

# The Place: Geology of the Columbia River Basin and historic Irrigon

## Columbia River Heritage Trail



The Columbia River is 1,214 miles long and drops 2,500 feet as it leaves its source in Canada and eventually spills into the Pacific Ocean. It defines and shapes the landscape of North Morrow County.

Granite boulders, gravel and sand deposited by Ice Age floods created Blalock and Sand Islands in the Columbia River. Lewis & Clark visited and camped with local Native Americans on Sand Island October 19, 1805. Their Journals noted Indian burial sites on Blalock Island, a 4000 acre island west of Irrigon in the middle of the Columbia.

Fruit orchards and a dairy were early commercial ventures on Blalock Island. Attempts were made to mine gold washed down with granite from Montana. As late as 1957, over \$4,000.00 was taken out in gold ore. The remaining granite, gold, Native American relics, and ancestral burial grounds are under the backwaters of the John Day Dam.



Irrigon couple digging their sweet potatoes in the fall

Dorothea Lang photo, 1939

Dams harness the Columbia River for irrigation and produce hydroelectric power for the Pacific Northwest Region. Dams make the Columbia River more readily navigable, control local flooding, influence the natural landscape and patterns of settlement and industry.



Building dams on the Columbia River changed it to a wide slow-moving reservoir. In some places, the river's depth was raised 25 feet. The rise in river level after John Day Dam necessitated construction of two fish hatcheries in Irrigon, and development of Umatilla National Wildlife Refuge to replace wetlands and wildlife habitat lost through flooding.

Annual Rainfall in the Columbia Basin is typically 9" – 12," resulting in a hot dry summer growing season. The practice of irrigating crops was first used in the late 1800's for small orchards and vegetable gardens. Continued improvements in irrigation extended the agricultural production of the region

The average size of farms, number and types of crops produced, and labor practices all changed as irrigated farming became more practical.

*"Roll on, Columbia, roll on.  
Roll on, Columbia, roll on.  
Your power is turning our darkness to dawn;  
Roll on Columbia, roll on."*

*"Tom Jefferson's vision would not let him rest;  
An empire he saw in the Pacific Northwest;  
Sent Lewis and Clark and they did the rest;  
So roll on Columbia, roll on."*

Woodie Guthrie, 1941



*Irrigon Irrigator office and Irrigon Post Office*

Photo courtesy Don Eppenbach



*Early Irrigon crops watered by irrigation,  
Columbia River in distance*

Photo courtesy Don Eppenbach