

<u>Pre-Field Experience Activities and Resources</u>

Understanding Watersheds

- Model a Catchment Basin
 Global Learning and Observations to Benefit the Environment (GLOBE)
 Students will construct a 3-dimensional model of a catchment basin. They will use the model to explore catchment basins, water pathways, and manipulate the model to illustrate how catchment basins can change. https://www.globe.gov/documents/11865/0e15aa76-355e-4be5-afb1-a8f81cd30bff
- Natural and Urban "Stormwater" Water Cycles: PowerPoint Lesson TeachEngineering.org

Students examine in detail the water cycle components and phase transitions, and then learn how water moves through the human-made urban environment. A PowerPoint® presentation and handout are provided. https://www.teachengineering.org/lessons/view/usf stormwater lesson01

 How Natural Areas Filter Water: Short video and extensive activities Nature Works Everywhere

In this lesson, students learn about the importance of water quality for human health and agriculture. They relate their own consumption activities to the water supply and also brainstorm various threats to the water supply. By contrasting natural filters with impervious (paved) areas, students compare the impact of development on the ability of nature to provide clean freshwater.

https://www.natureworkseverywhere.org/resources/how-natural-areas-filter-water/

History of the Buffalo River

 "If Our Water Could Talk" WNED-TV DOCUMENTARIES

> A short documentary on how water has defined Buffalo over the last two hundred years. https://www.pbs.org/video/if-our-water-could-talk-if-our-water-could-talk/