MCM # 1

PUBLIC EDUCATION

&

OUTREACH

MCM #1 –PUBLIC EDUCATION AND OUTREACH

BMP #1: Plans and Goals for Public Education and Outreach for Upcoming Year

- Continue to provide brochures and fact sheets for general public and specific audience through newsletters, website, and lobby display.

- Continue to maintain and update as appropriate the Township's Stormwater Management Information section of its website.

- Continue to distribute Township Spring/Summer, Fall and Winter newsletters which will include educational information relative to stormwater management.

- Continue to partner with DEP/LCD to publish and participate in watershed weekend events and other public meetings and outreach activities.

- Plan to offer storm inlet placard projects to interested scouts.

- Township will be investigating feasibility of establishing a relationship with the Dallas School District to work with District staff in developing and offering stormwater management related educational opportunities to elementary, middle and high school students.

- Continue to offer two stormwater management related seminars/workshops in the upcoming year.

MCM #1 –PUBLIC EDUCATION AND OUTREACH

BMP #2: Target Audience List

- All Township Residents through the use of Dallas Township Website
- Commercial establishments:
  - Offset Paperback
  - Payne Printery
  - Country Club Shopping Center
  - Weis Market
  - Dallas Shopping Center
  - Geisinger Dallas
  - Frontier Communications
- Institutional Uses
  - Dallas School District
  - Misericordia University
- Other Uses:
  - Darling Farms
  - Churches
- Special mailing list for residents located in or near a floodplain or stream
  - See FEMA Mapping

Remember.....

- What we do on land affects the quality of water we drink and use in so many ways.
- Many small sources of pollution add up to cause big water quality problems.
- Natural things such as soil, leaves, grass clippings, and pet waste can cause water pollution.
- Waste dumped into storm sewers goes into Susquehanna River without treatment.
- Automobiles and other vehicles cause water pollution as well as air pollution.

Everyone Can Make A difference!

Reporting of Illegal Dumping or Suspicious Discharges

Reporting will, in great part, rely on participation from the public. Residents who observe illegal dumping or observe pollutants with waterways or storm sewers should contact Dallas Township at **570-674-2000** to report a stormwater violation.

What You Can Do

You can help minimize illicit discharges by disposing waste in the proper manner.

- **Take used motor oil to a participating oil recycling center.**
- **Follow label directions regarding container disposal of cleaners.**
- **Compost yard waste or bag and dispose using solid waste collection programs**
- **Report any illicit discharge by calling Dallas Township (570)-674-2000**

Does Illicit Discharge Affect You?

Dallas Township
2919 SR 309 Highway
Dallas, Pa 18612

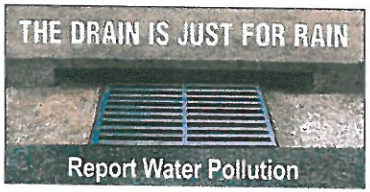
570-674-2000

What is Illicit Discharge?

An Illicit Discharge is the induction (accidentally or purposely) of non- storm water to the ground or into the storm sewer.

Examples of Illicit Discharge:

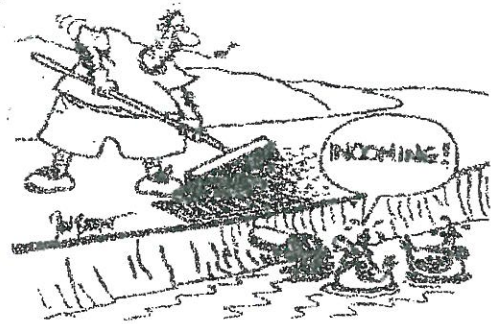
- ☐ Sanitary waste water
- ☐ Septic tank effluent
- ☐ Car wash waste waters
- ☐ Motor oil disposal
- ☐ Radiator flushing disposal
- ☐ Laundry waste waters
- ☐ Auto and household toxics disposal
- ☐ Leaves and yard waste



Six Easy Ways That You Can Keep Illicit Discharges Out of Our Waterways

There are simple steps that we can take to solve the problems that illicit discharges create. It is up to YOU, the homeowner and business owners who call Dallas Township home, to clean it up and to help keep it clean!

