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Benefits of the Crooked River Project

Irrigation water from Ochoco and Prineville Reservoirs helped create the Prineville area agricultural base, including both irrigated crops and livestock, but the project provides much more.

What's the Yearly Value?

- Irrigated crops: \$26 million
- Livestock production: \$14 million
- Flood damage prevented: \$1.2 million
- Recreation: 575,000 visits - \$6.7 million



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 Crooked River Project

OREGON



U.S. Department of the Interior
Bureau of Reclamation

The Making of a Desert

Over the last 70 million years, the Cascade Range volcanoes have drastically changed the Central Oregon climate. Lava floods and ash plumes transformed what was a tropical sea into a high basalt plateau. About 15 million years ago, the volcanoes had grown high enough to block moisture from the Pacific Ocean, and a desert was born. The Crooked River, fed by warm springs in the Ochoco Mountains, slowly carved its way through the rugged desert.



High basalt cliffs near Prineville, Oregon

Taming the Land

Settlers traveling to western Oregon began passing through the Crooked River area in 1842, but for 25 years, few stayed. Though the soils were suitable for a variety of crops, only about 9 inches of rain fell per year with little or none in the summer. The first settlers in the valley diverted water from the Crooked River in 1866, and soon immigrants settled in the Ochoco Valley near present-day Prineville.

A New Agency

Congress passed the Reclamation Act in 1902 to boost development of the arid West. Reclamation began creating water storage and irrigation networks by looking into locally supported projects.

The Ochoco Irrigation District

At the turn of the century, settlers continued to irrigate the Ochoco Valley. In 1916, they organized the Ochoco Irrigation District to build a dam and reservoir on Ochoco Creek that would irrigate 22,000 acres. The district finished Ochoco Dam in 1920, but perpetual water shortages forced them to reduce the irrigated acreage to 8,500. They had the land, but they needed more water.

Working with the District

Reclamation had prepared several investigative reports for Crooked River irrigation as early as 1913. In the late 1940s, Ochoco Dam began leaking excessively; fears were that a failure could destroy the area's agricultural potential and lay waste to the downstream town of Prineville. The Ochoco Irrigation District and Reclamation worked together to rebuild the district's dam.

By 1956, local farmers had successfully persuaded Congress to authorize the Crooked River Project, and Reclamation began rehabilitating and expanding the irrigation system. The largest component of the new project was Arthur R. Bowman Dam (initially called Prineville Dam).

The dam more than quadrupled the amount of storage water space, and it enabled irrigators to deliver water to more than 20,000 acres. The water users pay for the project's original construction and the ongoing operation and maintenance costs.

Saving Water for a Rainy Day

Project irrigators conserve and reuse the scarce water. In the late 1970s and early 1980s, Reclamation laid nearly 200,000 feet of pipe to reduce canal seepage and water evaporation. In addition, smaller diversion dams and wasteway systems capture water from project lands as it returns to the river system so other downstream irrigators can reuse the water.

A Favorite Recreation Spot

Prineville Reservoir immediately became a favorite destination. A state park, a wilderness area, and a national Wild and Scenic River adjoin the reservoir. The parks offer camping, swimming, picnicking, fishing, and boat launching facilities. Waterskiing is extremely popular at Prineville. A private concessionaire offers lodging and dining for recreationists at Prineville Reservoir Resort.



Prineville Reservoir: recreation since 1961



Protecting Life and Property

The 1958 flood, 10 miles downstream from Prineville happened the year construction began on Bowman Dam. Both Ochoco and Bowman Dams have storage space that prevents or reduces the damage floods can cause to the local community. In May 1998, when 25 percent of the area's annual rainfall fell in a mere 28 hours, Ochoco Dam was able to capture 75 percent of the runoff and prevent significant damage.



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Bringing Products to Market

The project's irrigated lands produce grain, hay, potatoes, mint, garlic, alfalfa, pasture, and seed for grass, carrots, and radishes. Area ranches use locally grown forage and grain for cattle.

