## MS4 STORM WATER PROGRAM

The City of New Castle submits an annual report to the Pennsylvania Department of Environmental Protection (PADEP) for the Municipal Separate Storm Sewer System (MS4) Program as required by their National Pollutant Discharge Elimination System (NPDES) storm water permit. The purpose of the MS4 program is to reduce the discharge of pollutants to protect water quality of the water resources within the community.

The City has adopted the Act 167 Storm Water Management Ordinance that requires the review and approval of storm water management plans prior to the start of new development.

The Lawrence County Conservation District reviews and enforces erosion and sedimentation pollution control for earthmoving activities and Post Construction Storm Water Management (PCSM) to protect the physical and biological integrity of the water resource.

As part of the annual report, the city is required to:

1. Distribute storm water related educational material to the public.
2. Conduct an annual public education meeting on the MS4 program.
3. Inspect the City's permitted storm outfalls annually for non-stormwater wastes containing pollutants that are referred to as illicit discharges.

The public can help by:

1. Reporting anyone dumping waste into the storm sewer system to the City of New Castle Code Enforcement Department at 724.656.3539.
2. Cleanup pet waste and dispose of properly.
3. Use fertilizers properly to prevent excess runoff.
4. Properly store materials that could contaminate water resources.

For more information on Storm Water Management and MS4 Requirements, visit the Pa DEP or EPA websites at the following links:

https://www.dep.pa.gov/Business/Water/CleanWater/StormwaterMgmt/Pages/default.aspx

http://water.epa.gov/polwaste/npdes/stormwater/Municipal-Separate-Storm-Sewer-System-MS4-Main-Page.cfm

## 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 we call 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.

## Good Rain Gone Wrong

Storm water becomes a problem when it picks up debris, chemicals, dirt, and other pollutants as it flows or when it causes flooding and erosion of stream banks. Storm water travels through a system of pipes and roadside ditches that make up storm sewer systems. It eventually flows directly to a lake, river, stream, wetland, or coastal water. All of the pollutants storm water carries along the way empty into our waters, too, because storm water does not get treated!

***Pet wastes left on the ground get carried away by storm water, contributing harmful bacteria, parasites and viruses to our water.***

***Vehicles drip fluids (oil, grease, gasoline, antifreeze, brake fluids, etc.) onto paved areas where storm water runoff carries them through our storm drains and into our water.***

***Chemicals used to grow and maintain beautiful lawns and gardens, if not used properly, can run off into the storm drains when it rains or when we water our lawns and gardens.***

***Waste from chemicals and materials used in construction can wash into the storm sewer system when it rains. Soil that erodes from construction sites causes environmental degradation, including harming fish and shellfish populations that are important for recreation and our economy.***

## Where to Go to Continue the Information Flow

Your community is preventing storm water pollution through a storm water management program. This program addresses storm water pollution from construction, new development, illegal dumping to the storm sewer system, and pollution prevention and good housekeeping practices in 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 water is . . . water! Contact your community's storm water management program coordinator or the Pennsylvania Department of Environmental Protection for more information about storm water management.

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

**www.dep.pa.gov**

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## Answers to Test Your Storm Sewer System Savvy:

**1. Ditch** – Part of the storm sewer system. Most people think that the system is just a series of underground pipes. It can also include ditches used to convey storm water from the land to a receiving lake, river, or stream.

**2. Fire Hydrant** – Not part of the storm sewer system. Water sprayed on fires is not regulated as storm water, but if water systems open hydrants to flush their water lines the chlorinated water should not be allowed to enter a stream.

**3. Storm Drain Inlet** – Part of the storm sewer system. Anything that enters this drain will go directly to streams, rivers or lakes without being treated first. It is important to recognize this as a storm drain to prevent it from being used as a trash can.

**4. Storm Sewer Outfall** – Part of the storm sewer system. An outfall is where storm water drains from the storm sewer system into a receiving lake, stream, or river. If there is a flow from an outfall when it isn't raining, there could be a problem with the system or someone has used a storm drain for illegally disposing of materials.

**5. Toilet** – Not part of the storm sewer system. Wastewater from sinks and toilets in houses and businesses travels through a sewer system designed to carry wastewater.