1. Used oil, antifreeze, and batteries can be recycled. Clean up any spills immediately, kitty litter or sawdust will absorb the spill. Be sure to sweep these up as well.
2. Wash your car on the grass so that the water, detergent, and dirt will be filtered by the soil. A better solution is to take your car to a commercial car wash, where the dirty water is sent to a wastewater treatment plant.
3. Empty bottles of household cleansers, pesticides, and weed killer should be disposed of according to label directions.
4. Grass clippings in the street should be swept up after each mowing. Grass clippings left in the street are being washed down into the storm sewers and end up in the streams where they have the potential to cause algae problems.



5. Paint brushes used with water based paint can be rinsed in the sink. If you have leftover paint in a can and it is latex or water-based paint you can fill the can with kitty litter and once it is absorbed you can set it out for trash pickup.
6. When walking your pet use a bag or use a scooper to clean up your pet's waste. In order to keep animal waste from contaminating our community, anyone who walks a pet should properly dispose of waste by picking it up, wrapping it, and either placing it into the trash or flushing it UNWRAPPED!

The household hazardous wastes in and around your home can affect your family and pets and can be toxic to fish and wildlife. An average Pennsylvania household generates an estimated 20 pounds of household hazardous wastes each year. That's a total of 62 million pounds–enough to fill 1,550 tractor trailers every year!

Preventing the generation of leftovers is the best way to solve the problem. Share the tips in this brochure with your friends to help them prevent household hazardous products from becoming wastes and potential pollutants in our streams.

The disposal recommendations in this brochure do not apply to wastes generated by businesses.

Household Solutions for Preventing Water Pollution from Hazardous Wastes

"Be A Solution to Water Pollution"

Hazardous products include such items as:

- Paints, stains and sealers
- Used motor oil and antifreeze
- Paint strippers and paint thinners
- Cleaning agents and solvents
- Drain and oven cleaners
- Fertilizers and pesticides
- Gasoline, kerosene and propane
- Batteries
- Mercury thermometers, thermostats and fluorescent lamps
- Pool chemicals

Dallas Township
2919 SR 309 Highway
Dallas, Pa 18612

www.dallastownship.com

Follow and share these tips for reducing, recycling and disposing of different types of hazardous materials in your home.

Remember that fertilizers, pesticides, oil and other pollutants from your yard and driveway can be washed into a storm drain and carried to a nearby stream or lake.

AUTOMOBILE

- Never dump vehicle fluids on pavement, the ground or down the storm drain. Collect and recycle motor oil, oil filters and other automobile fluids at vehicle service centers or parts stores listed on 1-800-CLEANUP and www.cleanup.org.
- Wash your vehicle at a professional car wash facility. This way the wastewater will be treated instead of possibly becoming a pollutant in a nearby steam. If you decide to wash your car at home, use a low or non-phosphate soap and wash your vehicle in a grassy area instead of on pavement.
- Regularly tune your car and fix leaks.

BATTERIES & MERCURY CONTAINING PRODUCTS

- Use rechargeable batteries instead of alkaline disposables. Recycle rechargeable batteries at the sites listed on 1-800-8BATTERY.
- Buy digital thermometers instead of mercury thermometers.
- Replace a mercury thermostat with a programmable, digital thermostat.

LIMITING HAZARDS FROM YOUR HOUSEHOLD

- Purchase non-hazardous or the least hazardous products for the job. As a general rule, a product with "CAUTION" on the label will be less hazardous than a product labeled "WARNING." The most potentially hazardous product is labeled "DANGER" or "POISON."
- Don't be tempted by a "buy one get one free" deal. It will probably result in having to manage twice as much hazardous waste.

LAWN CARE

- Use electric-powered lawn equipment instead of gas-powered whenever possible.
- Since it's easy to create leftovers by overestimating the gasoline necessary for a mowing season, plan to make a second purchase of a lesser amount to finish the season.
- Help fertilize your lawn by mowing 1/3 of the total grass height only and leaving the clippings on the lawn (mulching mowers and mowers with sharp blades work best).
- Use pesticides and herbicides sparingly and only when all else fails.
  - Plant native plants since they can survive without extra fertilizers, pesticides and water.
  - Pull weeds by hand or with a weeding tool.
  - If pesticides are necessary, spot treat weeds instead of applying to the whole area.
  - Pesticides/fungicides,/herbicides: Use as directed, find someone who will (e.g. local gardening club) or take it to a collection site (if available). As a last resort, stir into concrete mix until solid and dispose of in the trash.

