

tributary to Rapid Creek. The Unit is a part of the Pick-Sloan Missouri Basin Program, a comprehensive water development plan for the Missouri River Basin created in 1944.

The two reservoirs provide supplemental irrigation water for 8,900 acres of farmland in the Rapid Valley Water Conservancy District and municipal and industrial water for Rapid City, including Ellsworth Air Force Base. They also provide flood control benefits for Rapid City and areas along Rapid Creek. Recreation and fish and wildlife benefits are provided through cooperative efforts between Reclamation and other federal and state agencies.

Today, Pactola Dam provides excellent recreation opportunities for the public. Reclamation, the U.S. Forest Service and the South Dakota Department of Game Fish and Parks work together to provide the public with one of the best sites in the Black Hills. Welcome to Pactola Reservoir!



Campground information: 605-343-1567

Reservations: 877-444-6777

Bureau of Reclamation Great Plains Region http://www.usbr.gov/gp

# RECLAMATION Managing Water in the West

# Pactola Dam and Reservoir

**Dakotas Area Office** 



Managed by the Bureau of Reclamation Recreation facilities managed by the U.S. Forest Service



#### Reclamation

The Bureau of Reclamation was created more than a hundred years ago to provide water projects needed for the development of the American West. Rainfall often was too little or came at the wrong time for successful farming. Communities found it difficult to meet their needs when summer drought reduced flows in streams. Floods threatened property, crops and livestock.

As a result, Reclamation was created to "reclaim arid western lands" through water storage and delivery projects in the 17 western United States.

Today, Reclamation manages, develops, and protects water and related resources in an environmentally and economically sound manner in the interest of the American public.

Dam and Reservoir Facts

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Dam
Structural type:Earthfill
Structural height245 feet
Volume4,532,000 cubic yards
Reservoir
Maximum (acre-feet)99,029
Active volume (acre-feet)54,955
Water surface
Drainage area above the dam319 sq. mi.
<b>Recreation Facilities</b>
Campgrounds2
Campsites89
Picnic shelter areas3
Mooring spaces221
Swimming areas1
Marinas2
Public boat ramps2
Hiking trails
Interpretive sites



Early construction of Pactola Dam in 1954 as seen from the location of the present day Visitors Center. The name Pactola comes from the Greek word Pactolus meaning "gold-bearing sands".

### **Early Years**

Construction of Pactola Dam began in 1952 and was completed in 1956. At times nearly 200 men worked on the dam. Unskilled laborers earned \$1.25 an hour and skilled workers \$2.75 an hour. There were no accidental deaths in the four years of construction at Pactola, but numerous injuries resulted from the steep terrain and outcroppings of hard rock known as amphibolite.

In 1972, a severe thunderstorm dropped up to 17 inches of rain on the east slopes of the Black Hills. Rapid City was flooded but the drainage above Pactola Dam received much less rain. However, concerns about a possible future storm event led to modifications to ensure the dam's continued safety and reliability.

The largest modification to the dam was completed in 1987. It included raising the dam 15 feet and constructing a new and larger spillway to accommodate extreme floods. Additional modifications have been made to allow for frequent cleanup and maintenance in the outlet works while continuing to provide

year-round instream flows below the dam for the blue ribbon fishery and other wildlife.

## The Rapid Valley Unit and Project

By the mid-20th century, water in the West did more than irrigate 160 acre patches of alfalfa. Water flowed as the life blood of cities, private industries, and military bases. Droughts during the 1930s illustrated that Rapid City could not depend on surrounding springs as the foundation of a municipal water supply.

In 1942, the War Department broke ground on Ellsworth Air Force Base northeast of the city. The additional 5,000 military personnel strained the city's water supply. This pressure on the community's limited water resources and the need for irrigation water brought the local leadership to Reclamation for help. The Federal response was the construction of Deerfield Dam in 1945 and Pactola Dam in 1952.

The Rapid Valley Unit consists of Pactola Dam and Reservoir on Rapid Creek. The Rapid Valley Project includes Deerfield Dam and Reservoir located on Castle Creek, an upstream