

Surface Water

Fresh water on Earth's surface collects in streams, rivers, ponds, lakes, and wetlands, mostly as a result of precipitation (rain, snow, sleet, and hail).

Lakes form when water accumulates in natural and human-made depressions. They vary in size from small ponds to large bodies like the Great Lakes, which hold close to 20 percent of the world's freshwater supply.

Streams move surface water from the continents back to the oceans. The continuous flow of water, as well as evaporation from lakes and ponds, is balanced by water entering the cycle from groundwater, rivers, and precipitation.

Wetlands

Wetlands are "wet" because water has saturated the soil to the point that it is impossible to walk on. Wetlands play a role in cleaning, filtering, and storing fresh water, and in supporting habitats for many plants and animals (Figure 3.1.3).

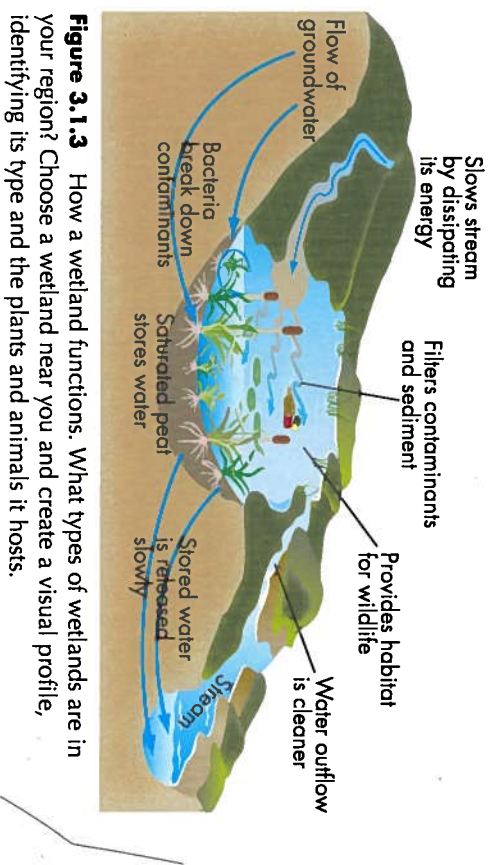


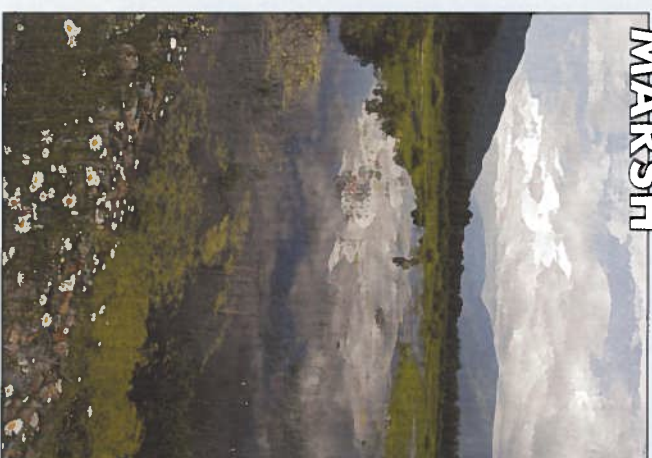
Figure 3.1.3 How a wetland functions. What types of wetlands are in your region? Choose a wetland near you and create a visual profile, identifying its type and the plants and animals it hosts.

The Canadian Wetland Classification System identifies five kinds of wetlands: swamps, marshes, bogs, fens, and shallow open waters (Figure 3.1.4).

Figure 3.1.4 Kinds of wetlands

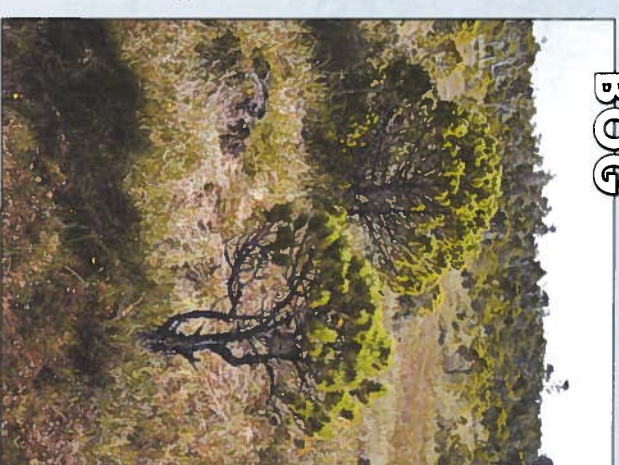
Figure 3.1.4 Continued

MARSH



Marshes, like this one in the Kootenay Mountains in British Columbia, have rich, fertile soil capable of supporting a variety of vegetation. Marshes are shallower than swamps and are dominated by grasses and low herbs rather than trees.

BOG



Bogs, like this one in Yukon Territory, are formed by rain- and snowfall, and are the most common type of wetland in Canada. Bogs accumulate acidic peat (deposited dead plant material), such as mosses and lichens.

FEN



Fens, like this one in Labrador, are wetlands that are fed by surface water, such as rivers and groundwater. Unlike bogs, they have neutral or alkaline, rather than acidic, water.

SHALLOW OPEN WATERS



Shallow open waters are small bodies of standing or gently flowing water, like this pond in Quebec. They include pools, oxbow lakes, and channels, and unlike lakes, maintain a consistent water temperature throughout.

A swamp is a wetland that contains trees growing through great expanses of water, like this swamp forest at Tow Hill Ecological Reserve, Haida Gwaii, British Columbia.

SWAMP

