

Buffalo Bill Dam
Cody Vicinity
Park County
Wyoming

HAER No. WY-2

HAER
WYO,
15-CODY,
1-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
Washington, D.C. 20240

HISTORIC AMERICAN ENGINEERING RECORD

HAER
WYO,
IS-CODY,
1-

WY-2

Buffalo Bill Dam (Formerly Shoshone Dam)

Date: 1905-10

Location: 7 miles west of Cody, Park Co., WY, in the Shoshone River Canyon.

Designed by: George Y. Wisner

Owner: U.S. Government, Department of the Interior, Reclamation Service (now Bureau of Reclamation).

Significance: Buffalo Bill Dam was the world's tallest dam upon its completion in 1910, it was the first dam to be built using the trail-load analysis technique. Today it is the keystone for the Shoshone project which has opened up a large area of northwestern wyoming's flat lands for farming.

Prepared for Transmittal by: Daniel Clement, 1983

In the late 19th century it became apparent to John Wesley Powell, chief of the U.S. Geological Survey, and others that the dry arid lands of the West could be made fertile and productive if only the amounts of water necessary for farming could be obtained. Irrigation was the answer to this problem and for years Powell and others advocated both public and private irrigation development. Direct federal involvement in irrigation activities was initiated in 1902 when Theodore Roosevelt signed the Reclamation Act. In so doing he created the United State Reclamation Service.

One of these areas chosen for an irrigation project administered by the Reclamation Service was located in northwest Wyoming, on the Shoshone River. The project called for a dam and reservoir to be placed just below the north and south forks of the Shoshone River, at the head of the Shoshone River Canyon. In 1903, the area was surveyed and in 1904 detailed maps were made of the canyon and surrounding land. Work started in November, 1905, with the construction of a temporary dam, a flume and a diversion tunnel to carry water around the actual construction site.

Work proceeded smoothly until the summer of 1906, when flood waters destroyed the flume and damaged the temporary dam. Summer flooding was to be a major problem over the course of construction. During the early summer over half the total annual runoff would come sweeping through the canyon carrying with it all but the sturdiest trees and the largest boulders. This runoff did not always stick to a predictable schedule. For example in May, 1908, runoff caught the contractor by surprise and filled newly dug excavation work with rocks and silt, causing a serious set back to construction progress.

The workcrew also presented a problem. Wyoming, at that time, had a population of about one person per square mile. The workers, mostly immigrants, had to be shipped in from as far away as San Francisco and St. Louis. A high turnover rate in workers, sometimes unskilled and unknowlegable in American labor practices, forced the contractor to constantly seek a fresh supply of labor in large cities. As many as eighty men at one time would be shipped in but, during construction the highest total of men working at one time was only 499. Even with all of these problems work on the dam proceeded with some regularity. On December 21, 1909, the Shoshone Dam supassed the Croton Dam near New York to become the world's tallest. On January 15, 1910 the last bucket of concrete was poured and the following day January 16, 1910 word was sent that the dam was completed.

A little over four years after construction began the Shoshone Dam topped off at 325 feet to become the world's tallest dam. It has a base width of 108 ft. and a top width of only 10 feet. It is 200 feet long at the crest and incorporates 82,900 cubic yards of concrete. Three decades later, the dam and the reservoir it holds back were named in honor of Buffalo Bill Cody, the name it still holds today.

ADDENDUM TO:
BUFFALO BILL DAM
(Shoshone River Dam)
Shoshone River Canyon
Cody vicinity
Park County
Wyoming

HAER WY-2
HAER WYO, 15-CODY, 1-

COLOR TRANSPARENCIES

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Washington, DC 20240-0001