PAINT

- Use latex paint instead of oil-based paint. This also eliminates the need for paint thinner.
- When painting a large area, buy a little less than you think you will need. Once the job is well underway, you will have a better idea of how much more is required. This way you can plan to have enough for touch ups, but avoid gallons of leftover paint.

Did you know Pennsylvania households waste approximately four million gallons of paint each year?

- Instead of buying methyl ethyl ketone (MEK) or xylene for stripping paint, do as much as possible with sandpaper and buy citrus oil stripper if needed.
- Paint/stain/varnish/sealer: Use it, find someone who will or take it to a collection site (if available).As a last resort, make it into a solid by mixing it with equal parts cat box litter and dispose of in the trash.
- When preparing your house for painting, collect paint chips and dispose of them in the trash. If left on the ground, they may wash into a storm drain and be carried to a nearby stream.

THERE ARE TWO PRIMARY WAYS TO REDUCE HOUSEHOLD HAZARDOUS WASTES:

1. **Think Prevention First!**
2. **Then, Recycle and Dispose of Wastes Properly!**

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.

Why is Storm Water "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.state.pa.us

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 from fire hydrants is not storm water, but is allowed by law to enter the storm sewer system.

3. Curb with Storm Drain Inlet – Part of the storm sewer system. Many people do not realize that this is an opening leading to the storm sewer system. Anything going into this inlet (e.g., trash, leaves, improperly disposed of hazardous materials) travel directly to a receiving lake, river, or stream without being treated first. Many communities stencil storm drains with "Do Not Dump" messages to let people know.

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 travel through a sewer system constructed to carry sanitary wastes. In some instances, older communities may have a combined sewer system designed to carry both storm water and sanitary waste.

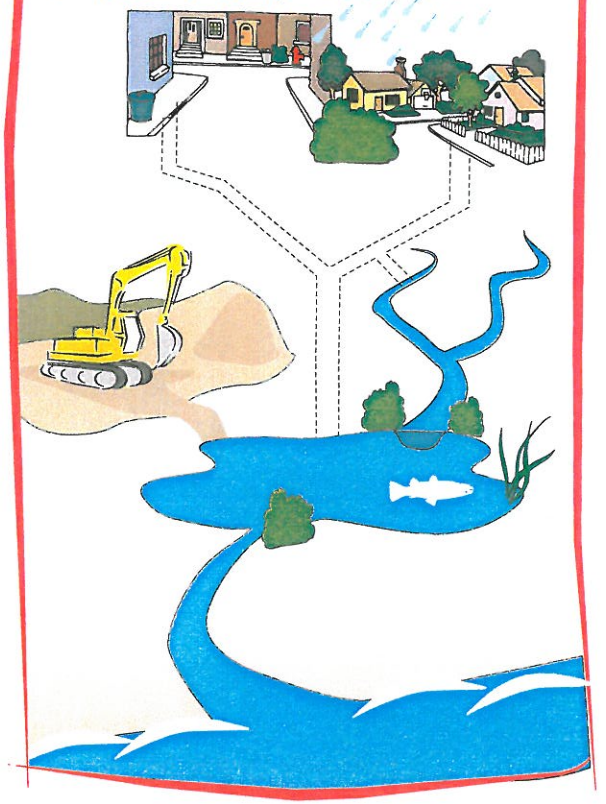
6. Septic System – Not part of the storm sewer system. Homeowners use septic tanks to manage sanitary wastes on-site. Improperly maintained septic systems can leak and contribute pollutants to the storm sewer system, as well as directly to lakes, rivers, and streams.

7. Roads and Other Paved Areas – Not part of the storm sewer system. 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. Storm Drain Inlet – Part of the storm sewer system. This is another example of what a storm drain may look like. Like the storm drain inlet shown in picture #3, anything that enters this drain will go directly to streams, rivers, and 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.

