



Why we are offering this free service

Your state chapter of the Association of State Floodplain Managers has trained local volunteers to offer floodplain modeling demonstrations in local schools. This hands-on class is offered at no cost to the school or the students.

Our primary goal is to help students who have been through a flood understand it from a scientific standpoint in order to process the trauma and regain a sense of control over their world.

We also want to raise awareness of the benefits of properly managed water resources and promote the profession of floodplain management to students. These hands on demonstrations and lessons from real floodplain professionals can easily be accommodated in most classroom time frames and settings.

How do I get this into my school?

Contact us:



**Michigan Stormwater Floodplain Association
(MSFA) mi.floods.org**

Mark Walton, CFM

MSFA - Floodplain Education in our Local Schools
Coordinator

(616) 949-0643 ext. 493 (O)

(616) 949-1708 (F)

email: mark.walton@noaa.gov



The floodplain education in our local schools campaign is a pilot project done in cooperation with the Outreach Process Partners and your local chapter of the Association of State Floodplain Managers.

STORMWATER FLOODPLAIN SIMULATOR

Floodplain Education for Schools



Floods affect us all

According to the Federal Emergency Management Agency (FEMA):

- Floods are the most common natural disaster in the United States
- Floods have caused nearly \$24 billion in U.S. flood losses in the last 10 years
- There is a 26 percent chance of experiencing a flood during the life of a 30-year mortgage in high-risk flood areas. However, losses due to flooding are not covered under typical homeowner's and business insurance policies
- Flood related deaths in the U.S. account for more fatalities than any other natural disaster

See how it happens with the Floodplain Simulator

The stormwater floodplain simulation system is a large-scale and visually striking model featuring a clear acrylic tank, a colorful resin landform insert, three different headwater trays and two rainmaker trays to simulate several real world environmental scenarios that students can recreate and modify.

Developed for education and outreach in cooperation with the Michigan Stormwater Floodplain Association, the model has already drawn considerable interest from schools around the nation—and it's no wonder.

This new model offers a real opportunity to educate children and adults alike about the dangers and impact of development and human activity in the floodplain. There are numerous experiments possible with the model that can be easily tailored to fit the age and education level of the students.

HANDS-ON



INTERACTIVE



AND FUN!



Using this simulator, students have the chance to:

- Create an experiment that will flood an entire town and cause homes to float away!
- See how land use affects the risk of flooding
- Explore the value of wetlands and retention ponds in floodplain management
- Construct their own levees and see how stream flow affects downstream communities during times of high runoff
- Simulate seasonal risks like ice damming
- Understand the dangers of driving over a flooded road
- Develop a hypothesis on what causes floods
- Plot and analyze data derived from their own and pre-defined experiments
- Measure runoff volume and construct their own hydrograph of stream flow over time
- Most importantly, they will work as a team to find and test solutions to a variety of floodplain problems simulated by the model.

Learn new watershed tools

The detailed study guide also introduces students to new tools to protect people and manage the resources of our critical watershed such as:

- No Adverse Impact®
- Turn Around Don't Drown™
- Run-off footprint
- Rain gardens
- Green roofs
- Porous pavement

Call to schedule your free Floodplain Management class today!