



Delta Cross Channel

Overview

The Delta Cross Channel (DCC), located near Walnut Grove, California, is a feature of Reclamation's Central Valley Project (CVP) Delta Division. The facility is a gate-controlled diversion channel on the east bank of the Sacramento River, about 30 miles downstream of Sacramento. The DCC facilitates the diversion of fresh water from the Sacramento River into the interior Sacramento-San Joaquin River Delta to the CVP and State Water Project (SWP).

Background

Reclamation completed the DCC in January 1951. The facility is key to maintaining water quality in the central Delta during controlled releases from northern CVP storage reservoirs, such as Shasta and Folsom, through the Delta to the headworks of the CVP's Delta-Mendota and Contra Costa canals and SWP's California Aqueduct.



The DCC, pictured above, is 6,000-feet long with a bottom width of 210 feet, and a capacity of 3,500 cubic feet per second (cfs). The gates extend about 245 feet across the channel at its mouth on the Sacramento River.

Reclamation closes the DCC gates during high water to prevent flood stages in the San Joaquin section of the Delta. After flood danger passes, Reclamation opens the gates to allow Sacramento River water through to the federal and state pumping plants. During certain periods, the DCC gates can operate frequently and boaters are advised to check gate status, especially around holidays. Opening or closing the gates takes about one hour.



When the gates are open, the DCC diverts fresh Sacramento River water to Snodgrass Slough. From there it flows through natural channels to the CVP's Jones Pumping Plant and SWP's Banks Pumping Plant. The distance from the channel to Jones Pumping Plant is about 50 miles (80 km).

Operating Criteria

The DCC gate operations follow State Water Resources Control Board Decision 1641 and the 2019 NOAA Fisheries and U.S. Fish and Wildlife Service (USFWS) Biological Opinions on the Long-Term Operation of the CVP and SWP; it allows greater flexibility for fishery and water quality protection by managing the gates in real-time.

Season	Gate Status
October 1 – November 30	DCC gates are typically open. When real-time fishery monitoring indicates salmon migration in the Delta, gates are closed for up to five days to provide beneficial migration conditions.
December 1 - May 20	DCC gates are usually closed.
May 21 – June 15	DCC gates are typically closed for a total of 14 days for fisheries protection as requested by the USFWS, NOAA Fisheries, and California Department of Fish and Wildlife. Whenever possible, the gates are open on the weekends (Saturday and Sunday) and on Memorial Day weekend to assist with recreational boating.
June 16 - September 30	DCC gates are generally open, but close intermittently during fishery experiments or maintenance.

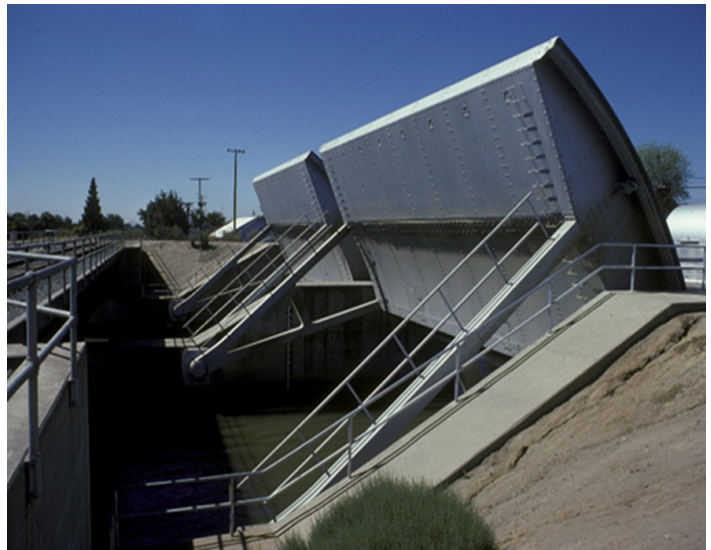
High flows on the Sacramento River, unforeseen fishery protection actions, and/or water quality compliance requirements in the Delta may also necessitate short-term closures. Reclamation’s typical standing operating procedures call for gate closures when flow on the Sacramento River exceeds approximately 22,500 cfs.



The DCC gates protect out-migrating salmonids from entering the interior Delta and help improve fish passage.

DCC Gate Improvements

Reclamation is currently investigating alternatives for modernizing the operation of the DCC gates to allow for more frequent operation. Improvements are also expected to increase the structure’s operational life, decrease operation and maintenance costs, increase the safety of employees, and improve conditions for recreational boaters.



Two radial gates, each 60 x 30 feet and weighing a total of 243 tons, open to allow water to flow down the channel, or close to prevent drawing endangered fish species into the interior Delta.

For up-to-date information on the DCC status, visit Reclamation’s Central Valley Operations Office website at: usbr.gov/mp/cvo/vungvari/dcc_chng.pdf