

The Great Lakes: The U.S. and Canada's Freshwater Treasures

AFTER

4.1 Introduction

A massive sheet of ice, the last of the Ice Age glaciers, crept across the North American continent. Covering thousands of miles, the ice sheet inched south across the vast region that is now Canada and what is today the northern United States. Finally, it slid to an icy stop near the present-day city of Chicago. All the while, the sheer weight of the huge glacier reshaped the landscape, grinding rocks into "rock flour," obstructing streambeds, and flattening mountains.

After thousands of years, Earth began to warm, and the vast blanket of ice began retreating. It left behind a transformed land, with high ridges and huge holes that the ice sheet had gouged into the land. As the ice melted, clear, fresh water filled the huge holes, and the Great Lakes were born.

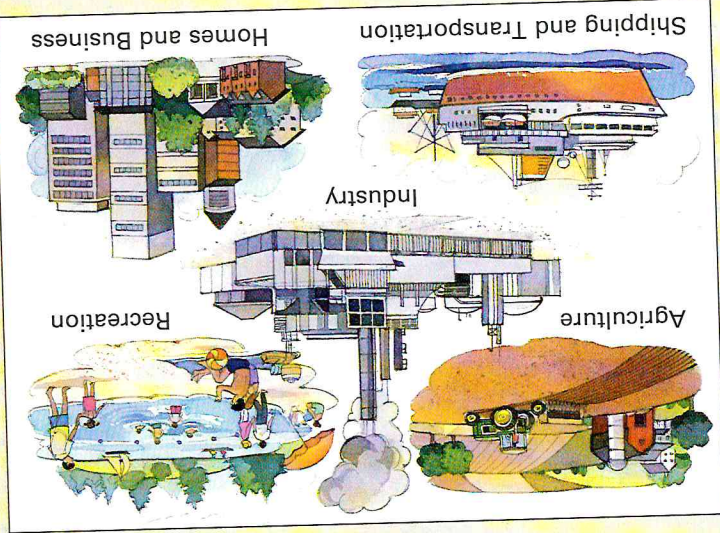
Over time, a rich **ecosystem** developed on the land left bare when the glaciers retreated. An ecosystem is a community of all the living things in an area, including plants, animals, and the physical environment in which they live. Ecosystems can be as small as a lawn or as large as Earth. The Great Lakes make up the world's largest **freshwater** ecosystem.

It took thousands of years for the movement of glaciers to create the Great Lakes. In just decades, however, human activity has greatly changed this region. In this chapter, you will learn how people can upset an ecosystem. You will also find out what can be done to solve some of the problems that human activity has created in the Great Lakes ecosystem.

Essential Question

How can people best use and protect Earth's freshwater ecosystems?

The diagram shows some of the main ways that people use the Great Lakes. All of these uses affect the lakes' ecosystem in some way, large or small. Keep this diagram in mind as you try to answer the Essential Question.



Graphic Organizer