



Rivers and streams are perhaps Oregon's greatest environmental assets. The state is known around the U.S. and the world as a place of beautiful, rushing rivers flowing through forested valleys and teeming with wild fish. This image, however, is only partly true. Oregon does have many large, beautiful rivers, but in some parts of the state rivers are widely separated and small or even dry during much of the year.

The pattern of rivers flowing west, north, east and south from the center of the state reflects Oregon's major drainage divides: the Cascades, Coast Range, Klamath-Siskiyou and Blue Mountains.

The state can be divided into four major hydrographic regions (see Drainage Basins, pages 168-169). The Umpqua and Rogue river systems, as well as a number of smaller rivers along the Coast, flow directly to the Pacific Ocean and form the Oregon Coastal hydrologic region. The Klamath River flows through northwestern California to reach the Pacific Ocean about 40 miles south of the Oregon boundary. These coastal rivers drain agricultural valleys and forested mountain canyons. The Willamette, Deschutes, John Day and Umatilla River systems are all tributaries of the Columbia River, the great river of the Western U.S. The Columbia's extensive headwaters drains parts of British Columbia, Montana, Idaho, Wyoming and Nevada. Spreading across nearly 260,000 square miles, the Columbia River system has the fifth largest drainage basin in North America. The Columbia River has been the major regional transportation network for canoes, steamboats and barges throughout Oregon's history. The Columbia River has also been a major supplier of fish and other foods, drinking and irrigation water and, for the past seventy years, hydroelectric power. Oregon's Columbia River tributaries rise in the Cascades and Blue Mountains, and flow northward through valleys largely used for agriculture and ranching. Along the eastern edge of Oregon, the Grande Ronde, Imnaha, Powder, Malheur and Owyhee river systems flow into the Snake River, the major southern branch of the Columbia River system. The Snake River tributaries have steep mountain headwaters and flow through some of Oregon's most spectacular canyons. An unusual drainage system, the Oregon Closed Basins hydrologic region is found in the arid south-central part of the state. Here, small rivers and dry streams feed closed basins and marshes, including Malheur Lake, Harney Lake, the Warner Lakes, Summer Lake, Lake Abert and Paulina Marsh. In these closed basins, the runoff collects and evaporates.

The following pages show how these river systems influence, and are used by, inhabitants of the state of Oregon. Water quantity in flowing rivers is illustrated on the Streamflow pages, while other water features are shown on the Lakes pages. The Drainage Basins pages shows how the river systems form natural land units for management of water resources and for planning. Water quality and the extensive human modifications of Oregon's rivers are shown on the Water Quality and Dams pages.