

# Floodplains and Floods-the Basics:

## What makes a bigger flood: wetlands or parking lot?

Borrow Ward's Science Floodplain Simulator for free.

Time: 20 -60 minutes.



**Scenario 1:**  
**Natural Headwaters**



**Scenario 2:**  
**Parking Lot Headwaters**



Students observing a flooding scenario.



Student reading "stream gauge"



Student explaining hydrograph

## Lesson in Brief

A short PowerPoint presentation to introduce topic is available upon request.

**Scenario #1.** Simulator has natural headwaters (sponges). Water is poured over natural headwaters and flows down river. A "stream gauge" is read as the water flows. The stream gauge makes it possible to create an Excel Spreadsheet hydrograph that can be projected on screen. Kids serve in different roles i.e. "rainmaker", "gauge reader", recorder".

**Scenario #2.** Activity is repeated with a parking lot at the headwaters.

Other scenarios are possible with levee, detention pond, etc.

Prepared by Montana Department of Natural Resources and Conservation

To arrange to borrow the simulator, contact  
Floodplain Community Assistance Program  
406.444.0862  
email: [tsears@mt.gov](mailto:tsears@mt.gov)

