

GRAND CANYON WATER SUPPLY TANKS
Grand Canyon National Park
South Rim
Grand Canyon
Coconino County
Arizona

HAER AZ-93
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WRITTEN HISTORICAL AND DESCRIPTIVE DATA

FIELD RECORDS

HISTORIC AMERICAN ENGINEERING RECORD

National Park Service
U.S. Department of the Interior
1849 C Street NW
Washington, DC 20240-0001

HISTORIC AMERICAN ENGINEERING RECORD

GRAND CANYON WATER SUPPLY TANKS

HAER No. AZ-93

Location: South Rim, Grand Canyon, Coconino County, Arizona

Dates of Construction: ca. 1901-1926

Original Owner, Use: Santa Fe Railway, domestic and team locomotive boiler supply

Current Owner, Use: National Park Service, storage

Significance: The Grand Canyon Water Supply Tanks are an example of the type of long-distance hauling of water for domestic and industrial purposes that was common in the Southwest in the nineteenth and early twentieth centuries.

Description: The Santa Fe Railway water-hauling system at the South Rim of the Grand Canyon involved bringing water from 60 to 100 miles outside the South Rim to the tourist facilities at the Grand Canyon. Water was drained from the tank cars and then pumped into several steel water tanks, three of which remain. The extant portions of the system consist of a railway siding (with date nails in cross ties for the year 1926), taps used in draining the tank cars, a pump house and pump (not original), and three large riveted-steel water tanks.

The sizes and capacities of the tanks are as follows:

| <u>Height</u> | <u>Diameter</u> | <u>Capacity (gallons)</u> |
|---------------|-----------------|---------------------------|
| 45' | 24' | 150,000 |
| 58' | 24' | 200,000 |
| 59 1/2' | 39' | 500,000 |

The middle size water tank (58' high) is the type commonly used at water stops on the Santa Fe Railway. The smallest of the three tanks (45' high) is presently being used to hold reclaimed water from the sewage treatment plant at the park.

History: As early as 1901, the Santa Fe Railway was engaged in hauling water for both domestic use and for steam locomotive boiler use to the South Rim of the Grand Canyon. The riveted-steel tanks built by the Santa Fe Railway provided storage for water at the South Rim. Tanks of this type were used throughout the Southwest for storage of water for steam locomotive boiler supply. The tanks are scheduled for removal at the close of 1971.

Sources:

Marshall, James. *Santa Fe, The Railroad that Built an Empire*. New York: Random House, Inc., 1945.

Matteson, Bill, Park Engineer, Grand Canyon National Park. Interview by field team, August 2, 1971.

“Santa Fe Splinters.” 34 vols. Microfilm. Available in Southwest Collection, Texas Tech University, Lubbock, Texas.

Shaw, Bruce, Chief of Operations, Grand Canyon National Park. Interview by field team, August 2, 1971.

Historians: Steve Rae and T. Lindsay Baker, August 1-2 and October 21, 1971

Project

Information: The Grand Canyon Water Supply Tanks were inventoried for the Historic American Engineering Record as part of the Southwest Water Resources Project, a joint project with the Texas Tech Water Resources Center. The survey was subsequently published as *Water for the Southwest: Historical Survey and Guide to Historic Sites* by the American Society of Civil Engineers in September 1973.