




## Experiment: What is a Watershed?

During some parts of the year, we get a lot of rain, which means we get a lot of stormwater runoff. This is the water that travels across the ground and downhill. Because of gravity, the runoff will always flow downhill towards the lowest point in the area. The area of land in which all the water will flow down to a certain point is called a watershed.

If you stood on top of a mountain and the water on one side flows to one river, while the water on the other side flows to another, you are standing on the divide between two watersheds. Any stormwater runoff that flows across the ground in Kansas City, will end up in the Missouri River. Therefore, Kansas City is in the Missouri River Watershed. The Missouri River then flows to the Mississippi River, so it is also in the Mississippi River Watershed. These rivers are the lowest points in the area.

Not only does stormwater within the watershed flow into the river, it carries pollutants along with it, such as trash, oil, and animal waste. Trash that is on the ground in Kansas City can end up in the Mississippi River and eventually the Gulf of Mexico. All the more reason to keep our ground clean.

In this activity, you will create a model of a watershed and watch how water and pollutants travel through your watershed.

Materials:	Instructions:
<ul style="list-style-type: none"> <li>• Sheet of white paper</li> <li>• Shallow pan (or do this outside)</li> <li>• Washable markers</li> <li>• Spray bottle full of water</li> <li>• Pollutants (crushed up dry leaves will work great to model trash)</li> </ul> 	<ol style="list-style-type: none"> <li>1. Slightly crumple up your piece of paper, then partially smooth it out. You should see ridges and height differences on your paper like in the picture. This represents a landscape.</li> <li>2. Trace along the ridges with washable markers. Use different colors to represent different pollutants such as fertilizer, pesticides, and animal waste.</li> <li>3. Lay your sheet of paper in the pan or on the ground outside. Spray water onto it to represent rain.</li> <li>4. Watch how the pollutants (marker colors) wash down to the lowest point. Did the water begin to gather together at this point as well?</li> <li>5. Sprinkle some dirt or another object to represent trash on the ground. Spray the water again and watch where the “trash” ends up. Did it also flow to the lowest point?</li> </ol>

### Reflection Questions:

1. The area where the water collected at the lowest point of your watershed represents a river or lake. How would it feel to be an animal that lives in a river or lake that is full of pollutants from a watershed?
2. What are some actions people can take to help prevent or reduce the amount of pollutants in their watershed?