

FRANKLIN CANAL
Extending 31 miles along the Rio Grande
El Paso
El Paso County
Texas

HAER TX-125
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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

FRANKLIN CANAL

HAER No. TX-125

Location: Extending 31 miles along the Rio Grande, El Paso, El Paso County, Texas

Dates of Construction: 1889-1891

Original Owner, Use: Franklin Irrigation Company, irrigation

Current Owner, Use: U.S. Bureau of Reclamation, irrigation

Significance: The Franklin Canal was the first large irrigation project constructed along the Rio Grande in the area near El Paso, Texas.

Description: A masonry wing dam extending diagonally into the Rio Grande about 300' diverts water into the heading of the Franklin Canal, about a mile northwest of El Paso. The 31-mile-long canal begins about 30' wide but decreases to 15' at Fabens, where it returns to the Rio Grande. When completed, it had a capacity of 175 cubic feet per water per second and could irrigate about 1,400 acres at normal river flow. The canal had a steeper grade than necessary, which required concrete drop structures at several locations to control the velocity of the water. The novel design of the drop structures consisted of counter-balanced cylindrical gates that could be adjusted to allow a discharge of the proper velocity to prevent erosion or silting of the channel.¹

History: The Franklin Irrigation Company completed the canal in 1891 at a cost of \$150,000. In 1912, the U.S. Reclamation Service purchased the canal, and it became a key part of the Rio Grande Project. The canal was renovated and enlarged between 1912 and 1916. The work included repairing the diversion dam, enlarging the heading of the canal, and lining a portion of the channel with concrete. When completed, the canal was capable of irrigating 40,000 acres.

The canal has been altered several times since its completion. Currently, the portion of the canal leaving the downtown area of El Paso is heavily

¹ Arthur Powell Davis, *Irrigation Works Constructed by the United States Government* (New York: John Wiley & Sons, Inc., 1917).

silted and poorly maintained. Due to urban growth, the Franklin Canal is not used to its previous extent.

Sources:

Davis, Arthur Powell. *Irrigation Works Constructed by the United States Government*. New York: John Wiley & Sons, Inc., 1917.

Lee, Willis T. "Water Resources of the Rio Grande Valley and their Development." Water Supply and Irrigation Paper No. 188, U.S. Department of the Interior, Geological Survey. Washington: Government Printing Office, 1907.

Thirteenth Annual Report of the Reclamation Service, 1913-1914. Washington: Government Printing Office, 1915.

Twelfth Annual Report of the Reclamation Service, 1912-1913. Washington: Government Printing Office, 1914.

Historians: Steve Rae and T. Lindsay Baker, November 8, 1971 and January 10, 1972

Project

Information: The Franklin Canal was 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.