

A PLAN FOR POLLUTION CONTROL

Public Review and Comment

Virtual Workshop

May 2014

Polluted Runoff

When it rains, water can soak into the ground, evaporate, or run over land into our creeks, rivers, and lakes.

Runoff, or stormwater, is the water that runs overland into local waterways.

This runoff may be become polluted runoff as it flows over land and picks up debris and chemicals.



Problems with Polluted Runoff

- Washes into streams
 - ▣ Trash, fertilizers, pesticides, sediment, motor oil, detergents, road salt, etc.
- Degrades our waterways
- Is hard to manage and control

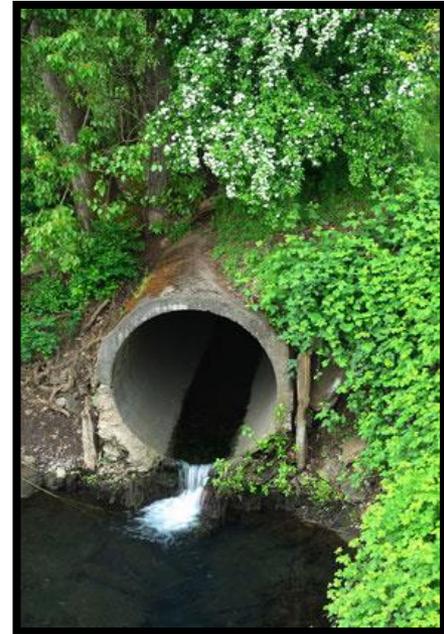


Managing Runoff

The EPA regulates runoff with a program under our nation's Clean Water Act called:

National Pollutant Discharge Elimination System (NPDES)

- This program requires a permit to release runoff into our nation's waterways.
- Polluted runoff is a growing problem, so counties and municipalities with over 10,000 people must have an NPDES permit for their storm sewer systems.



The Storm Sewer System

The storm sewer system is also called:

Municipal Separate Storm Sewer System (MS4)

How does the MS4 work?

- Inlets collect runoff
- A pipe, network of pipes, or open conveyances are designed to move the runoff to an outfall
- Outfalls can be located along streams of all sizes

An MS4 is:

- Not part of a sewage treatment plant
- Owned by a state, city, town, or other public entity (such as DeIDOT)



What Gets into the Storm Sewer (or MS4)?

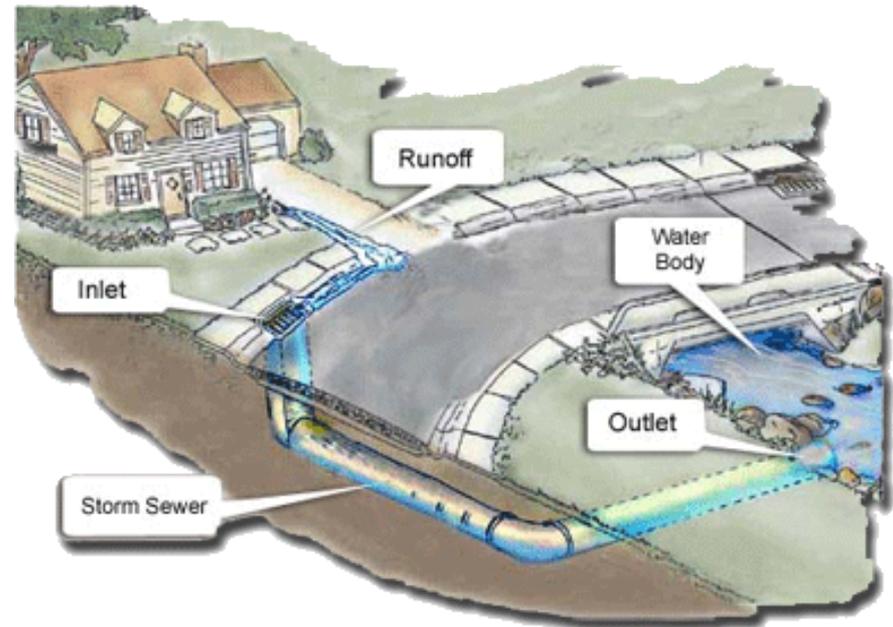
- Polluted runoff from roads, parking lots, and sidewalks may contain:
 - motor oil
 - leaves
 - grass clippings
 - paint
 - soap
 - chlorine
 - fertilizer
 - pesticides
 - animal waste
 - etc.



