



DIY: Build Your Own Watershed!

What is a watershed?

Watersheds are all of the land that drains water into a particular body of water. For example, if we look at the Hudson River Watershed, the watershed includes all of the land where rain water, streams, and lakes drain into the Hudson River.

Why are watersheds important?

Watersheds are important because they are a source for a huge amount of water. Clean watersheds provide clean water. Watersheds with a lot of erosion or pollution, will provide unclean water. **Pollutants** can come from farms, cities, roads, or other human-caused sources.

New York City's Watershed

New York City gets its water from the Hudson Valley and the Catskills. Much of the drinking water for the city is held in large **reservoirs** and transported through long tunnels called **aqueducts**. Take a look at the map on the next page. Trace how your drinking water starts in the Catskill/Delaware Watershed and travels down through the Croton Watershed and then eventually to your borough!



New York City's Drinking Water Supply Watershed (NYC DEP)

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Pre-Experiment Questions (Hypothesis):

Water isn't just for drinking! Make a list of all the ways you use water every day.

What are some pollutants that might cause water to be unclean in a waterbody?

Why is it important to keep the watershed clean?

Supplies Needed to Build Your Own Watershed:

- Paper
- 2 water-based markers
- Spray bottle
- Water

Instructions (Methods)

1. Scribble on your paper with one of your markers. This color will represent pollution, like trash, chemical spills, and pesticides. Scribble on your paper with another marker. This color will represent the clean water that is on the ground, waiting to flow into rivers.
2. Crumple your piece of paper into a ball like this:



3. Uncrumple your paper slightly so you still have peaks and valleys. These are your mountains and valleys.



4. Now spray your paper from ~1/2 foot away. This spray represents rain.
5. Answer the following questions about what you saw.

Post-Experiment Questions (Conclusion)

What did you notice about the two colors as you sprayed the paper?

Do you think it would be easy to separate these two colors (the “pollution” and the “clean water”) after the rain? What do you think this shows about the pollution and clean water in real life watersheds?

What are some ways you think NYC residents can improve their watersheds? Share your ideas (and your watershed) with us on social media!
