



## Benefits of the Umatilla Project

The Umatilla Project provides water for irrigation, recreation, fish and wildlife. The project also reduces flood damage.

### What's the Yearly Value?

Irrigated crops: \$82 million  
Livestock production: \$12 million  
Recreation: 170,000 visits - \$4.9 million  
Flood damage prevented: \$7,193,000



Doug Menuez, Getty Images



The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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# RECLAMATION

*Managing Water in the West*

## The Story of the Umatilla Project

OREGON



U.S. Department of the Interior  
Bureau of Reclamation

## A Land Rich in Heritage



Early 1900s tribal fishing on Columbia River

For more than 10,000 years, the Umatilla, Cayuse, and Walla Walla Tribes occupied what is now southeastern Washington and northeastern Oregon, gathering food and fishing the Columbia River and its tributaries. The Treaty of 1855 with the Federal government moved the three tribes to a 250-square-mile reservation, and they became known as the Confederated Tribes of the Umatilla Indian Reservation. Although the treaty brought an end to their nomadic way of life, it affirms their rights to gather food, fish, and hunt in their usual and accustomed places forevermore.

## Water Desperately Needed



Umatilla Basin Homesteaders

Before the 20th century began, settlers started homesteading the dry Umatilla River basin.

Farmers in the basin began developing irrigation using Umatilla River water in the 1860s. It soon became apparent that agriculture would not be successful without a large-scale irrigation project.

## A New Agency

Congress passed the Reclamation Act in 1902 to boost development of the arid West. The Bureau of Reclamation began creating water storage and irrigation networks by looking into locally supported projects. The Act states that those who receive irrigation water from Reclamation projects will pay part of the construction costs and ongoing operation and maintenance costs.

## The Project Takes Shape

Private interests built several major canals as local residents campaigned for a Federal water project. In 1903, Reclamation engineers started plans for irrigating land in the lower Umatilla River valley and south of the Columbia River west of Umatilla. Congress authorized the Umatilla Project in December 1905, and Reclamation started construction the next year, connecting many of the private canals to project facilities. Cold Springs Reservoir provided irrigation water by 1908; McKay Reservoir by 1927. The project converted nearly 45,000 acres of sagebrush into productive agricultural land. The irrigation diversions, however, occasionally dried up the Umatilla River.

## A Successful Package Deal

Irrigation diversions and habitat damage in the early 1900s contributed to the decline of the once-productive salmon runs. Eventually, no salmon

returned, making it impossible for the Tribes to fish for salmon in the Umatilla River. Water was needed to maintain both the substantial agricultural industry and a healthy fishery.

In the mid-1980s, some 70 years after the last Umatilla River salmon run, the Confederated Tribes, irrigators, Oregon Department of Fish and Wildlife (ODFW), U.S. Army Corps of Engineers (Corps), Bonneville Power Administration (BPA), and Reclamation focused on resolving conflicting water needs in the lower Umatilla River. The Corps excavated a low-flow fish passage channel in the Umatilla River downstream from Three Mile Falls Diversion Dam. Reclamation and ODFW built fish screens, ladders, and trapping facilities using BPA funds.



Three Mile Falls Diversion Dam

Congress passed the Umatilla Basin Project Act in 1988, authorizing a series of water exchange systems. Water from the plentiful Columbia River would irrigate project lands in exchange for leaving an equal amount of water in the Umatilla River for the fishery. Reclamation phased in construction of the facilities, bringing the water exchange to life in 1993. BPA provides the electricity to pump the exchange water; rate payers pay the pumping costs. The exchange remains successful today in irrigating crops while improving the Umatilla River fish habitat.



