

Which Watershed Are You In?



SUGGESTED GRADE LEVELS: MS

SUBJECTS: Social Science

SKILLS: analysis, comparison and generalization, critical thinking, research, problem solving, interpretation

CORRELATION TO

ILLINOIS LEARNING STANDARDS: Social Science
SS.G.1.6-8.LC., SS.G.1.6-8.MdC., SS.G.3.6-8.LC.

Objectives

Students will: 1) become familiar with watersheds and the importance of water quality; and 2) be able to determine which watershed they live in and what bodies of water originate in or feed into that watershed.

Method

Students use a road map to mark the boundaries of their watershed and flow of water within and out of the watershed.

Background

The U.S. Environmental Protection Agency defines a watershed as a “geographic area in which water, sediments and dissolved materials drain into a common outlet.” This area is also called the drainage basin, drainage area or catchment. Since water flows downhill, watersheds are defined by topography; to draw a watershed, you essentially connect high points and ridges on a topographic map. Finding out which watershed you live in involves in-depth local map interpretation.

Literature Cited

Adapted with permission from: *The Volunteer Monitor*, Volume 6, Number 2. Fall 1994. San Francisco, California.

Materials

Illinois road map (available from Secretary of State’s offices or Illinois Department of Transportation District Offices, downloadable from <http://www.idot.illinois.gov/Assets/uploads/files/Travel-Information/Maps-&-Charts/2015ILMap.pdf> or available from the Communications Department of the Secretary of State’s offices at 217-785-8234); paper; markers

Procedure

1. Have students locate their city on an Illinois road map.
2. Find the river or creek on the map that is closest to your city.

Trace the flow of this river/creek downstream with a marker. Continue tracing as it joins other rivers. Stop when you reach Cairo (or in some cases, Lake Michigan). You may need to explain to students that not all cities have runoff that flows directly into a river. For most, it will be smaller streams that merge into larger streams. This step illustrates where runoff from your city may travel.

3. Next, go upstream from your city to the origin of the river or creek. Using a marker of a different color than the one used in step 2, trace the course of this river/creek plus any streams that are shown entering it along the way. With a pencil, broadly circle the area around your marking, but do not cross any other streams. Don’t worry if your watershed boundaries are not exact. For classroom purposes, drawing dividing lines between stream systems will give students an idea of the size of the watershed they live in. NOTE: Students in northern Illinois may need a Wisconsin road map as well. Students along the eastern Illinois border may need an Indiana road map, too.

Extensions

1. Using a road map and a national map, have students trace the stream nearest to their location to its headwaters and then follow the path of water on this route to the Gulf of Mexico. NOTE: Portions of Lake and Cook counties drain directly into Lake Michigan. Using a map of the eastern United States, have students trace the possible route of runoff from these counties to the Atlantic Ocean.
2. Take the class outdoors and investigate a nearby body of water. Discuss the kinds of pollutants that might be present and their possible sources. Use a water quality testing kit to help you confirm your predictions.
3. Have students brainstorm how individual households can reduce pollution in the community. What can be done by just one person to help clean the environment?

Evaluations

1. After students trace their local stream to an Illinois border river or lake, have them name some of the cities located along that path. How did the river or lake contribute to the growth of these cities?
2. Students should be able to define a watershed and locate their watershed on a map.
3. Students should be able to name major streams within their watershed.
4. A toy boat is placed in a river near your city. What might be the route of its travels?
5. What we do in our backyard in Illinois may affect organisms in Louisiana. Do you agree or disagree?



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DNR 93 – 4/16 • IOCI 16-0539 