

Start with a Book: River Rangers

Storm Drain Cleanup



Introduction

Storm drains carry excess water from rain away from our streets — and into our local waterways. But what happens if the water we send down our storm drains isn't clean? In this activity, kids will explore how the water from storm drains can impact the water quality of local waterways.

Supplies

“WATERWAY”

- Aquarium tank or large clear plastic recycled container (like those big pretzel containers from Walmart or Costco)
- Rectangular cardboard box (to fit over aquarium or plastic container)
- Water
- Watering can or spray bottle

“POLLUTANTS”

- Green food coloring (pesticides and fertilizer)
- Vegetable oil (motor oil)
- Soil, sand, pebbles (erosion)
- Grass clippings or shredded paper and twigs
- Cafeteria waste or trash

Get kids thinking ...

When rain falls or water runs off from sprinklers where do you think the water goes? Some of the water flows downhill to the nearest creek or ditch — that's called stormwater runoff. In cities and towns, the water can't soak through the pavement, rooftops, and concrete (because they are impervious surfaces).





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Have you ever seen holes or openings at the curb? These are storm drains and they're connected to a pipe that carries the water directly to your local river, bay, or other water source.



Let's get started!

SET UP THE ACTIVITY: Place the aquarium on a table and fill it half-way with water. Cut a hole in the bottom of the box and place the box on top of the aquarium. The box represents the storm drain and the aquarium represents the waterway that the storm water mixes into after entering the storm drain.



Talk with the kids about the purpose of storm drains and where the water and objects that float down into a storm drain go. If you have time for a short walk outside, you might look for the closest storm drain. **ASK THE KIDS:** What are all the things you can think of that might enter a storm drain during a rain storm?

Talk about each of the "pollutants" and ask the kids how each might get into the storm drain. Have the kids take turns adding a pollutant into the storm drain. Use the watering can or spray bottle to create rain to wash the pollutant into the waterway.

After adding all of the pollutants, examine the contents of the waterway. **ASK THE KIDS:** How has the waterway has changed? How do these changes make you feel?

REFLECTION QUESTIONS

- What types of the pollution are natural?
- What types of pollution are added by people living in the local communities?
- What could be done to stop pollutants from entering storm drains?





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More stormwater activities

**STORMWATER SLEUTH: HOW MUCH WATER RUNS OFF?
(UNIVERSITY OF NEBRASKA EXTENSION)**

water.unl.edu/documents/How%20Much%20Water%20Runs%20Off%20opt.pdf

**STORMWATER SLEUTH: STORMWATER WALK
(UNIVERSITY OF NEBRASKA EXTENSION)**

water.unl.edu/documents/Stormwater%20Walk%20opt.pdf

BUILD YOUR OWN RAIN BARREL

water.unl.edu/documents/Build%20Your%20Own%20Rain%20Barrel%20opt.pdf

STORM DRAIN STENCILING TOOLKIT (THINK BLUE MAINE)

cfpub.epa.gov/npstbx/files/stencil_toolkit%20FINAL.pdf

Learn more about stormwater

ONLY RAIN DOWN THE DRAIN (INTERACTIVE)

onlyraindownthedrain.com/interactive-model/

**H2O JO TAKES A RIDE THROUGH THE STORM DRAIN
(CITY OF BOULDER WASH PROJECT)**

youtube.com/watch?v=ytq7DP9ENhU

**FREDDY THE FISH TEACHES ABOUT STORMWATER
(NORTH CENTRAL TEXAS REGIONAL STORMWATER PROGRAM)**

youtube.com/watch?v=jjPflhJbdc0

**STORMWATER POLLUTION AND GREEN INFRASTRUCTURE SOLUTIONS
(NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION)**

youtube.com/watch?v=ATNy-valPXI

