

Stormwater Activity Guide



What is Stormwater?

When rain (and other types of precipitation like snow, sleet, or hail) falls to the ground, the surface it lands on plays a big part in what happens next. On natural surfaces like dirt or rocks, water will steadily soak into the ground, but where the surface does not allow water to soak through, it will collect and move across the land toward the nearest waterway, picking up all sorts of pollutants along the way. This is called **stormwater runoff**. In this case, pollution doesn't just mean oil or trash. Excess fertilizer from lawns, loose soil in open patches, or even dog poop can all end up in a nearby waterway.



Plants can be a sign of healthy stormwater management areas, filtering larger pollutants out of runoff and allowing water to disperse and infiltrate into the soil.



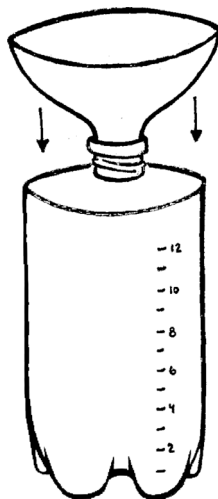
Paved surfaces funnel runoff to specific locations at a faster pace, concentrating pollutants and inhibiting infiltration anywhere else along the way.

Build Your Own Rain Gauge:

How much rain does it take to create a stormwater problem? Meteorologists measure precipitation by collecting it with a tool called a rain gauge. This is important in order to track and understand changes in precipitation and the effects these changes can have on an ecosystem.

Follow these easy steps to make your own rain gauge and start measuring and tracking precipitation amounts where you live.

You can use this information to decide how best to help stop storm water from becoming polluted runoff! See the back of this guide for some ideas.



MATERIALS AND TOOLS

- 1 Liter plastic bottle
- Scissors
- Ruler
- Permanent marker

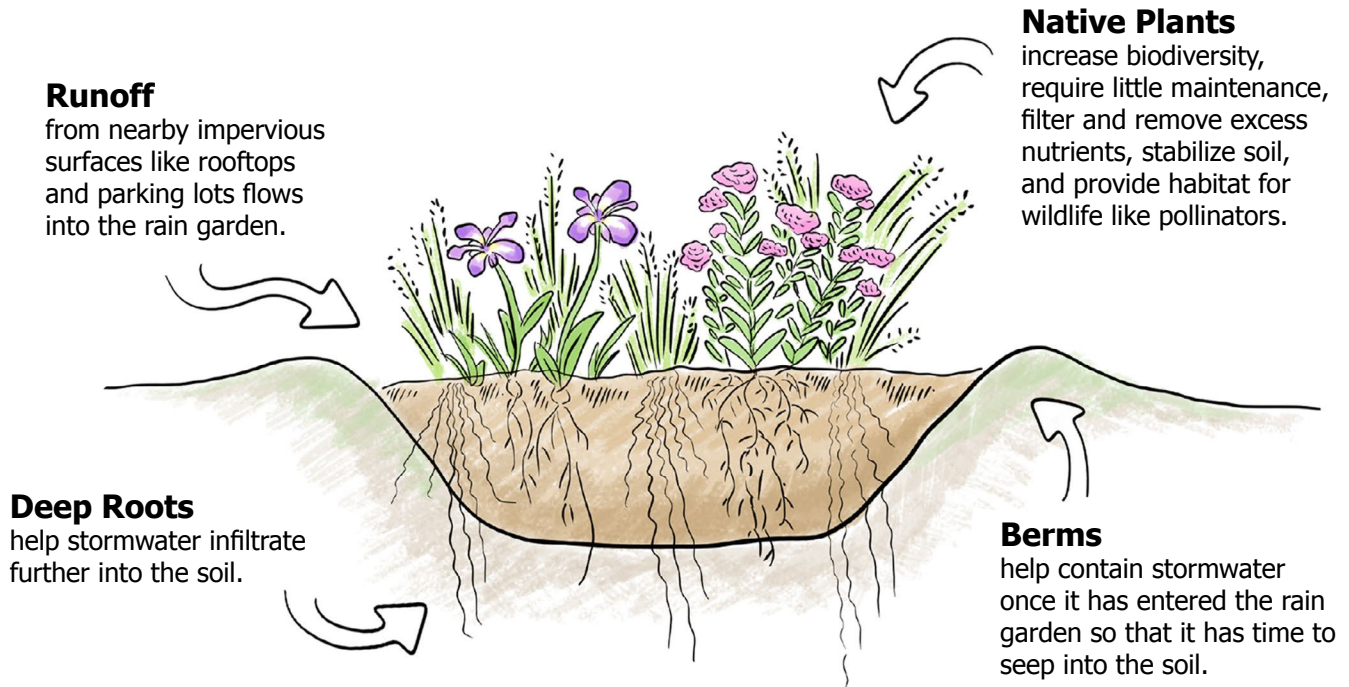
INSTRUCTIONS

1. Using the scissors, cut the top off of the plastic bottle and invert it to make a funnel.
2. Using the ruler and marker, mark every 1/2 inch up the side of the bottle. This way you will easily be able to tell how much rain has been collected.
3. Support the bottom of the bottle or bury it partially in the ground to keep it from tipping over in the wind.
4. After the rain stops, check your rain gauge to see how much you have collected. Keep a record of your measurements over time.

This activity is adapted from The Ecology Center

Preventing Stormwater Pollution with Rain Gardens

Rain gardens are designed to catch stormwater and release it into the soil slowly so that pollutants can be filtered out. They require less maintenance than traditional storm drains and sewer systems and supply water and nutrients to native plants that increase the health of the soil, provide habitat for wildlife, and beautify the area!



Ways you can help:

- Find instructions for designing a rain garden at your home, work, or anywhere else.
- Rain barrels are another great way to capture and store precipitation for later use like gardening or other household needs. This allows stormwater to soak into the soil over time rather than in large concentrations. Build a rain barrel using the how-to guide from the US Environmental Protection Agency.
- Learn more about other ways to mitigate stormwater pollution at www.epa.gov/soakuptherain

