



Friant-Kern Canal

Overview

As part of the Central Valley Project, the 152-mile Friant-Kern Canal delivers water to one million acres of some of the most productive farmland in the country and provides drinking water to thousands of San Joaquin Valley residents. The canal begins at Friant Dam and conveys water from Millerton Lake, a reservoir on the San Joaquin River, south to its terminus at the Kern River in Bakersfield. Friant-Kern Canal was designed as a gravity-fed facility and does not rely on pumps to move water.



The Friant-Kern Canal

Subsidence and Canal Operations

Completed in 1951, Friant-Kern Canal was constructed to have a capacity of 5,000 cubic feet per second (cfs) that gradually decreases to 2,000 cfs at its terminus (one cubic foot of water is about 7.5 gallons). The canal is built in both concrete-lined and unlined earth sections. Subsidence in the area, caused by pumping groundwater faster than it can be recharged, has caused parts of the canal to sink. This negatively affects the canal's ability to convey water, reducing the canal's capacity. When the land elevation lowers, the canal must be operated at a reduced flow to ensure that water does not overflow banks, thereby restricting the ability to make full water deliveries.

Capacity Correction

The diminished capacity in the canal has resulted in as much as 300,000 acre-feet of reduced water deliveries in certain water years with effects most prominent in the

middle reach of the canal (milepost 88 to milepost 121).

To address the canal's capacity loss, Reclamation and the Friant Water Authority have implemented a 2-phase capacity correction project. The Middle Reach Capacity Correction Project, completed in Spring of 2024, was the first phase and corrected the most critical portion of the canal. Negotiations for the second phase, or the Upper and Lower Reach Capacity Correction Project, are ongoing.

When the multi-phased project is complete, the canal's conveyance capacity will be restored from the current 1,600 cfs to the original 4,000 cfs.

The project is funded by Reclamation, Friant Water Authority, and California Department of Water Resources.

More information on the project can be found here:
<https://www.usbr.gov/mp/sccao/fkc-fr.html>