When It Rains, It Drains

Understanding Storm Water and How It Can Affect Your Money, Safety, Health, and the Environment

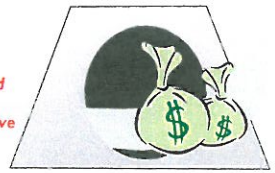


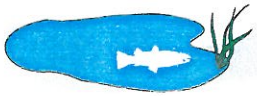
What Happens When It Rains?

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.

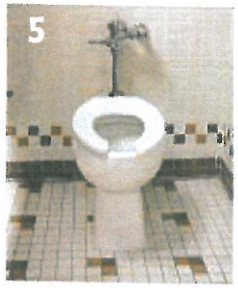
More expensive treatment technologies to remove harmful pollutants carried by storm water into our drinking water supplies.

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

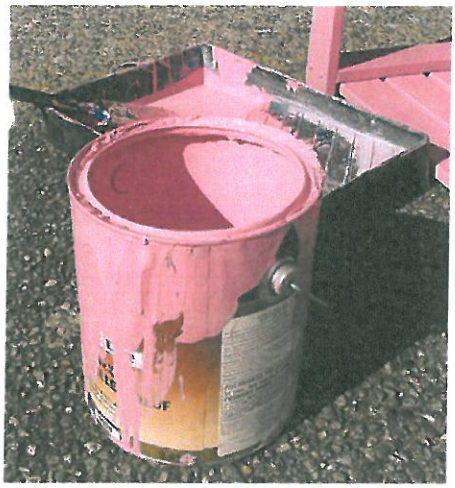
Rain by nature is important for replenishing drinking water supplies, recreation, and healthy wildlife habitats. It only becomes a problem when pollutants from our activities like car maintenance, lawn care, and dog walking are left on the ground for rain to wash away. Here are some of the most important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

What Do You Do With Household Chemicals?

There's Hazardous Waste in my Home?

If you look closely in your kitchen, bathrooms, basement, or garage, you just might find some household hazardous waste! Many common household products such as drain and oven cleaners, paint, and paint thinner (to name only a few!) contain chemicals that qualify as hazardous waste. These hazardous substances are toxic, corrosive, can easily catch fire, or are dangerous when mixed with other chemicals. If you see the words *caution, hazardous, danger, flammable, or poison*, you know to use these products with caution. You need to use caution when disposing them, too.



Don't Pour It Out!

When toxic chemicals are poured down storm drains, or on the ground, those chemicals are likely to end up in nearby waters. Even throwing household chemicals in the trash can contaminate water resources, once they are in the landfill. And your garbage collector will thank you, too! Many trash handlers have been injured by fumes and splashing chemicals.

Do I Have Options?

Yes! Here are a few ideas for reducing the amount of household hazardous waste in your home, which means less waste you have to dispose of.

- If the product is still useable, but you don't need it all, share with friends or neighbors who might need it.
- Buy only what you need for the job you're working on. More is not always better, when you think about the extra effort to store and dispose of the product.
- Choose non-hazardous products when you can. Lemon juice, vinegar, hot water, borax, soap, and baking soda are good alternatives to harsh, chemical cleansers. Check online for non-toxic toxic home cleaning recipes.
- Buy phosphate-free, biodegradable detergents and cleaners and water-based products, when possible, as these are typically less toxic.

Storm drains lead directly to local waters. No filters. No treatment. Chemicals that enter stormdrains wind up in the water we drink, fish, and swim.

A Few Good Recipes

All-purpose cleaner: ½ cup vinegar and ¼ cup baking soda mixed into ½ gallon of water

Bathroom mold: mix one part hydrogen peroxide (3%) with two parts water; spray on mold and wait one hour before cleaning

Carpet stains: ¼ cup borax, ¼ cup salt, and ¼ cup vinegar mixed into a paste; leave on stain for a few hours, then vacuum

Drain cleaner: pour ½ cup baking soda down the drain, then ½ cup vinegar; after 15 minutes, pour in boiling water to clear residue. Caution: only use this method with metal plumbing. Plastic pipes can melt if excess boiling water is used. Do not use this method after trying a commercial drain opener; the vinegar can react with the drain opener to create dangerous fumes.