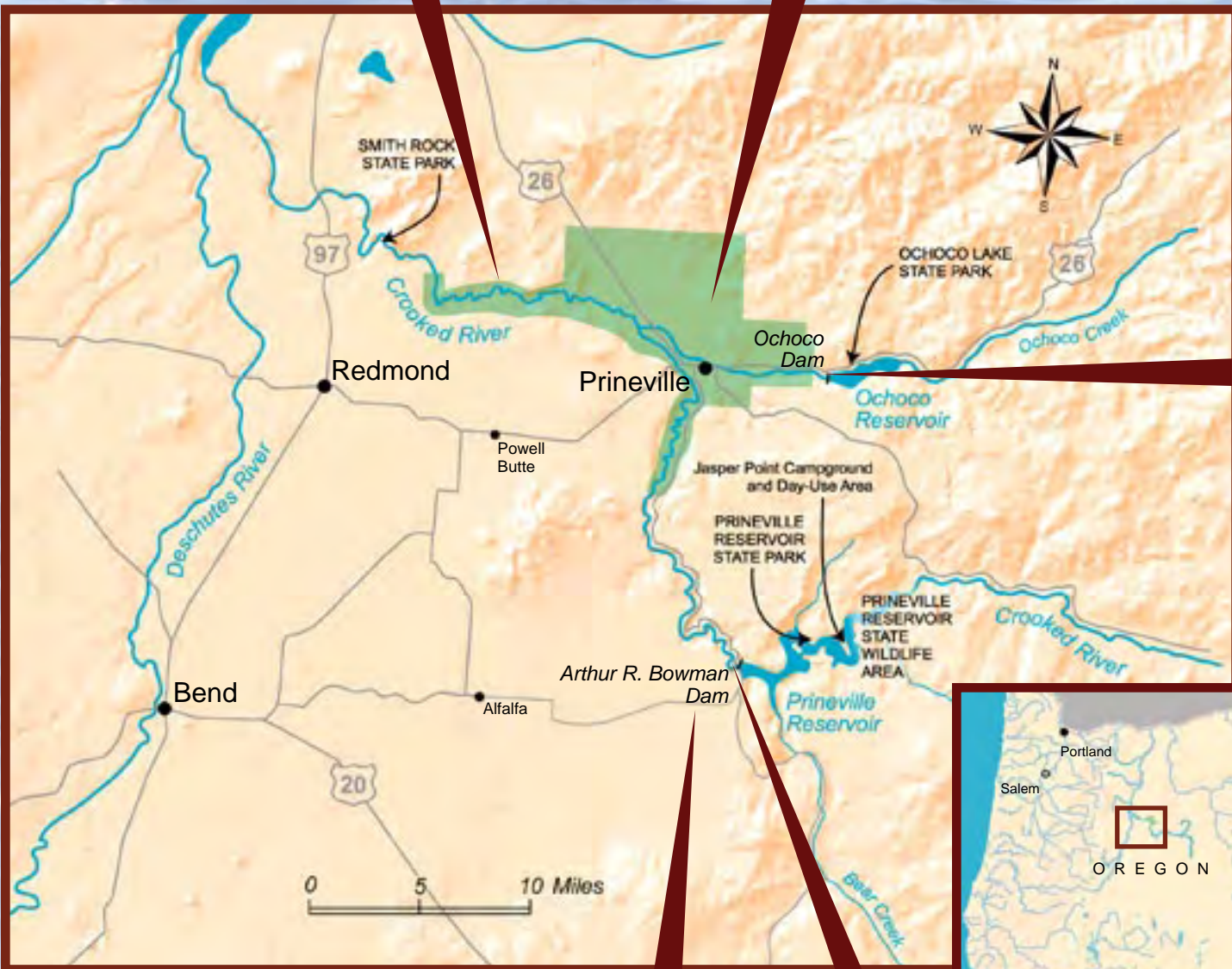


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They Just Can't Stay Away

Prineville Reservoir State Park (which includes the recreational site at Jasper Point) is one of the most heavily used parks in Oregon. The Prineville recreation area is 8,700 acres, with 3,030 acres of reservoir water surface surrounded by 43 miles of shoreline. Ochoco Lake State Park, managed by Crook County Parks and Recreation, is a smaller park on Ochoco Reservoir. Ochoco Reservoir has 1,100 acres of surface water surrounded by 8 miles of shoreline.



Keeping the Dams Safe

Reclamation operates a Safety of Dams program to ensure all its facilities and structures are safe. From 1994 to 1997, Ochoco Dam was the site of a major Safety of Dams modification to correct seepage and internal erosion within the earthen dam. The reservoir successfully filled with water in 1997 and returned to its role of providing irrigation water and flood control for the project.

Promoting Fish and Wildlife

The project reservoirs also support area wildlife. An excellent trout fishery has developed in Crooked River downstream from Bowman Dam since the reservoir was created. Congress designated this section a "Recreational River" under the Wild and Scenic Rivers Act. Fly fishing is excellent upstream and downstream from Prineville Reservoir, and flows are often released from the reservoir to support the fishery.



Honoring a Local Citizen

In 1973, the Secretary of the Interior renamed Prineville Dam to honor Judge Arthur R. Bowman, a prominent Prineville citizen. Judge Bowman, who died in 1970, was active in the Crooked River Project efforts from the earliest stages in 1927 until the project's authorization in 1956. His former Prineville business office is now the Arthur R. Bowman Memorial Museum.



A Light at the End of the Tunnel

Bowman Dam's 11 foot diameter tunnel carries Prineville Reservoir water through the dam to the Crooked River channel below. The additional 150,200 acre feet of water storage space helped the Ochoco Irrigation District and others bring more land into production.



The upper end of Prineville Reservoir is a Wildlife Management Area. The Oregon Department of Fish and Wildlife manages 3,800 acres of Reclamation land for a variety of wildlife, including mule deer, bald eagles, and waterfowl.

Arthur R. Bowman Dam

Constructed: 1958 1961
Height: 251 ft
Crest Length: 800 ft
Total Water Storage (Prineville Reservoir): 148,633 acre feet

Ochoco Dam

Constructed: 1918 1920
Height: 152 ft
Crest Length: 1,100 ft
Total Water Storage (Ochoco Reservoir): 44,214 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.



Fish in January; Fish in June

Fishing at Prineville Reservoir can be excellent for both warm- and cold water species. During the warmer months, anglers have great success with rainbow trout, cutthroat trout, smallmouth bass, largemouth bass, catfish, and crappie. Ice fishing is also popular at both Prineville and Ochoco Reservoirs as visitors brave the cold to catch rainbow and cutthroat trout.



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