## Many Benefits

Congress authorized the Talent Division of the Rogue River Basin Project in 1954 for irrigation, flood protection, power generation, fish and wildlife, and recreation facilities.

## What's the Yearly Value?

Irrigated crops: $72 million
Livestock industry: $25 million
Power generated: $2.75 million
Recreation: 505,000 visits - $14 million
Flood damage prevented: $30,000

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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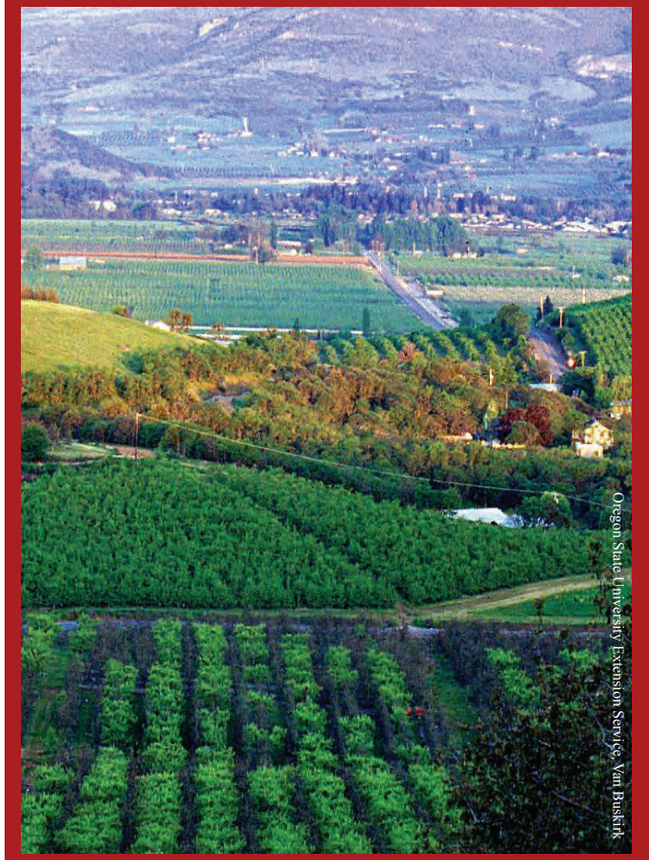
# RECLAMATION

*Managing Water in the West*

The Story of the

# Rogue River Basin Project

OREGON



Oregon State University Extension Service, Van Buskirk

U.S. Department of the Interior
Bureau of Reclamation

## Commerce Takes Hold

Gold drew miners to the Rogue River valley in the mid-1800s. Settlers soon recognized the agricultural possibilities, developed small farms along the valley's streams, filed the first Oregon water right in 1851, and built the first irrigation ditch the next year. Apple and pear orchards were producing fruit for local settlers by the 1860s.

The newly completed railroad made it possible for the valley's growers to export fresh fruit to locations as far away as New York and Australia. Medford and Ashland became the center of the nontropical fruit production industry.

Orchards become widespread

## The Seeds of Irrigation

By the close of the 19th century, growers and investors realized the importance of a reliable water supply. The first water company incorporated in 1900, obtained rights-of-way and built canals, thereby starting a practice that would repeat through several decades.

## An Agency is Born

Congress passed the Reclamation Act in 1902 to boost development of the arid West. The Bureau of Reclamation soon began creating water storage and irrigation systems. The Act, and later legislation, stated that those receiving irrigation water and power from Reclamation projects would pay part of the construction and ongoing operation and maintenance costs.

## Private Companies Think Big

Although private interests built several early storage reservoirs, including Fourmile Lake and Fish Lake, these facilities could not provide all the water needed for the ambitious, basin-wide plans. Many Rogue River valley lands remained unirrigated. At the request of the State of Oregon, the Federal government in 1915 began studying the basin's potential for irrigation. Reclamation proposed building new canals, tunnels, dams, and reservoirs.

## Needs Other Than Irrigation

As the valley's population grew, so did the need for flood protection and more electricity. By mid-century, these needs prompted private, State, and Federal entities to investigate the feasibility of a large, multi-purpose water project. Oregon officials determined that water from high-elevation streams on both sides of the Cascade Divide should be used in the Rogue River basin for irrigation and hydroelectricity.

Congress approved the Talent Division of Rogue River Basin Project in 1954.