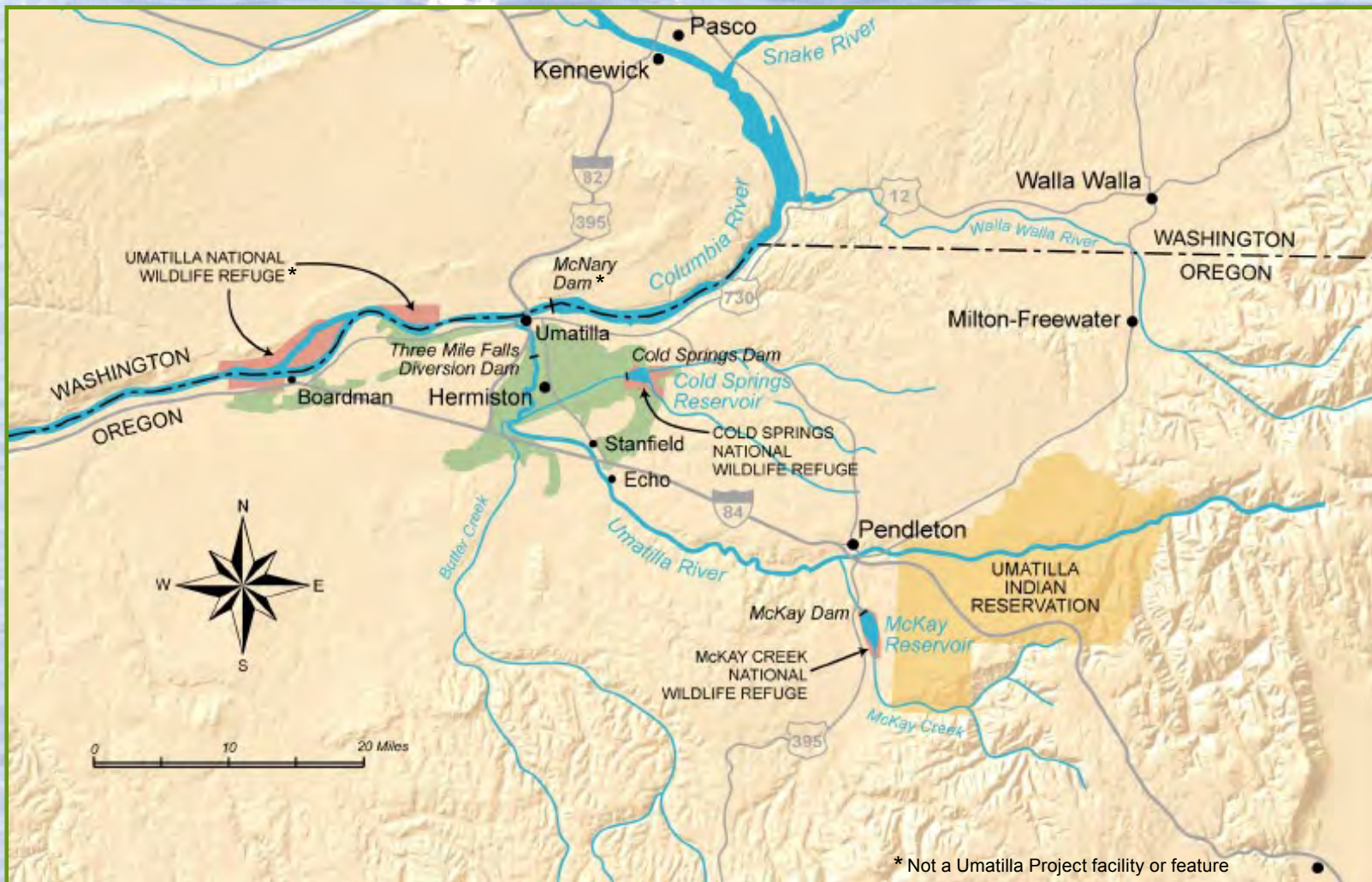
### Water for Agriculture

The Umatilla Project supplies water to four irrigation districts and other irrigators on about 45,000 acres of land centered around Hermiston, Oregon, and along the Columbia River. Irrigated crops include vegetables, watermelon, grains, mint, alfalfa hay, pasture, and grass seed. A substantial livestock industry developed from the feed production, and local food processing plants add to the agricultural economy.



### Project Water — The Basis for Refuges

The McKay Creek and Cold Springs National Wildlife Refuges encompass the two project reservoirs and provide important resting and feeding stops for thousands of geese and ducks during the fall migration. Other wildlife, such as shore birds, pheasants, quail, elk, and mule deer, also inhabit the refuges. The two refuges, managed by the U.S. Fish and Wildlife Service, contain almost 5,000 acres of open water, marsh, sagebrush, trees, and grassland.



### Cold Springs Dam

Constructed: 1907 1908  
 Height: 115 ft  
 Crest Length: 3,450 ft  
 Total Water Storage (Cold Springs): 39,260 acre feet

### McKay Dam

Constructed: 1923 1927  
 Height: 165 ft  
 Crest Length: 2700 ft  
 Total Water Storage (McKay): 71,534 acre feet

1 acre-foot of water is enough water to cover 1 acre of land 1 foot deep in water, or 325,850 gallons.

### Reducing Flooding

Reclamation uses up to 6,000 acre feet of reservoir space in McKay Reservoir and a small amount of space in Cold Springs Reservoir to temporarily store flood inflow, thereby reducing downstream flood damage.



### Salmon Return to the Umatilla River!

The Confederated Tribes of the Umatilla Indian Reservation, Oregon Department of Fish and Wildlife, and Reclamation led efforts that resulted in a model fisheries restoration program, the remarkable improvement in steelhead numbers, and the return of salmon to the Umatilla River. These efforts involve the water exchange, watershed habitat management, fish hatcheries, some transporting of fish, monitoring, evaluation, and understanding among the program's participants who continue to work toward improved fish habitat.



### Improving Fish Migration

Many facilities on the Umatilla Project assist fish in migrating through the river system. A low flow channel consolidates the water into a more narrow and deeper channel for fish. A fish ladder provides a route for fish to pass over Three Mile Falls Diversion Dam. Screens prevent juvenile fish from entering waterways that could entrap them.



### Umatilla Project Today — A Century of Water

Project facilities include Cold Springs and McKay Dams and Reservoirs, three diversion dams, five pumping plants, more than 240 miles of canal, and nearly 9 miles of pipeline.



### Recreation Oasis

Nearly 1,200 acres surrounding McKay and Cold Springs Reservoirs are designated public hunting grounds. Boat launch facilities at both reservoirs attract boaters and water sport enthusiasts. Other recreation activities include warm water fishing, waterfowl hunting, picnicking, and wildlife viewing.