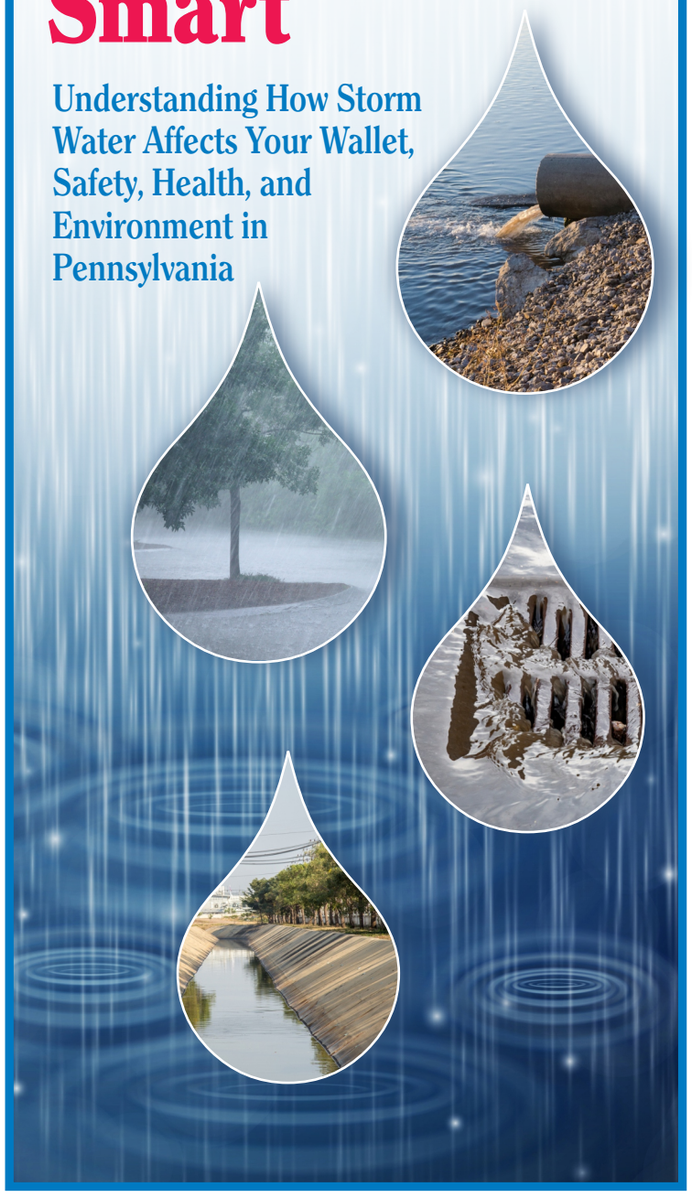
**6. Septic System** – Not part of the storm sewer system. Homeowners use septic tanks to manage sanitary wastes on-site. Improperly maintained septic systems can leak and contribute pollutants to the storm sewer system, as well as directly to lakes, rivers, and streams.

**7. Roads and Other Paved Areas** – Source of much of the flow to storm sewer systems. Roads and other hardened surfaces such as parking lots and sidewalks can accumulate pollutants (e.g. oil, grease, dirt, leaves, trash, pet wastes) that storm water eventually washes into the storm sewer system.

**8. Protected Storm Drain Inlet** – Where construction or other activities cause sediment or other pollutants to flow to an inlet, sandbags or filters can be used to mitigate.

# Be Storm Water Smart

## Understanding How Storm Water Affects Your Wallet, Safety, Health, and Environment in Pennsylvania



## What Happens When It Rains?

Rain is an important part of nature's water cycle, but there are times it can do more damage than good. Problems related to storm water runoff can include:

***Flooding caused by too much storm water flowing over hardened surfaces such as roads and parking lots, instead of soaking into the ground.***

***Increases in spending on maintaining storm drains and the storm sewer system that become clogged with excessive amounts of dirt and debris.***

***Decreases in sportfish populations because storm water carries sediment and pollutants that degrade important fish habitat.***

***More expensive treatment technologies to remove harmful pollutants carried by storm water into our drinking water supplies.***


***Closed beaches due to high levels of bacteria carried by storm water that make swimming unsafe.***

We can help rain restore its good reputation while protecting our health and environment while saving money for ourselves and our community. Keep reading to find out how. . .