Example of a Storm Sewer System

In this example storm sewer system, or MS4, the runoff in this neighborhood is collected at the inlets and transported in pipes to management areas. This network or system collects and transports the water that runs off our roofs, driveways, roads and parking lots.

In some areas ponds and other treatment systems, known as **best management practices** (BMPs), store and clean the water that runs off our roofs, driveways, roads and parking lots prior to leaving the outfalls. Examples of these BMPs include: ponds, rain gardens, bioswales, etc).



DeIDOT's and New Castle County's MS4

- Receives runoff from
 - ▣ DeIDOT roadways
 - ▣ New Castle County
 - ▣ Town of Bellefonte
 - ▣ Town of Elsmere
 - ▣ Town of Newport
 - ▣ City of Delaware City
 - ▣ City of New Castle

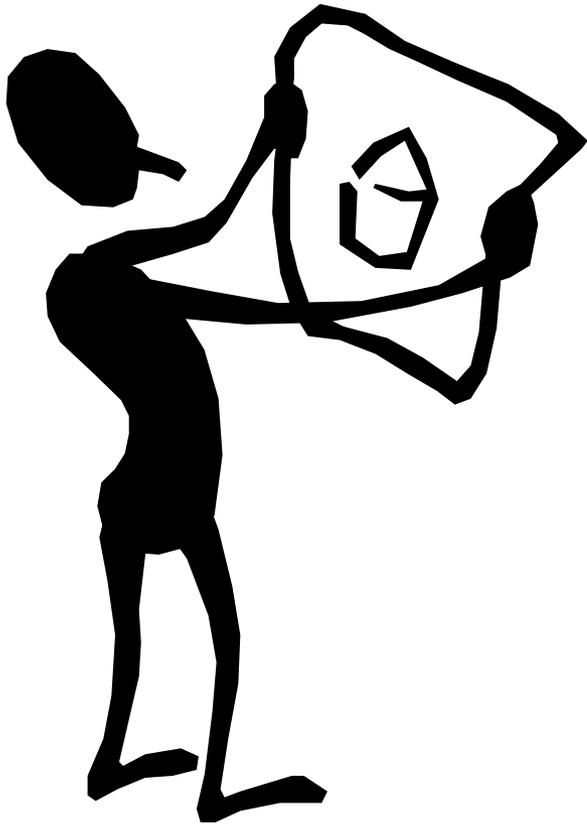


DeIDOT's and New Castle County's MS4

- Receives runoff from residential areas, roads, parking lots, commercial and industrial areas.
- Includes more than 50,000 inlet structures.
- Also includes over 2,000 best management practices (BMPs) that clean and treat the runoff prior to its release in local streams.



The Plan



- DeIDOT and New Castle County are required by their NPDES permit to create a **plan** to decrease the polluted runoff in the waterways.
- The plan is known as the **Stormwater Pollution Prevention & Management Program or **SWPP&MP****

The Plan (cont.)

GOALS

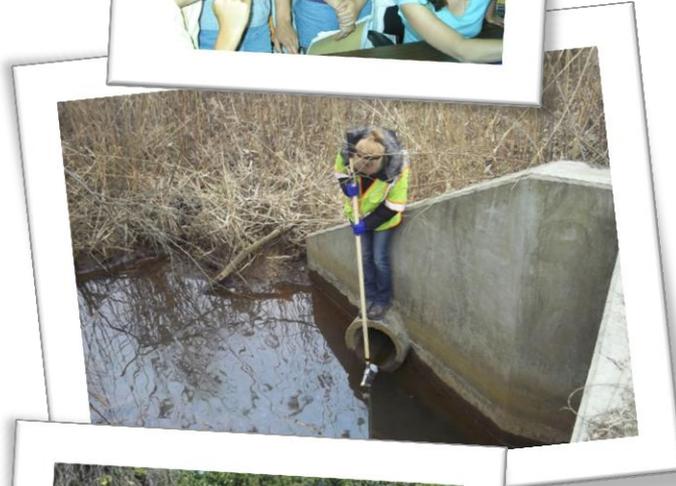
- Work together to reduce pollutants entering and ultimately discharging from the MS4 into our local streams and waterways to create a cleaner environment for current and future generations.



