

When It Rains, It Drains.

Campus is your home away from home.
Help keep it clean and protect our water resources.

What is storm water?

Storm water is surface runoff in any area due to precipitation or meteorological events such as snow melt. Runoff generally occurs as the result of overland flow from impervious areas, during extremely heavy precipitation, or from major snowmelt or rain on frozen ground.

The construction of new roads, buildings, and other structures can also change an area's ability to absorb water. Poorly controlled storm water runoff has the potential to significantly affect the quantity and quality of both surface and ground water.

Penn State's participation in the MS4 program helps ensure storm water runoff is treated to the highest degree possible.

What can you do?

Pick up trash: If you see trash on the campus grounds that you can safely pick up, put it in the nearest garbage can or recycling bin to keep it from entering the storm drain system. It's that simple.

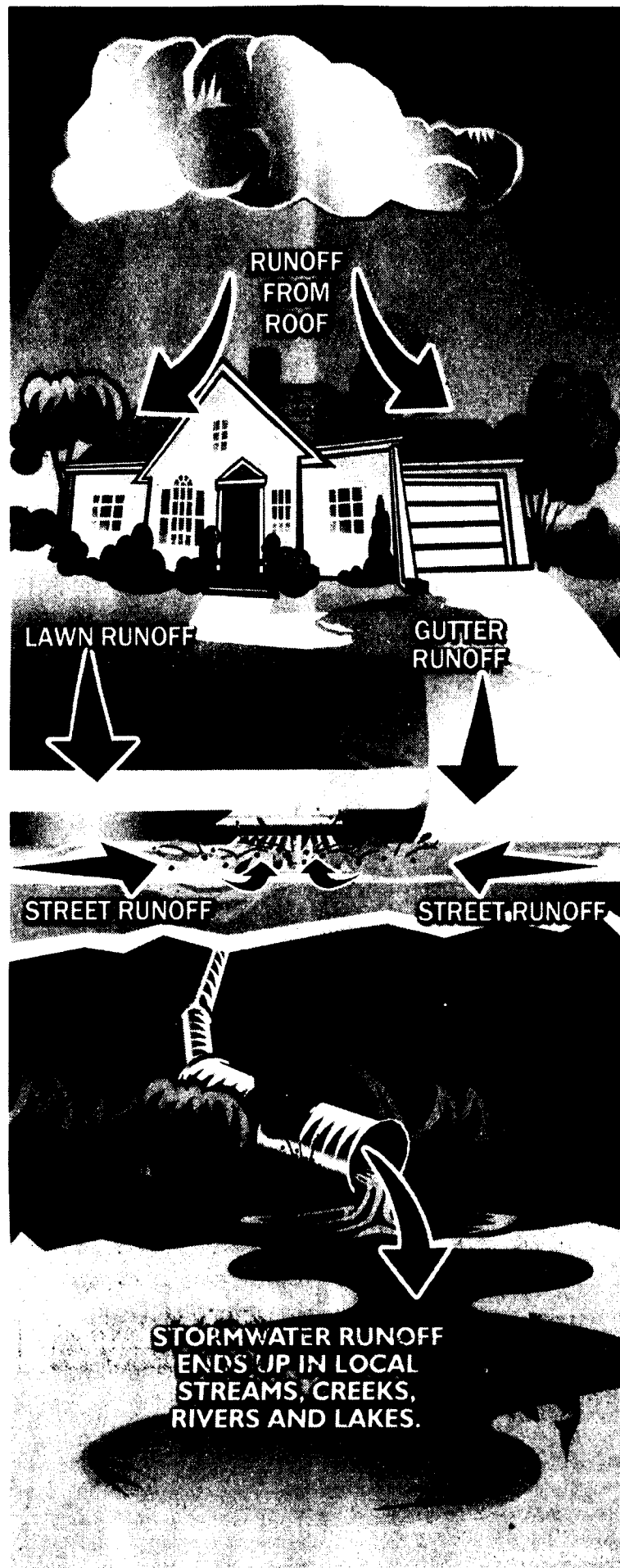
Volunteer: Volunteering for events such as Earth Day or watershed cleanups is a great way to help the environment. To take part in an existing event or develop a new one, contact Ann Quinn at abq1@psu.edu.

