



United States
Environmental
Protection Agency

Wetlands Overview

What Is a Wetland?

Although wetlands are often wet, a wetland might not be wet year-round. In fact, some of the most important wetlands are only seasonally wet. Wetlands are the link between the land and the water. They are transition zones where the flow of water, the cycling of nutrients, and the energy of the sun meet to produce a unique ecosystem characterized by hydrology, soils, and vegetation—making these areas very important features of a watershed. Using a watershed-based approach to wetland protection ensures that the whole system, including land, air, and water resources, is protected.



Wetlands found in the United States fall into four general categories—marshes, swamps, bogs, and fens. Marshes are wetlands dominated by soft-stemmed vegetation, while swamps have mostly woody plants. Bogs are freshwater wetlands, often formed in old glacial lakes, characterized by spongy peat deposits, evergreen trees and shrubs, and a floor covered by a thick carpet of sphagnum moss. Fens are freshwater peat-forming wetlands covered mostly by grasses, sedges, reeds, and wildflowers.

Although wetlands are best known for being home to water lilies, turtles, frogs, snakes, alligators, and crocodiles, they also provide important habitat for waterfowl, fish, and mammals. Migrating birds use wetlands to rest and feed during their cross-continental journeys and as nesting sites when they are at home. As a result, wetland loss has a serious impact on these species. Habitat degradation since the 1970s has been a leading cause of species extinction.

Good News

Often called “nurseries of life,” wetlands provide habitat for thousands of species of aquatic and terrestrial plants and animals.

Two-thirds of the 10 million to 12 million waterfowl of the continental United States

reproduce in the prairie pothole wetlands of the Midwest. In the winter millions of ducks like these can be found in the wetlands of the south-central United States.



Dave Davis

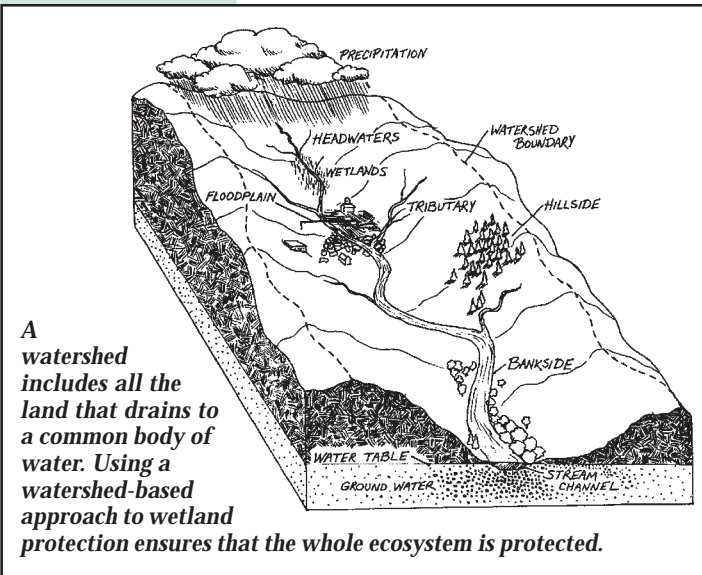
This forested wetland on the Chincoteague National Wildlife Refuge on Virginia's Eastern Shore is part of the Atlantic flyway, where shorebirds and waterfowl rest before they migrate south for the winter.

Dave Davis



Is there a wetland in your neighborhood?

The best way to find out if there's a wetland in your watershed or neighborhood is to contact your Natural Resources Conservation Service office or local public works or planning department. Most have specialists trained in identifying and delineating wetlands. The U.S. Fish and Wildlife Service's National Wetland Inventory maps can also help. The maps indicate open water and likely wetland areas. For copies, call 1-888-ASK-USGS or visit the National Wetlands Inventory web site at www.nwi.fws.gov.





A freshwater pool at Assateague National Seashore in Virginia.

Living systems cleanse water and make it fit, among other things, for human consumption.

Elliot A. Norse, in R.J. Hoage, ed., *Animal Extinctions*, 1985, Smithsonian Press.

The nation behaves well if it treats the natural resources as assets which it must turn over to the next generation increased, and not impaired, in value.

