

## The Role of Wetlands

If you enjoy boating, canoeing, fishing or swimming in Massachusetts, you may want to thank a wetland. Wetland plants and soils work around the clock to cleanse both surface and groundwater which helps to protect public health. How do they do it? Scientists are still discovering how these valuable natural resources work.

Wetlands contain certain soils that are formed in response to, and plants that are adapted to, wet conditions. These areas have water at or near the ground's surface for a significant period of time each year. Wetlands are most often found along inland and coastal

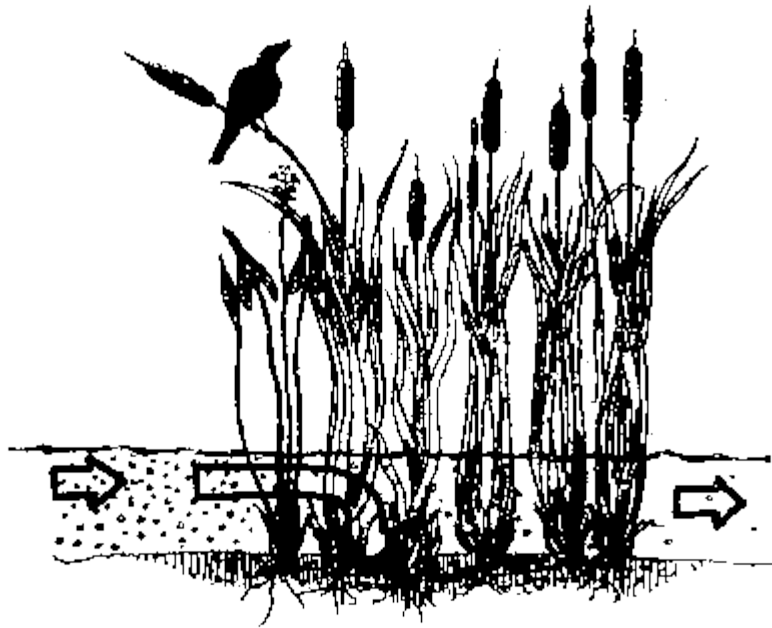


waterbodies, including lakes, ponds, rivers and streams. Wetlands act as natural buffers and serve to protect the quality of our water. They also play an important role in the life of many species of wildlife.

Wetlands act as a natural sponge and filter by removing pollutants from water. Some pollutants are held for years in the roots of plants such as arrowhead, cattails, or reed canary grass. Other pollutants are removed by wetland soils that have beneficial bacteria and remove nitrates from water. Sometimes these pollutants are later released by the plants and soil in the winter months when impacts to water quality will be greatly reduced.

**W**etland plants also filter sediments from water and help to stabilize the land around them. Moving water passing through wetlands is slowed down, which results in sediments settling out of the water. Since the water flow is reduced, erosion of sediments is also reduced.

**W**etlands are important to wildlife as well. They provide food and shelter for a variety of animals. They offer breeding and nesting areas for many birds and mammals such as osprey, black duck and otter. They also serve as migration corridors for birds such as Great Blue Herons and Canada Geese. Many types of salamanders, frogs and turtles rely on wetlands for their survival.



**S**o the next time you drink a glass of clean water from the tap, catch a good sized fish at Forge Pond, or canoe or boat on a scenic waterway such as Stony Brook - you can thank the wetlands in your area and the role of wetland plants in maintaining wildlife, fish and water quality.

**B**ecause wetlands provide so many public benefits, federal, state and some local laws have been enacted to protect them. You can learn more about wetlands and how to protect them in Westford by contacting the Conservation Commission. Your Conservation Commission is the steward of wetlands in your community because it administers the state wetland protection laws in cooperation with the Massachusetts Department of Environmental Protection. Your commission also preserves local open space which includes wetlands. By working with your Conservation Commission you can do your part in preserving this valuable natural heritage for generations to come.

*Illustrations by Dan Dailey courtesy of the Massachusetts Department of Environmental Protection.*