Toilet bowl cleaner: ¼ cup baking soda mixed with 1 cup vinegar; pour into toilet bowl and let it sit before scrubbing

The Usual Suspects

How can you tell if the product you want to throw away is toxic and needs special disposal procedures? Read the label! If in doubt, the following list includes common household items that contain hazardous ingredients:

Cleaning products: oven cleaners, drain cleaners, wood and metal cleaners and polishes, toilet cleaners, tub, tile and shower cleaners, bleach, pool cleaners

Automotive products: motor oil, fuel additives, carburetor and fuel injection cleaners, air conditioning refrigerants, starter fluids, automotive batteries, transmission and brake fluid, antifreeze

Lawn and garden products: herbicides, pesticides, fungicides, wood preservatives

Indoor pesticides: ant and cockroach sprays and bait, flea repellants and shampoos, bug sprats, houseplant insecticides, moth repellants, mouse and rat poisons and baits

Workshop or painting supplies: adhesives and glues, furniture strippers, oil- or enamel-based paint, stains and finishes, paint thinners and turpentine, paint strippers and removers, photographic chemicals, fixatives, and other solvents

Flammable products: propane tanks and other compressed gas cylinders, kerosene, home heating fuel, diesel fuel, gas/oil mix, lighter fluid

Miscellaneous: batteries, mercury thermometers or thermostats, fluorescent or energy-efficient light bulbs, driveway sealer

Making Auto Care Stormwater- Friendly

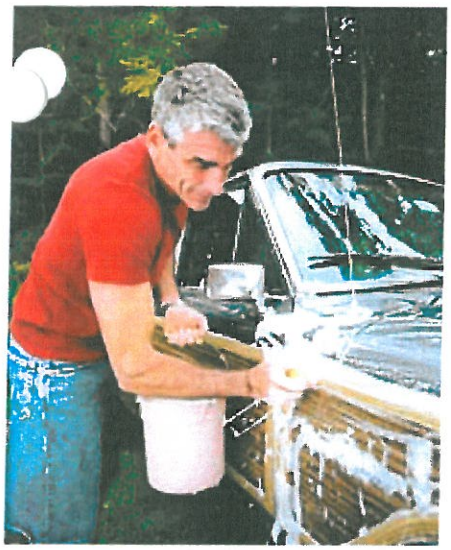
Do You Change Your Own Oil?

Recycling used oil doesn't simply keep it out of stormdrains; 2 gallons can generate enough energy to run an average household for almost 24 hours!

If you change your own motor oil, it is possible to recycle the used oil. Pouring it out *anywhere* is a threat to drinking water supplies and the waters that we Pennsylvanians love to fish, boat, and enjoy! To recycle your used oil:

1. Drain it into a container with a tight-fitting cap.

2. Take the used oil to a transfer station in your community or to a local auto parts shop. Most will collect used oil from you.



Do You Wash Your Car At Home?

You might notice something different about the photos to the left of people washing their cars. They aren't doing it on the driveway, or in the street. They're washing their cars on the grass. It's not something that most of us would consider a form of pollution, but washing your car on a paved surface allows the soapy water and dirt from your car to quickly enter a stormdrain. From there, it goes directly to local waters.

Simply moving your car off of a paved surface and onto a more permeable one such as the lawn or a gravel driveway can help keep that pollution out of stormdrains.

The best way to reduce pollution from car washing, though, is to wash your car at a certified car wash facility. They are required to recycle, collect, or dispose of the wash water properly.

Everyday Maintenance

In addition to recycling used oil and avoiding washing your car on paved surfaces, simple regular maintenance is one of the best ways to minimize the impact your vehicle has on stormwater problems. After all, oil, grease, and other automotive fluids are one of the main sources of stormwater pollution. Regular inspections of your car or truck will help ensure that unwanted leaks are kept to a minimum; they'll help keep your vehicle running longer and better, too!

Every year in Pennsylvania, do-it-yourself oil changers discard more than 3 million gallons of oil. Where does it go?

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.**

Thanks to the Washington State Water Quality Consortium for permission to adapt and use this poster.

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.

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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