

Discover Storm Water

ILLUSTRATIONS BY PETER GROSSHAUSER

WHAT IS STORM WATER?

STORM WATER: WHERE DOES IT COME FROM?
WHERE DOES IT GO?

STORM WATER MANAGEMENT

WHAT IS IN STORM WATER?

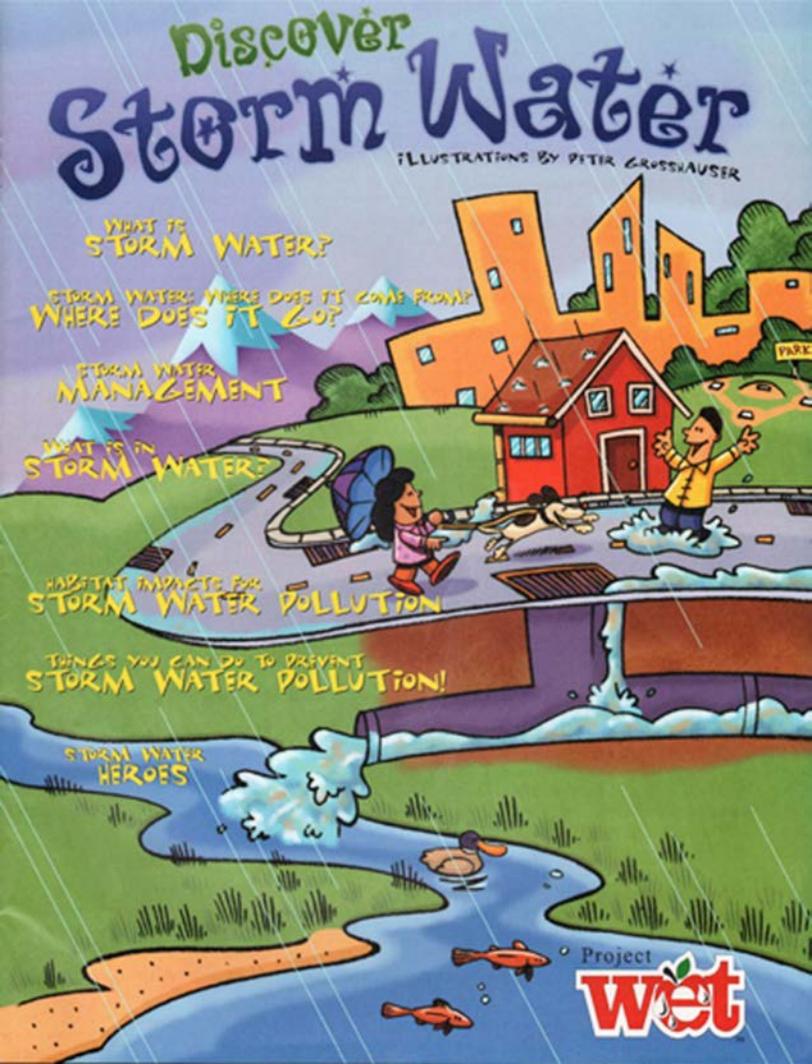
HABITAT IMPACTS FROM STORM WATER POLLUTION

THINGS YOU CAN DO TO PREVENT STORM WATER POLLUTION!

