

# Floodplain Protection

## Critical Lands



“When we disconnect rivers from their floodplains and completely prevent natural flooding, it is to the peril of the river, the floodplain and – quite often – people.”  
*The Nature Conservancy*

## What is a Floodplain?

A floodplain is the lowland and relatively flat area adjoining inland and coastal waters, including areas subject to a one percent or greater chance of flooding in any given year (100-year floodplain).

Flooding is a natural process that forms and allows floodplains and coastal zones to function properly. Periodic flows of water that overtop the banks of a river and encroach upon coastal areas are the lifeblood of the riparian corridors, marshes, beaches, and other natural areas.

## Why protect them?

Floodplains play an important role in natural flood and erosion control by providing areas where floodwaters are stored, and reducing flood velocities, flood peaks and sedimentation.

Floodplains also play an important role in water management by filtering nutrients and impurities from runoff. They process organic wastes, help to moderate temperature fluctuations, promote infiltration and recharge of the aquifer, and slowly release water to reduce infrequency and duration of low surface flows.

In addition to the societal and water quality benefits, floodplains benefit wildlife by providing breeding and feeding grounds, creating and enhancing waterfowl habitat, and protecting habitat for rare and endangered species.

When we develop in floodplains we reduce the floodplain's storage capacity, causing the next flood of equal intensity to crest even higher than the last.

## How to protect and enhance

- **Establish natural areas with native vegetation to enhance the natural function of the floodplain.**
- **Protect existing vegetation and topography within a floodplain.**
- **Plant trees in the floodplain.**
- **Do not put structures on a floodplain.**
- **Manage stormwater on-site in upland areas to reduce contributions from run-off.**
- **Reserve the floodplain for passive recreation activity use only.**

## How to manage

Our management of water is becoming increasingly complex. Past practices have resulted in the disconnection of rivers from floodplains – with a resultant loss in biodiversity and a requirement for complex, expensive and sometimes damaging flood defense schemes. Many of our current demands are incompatible with each other. For example, we want functioning floodplains for flood management and important biodiversity, but people want to live by rivers, and we need space to build houses to account for changing demographics. It is important that we protect floodplain areas not only for the biological benefits but also the water quality and economic benefits they provide.

## Resources

Wisconsin Department of Natural Resources. Floodplain Management. <http://dnr.wi.gov/org/water/wm/dsfm/flood/purpose.htm>

Association of State Floodplain Managers. Natural and Beneficial Floodplain Functions: Floodplain Management – More than Flood Loss Reduction. [www.floods.org/PDF/.../ASFPM\\_NBF%20White\\_Paper\\_%200908.pdf](http://www.floods.org/PDF/.../ASFPM_NBF%20White_Paper_%200908.pdf)

## More Information

For more information on floodplains contact:

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