

What is a Wetland?

A wetland is an area of land that is either permanently wet or wet most seasons of the year. In these areas, there are many different plants and animals that have adapted to the very wet conditions. Wetlands vary widely by location and they can be found on every continent except Antarctica.

In the 19th and 20th centuries people frowned upon wetlands. Many people have regarded wetlands as mosquito breeding grounds, source of unpleasant smells, or even a waste of good land. This attitude has led to a large amount of wetlands being drained, filled, or ditched.

Wetlands are great nurseries of life. They are home to a large variety of animals. These animals vary by the location and climate of the wetland. Some well-known species of wetland life are: turtles, alligators, frogs, water-lilies or other water flowers. These species are common year-round, but there are also many migrating birds that use wetlands as a temporary home or resting place.



Types of Wetlands

Marshes

Marshes are a wetland that has water year round. The water is usually a collection of surface water, but sometimes can include ground water. Marshes have plants that have become adapted to very saturated soil. A marsh's main function is to control the spread of water. Marshes also act as a natural filter of sediment and excess nutrients.

Swamps

A swamp is a wetland that has many woody trees. In a swamp, the water flows during most of the growing season and is stationary during the rest of the year. The soil in swamps has lots of nutrients which supplies trees found there. A swamp's primary function is flood protection which it does so by acting as a sponge and absorbs rainwater. Swamps also supply a large amount of vegetation and food for surrounding plants and animals.

Bogs

Bogs are known for their spongy moss and acidic waters. Most of the waters in bogs are collected from precipitation. Since the water is so acidic and lacks nutrients, there is very little plant and animal life. The main function of a bog is to prevent downstream flooding by collecting and absorbing precipitation, like retention thru infiltration or detention basin. They also can protect animals from human encroachment.

Fens

Fens have moss like bogs, but the water is much less acidic. The lack of acidity allows for many diverse plants and animals to live there. The water in fens is most often provided by upstream sources. Fens have many similar functions to the other types of wetlands, like reducing floods, improving water quality, and providing a home for many plants and animals.

Government Protection of Wetlands

There are many ways the government can help protect wetlands. The first way is to create, develop, & follow comprehensive wetland conservation plans. Governments also can develop & enforce water quality standards. Lastly, they can include wetlands into other established water programs.

All of these functions require funding. Grants are available for governments to help support and enact these main functions.

What can you do to protect wetlands?

As you can see there are some functions that the local & federal government can do to help protect wetlands. However, there are many important things that you can do to help protect local wetlands as well.

Residents that live near wetlands should:

- Use environmentally friendly products to keep harmful chemicals out of the water
- Leave surrounding buffer strips as open space

Residents that live in a community with a wetland should:

- Encourage local & federal government leaders to protect & maintain wetlands
- Read & become educated
- Encourage neighbors & other community members to protect & maintain wetlands

Healthy Wetland



This type of growth is typical after two to three growing seasons from the completion of construction of the wetland.

Wetland Construction

Following pictures courtesy of Charles Harman, AMEC Earth & Environmental, Inc.



Site planning is one of the first stages of constructing a wetland.



The next stage of the process is planting plants to help build surrounding vegetation.



During the beginning stages of a completed wetland you should see growth and an accumulation of water.

Local Batavia Wetlands

- Braeburn Marsh
- Nelson Lake
- Windmill Lakes

Wetland Construction

Design and determine location of the wetland



Test the proposed area to ensure that the land is suitable for supporting a wetland



If the above procedures and characteristics are met, the construction process can begin



The site needs to be graded properly to ensure that the water flows, drains & collects in the way it was designed.



Specified plants are next installed to start to provide plant life to the wetland area. These plants are usually accustomed to growing in the type of wetland condition and they will also make good homes and food for native species.



Once construction is completed, the wetland needs to be monitored. When monitoring, check for: the coverage & health of the plants, the presence of problematic species and/or local wildlife, water quality, and erosion

References

EPA Website

<http://www.epa.gov/owow/wetlands>

Wetlands Initiative Website

<http://www.wetlands-initiative.org/TWIfaqs.html>

Wetlands Watch Website

http://www.wetlandswatch.org/wet_facts.asp

Interstate Technology Regulatory Council Website

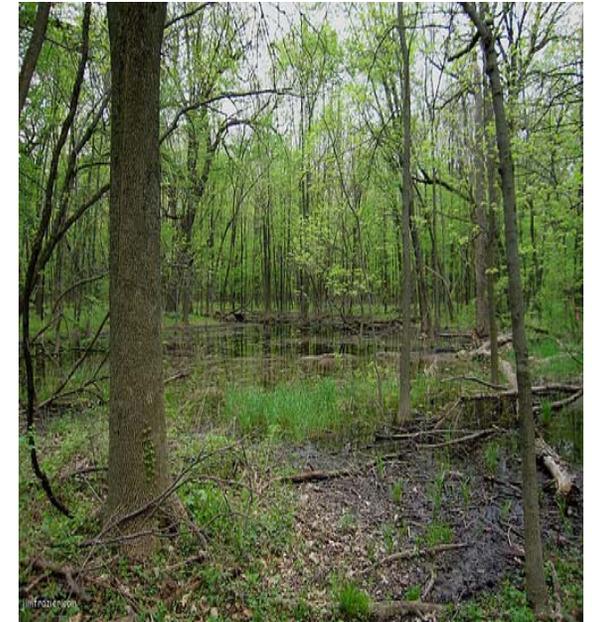
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Wetlands

All the information you need to know as a member of a community with local wetlands.



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