Irrigation began in 1871 when farmers diverted water from Whychus Creek near the town of Sisters. Local farmers developed several canals and formed irrigation districts by the early 1900s, but the amount of irrigated land remained small. The valley plains were first devoted to grazing sheep and cattle. Dryland wheat farming gradually replaced grazing, with initial harvests of 30 bushels per acre. In the 1930s, soil moisture became depleted, the yields dropped, and farmers began searching for more water. Some were in favor of developing irrigation at any cost; others were wary of a Federal partnership.

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 supporting locally developed projects. Irrigators in the Deschutes River basin petitioned for a Federal water project at the turn of the century, but the area first appeared too wild, too remote, and of too little value for Reclamation to develop. The partnership of poverty and drought that nearly broke the West in the 1930s finally brought engineers and irrigators together.

Unlike the Oregon coast's lush forests, the terrain east of the Cascade Mountains is a high desert with plenty of evidence of its volcanic past. About 15 million years ago, rivers of molten lava covered much of central Oregon with basalt and obsidian. Building the project did not end with the main canal and the two dams. Reclamation built Haystack Dam and Reservoir in 1957 to improve water delivery by storing water 40 miles closer to area farms. The North Unit Irrigation District built the Crooked River pumping plant in 1968 to make additional water available.

Irrigation enhancement and water conservation continue today as the irrigation districts work with Reclamation to reduce seepage by lining canals and replacing open canals with buried pipelines. The area districts are also fine-tuning their water use by adding measurement structures. Reclamation continues to monitor and inspect the dams to ensure they will continue to provide irrigation benefits to the area. With the cooperation of water districts, Reclamation monitors and repairs the structures to help them withstand the aging process and enhances the canals and laterals to increase the project's efficiency.

Wind and water then deposited a sandy loam over the rock and ash. The summer's drying winds, low precipitation (between 8 and 12 inches a year), and high evaporation rate prevented most seeds from germinating. However, human intervention has made it possible to farm this high desert.

Congress approved the Deschutes Project in 1937. President Roosevelt immediately dispatched Civilian Conservation Corps enrollees to begin construction. The corps quickly rehabilitated the Crane Prairie Dam in 1940. World War II delayed the project's completion, but conscientious objectors reinforced the corps. Wickiup Dam and the 65-mile-long North Unit Main Canal were completed in the late 1940s. Though simple in design, the project features mid-century cutting-edge technology built by an unusually large labor force.

Benefits of the Deschutes Project

The Deschutes Project provides the water irrigators need to succeed. It also provides recreation benefits and water for municipal and industrial users.

What's the Yearly Value

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**The Terrain**

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**Farming in the High Desert**

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**Building the Project**

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**Enhancing Irrigation**

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Water travels through both lined and unlined canals
**Haystack Dam**
- **Constructed:** 1956-1957
- **Height:** 105 ft
- **Crest Length:** 1,200 ft
- **Water Storage:** 5,600 acre-feet

**Haystack Dam and Reservoir**
- Water from Wickiup Reservoir is diverted into the North Unit Main Canal and carried over 40 miles to Haystack Reservoir where it is stored until needed for irrigation.
- Haystack Reservoir is a popular location for fishing, water skiing, and even hydro boat racing.

**Crooked River Pumping Plant**
- The North Unit Irrigation District pumps water 150 feet up from the Crooked River Gorge into the North Unit Main Canal to provide additional irrigation water.

**Delivering the Water**
- Just north of the city of Bend, up to 1,000 cubic feet per second of water enters the North Unit Main Canal and travels about 65 miles to farms. The trip isn’t always on smooth ground. Flumes, siphons, and tunnels help the water overcome the sometimes rugged terrain.

**One of Oregon’s Largest**
- Typically, dams are anchored in the narrowest spot in a river canyon. Wickiup Dam was anchored in a prairie to create a large reservoir bottom. When full, Wickiup Dam’s 2.5-mile long crest creates a 15-square-mile reservoir surface, one of Oregon’s largest bodies of water.

**Recreation in the Deschutes River Basin**
- The Deschutes Project supports the tourism and recreation industries of central Oregon. Recreation at the reservoirs includes trophy fishing, camping, boating, swimming, hunting, hiking, and biking. The Deschutes National Forest manages the campgrounds around Crane Prairie and Wickiup Reservoirs, and each reservoir is near a private concession for lodging and recreational supplies. The concessionaire at Haystack Reservoir also offers boats for rent.

**Premier Fishing Opportunities**
- In addition to providing irrigation water, Crane Prairie Reservoir offers premier fishing and a blue ribbon rainbow trout fishery. Hundreds of acres of an 80-year-old submerged forest provide excellent habitat for fish and aquatic insects. The reservoir is also an excellent breeding and nesting ground for a variety of waterfowl.

**For the Fish**
- Wickiup and Crane Prairie Reservoirs support numerous species of fish, including German brown trout, rainbow trout, brook trout, kokanee, and large mountain whitefish.

**For the Birds**
- Sandhill cranes, great blue herons, Canada geese, bald eagles, and osprey frequent the project’s 16,000 acres of reservoir surface and 75 miles of shoreline. Birdwatching opportunities are plentiful.

**What’s Growing**
- Today, over 102,000 acres use Deschutes Project water to grow alfalfa, wheat, mint, pasture, bluegrass seed, carrot seed, potatoes, and other specialty crops. Area dairies and livestock operations use project grown feed supplies to produce milk products, beef, and lamb.

**Ochoco Dam**
- These dams are not Deschutes Project facilities.

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*Skeet Kidd Photography, Dan Pavlick/Deschutes National Forest*