1945 flood damage

## Connecting the Facilities

The next year, Reclamation began the task of enlarging and repairing private irrigation structures and constructing new facilities to store and deliver water and generate electricity. Rogue River basin irrigators obtained water rights and the rights to store those waters.

The original concrete Emigrant Dam now lies beneath an earthen dam built in 1961

Reclamation completed this work over the next 12 years, incorporating both the private and Federal structures into the Rogue River Basin Project system, which today remains effective in meeting the basin's many water and power needs.

## Rogue River Basin Project Today

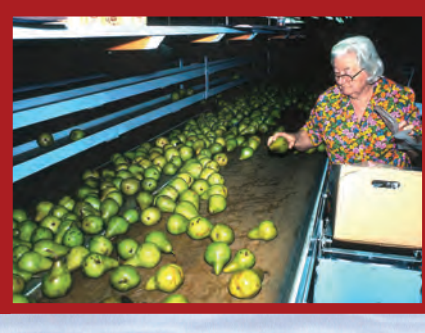
The project is a mix of Federal and private structures providing up to 144,000 acre-feet of water to over 35,000 acres of irrigated land. The project has 7 reservoirs, 16 diversion dams, 1 powerplant, and more than 450 miles of canals serving Talent, Medford, and Rogue River Valley Irrigation Districts.

## For the Fish

Reclamation works with local watershed councils and irrigation districts to install fish screens and ladders throughout the basin. The screens prevent fish from becoming stranded in canals. The ladders make it easier for fish to move upstream past a diversion dam.

## Water for Crops

Project water is vital to the agricultural success of the Rogue River basin. Irrigated farms specialize in fruit orchards (mainly pears), some specialty crops, hay, pasture, and grain. Pears grown in the valley are known worldwide. Over 90 percent of the orchards use sprinkler irrigation. These irrigated lands also serve a productive livestock industry.



USDA/ARS National Clonal Germplasm Repository

### Agate Dam
Constructed: 1965-1966
Height: 86 ft
Crest Length: 3,800 ft
Total Water Storage: 4,780 acre-feet

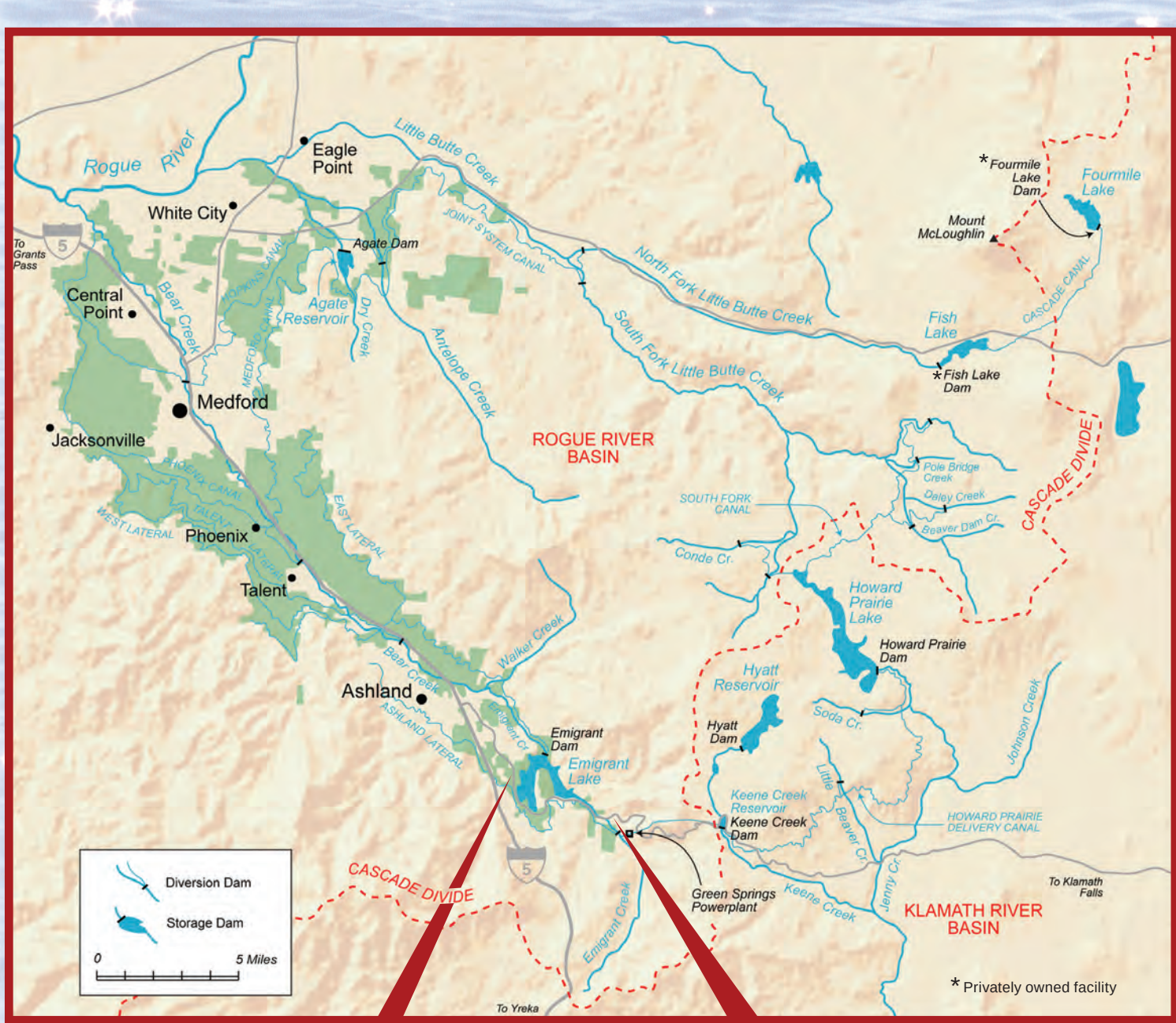
### Emigrant Dam
Constructed: 1924
Reconstructed: 1958-1960
Height: 204 ft
Crest Length: 750 ft
Total Water Storage: 40,500 acre-feet