## Test Your Storm Sewer System Savvy!

What does the storm sewer system look like in your community? See if you can identify which pictures are part of the storm sewer system (Answers are on the back.)









## Restoring Rain's Reputation: What Everyone Can Do To Help

Rain by nature is important for replenishing drinking water supplies, recreation, and healthy wildlife habitats. It only becomes a problem when pollutants from our activities like car maintenance, lawn care, and dog walking are left on the ground for rain to wash away. Here are some of the most important ways to prevent storm water pollution:

- Properly dispose of hazardous substances such as used oil, cleaning supplies and paint—never pour them down any part of the storm sewer system and report anyone who does.
- Use pesticides, fertilizers, and herbicides properly and efficiently to prevent excess runoff.
- Look for signs of soil and other pollutants, such as debris and chemicals, leaving construction sites in storm water runoff or tracked into roads by construction vehicles. Report poorly managed construction sites that could impact storm water runoff to your community. (See the back of this brochure for contact information.)
- Install innovative storm water practices on residential property, such as rain barrels or rain gardens, that capture storm water and keep it on site instead of letting it drain away into the storm sewer system.
- Report any discharges from storm water outfalls during times of dry weather—a sign that there could be a problem with the storm sewer system.
- Pick up after pets and dispose of their waste properly. No matter where pets make a mess—in a backyard or at the park—storm water runoff can carry pet waste from the land to the storm sewer system to a stream.
- Store materials that could pollute storm water indoors and use containers for outdoor storage that do not rust or leak to eliminate exposure of materials to storm water.

# WHEN YOU'RE WASHING YOUR CAR IN THE DRIVEWAY, REMEMBER YOU'RE NOT JUST WASHING YOUR CAR IN THE DRIVEWAY.


All the soap, scum, and oily grit runs along the curb. Then into the storm drain and directly into our lakes, streams and into coastal waters including the Chesapeake Bay. And that causes pollution which is unhealthy for fish. So how do you avoid this whole mess? Easy. Wash your car on grass or gravel instead of the street. Or better yet, take it to a car wash where the water gets treated and recycled.

If you have questions regarding storm water, please contact your municipality or Pennsylvania Department of Environmental Protection's Regional Office. For general questions, you may also contact DEP's Bureau of Water Management at (717) 772-5661 or visit **www.dep.state.pa.us**.

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# WHEN YOU'RE FERTILIZING THE LAWN,

# REMEMBER, YOU'RE NOT JUST

# FERTILIZING THE LAWN.

You fertilize the lawn. Then it rains. The rain washes the fertilizer along the curb, into the storm drain, and directly into our lakes, streams and into coastal waters including the Chesapeake Bay. This causes algae to grow, which uses up oxygen that fish need to survive. So if you fertilize, please follow directions and use sparingly.

If you have questions regarding storm water, please contact your municipality or Pennsylvania Department of Environmental Protection's Regional Office. For general questions, you may also contact DEP's Bureau of Water Management at (717) 772-5661 or visit **www.dep.state.pa.us**.

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# WHEN YOUR CAR'S LEAKING OIL ON THE STREET, REMEMBER IT'S NOT JUST LEAKING OIL ON THE STREET.

Leaking oil goes from car to street. And is washed from the street into the storm drain and into our lakes, streams and into coastal waters including the Chesapeake Bay. Now imagine the number of cars in the area and you can imagine the amount of oil that finds its way from leaky gaskets into our water. So please, fix oil leaks.

If you have questions regarding storm water, please contact your municipality or Pennsylvania Department of Environmental Protection's Regional Office. For general questions, you may also contact DEP's Bureau of Water Management at (717) 772-5661 or visit **www.dep.state.pa.us**.

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# WHEN YOUR PET GOES ON THE LAWN,

# REMEMBER IT DOESN'T JUST

# GO ON THE LAWN.

When our pets leave those little surprises, rain washes all that pet waste and bacteria into our storm drains. And then pollutes our waterways. So what to do? Simple. Dispose of it properly (preferably in the toilet). Then that little surprise gets treated like it should.

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For general questions, you may also contact DEP's Bureau of Water Management at (717) 772-5661 or visit **www.dep.state.pa.us**.
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