

WAD-A-WATERSHED

Objective: Students will be able to understand the basic geography of a watershed, how water flows through the system, and how people can impact the quality of our water.

Illinois State Goals: 10.B., 13.B., 17.A., 17.B., 22.C.

Top Book Hits:

The Disappearing Earth by Doug Peterson; **ISBN-13:** 978-1883097271

Spring Waters Gathering Places by Sandra Chisholm DeYonge;

ISBN-13: 978-1888631050



Materials Needed:

- 8 ½ x 11 paper (one sheet for each student)
- 3 different colors of water soluble markers
- Several spray bottles of water

Procedure:

A watershed is a geographic area in which water, sediments and dissolved minerals all drain into a common body of water like a stream, creek, reservoir, or bay. A watershed includes all the plants, animals, and people who live in it, as well as the non-living components like rocks and soil. We are all part of a watershed, and everything we do can affect the surface and ground water that runs through this system. When you create your miniature watershed, be sure to use water-soluble markers. As the markers “bleed,” they demonstrate how rain moving through the watershed affects soil erosion and urban runoff.

1. To create the watershed, crumple a piece of paper up into a tight ball. Gently open up the paper, but don’t flatten it out completely. The highest points on the paper now represent mountaintops, and the lowest wrinkles represent valleys.
2. Choose one color of water-soluble marker and use it to mark the highest points on the map. These points are the mountain ridgelines.
3. Choose a second color and mark the places where different bodies of water might be: creeks, rivers, lakes, etc.
4. With a third color, mark four to five spaces to represent human settlement: housing tracts, factories, shopping centers, office buildings, schools, etc.

5. Use the spray bottles to lightly spray the finished maps. This spray represents rain falling into the watershed. Discuss students' observation about how water travels through the system.
 - What changes did you observe in the maps?
 - Where does most of the rain fall? What path does the water follow?
 - Where does erosion occur? What happen to the human settlement – are any buildings in the way of a raging river or crumbling hillsides? How does the flow of water through the watershed affect our choice of building sites?
 - How does this map demonstrate the idea of a watershed?

Explore More: EnviroScape demonstration model may be available through local NRCS/SWCD or agricultural literacy coordinator.
U.S. Geological Survey (USGS) Science in Your Watershed <http://water.usgs.gov/wsc/>
USGS Water Science for Schools <http://ga.water.usgs.gov/edu/watershed.html>
Watershed game <http://www.bellmuseum.org/distancelearning/watershed/watershed2.html>