The Plan (cont.)

In this plan there are required activities to meet the rules set by the EPA's regulations.

- Examples include:
 - ▣ Public education (website, workshops, trainings, outreach)
 - ▣ Runoff control and site inspections during and following construction
 - ▣ Illegal discharge detection
 - ▣ Post construction stormwater management to improve water quality
 - ▣ Water quality monitoring
 - ▣ Street sweeping
 - ▣ Good housekeeping practices at public facilities



Why a Plan is Important?

- A plan is important because it helps to:
 - ▣ Improve the water quality in our local streams and rivers.
 - ▣ Increase safe recreation opportunities for current and future generations.
 - ▣ Provide clean drinking water.
 - ▣ Offer safe boating and swimming opportunities.
 - ▣ Keep the fish and wildlife healthy.
 - ▣ Ensure clean water which is good for the economy.



The Plan Will Help to Meet Pollution Reduction Goals

- The EPA has set a maximum pollution level for local waterways. This is known as a Total Maximum Daily Load (TMDL).
- TMDLs are also commonly referred to as a “pollution diet.”



The Plan Will Help to Meet Pollution Reduction Goals (cont.)

- New Castle County and DeIDOT will work to improve the waterways based on the pollution loading levels set by the TMDLs.
- As required by the plan, a unique plan to meet the TMDLs will be developed for each of the 21 watersheds in New Castle County.



Improvement Through Watershed Restoration Plans

- Through the efforts outlined in the SWPP&MP the County and DeIDOT will work to meet these pollution levels (or TMDLs) and the efforts will be done through the following actions:
 - Research and work on the local waterways will be outlined in several watershed restoration plans, called Water Quality Improvement Plans (WQIP's).
 - The WQIP will contain solutions or common ways to improve our waterways, for example stream restoration, installation of new BMPs, new policies, citizen complaint services, and enforcement.



How Do We Know if the Waterways are Improving?

- The plan (SWPP&MP) requires scientific monitoring to determine if the waterways are improving.
- Monitoring includes mapping, sampling, and identifying the types of pollution entering the waterways.



How Will DeIDOT and New Castle County Pay For This Work?

- The cost to develop and implement this plan (SWPP&MP) is being provided through New Castle County and DeIDOT's funds.
- Additional funding may be required for planning and building practices to decrease polluted runoff and improve our waterways.



How Does This Affect Me?

- Responsible citizens may be called to act, for example:
 - ▣ Proper yard maintenance
 - ▣ Appropriate waste disposal
 - ▣ Discharge detection

- At the local level you may see:
 - ▣ Local streams that may be improved through engineered practices.
 - ▣ Repairs and improvements made to local runoff ponds and other local runoff controls.
 - ▣ Outreach and education campaigns.



Schedule

- SWPP&MP
 - Final draft – May 7, 2014
 - Public comment on final draft – June 16-July 16, 2014
 - SWPP&MP final submittal – August 7, 2014
 - SWPP&MP implementation – some programs already begun
 - All programs in place by November 7, 2014 (may vary based on DNREC and EPA review and approval)

- Public Education and Outreach (ongoing)

- Watershed restoration plans (or WQIPs) are developed over a period of years.
 - WQIPs for the first two watersheds will be completed by May 2017
 - Schedules for the remaining WQIPs is to be determined

Where Can I Find More Information?

- U.S. EPA NPDES Stormwater Program
http://cfpub.epa.gov/npdes/home.cfm?program_id=6
- DNREC Surface Water Discharges Section
<http://www.dnrec.delaware.gov/wr/Services/Pages/SurfaceWaterDischarges.aspx>
- NCC Stormwater Management
<http://nccde.org/223/Stormwater-Management>
- DeIDOT Stormwater Quality Program
www.deldot.gov/stormwater

Your Actions Make A Difference

- Review the plan
 - Comment (at the virtual workshop link at www.deldot.gov/stormwater)
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- Do your part and keep our waterways clean and healthy for your family and future generations. Don't dump anything in storm drains and spread the word on where stormwater runoff goes.

