Stormwater is rain or melting snow that flows off of rooftops, paved areas and compacted soil, eventually flowing into rivers and streams. On its journey it picks up many of the pollutants it encounters—litter, pet waste and gasoline residue—and itself becomes a pollutant.

THE STORY OF STORMWATER

Stormwater in the City

In a natural setting, plants and trees absorb stormwater and it seeps into the ground. This slow soaking of water is important because water that travels more slowly to streams and rivers helps sustain them through dry spells. The water that reaches streams is also cleaner because it gets filtered as it flows slowly underground.

Urban environments are filled with hard, impervious surfaces – rooftops, sidewalks and streets—that prevent rainfall from soaking into the ground. In a city setting, 70-100% of the land is hard and impenetrable. When it



rains, millions of gallons of water runs off these hard surfaces and rushes into the sewer.

Where does our stormwater go?



Stormwater and Our Sewer System

Philadelphia has two types of sewer systems – combined and separate. In a combined system, sewage from homes and businesses mixes with stormwater from the street in one pipe that travels to a treatment plant. During heavy rains, diluted sewage and pollutants can overflow into our rivers.



In a separate system, there are two different pipes. One pipe carries sewage to the treatment plant and another carries stormwater to our rivers.



◀ COMBINED SEWER SYSTEM IN DRY AND WET WEATHER

Reducing the impact of stormwater

The traditional approach to stormwater management involves building large underground storage tunnels and tanks that are expensive and can take decades to build.

Philadelphia is trying a new approach which uses green stormwater infrastructure. These green tools filter and store water through natural processes. Even better, improvements are immediate, neighborhood-based and beautiful. This approach results in cleaner creeks and rivers that everyone can enjoy.

GREEN STORMWATER

Philadelphia Water Department