Never dump down drains: Storm inlets should never be treated as garbage receptacles. If left untreated, pollutants from storm drainage systems can kill fish and other aquatic life in our streams and the lake.

Educate others: When you hear interesting facts that help our environment, spread the word. Knowledge is contagious!

Use care where your car is concerned: Make sure your vehicle isn't leaking fluids; dispose of any old fluids at a designated recycling point. Wash your car on grass or gravel areas instead of pavement areas where the runoff goes right to a storm drain inlet.

Conserve water: Enough said!



As you're walking around the Penn State Behrend campus in rainy weather, have you ever wondered where the runoff from storm water goes? Just as in the neighborhoods where many of you grew up, the answer is that it travels to ditches, sometimes called swales, as well as to storm drain inlets. From these places, it moves to storm water detention ponds or to wetlands where water quality is addressed.

The runoff from Penn State Behrend ultimately travels to Four Mile Creek and in turn to Lake Erie. You can probably see then that anything thrown into an inlet or swale on campus could very well end up in our Great Lake. That's why it's so important to improve the quality of storm water runoff here at Penn State Behrend, and we need your help to do that.

What is the MS4 program?

MS4 is an acronym for "small municipal separate storm sewer system," as defined by the U.S. Environmental Protection Agency. Under Phase II of the EPA's NPDES program, small MS4s such as Penn State are required to get a permit for their storm water management systems. The MS4 program has six major components: public education, public involvement/participation, illicit discharge detection and elimination, construction site runoff control, post-construction storm water management, pollution prevention, and good housekeeping practices.

The University holds dozens of water quality permits including small MS4 permits for its locations throughout the Commonwealth, including Penn State Behrend. As a participant in the program, the University is installing these medallions on storm drain inlets:



Test your storm water knowledge

Answer true or false: Which of the following are part of a storm drainage system?

1. A ditch or swale
2. A fire hydrant
3. A roadway inlet
4. A puddle
5. A roof gutter
6. A culvert outlet
7. A toilet
8. A green roof
9. A septic tank
10. A basement floor drain

To learn more...

About Penn State's storm water management policies or MS4 program, contact: Larry Fennessey at (814) 863-8743 or laf8@psu.edu, or Paul Ruskin at (814) 863-9620 or pdr2@psu.edu.

About Penn State Behrend's storm water management practices, contact: John Ream at jor1.psu.edu

About the Pennsylvania Department of Environmental Protection's storm water programs, visit www.dep.state.pa.us.



Answers:

1. True. Storm drainage systems include more than inlets and underground pipes, even ditches or swales that convey runoff to a water body.
2. False. A fire hydrant is part of the potable water system. By law, water that comes out of the hydrant is allowed to enter the storm water system.
3. True. A roadway inlet is an entry point for runoff to enter underground storm drainage pipes.
4. True. A puddle is an integral part of the storm water system. Puddles allow water to infiltrate the ground or evaporate instead of traveling directly to a body of water.
5. True. A roof gutter is an entry point for runoff to enter underground storm drainage pipes. At Penn State, some roof leaders are directed into dry wells where the water enters the soil or groundwater instead of going directly to a body of water.
6. True. A culvert outlet is the point where runoff enters a ditch or other body of water.
7. False. A toilet is part of the wastewater system, not the storm drainage system.
8. True. A green roof is one of many best management practices (BMP) that the University uses to control storm water quality and quantity.
9. False. A septic tank is part of the wastewater system, not the storm drainage system. Properties outside of a wastewater service area use septic systems to manage wastewater on-site; if improperly maintained, a septic tank can leak and contribute pollutants to a storm drainage system and bodies of water.
10. False. A basement floor drain is part of the wastewater system, not the storm drainage system. In some older buildings, floor drains may be cross-connected into the storm drainage system, so no pollutants should ever be placed down them.