—Theodore Roosevelt, 1907

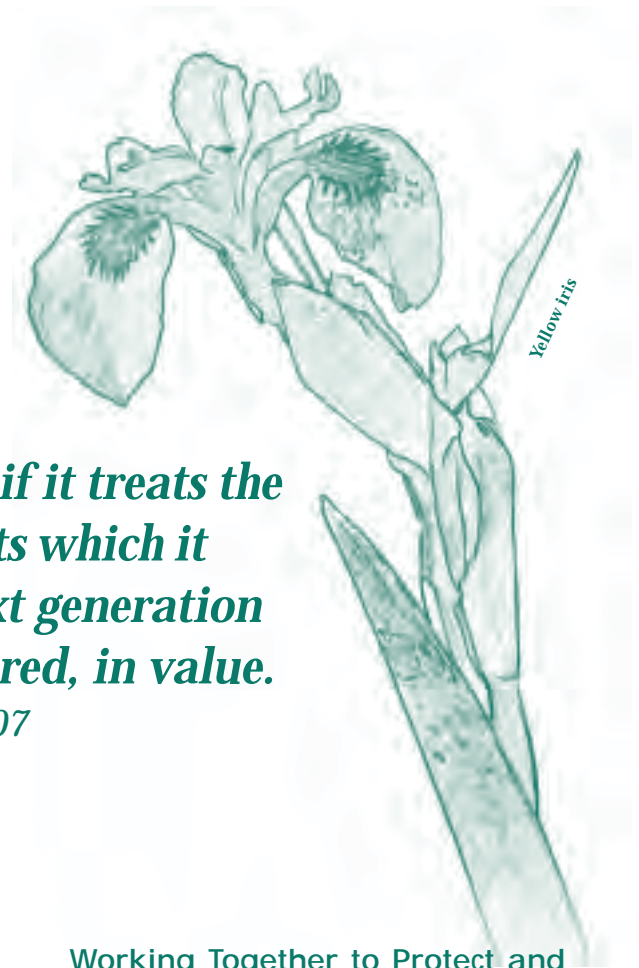
Wetlands do more than provide habitat for plants and animals in the watershed. When rivers overflow, wetlands help to absorb and slow floodwaters. This ability to control floods can alleviate property damage and loss and can even save lives. Wetlands also absorb excess nutrients, sediment, and other pollutants before they reach rivers, lakes, and other waterbodies. They are great spots for fishing, canoeing, hiking, and bird-watching, and they make wonderful outdoor classrooms for people of all ages.

Bad News

Despite all the benefits provided by wetlands, the United States loses about 60,000 acres of wetlands each year. The very runoff that wetlands help to clean can overload and contaminate these fragile ecosystems. In addition, nonnative species of plants and animals and global climate change contribute to wetland loss and degradation.

What Is EPA Doing to Protect Wetlands?

EPA has a number of programs for wetland conservation, restoration, and monitoring. EPA, along with the U.S. Army Corps of Engineers (Corps), establishes environmental standards for reviewing permits for discharges that affect wetlands, such as residential development, roads, and levees. Under Section 404 of the Clean Water Act, the Corps issues permits that meet environmental standards (after allowing the public to comment).



Working Together to Protect and Restore Wetlands

In addition to providing regulatory protection for wetlands, EPA works in partnership with states, tribes, and local governments, the private sector, and citizen organizations to monitor, protect, and restore these valuable habitats. EPA is helping states and tribes incorporate wetland monitoring, protection, and restoration into their watershed plans. EPA is also developing national guidance on wetland restoration, as well as constructed wetlands used to treat storm water and sewage. Nationally, EPA's Five-Star Restoration Program provides grants and promotes information exchange through community-based education and restoration projects.

EPA works with a variety of other federal agencies to protect and restore wetlands, including the U.S. Fish and Wildlife Service, the U.S. Department of Agriculture, and the National Marine Fisheries Service. EPA is working with these agencies and others to achieve an overall increase of wetlands over the next five years. EPA also partners with private interests and public organizations like the Association of State Wetland Managers, the National Association of Counties, local watershed associations, schools, and universities to advance conservation and restoration programs.

How Can I Help?

First, identify your watershed and find the wetlands in your neighborhood. Learn more about them and share what you learn with someone you know! Encourage neighbors, developers, and state and local governments to protect the functions and values of wetlands in your watershed.

