SAN LUIS & DELTA-MENDOTA WATER AUTHORITY

AboutUs



About the San Luis & Delta-Mendota Water Authority

The San Luis & Delta-Mendota Water Authority is a joint powers authority serving 28 member agencies, 26 of which contract with the United States Bureau of Reclamation for water supply from the Central Valley Project (CVP). The Authority delivers water to the most diverse set of member agencies in California. The member agencies provide water to approximately 1,2 million acres of highly productive farmland, 2 million California residents, and millions of waterfowl dependent upon the nearly 200,000 acres of managed wetlands within this area of the Pacific Flyway. The Authority is governed by a 19-member Board of Directors and serves two important roles: (1) To act as the operations and maintenance entity for the Delta Division and south of Delta CVP facilities that the Authority's member agencies depend on for the delivery of their water supply, and (2) To provide unified representation on common interests of Authority members.

O'Neill Pumping Plant







Agriculture

Water moved through Authority facilities serves the San Joaquin Valley's irrigated agriculture industry, which is one of the most water efficient agricultural industries in the nation. Currently approximately 1.2 million acres of highly-productive farmland receives water through the Authority. These farms use high-tech irrigation practices to grow more than 60 high-value crops that make California the leading agricultural state in the nation. From fruits and vegetables, nut crops, dairy, beef, and fiber, our farmers manage water as efficiently as possible to make an enormous contribution to the domestic and export value of agriculture.

Municipal and Industrial

California's Silicon Valley is the leading technology center in the nation. Home to some of the world's top companies, this region depends on reliable water supplies to energize these successful businesses and communities. The Silicon Valley depends on local, state, and federal water supplies, with federal supplies moving through infrastructure operated and maintained by the Authority. Additionally, partnerships between Authority member agencies and local governments increase the quality and reliability of water supplies for disadvantaged communities in the San Joaquin Valley.

Environment

California's San Joaquin Valley is rich in wildlife diversity and habitat. It hosts over 300 species of birds and many other species of wildlife including Tule elk, mule deer, mountain lion, bobcat, coyote and many species of reptile and amphibians. This area contains one of the largest riparian forests in California, located at the San Joaquin National Wildlife Refuge. The Grasslands Ecological Area, in Merced County, includes the largest contiguous freshwater wetland in the western United States. Millions of migratory waterfowl and shorebirds overwinter here, making it one of the most important habitats in the Americas. Local partnerships between

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Facilities Operated by San Luis & Delta-Mendota Water Authority



Delta-Mendota Canal

C.W. "Bill" Jones Pumping Plant

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agricultural and environmental water managers help improve water supply reliability for both farms and wildlife areas.

In addition to sustainable water management practices, the Authority and its member agencies have taken a leadership role in renewable energy development and generation of more than 2.4 gigawatts, helping California to meet its SB 100 goal of 100 percent renewable energy by 2045.

Delta Cross Channel

The Delta Cross Channel diverts water from the Sacramento River into the central Delta. Located near Walnut Grove, the channel is critical for controlling ocean salinity as part of the Delta Division of the Central Valley Project.

The Delta Cross Channel is a controlled diversion channel between the Sacramento River and Snodgrass Slough. Water is diverted from the river through a short excavated channel near Walnut Grove into the slough. The water then flows through natural channels for about 50 miles to the vicinity of the C.W. "Bill" Jones Pumping Plant.

The diversion provides water to the intakes of the state and federal pumping facilities, improves the irrigation supplies in the Sacramento-San Joaquin Delta, and helps repel ocean salinity. The earth section is designed to divert approximately 3,500 cubic feet per second, or 7,000 acre-feet per day.

The United States continues to perform operations and maintenance of this facility, but contracts with SLDMWA to provide emergency assistance on an as-needed basis.

Delta-Mendota Canal

The Delta-Mendota Canal carries water southeasterly from the C.W. "Bill" Jones Pumping Plant to the Mendota Pool. The canal, located along the west side of the San Joaquin Valley, is essential for irrigation, municipal and industrial, and refuge water supply as part of the San Luis and San Felipe Units, as well as the Delta Division of the Central Valley Project.

Completed in 1951, the Delta-Mendota Canal is used for delivery of water along the west side of the San Joaquin Valley and to replace San Joaquin River water stored at Friant Dam.

The canal is 116.5 miles long and terminates at the Mendota Pool about 30 miles west of Fresno. The initial diversion capacity is 4,600 cubic feet per second (9,200 acre-feet per day), which is gradually decreased to 3,211 cubic feet per second (6,422 acre-feet per day) at the terminus.

O'Neill Pumping Plant

The O'Neill Pumping Plant, located about 12 miles west of Los Banos, lifts water from the Delta-Mendota Canal into the O'Neill Forebay. This plant is essential for supplying water to O'Neill Forebay and the San Luis/San Felipe Units of the Central Valley Project.







Delta Cross Channel

Tracy Fish Collection Facility

Completed in 1968, this facility consists of an intake channel leading off the Delta-Mendota Canal and six pumping-generating units. These units normally operate as pumps to lift water from 45 to 53 feet into the O'Neill Forebay. When water is released from the Forebay to the Delta-Mendota Canal, these units are able to operate as generators, delivering power to the grid. When operating as pumps and motors, each unit can discharge about 650 cubic feet per second (1,300 acre-feet per day) and has a rating of 6,000 horsepower. When operating as turbines and generators, each unit has a generating capacity of approximately 4,000 kilowatts.

C.W. "Bill" Jones Pumping Plant

The C. W. "Bill" Jones Pumping Plant lifts water from the Sacramento-San Joaquin Delta into the Delta-Mendota Canal. The plant, located about 12 miles northwest of Tracy, is essential for supplying agricultural, urban, and wildlife water to the Delta Division and to the San Luis and San Felipe Units of the Central Valley Project.

The majority of the water conveyed to the Jones Pumping Plant pumps is derived from northern Central Valley Project reservoirs. The supply is routed across the Sacramento-San Joaquin Delta from the Sacramento River to the Old and Middle Rivers through the Delta Cross Channel and the natural channels of the Delta. The intake to the pumps is about 9 miles northwest of Tracy.

Six pumps, each powered by a 22,500-horse-power electric motor, lift Delta waters about 200 feet from the intake through three discharge pipes, which then carry it up a distance of about 1 mile to the Delta-Mendota Canal. Power to run each pump is generated by CVP facilities.

The total capacity of the plant is about 5,200 cubic feet per second (10,400 acre-feet/day), each unit with a pumping capacity between 850 cfs and 1,050 cfs.

Tracy Fish Collection Facility

The Tracy Fish Collection Facility (TCFC) intercepts fish from the Old River and the C. W. "Bill" Jones Pumping Plant. The facility, located 2.41 miles upstream from the pumping plant, is vital for the preservation of various delta species as part of the Delta Division of the Central Valley Project. The TFCF was primarily built to intercept downstream migrant fish so they are returned to the main delta channel to resume their journey to the ocean.

Due to the significant ongoing research at the TFCF, the United States Bureau of Reclamation continues performing the operation & maintenance at the facility and the San Luis & Delta-Mendota Water Authority has a service contract to provide emergency assistance when requested.

