



# GOING WITH THE FLOW!



## Have you ever thought about where the water in rivers, streams, lakes, and ponds come from?

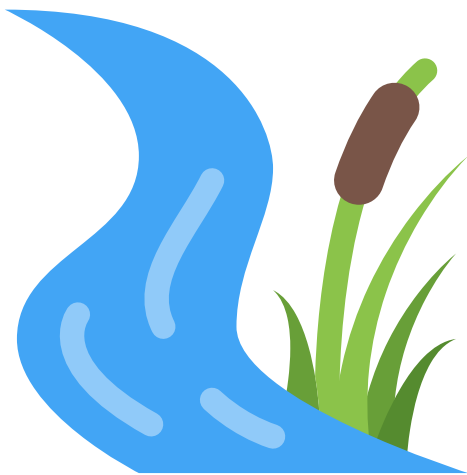
Just like on your roof at home, when rain falls on hills, mountains, and other areas of higher elevation, it can flow down. This is where our aquifers, rivers, lakes come from! Because water is just "going with the flow" of gravity, it can get stuck or **polluted** when it runs into barriers in the environment.



When rain flows down land into a river, creek, stream, lake, pond, or even ocean, we call all of that land the **watershed** or "**drainage basin**"

Controlling what we put into our environment controls what we put in our bodies: As rain and snowmelt flow down the watershed, it picks up whatever is loose in its way. This means that, before purification treatment, your water can be contaminated with dirt, litter, and even oil from cars!

**Find Out More on the NIH Environmental Health Sciences website:**



Because humans need water to live, we each live near a body of water. This means that we all interact with a watershed, and we are impacted by the watershed's flow of water.

**For more activities and information visit [RevUpTheFun.org](http://RevUpTheFun.org) and [conservemaineenergy.org](http://(207) 753-6626)**



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# HOW DOES RAINWATER END UP WHERE IT DOES?

Your job is to make mountains, rivers, and lakes to determine where to put your town.

**Follow below to make a 3D map!**

## YOU WILL NEED:

- 2 pieces of plain scrap paper (8.5x11)
- Spray bottle
- Water
- Water-based markers (blue, brown, black)

## VARIATION:

If you don't have a fine mist-spray bottle or washable markers, try laying a piece of plastic wrap over your town before making it rain. This way, you will be able to see where the water ends up and you can trace it afterward.

1. Gather all your materials (you can substitute markers for pens)
2. Crumple up a piece of paper and smooth it out most of the way so that there are high points (small ridges) and low points (valleys). This is the outline for your watershed!
3. Find the creases in the paper along the high points - these are your ridgelines (the top of your watershed). Use a washable blue marker to trace these high lines.
4. Once you have your ridgelines, let it rain! Use a spray bottle to gently "rain" over your town. Where does the water collect?
5. Name your lakes, rivers, and other land and water formations, and add houses and streets!
6. On a clean sheet of paper, include human activity. Draw in streets, houses, farms, factories, highways and other ways people interact with land.
7. Use washable markers to dot various places that might pollute your water. Are there any factories, landfills, or other polluters in your town?
8. Crumple this piece of paper, smooth it as before, and trace your new ridgelines.
9. Once you have your ridgelines, let it rain! Use the spray bottle to gently "rain" over your town again. After each misting, notice how the water trickles and falls down from your high points. Based on where clean water ends up and where dirty water ends up, where would you want your towns to be?