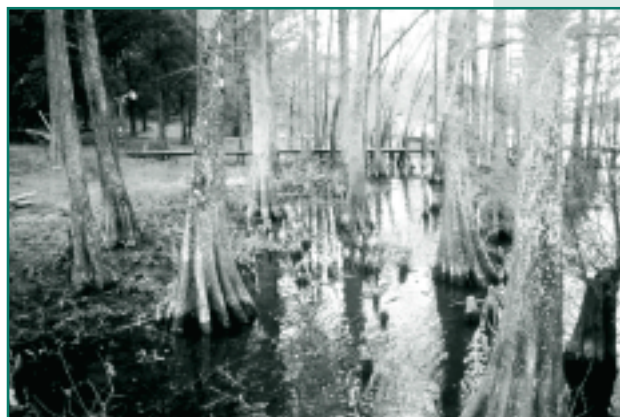
To prevent wetland loss or degradation, follow these simple guidelines:

- Invest in wetlands by buying duck stamps. Proceeds from these \$15 migratory bird hunting stamps support wetland acquisition and restoration. The stamps are available on-line at the U.S. Fish and Wildlife Service's web site (www.fws.gov) or at your local post office.
- Instead of draining or filling wetlands, find more compatible uses, such as waterfowl and wildlife habitat.
- When developing your landscaping plan, keep wetlands in mind. Plant native grasses or forested buffer strips along wetlands on your property to protect water quality.
- Participate in a volunteer wetland monitoring program.
- Plan to avoid wetlands when developing or improving a site. Get technical assistance from your state environmental agency before you alter a wetland.
- Maintain wetlands and adjacent buffer strips as open space.
- Support your local watershed association.
- Plan a wetland program or invite a wetland expert to speak at your school, club, youth group, or professional organization.
- Build a wetland in your backyard. Learn how by visiting the U.S. Department of Agriculture's web site at www.nrcs.usda.gov/feature/backyard/



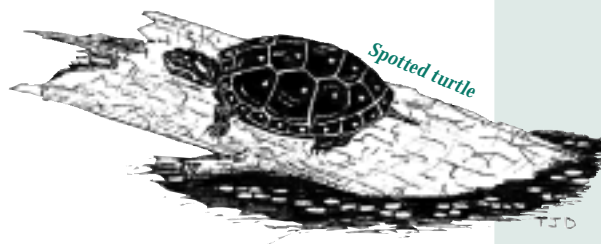
Dave Davis

Wetland habitat along this Idaho riparian corridor provides food and shelter for diverse wildlife species.



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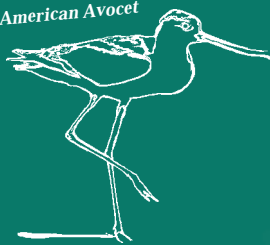
If bottomland hardwood swamps are protected, Bald Cypress trees like these can grow for more than 2000 years.



Spotted turtle

Wetlands can be found in every county and climatic zone in the United States.

American Avocet



Wetland Resources

On the Internet

EPA's Wetland Home Page	www.epa.gov/owow/wetlands
USDA's Wetland Reserve Program	www.nrcs.usda.gov/programs/wrp
The Association of State Wetland Managers	www.aswm.org
National Marine Fisheries Service Restoration Center	www.nmfs.noaa.gov/habitat/restoration
USDA NRCS's Wetland Science Institute	www.pwrc.usgs.gov/WLI
National Wetlands Inventory Center	www.nwi.fws.gov
Izaak Walton League	www.iwla.org
U.S. Fish and Wildlife Service	www.fws.gov
Army Corps of Engineers	www.usace.army.mil
USGS National Wetlands Resources Center	www.nwrc.usgs.gov
U.S. Forest Service	www.usda.fs.gov

In Print

America's Wetlands: Our vital link between land and water. Available on the Internet at www.epa.gov/owow/wetlands/vital/toc.html.

Our National Wetland Heritage: A Protection Guide, Jon Kusler and Teresa Opheim. Available from the Association of State Wetland Managers. Call (518) 872-1804 or visit www.aswm.org.

Wetlands, 3rd edition, William J. Mitsch and James G. Gosselink. Available from the Association of State Wetland Managers. Call (518) 872-1804 or visit www.aswm.org.

History of Wetlands in the Conterminous United States: National Water Summary on Wetland Resources, U.S. Geological Survey Water Supply Paper 2425. Available from the U.S. Fish and Wildlife Service at wetlands.fws.gov/bha or from the U.S. Geological Survey at water.usgs.gov/nwsum/WSP2425/history.html.

National Wetlands Status and Trends Study and Report for the Year 2000. Available from the U.S. Fish and Wildlife Service at wetlands.fws.gov/bha.

Recognizing Wetlands. Available from the U.S. Army Corps of Engineers at www.wes.army.mil/el/wetlands.