

# Wetlands of West Virginia



## What is a wetland?

Wetlands are areas where the land is covered by shallow water or the soil is saturated to the surface for at least two weeks during the growing season. Wetlands are wet enough to affect the types of soils and plants that can occur, but they may also be dry at certain times of the year. Plants and many animals found in wetlands are specially adapted to live in these wet conditions. Wetlands can be found in every county in West Virginia. Some common names for different types of wetlands are swamp, marsh, and bog. The words “glade” or “glady” appear in many place names in West Virginia and indicate an historically open area that is often a wetland.



## Why are wetlands important?

Wetlands are part of the foundation of our nation’s water supply and are vital to the health of our communities. Wetlands feed into rivers, lakes and streams, reduce flooding, recharge groundwater supplies, remove pollution and provide fish and wildlife habitat. Wetlands improve water quality by capturing sediment, removing pollutants, and cycling nutrients through their productive ecosystems. They slow floodwaters, reduce flood peaks, and help protect downstream communities.

Wetlands are comparable to rainforests and coral reefs when it comes to productivity. Wetlands in West Virginia account for less than one percent of the total area of the state, yet they provide essential habitat for a remarkable 23% of West Virginia’s plant species, and for an even higher 44% of its rare plants. Wetlands are home to many migratory birds, amphibians, insects, fish, and mammals. Wetlands also provide recreational opportunities such as hunting, fishing, canoeing, photography, and wildlife observation.

## Why should we be worried about our wetlands?

In the historic past, wetlands were often regarded as wasted land. It was a widely accepted practice to drain or fill wetlands for other uses, or to use them as dumping grounds. As a result, more than half of the wetlands that existed in the U.S. at the time of European settlement have vanished. In mountainous West Virginia, where level land is at a premium, we have lost 80-90% of our wetlands.

Wetlands across West Virginia are still under threat as land is converted from natural to developed land uses as part of economic development, construction, and extractive industries. Pollution, artificial drainage, and invasive species also degrade existing wetlands.





## How are wetlands legally protected in West Virginia?

West Virginia has the goal of no net loss of wetlands and wetland functions in the state. West Virginia wetlands are protected by the Clean Water Act of 1972 and the Food Security Act of 1985. The Clean Water Act regulates dredge and fill activities on wetlands and is under the jurisdiction of the U.S. Army Corps of Engineers and U.S. Environmental Protection Agency. DEP and DNR provide state certification of certain wetland sites under the Clean Water Act. The Food Security Act is administered by the U.S. Department of Agriculture and protects wetlands on agricultural land by withholding federal farm benefits if wetlands are converted to agricultural uses.

## What is the role of DEP's Watershed Assessment Branch?

The purpose of DEP's Watershed Assessment Branch is to collect and analyze data to determine the quality of waterbodies in West Virginia in relation to the Clean Water Act. In 2019, a new protocol was initiated to rapidly assess the water quality, flood attenuation, wildlife habitat and ecological integrity functions of wetlands statewide. All mapped wetlands in the state have been scored using preliminary remote sensing data. Rapid field assessments providing more accurate scores are conducted at a much smaller number of sites as part of the state's watershed monitoring activities, and as part of Clean Water Act permitting.



## Resources

DEP Division of Water and Waste Management, Watershed Assessment Branch, 601 57<sup>th</sup> Street SE, Charleston, WV 25304. Phone: 304-926-0495. [https://dep.wv.gov/WWE/watershed/Pages/watershed\\_management.aspx](https://dep.wv.gov/WWE/watershed/Pages/watershed_management.aspx) This is the branch of DEP responsible for wetland monitoring.

DEP Data Viewer [https://tagis.dep.wv.gov/wvdep\\_gis\\_viewer/](https://tagis.dep.wv.gov/wvdep_gis_viewer/) (Click on Layer List / Watershed Assessment / Wetlands) This website shows the functional scores and location of mapped wetlands in West Virginia. Note that many forested wetlands and smaller wetlands have not yet been mapped.

DEP Wetland Resource Guide <https://dep.wv.gov/WWE/getinvolved/sos/Pages/Wetstudyguide.aspx> This website provides links to wetland resources of interest to West Virginians.

National Wetlands Inventory <https://www.fws.gov/wetlands/> This website shows the location of mapped wetlands in the United States. Note that many forested wetlands and smaller wetlands have not yet been mapped.

U.S. EPA Wetlands Protection and Restoration <https://www.epa.gov/wetlands> This website provides links to a broad set of information about wetlands.