STORM WATER HEROES

Project

wet



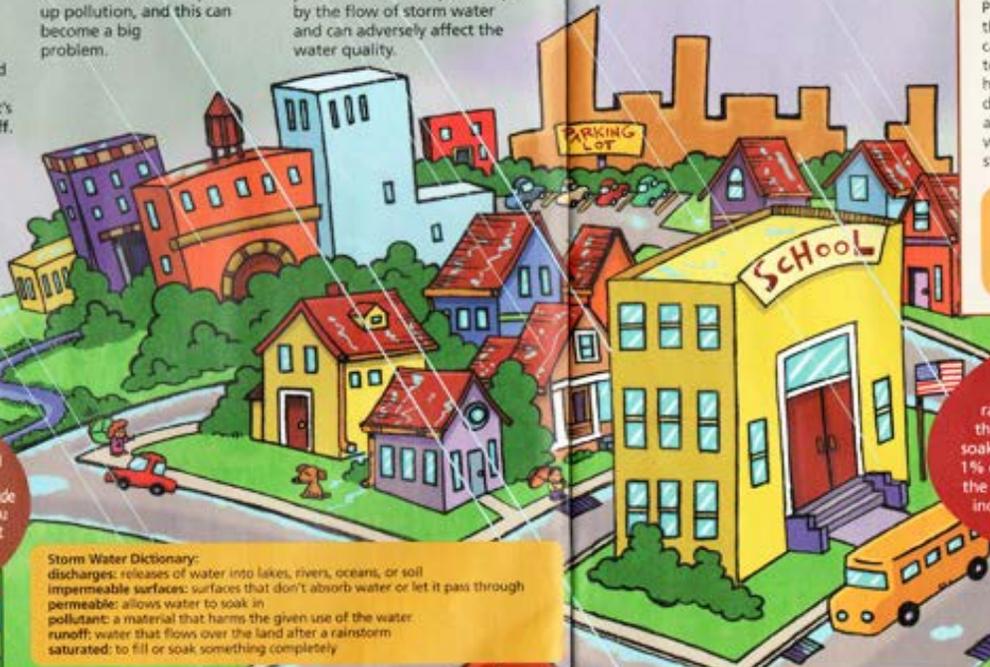
WHAT IS STORM WATER?

Storm water is water that falls from the sky as rain or snow. Wherever you live, whether it's a very wet or very arid climate, storm water occurs. When water falls to earth as rain or snow, most of it seeps into the ground. If the ground is saturated, frozen, or covered with impermeable surfaces like a concrete sidewalk or a paved parking lot, the water flows over the land, creating what's known as storm water runoff.

Maybe you've heard people say that rain washes the streets clean, but have you ever thought about where that water ends up? Storm water runoff can add needed water

to streams, lakes, and wetlands, but it can also cause flooding, erosion, and pollution problems. Storm water by itself is necessary and good, but when it passes through urban areas like cities or towns it can pick up pollution, and this can become a big problem.

Storm water discharges are generated by runoff from land and impermeable areas such as paved streets, parking lots, and building rooftops during rain and snowfall. These surfaces often contain pollutants that are picked up by the flow of storm water and can adversely affect the water quality.



Look for these corner boxes throughout this booklet. On one side you'll find Fascinating Facts about storm water; and on the other side you'll find questions to help you learn more about your nearest storm drain.



Storm Water Dictionary:
discharges: releases of water into lakes, rivers, oceans, or soil
impermeable surfaces: surfaces that don't absorb water or let it pass through
permeable: allows water to soak in
pollutant: a material that harms the given use of the water
runoff: water that flows over the land after a rainstorm
saturated: to fill or soak something completely

In AD 42, the Romans brought their skill of water collection to England and helped build drains all over the country.

A-MAZE-ING STORM WATER

Try this activity to see how storm water can travel. Cover a piece of cardboard with wax paper. Use clay to create a maze similar to city streets, parks, and streams. Add sponges to represent permeable areas, such as wetlands or soccer fields. Place a large drop of water at the start of your maze and tilt the cardboard until the water travels to the end. As it moves, you can have it travel through spots containing ingredients that represent pollution. How does the appearance of the water change? Would you want to swim in this water? How much water stayed in the sponges?



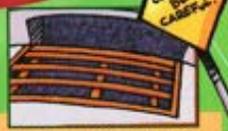
POLLUTION

- | | |
|----------------------------|-----------------------|
| powdered cocoa | = sediment or soil |
| green food coloring | = fertilizers |
| candy sprinkles | = pet waste |
| paper clips | = litter |
| grass clippings | = grass |
| vegetable oil or soy sauce | = oil & gas from cars |
| salt | = road salt |

TRY THIS

Here is a math problem to show how storm water runs off different surfaces. Imagine a 3-hour rainstorm. Each hour, 1/2 inch of rain falls to the earth. On a soccer field, 60% of the rain soaks into the ground. On a parking lot, only 1% of the water soaks into the concrete. At the end of three hours, how much rain (in inches) has run off from both surfaces? Check the back for the answer.

CAUTION!
BE CAREFUL!



How far apart are the grates on your neighborhood storm drain? Observe carefully and write the answer in here.
Note: Some storm drains have large openings. Always use care, and NEVER reach any body parts into a storm drain. Stay on the sidewalk, wear bright colors, and go with a buddy!

