The Columbia River Basin

Physical Characteristics

The Columbia River, the "Great River of the West," is arguably the most significant environmental force in the Pacific Northwest. It drains 259,000-square-mile, including territory in Oregon, Washington, Idaho, Montana, Nevada, Wyoming, Utah, and British Columbia. Fifteen percent of the basin (39,000 square miles) lies in Canada. The Columbia River flows for more than 1,200 miles from the base of the Canadian Rockies to the Pacific Ocean at Astoria, Oregon and Ilwaco, Washington.

The Columbia River has ten major tributaries – the Kootenay, Okanagan, Wenatchee, Spokane, Yakima, Snake, Deschutes, Willamette, Cowlitz, and Lewis rivers.

Its largest tributary, the Snake River, is more than 1,100 miles long and runs through the deepest gorge in North American, Hell's Canyon (7,900 feet deep).

The river cuts through the Cascade Mountain Range, creating the 100-mile-long and 3,000 foot-deep Columbia River Gorge. Before massive dam building in the 20th century, the Columbia plunged over basalt cliffs as it flowed through the Gorge; today's engineered Columbia provides a nearly sea level pathway through the mountain range.

The basin's ecology is diverse. Precipitation levels range from 110 inches to 6 inches per year.

The tidal reach extends to Bonneville Dam, approximately 100 miles from the ocean.

History

My parents gave birth to me here, and I fancy that this is my country . . . . Let me remain in my own country and I shall die contented. – Chief Moses, 1870

The basin's Native American communities constituted some of the largest towns in North America. Early archaeological evidence of human habitation dates to 11,000 years.

In 1775, Bruno de Hezeta confirmed the river's location. From the late 1700s through the early 19th century, a series of American and British explorers documented the river's route.

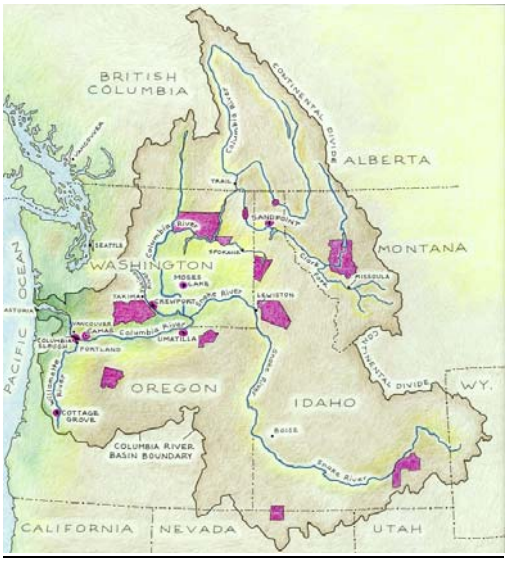
After the War of 1812, England and the United States jointly occupied the basin, with the Hudson's Bay Company's Fort Vancouver established at present-day Vancouver, Washington in 1825.

American settlers began to arrive in the region in the 1840s. In 1846, the Oregon Treaty established American territory south of the 49th parallel.

By the mid-1850s, the federal government began a process of treaty-making with Native people that led to their displacement to reservations. Among other rights, Native people retained their right to fish and hunt in usual and accustomed places in the treaty documents.

During the late 19th century, capitalists developed natural resources and transportation industries on the Columbia, with 40 canneries operating in the 1880s, packing salmon for export.

A Twentieth Century River



The Northwest is destined to become the greatest power empire in the nation. – Harold, Ickes, Secretary of the Interior, 1941.

The engineered Columbia River provides flood control, navigation, power production, irrigation, and recreation. The river continues to provide fish and wildlife habitat, and foods for native and non-native people.

The Center for Columbia River History studied the effects of dam building on eight basin communities – Camas, Crewport, and Moses Lake, Washington; Cottage Grove, Columbia Slough, and Umatilla, Oregon; Sandpoint, Idaho; and the Columbia Native fishery. To read those histories, go to ccrh.org and click on "Community Histories."

1932 – Large scale hydroelectric power generation began with Rock Island Dam.

1938 – Bonneville Dam, the first "big" dam, was completed under Franklin D. Roosevelt's Public Works program. The dam provided jobs and electricity, and inundated traditional Native American fishing sites.

1941 - Grand Coulee Dam, the "biggest thing on earth" blocked 1,000 miles of fish habitat upriver, drowned ten towns, and irrigated the Eastern Washington desert.

1941 – 1945 – Columbia River electricity powers aluminum plants, shipyards, and the Hanford Engineering Works near Richland, Washington. The river's hydroelectricity stimulates Pacific Northwest industrial growth throughout the 20th century.

1948 – The Vanport Flood inundates communities along the Columbia River, most significantly the wartime community of Vanport, Oregon, which was completely destroyed. Flood control became a major justification for the continued development of the river.

1957 – The Dalles Dam inundated Celilo Falls, a Native American fishing and trade site for millennia.

1964 – The Columbia River Treaty between Canada and the United States allowed for the development of the Canadian Columbia River. In that same year, federal legislation approved the creation of the NW-SW Intertie that connected the Northwest powergrid system through an inter-regional and international network of interties and relay stations.

1973 - Canada completes Mica Dam, the last of the mainstem dams on the upper river.

1961-1974 - Four Snake River dams are completed, creating a transportation corridor from the sea 465 miles inland to Lewiston, Idaho.

1986 – The Columbia River Gorge National Scenic Area Act mandates protection of the gorge area.

1990s - Snake River Sockeye (1992) and Willamette Steelhead (1998) are listed as endangered. Since the 1950s, the Columbia has become less habitable for anadromous fish due to the combined consequences of dams and increased ocean fishing, with deteriorating habitat and changing river conditions.