

Basic Urban Hydrology-grades 4-8



Using activities from a variety of sources including Project WET, Stormwater Coalition, and the EPA, these kits provide the materials needed for students to develop a basic understanding of urban hydrology. Key understandings include the path of water in urban areas, urban water quality issues, how urban areas fit into and impact the water cycle, and how to conserve water resources.

Activities and Equipment

Discover a Watershed, Watershed Manager The Blue Traveler

Students simulate the movement of water within and between natural and constructed systems. Students will learn how water's movement on the planet affects water conservation measures.

SPLASH Southwest Water Cycle Diagram

Students learn about the Southwest Water Cycle and how human population affects water. Activities include mental journeying and diagram drawing.

Stormwater Coalition Walking in the Watershed

Students survey sections of the watershed surrounding the school and their neighborhood and record and report observations. They assess pollution sources and pollution issues in their community. Research on pollution sources, effects, solutions, alternatives, costs, and laws.

EPA Excuse Me, Is this the Way to the Drainpipe?

Students learn about the sources of their drinking water and where it goes after it leaves the house. Reading and art activities.

Project WET A-maze-ing Water

Students build mazes and guide a drop of water through their device to learn about drainage pipes and the effects of pollutants on water.

Stormwater Coalition Fred the Fish and Urban Stew

Students learn how nutrients and toxic substances contribute to storm water pollution. The need for clean water is discussed. Students explore how pollutants affect their personal sponge named Fred.

EPA The Case of the Mysterious Renters

Students learn about uses for water, how much their families use each day, conservation. Students read a story about water users, fill out a personal water use survey, form hypotheses, and learn about water conservation measures they can take at home.

Project WET Poison Pump

Students learn about epidemiology and water borne diseases through investigation of a map and a mystery story.

Project WET Wet-Work Shuffle

Students learn about the ins and outs of water management and the occupations and professions that work with water management and science.

EPA Streams in the City

Students learn about rainfall and runoff, the effects of urbanization, and permeability through hypothesizing about various scenarios, research about their school grounds, construction of a rain gauge, runoff calculations, and studying runoff mitigation practices.

Advanced Urban Hydrology-grades 7-12



Using activities from a variety of sources including Project WET, Stormwater Coalition, and the EPA, these kits provide the materials needed for students to develop an understanding of urban hydrology. Key understandings include urban water quality issues, the interconnected paths of water movement in developed areas, urban flooding, and best management practices for urban residents.

Activities and Equipment

Discover a Watershed, Watershed Manager The Blue Traveler

Students simulate the movement of water within and between natural and constructed systems. Students will learn how water's movement on the planet affects water conservation measures.

SPLASH Southwest Water Cycle Diagram

Students learn about the Southwest Water Cycle and how human population affects water. Activities include mental journeying and diagram drawing.

Stormwater Coalition Walking in the Watershed

Students survey sections of the watershed surrounding the school and their neighborhood and record and report observations. They assess pollution sources and pollution issues in their community. Research on pollution sources, effects, solutions, alternatives, costs, and laws.

Water Environment Federation Biography of a River

Students research and present biographies of significant and historical events/facts about their research on state rivers.

Water Environment Federation Wastewater Treatment

Students learn the ins and outs of a wastewater treatment facility through presentations and completion of diagrams. A good extension for this activity includes visiting a local wastewater treatment plant.

Project WET Color Me a Watershed

Through interpretation of maps and runoff calculations students learn how development can affect a watershed. Topics covered include land use, population growth, and runoff.

Project WET Wet-Work Shuffle

Students learn about the ins and outs of water management and the occupations and professions that work with water management and science.

Project WET The Price is Right

Students learn about economics and environmental planning as they calculate the cost of building a water development project. Students use development cost calculations and city maps to decide where and how to supply a city with water facilities.

Project WET A Grave Mistake

Students read stories and analyze data to trace the flow of contaminated ground water. Students view diagrams and learn about plumes through a simulated plume device.

EPA Streams in the City

Students learn about rainfall and runoff, the effects of urbanization, and permeability through hypothesizing about various scenarios, research about their school grounds, construction of a rain gauge, runoff calculations, and studying runoff mitigation practices.