### Howard Prairie Dam
Constructed: 1957-1958
Height: 100 ft
Crest Length: 1,040 ft
Total Water Storage: 62,100 acre-feet

### Hyatt Dam
Constructed: 1922-1923
Height: 53 ft
Crest Length: 775 ft
Total Water Storage: 16,200 acre-feet

### Keene Creek Dam
Constructed: 1957-1959
Height: 78 ft
Crest Length: 558 ft
Total Water Storage: 340 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 Flood Damage

Reclamation and the U.S. Army Corps of Engineers work cooperatively to maximize flood protection by regulating reservoir storage in Emigrant Lake to keep some space empty during the flood season. This space can temporarily store heavy snowmelt and precipitation runoff until it can be gradually released to reduce downstream flooding. Other project reservoirs also help reduce flooding.

## Electricity for Two States

Green Springs Powerplant generates an average of 64.6 million kilowatt hours of electricity each year to help meet the expanding electricity needs in southern Oregon and northern California. This is enough electricity to serve 4,000 households.

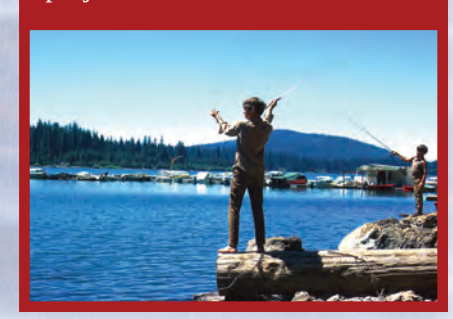
## Water Fun

The Rogue River Basin Project supports a wide variety of recreation activities including trout and bass fishing, swimming, boating, waterskiing, camping, picnicking, hiking, and waterfowl hunting. Jackson County Parks and Reclamation manage recreation facilities at three project reservoirs. Private resorts offer services at two of the reservoirs. The Bureau of Land Management and U.S. Forest Service manage other recreation facilities near project reservoirs.

## Protecting Species

USFWS, Menke

Reclamation consults with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (NOAA Fisheries) on operations to avoid harming threatened or endangered species. The three irrigation districts operate Rogue River Basin Project facilities in a way that minimizes impacts to endangered fish, wildlife, and plant species, their communities, and their environments.

## Reducing Seepage

Reclamation, in partnership with Talent Irrigation District, lined some irrigation canals with a geomembrane to keep the water from seeping through the canal walls. Conservation efforts like these make more water available for crops and increase the amount of water left in the stream to improve water quality and fish habitat.