# PRINCE WILLIAM COUNTY SCHOOLS AFTER THE STORM 2024



#### What is stormwater runoff?

• Stormwater runoff occurs when precipitation from rain or snowmelt flows over the ground. Impervious surfaces like driveways, sidewalks, and streets prevent stormwater from naturally soaking into the ground.

#### Why is stormwater runoff a problem?



• Stormwater can pick up debris chemicals, dirt, and other pollutants and flow into a storm sewer system or directly to a lake, stream, river, wetland, or coastal water. Anything that enters a storm sewer system is discharged untreated into the waterbodies we use for swimming, fishing, and providing drinking water.

# The effects of pollution

- When algae die, they sink to the bottom and decompose in a process that removes oxygen from the water. Fish and other aquatic organisms can't exist in water with low dissolved oxygen levels.
- Bacteria and other pathogens can wash into swimming areas and create health hazards, often making beach closures necessary.
- Debris—plastic bags, six-pack rings, bottles, and cigarette butts—washed into waterbodies can choke, suffocate, or disable aquatic life like ducks, fish, turtles, and birds.
- Household hazardous wastes like insecticides, pesticides, paint, solvents, used motor oil, and other auto fluids can poison aquatic life.
- Land animals and people can become sick or die from eating diseased fish and shellfish or ingesting polluted water.
- Polluted stormwater often affects drinking water sources. This, in turn, can affect human health and increase drinking water treatment costs.



- Polluted stormwater runoff can have many adverse effects on plants, fish, animals, and people.
- Sediment can cloud the water and make it difficult or impossible for aquatic plants to grow. Sediment also can destroy aquatic habitats.
- Excess nutrients can cause algae blooms.

• Dirt, oil, and debris that collect in parking lots and paved areas can be washed into the storm sewer system and eventually enter local waterbodies.



# **General Site Solutions**

- Establish routine inspections of your curb and drop inlets to help identify issues.
- Sweep up litter and debris from sidewalks, driveways and parking lots, especially around storm drains.
- Cover grease storage and dumpsters and keep them clean to avoid leaks.
- Apply fertilizers and pesticides according to label instructions to save money and minimize pollution.



Report any chemical spill to Risk Management Services at 703-791-7206! They will respond and take appropriate action and keep spills from harming the environment.

#### **General Construction Solutions**

- Erosion controls that aren't maintained can cause excessive amounts of sediment and debris to be carried into the stormwater system. Construction vehicles can leak fuel, oil, and other harmful fluids that can be picked up by stormwater and deposited into local waterbodies.
- Divert stormwater away from disturbed or exposed areas of the construction site.
- Install silt fences, vehicle mud removal areas, vegetative cover, and other sediment and erosion controls and properly maintain them, especially after rainstorms.
- Prevent soil erosion by minimizing disturbed areas during construction projects, and seed and mulch bare areas as soon as possible.



- 2,500 Square Feet is the threshold for site plans, permits, and inspections for state and federal programs.
- For Projects greater than 2,500 Square Feet follow in-house procedures to obtain permits.

## Vehicle Care

- Washing your car or truck can send detergents and other contaminants through the storm sewer system. Dumping automotive fluids into storm drains has the same result as dumping the materials directly into a waterbody.
- Use a commercial car wash that treats or recycles its wastewater.
- Repair leaks and dispose of used auto fluids and batteries at designated dropoff or recycling locations. Uncovered fueling stations allow spills to be washed into storm drains. Cars waiting to be repaired can leak fuel, oil, and other harmful fluids that can be picked up by stormwater.



- Clean up spills immediately and properly dispose of cleanup materials. Report any chemical spill to Risk Management Services at 703-791-7206. They will respond and take appropriate action and keep spills from harming the environment.
- Provide cover over fueling stations and design or retrofit facilities for spill containment.
- Properly maintain fleet vehicles to prevent oil, gas, and other discharges from being washed into local waterbodies.
- Install and maintain oil/water separators.

## **Special Tank Systems**

- Leaking and poorly maintained Septic systems release nutrients and pathogens (bacteria and viruses) that can be picked up by stormwater and discharged into nearby waterbodies. Pathogens can cause public health problems and environmental concerns.
- Inspect your system every year and pump your tank as necessary.
- Don't dispose of household hazardous waste in sinks or toilets.
- Don't dispose of spent cleaning supplies or water in storm drains.

#### Pet Waste

- Pet waste can be a major source of bacteria and excess nutrients in local waters.
- When individuals walk pets on school property, request or remind them to pick up the waste and dispose of it properly. Leaving pet waste on the ground increases public health risks by allowing harmful bacteria and nutrients to wash into the storm drain and eventually into local waterbodies.

#### **General School Maintenance**

• Do not dispose of any cleaning or maintenance product (paint, cleaning supplies, floor care products) in storm inlets or the storm sewer system. Any dumping of materials will result in an Unlawful discharge in to our permitted storm water system.

PRINCE WILLIAM COUNTY PUBLIC SCHOOLS LAUNCHING THRIVING FUTURES

For more information contact:

Administrative Coordinator: Julius Williams Office: 703-791-8801

Risk Management: 703-791-7206 After-hours emergency contact: 703-791-8805

https://www.epa.gov/npdes/npdes-stormwaterprogram