

Canada's Natural Systems

Unit 1 Lesson 10 - Water and Soil

Water Systems

- Much of the water that falls as rain and snow in Canada ends up in an interconnected network of waterways that include lakes, rivers, groundwater, and **wetlands**, such as bogs, swamps, or marshes.
- Water that runs off the land in rivers and lakes is called **runoff**.
- A **drainage basin** is the area of land from which all water received as precipitation flows to a particular ocean.
- The major drainage basins are divided into smaller areas of land called **watersheds**. A watershed is usually named after the river or lake that drains it, for example, the Lake Winnipeg or the Ottawa River watershed.
- The water that falls on Canada's landscapes is unevenly distributed. About 75% of this water drains north into either the Arctic Ocean or Hudson Bay.
- Canada has about two million lakes! The Great Lakes water system is the largest of the Atlantic Ocean drainage basin.
- About nine million Canadians and 31 million Americans depend on the water in these huge lakes for household use and as the basis of an extensive industrial heartland economy.

Soil

- An important piece of the ecosystem puzzle can be found in the soil beneath your feet.
- you should notice that it is typically composed of layers, or horizons, of different material, as shown in the **soil profile**
- **humus** is rich in nutrients, such as nitrogen, that plants need to grow.
- Soils that are found in areas covered by forests are called **podzols**. Podzolic soils that form under deciduous or leafy trees have different characteristics than those that lie under coniferous trees or in mountainous regions.
- Thick grassland soils, called **chernozems**, cover large areas of the Prairie provinces. Chernozems range from brown to black in colour, depending on how much humus, or rich organic matter, is found in the upper layer. Black chernozem soils are often very fertile and rich in nutrients.

