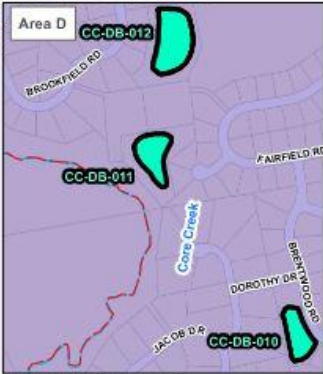
- CORE CREEK
- MARTINS CREEK
- QUEEN ANNE CREEK
- ROCK RUN
- PennDOT
- Streams
- Parcels
- Municipal Boundary

Last Revised: 1/14/2022



Data Sources:
1. Parcel Data provided by Bucks County Planning Commission.
2. Stream data provided by Pennsylvania Spatial Data Access (PASDA).

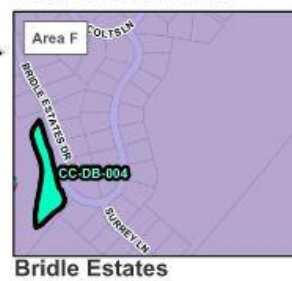
Basin Retrofit



Basin Retrofit



Basin Retrofit



Basin Retrofit



Basin Retrofit



Basin Retrofit



Basin Retrofit



Basin Retrofit



PA DEP Permit Schedule

- ▶ MCM 1 - PEOP Updated Annually starting in 2018
 - ▶ Must distribute two types of materials annually
- ▶ MCM 2 - PIPP Updated Annually starting in 2018
 - ▶ Must conduct at least one public meeting dedicated to the MS4 program by 2023.
- ▶ MCM 3 - IDD&E Program Updated Annually starting in 2018
 - ▶ Must have map of entire MS4 system, update and maintain annually (Required since 2013)
 - ▶ Dry weather inspection of every outfall at least once by 2023.
 - ▶ SWM Ordinance must be consistent with the DEP 2022 Model Ordinance by September 30, 2022.
- ▶ MCM 4 - Annual Reports on any violations
- ▶ MCM 5 - Full Inventory of PCSM BMPs with O&M Activities starting 2018
- ▶ MCM 6 - O&M Plan Updated Annually starting in 2018
 - ▶ Must update inventory of Operations and Land Uses that may contribute to pollution in SW Runoff annually
 - ▶ Develop and annually update employee training to abide by O&M Plan.

PADEP Permit Schedule

- ▶ MCM 1 - PEOB Updated Annually starting in 2018 **Complete**
 - ▶ Must distribute two types of materials annually
- ▶ MCM 2 - PIPP Updated Annually starting in 2018 **Complete**
 - ▶ Must conduct at least one public meeting dedicated to the MS4 program by 2023.
- ▶ MCM 3 - IDD&E Program Updated Annually starting in 2018 **Last Updated 2021**
 - ▶ Must have map of entire MS4 system, update and maintain annually (Required since 2013) **Complete**
 - ▶ Dry weather inspection of every outfall at least once by 2023. **In Progress**
 - ▶ SWM Ordinance must be consistent with the DEP 2022 Model Ordinance by September 30, 2022. **In Progress**
- ▶ MCM 4 - Annual Reports on any violations **Last Updated 2021**
- ▶ MCM 5 - Full Inventory of PCSM BMPs with O&M Activities starting 2018 + Basin Inspection **Complete**
- ▶ MCM 6 - O&M Plan Updated Annually starting in 2018 **Last Updated 2021**
 - ▶ Must update inventory of Operations and Land Uses that may contribute to pollution in SW Runoff annually
 - ▶ Develop and annually update employee training to abide by O&M Plan.

Grant Opportunities

- ▶ Growing Greener
 - ▶ 15% match, reimbursable grant **Due June 24, 2022**
- ▶ Watershed Restoration
 - ▶ \$300,000 max, 15% match, **Due May 31, 2022**
- ▶ Flood Mitigation
 - ▶ Stream Bank Restoration, HEC-RAS Analysis required - **Due May 31, 2022**
- ▶ PennVEST - Various Programs

Questions?

- ▶ Andrew Pockl - Andrew.Pockl@rve.com