



Floodplain Management

From the early 1900's to 2000, flood damage in the United States has tripled, and costs \$6 billion a year"

Did You Know?

7 percent, or 178 million acres, of US land is in the floodplain.

What is a Floodplain Management?

Floodplains are low-lying areas adjacent to bodies of water that are susceptible to flooding during seasonal or unexpected weather events. As communities have grown many have built structures in the floodplain. Combined with the impervious surfaces that come with development, such as streets, sidewalks and rooftops, stormwater is increasingly unable to return naturally into the ground and contributes to a community's flooding problems.



Obion River in Tennessee overflowing into floodplain. Photo courtesy Tim McCabe, USDA NRCS

Floodplain management is an opportunity for communities to make better land-use decisions, zoning changes and building requirements

Importance of Floodplain Management

Is Cost-Effective: Costs to the individual homeowner as well as federal, state and local governments after a flood event can be enormous. From the early 1900's to

2000, flood damage in the United States has tripled, and costs \$6 billion a year (No Adverse Impact).

However, just by participating in FEMA's Community Rating System, communities can save hundreds of thousands of dollars in flood insurance by implementing better land use practices.

Restores Natural Hydrology: Floodplain management allows the land in those areas to naturally store floodwaters and reduce the speed of floods. This will help to reduce damage and increase the response time communities have to react to flood events.

Improves Water Quality: Efforts to improve floodplain management also tend to be good watershed management practices. Wetland and riparian protection, increased stormwater mitigation and sustainable development techniques all help to improve water quality as well as manage floodplains.

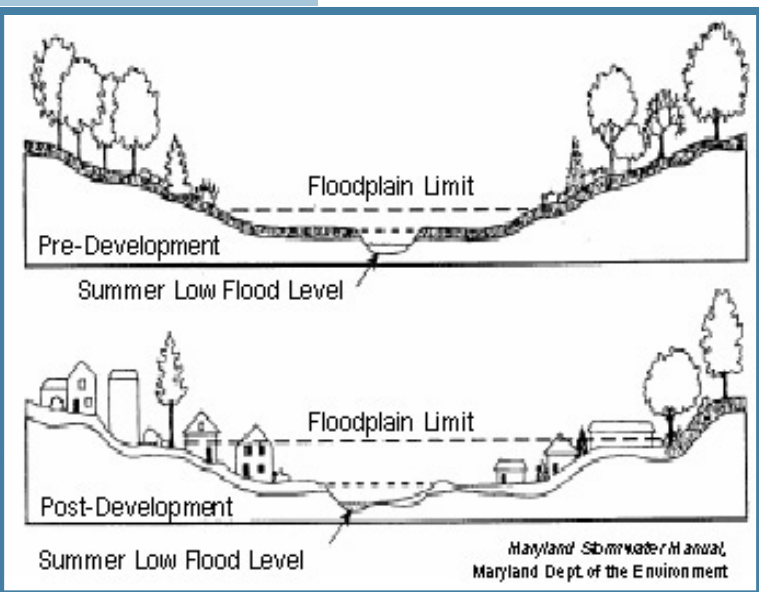


Diagram showing the impact of development on a floodplain.

Maryland Stormwater Manual, Maryland Dept. of the Environment

Codes & Ordinances

References & Resources

Federal Emergency
Management Agency
Floodplain Management
[www.fema.gov/plan/
prevent/floodplain/index](http://www.fema.gov/plan/prevent/floodplain/index)

Floodplain
Management
Association
www.floodplain.org

National Flood
Insurance Program
www.floodsmart.org

No Adverse Impact
Floodplain
Management
Community Case Studies
[www.floods.org/PDF/
NAI_Case_Studies.pdf](http://www.floods.org/PDF/NAI_Case_Studies.pdf)

No Adverse Impact
Floodplain
Management
Toolkit for Common Sense
Floodplain Management
[www.floods.org/
NoAdverseImpact/
NAI_Toolkit_2003.pdf](http://www.floods.org/NoAdverseImpact/NAI_Toolkit_2003.pdf)

Floodplain Development Requirements.

Knox County, TN—Sec. 26-193.

A floodplain development permit is required for any development or alteration to the natural drainage system within the 500-year floodplain in the county. The director shall approve said permit based on the requirements herein and the required engineering calculations stipulated by the director. All activities that take place within the 500-year floodplain must conform to the regulations set forth in the county flood damage prevention ordinance.

Development Prohibited in Floodways

Orange County, FL—Sec. 19-93

Located within the areas of special flood hazard established by this chapter are areas designated as floodways. Any encroachments, including fill, new construction, substantial improvements, and other development that would result in any increase in flood levels within the county and the communities adjacent thereto during the occurrence of the base flood discharge are prohibited within the floodways.

Limited and Prohibited Uses in the Floodway

Pima County, AZ—Sec. 16-24-020

No use shall be allowed which: A. Acting alone or in combination with existing or future uses creates a danger or hazard to life or property. In determining whether a use creates a danger or hazard to life or property, the Chief Engineer may require a certification, sealed by an Arizona registered professional civil engineer that the proposed use will not result in any increase in the floodway elevations during the occurrence of the base flood, nor will the proposed use divert, retard, or obstruct the flow of flood waters; B. Increases the floodway elevations; C. Increases erosion potential upstream and/or downstream; and D. Places a waste disposal-system wholly or partially in a floodway.

Model Ordinance Guidelines

Idaho Model Floodplain Ordinance

Idaho Department of Water Resources

www.idwr.idaho.gov/water/flood/Idaho%20model%20ordinance.doc

Maryland Model Floodplain Management Ordinance

Maryland Department of the Environment

www.mde.state.md.us/assets/document/flood_hazards/revordinance2004.pdf

Model Floodplain Ordinance

Wisconsin Department of Natural Resources

[www.dnr.state.wi.us/org/water/wm/dsfm/flood/Documents FPMModelOrdMay2008.pdf](http://www.dnr.state.wi.us/org/water/wm/dsfm/flood/Documents/FPModelOrdMay2008.pdf)

SOUTHEAST WATERSHED FORUM

One Vantage Way • Suite E250 • Nashville, TN • 37228
www.southeastwaterforum.org • www.watershed-assistance.net

