

CALIFORNIA WATER INFRASTRUCTURE SYSTEMS

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Central Valley Project	State Water Project	All American Canal	Colorado River Aqueduct	Los Angeles Aqueduct	Mokelumne Aqueduct	Hetch Hetchy
<i>Operated by:</i> Bureau of Reclamation	<i>Operated by:</i> Dept. of Water Resources	<i>Operated by:</i> Imperial Irrigation District	<i>Operated by:</i> Metropolitan Water District	<i>Operated by:</i> Los Angeles DWP	<i>Operated by:</i> East Bay MUD	<i>Operated by:</i> San Francisco PUC
<i>Built:</i> 1930s - 1950s	<i>Built:</i> 1960s - early 1970s	<i>Built:</i> 1934 to 1939	<i>Built:</i> 1932 to 1941	<i>Built:</i> 1908-1913	<i>Built:</i> 1926-1929; second pipeline completed 1949; third pipeline in 1963	<i>Built:</i> 1914 - 1934
<i>Avg. Deliveries</i> 7 MAF	<i>Avg. Deliveries</i> 2.3 MAF	<i>Avg. Deliveries</i> 3.1 MAF	<i>Avg. Deliveries</i> 1.2 MAF	<i>Avg. Deliveries</i> 200,000 AF	<i>Avg. Deliveries</i> 364,000 AF	<i>Avg. Deliveries</i> 265,000 AF
<i>Length:</i> About 400 miles	<i>Length:</i> 600+ miles	<i>Length:</i> 80 miles	<i>Length:</i> 242 miles	<i>Length:</i> 223 miles	<i>Length:</i> 95 miles	<i>Length:</i> 160 miles
<i>Serves:</i> Sacramento Valley and San Joaquin Valley agriculture, plus some municipalities in the Central Valley and the Bay Area	<i>Serves:</i> Northern Bay Area and Southern Bay Area communities, San Joaquin Valley, Southern California	<i>Serves:</i> Imperial Valley	<i>Serves:</i> Metropolitan's 5200-square mile service area in Southern California, which spans from Ventura County to San Diego County.	<i>Serves:</i> City of Los Angeles	<i>Serves:</i> 35 municipalities in the East Bay, including Oakland, Berkeley, Richmond, and parts of Alameda and Contra Costa County	<i>Serves:</i> The city San Francisco and other Bay Area cities spread across Santa Francisco, Santa Clara, Alameda, and San Mateo counties
<i>Path:</i> The Central Valley Project does not consist of contiguous facilities; it is instead divided into eight divisions, some of which work in conjunction with other divisions, while other divisions operate completely independently. The Central Valley Project delivers irrigation water to an area spanning the length of the Central Valley from Shasta Reservoir to Kern County; Central Valley Project water also serves water for urban uses in the Bay Area and parts of the Central Valley.	<i>Path:</i> The 3.5 MAF Lake Oroville reservoir is the starting point for the SWP system; the water then travels down the Feather River, joins with the Sacramento River and flows into the Delta. From the south Delta, it is placed in the California Aqueduct for delivery to the San Joaquin Valley and Southern California. Branches of the system deliver water to the northern Bay Area, the southern Bay including San Jose, and the Central Coast areas of San Luis Obispo and Santa Barbara.	<i>Path:</i> Water enters the IID system at Imperial Dam; from there it travels 80 miles to a point near Calexico. At the point where the canal enters the eastern Imperial Valley, a canal branches off to carry water 123 miles to the Coachella Valley.	<i>Path:</i> The Colorado River Aqueduct begins at the Whitsett Pumping Plant, located on Lake Havasu, about 2 miles above Parker Dam on the Colorado River; from there the aqueduct travels 242 miles to Lake Mathews near Riverside, the aqueduct's terminal reservoir.	<i>Path:</i> From Mono Lake, water flows through tunnels down to Crowley Lake; from there water travels through the Owens River to the intake for the aqueduct; from there, the water travels through cement-lined canals and pipelines to enter Southern California through the Cascades facility located in Sylmar.	<i>Path:</i> The aqueduct begins at Pardee Reservoir, travels southwest for 95 miles through the western foothills of the Sierra Nevada and then west across the Central Valley along the Calaveras River before crossing the Sacramento-San Joaquin River Delta in a pipeline. Once the water reaches the Berkeley Hills above the East Bay, it is channeled into a complex distribution system consisting of six terminal reservoirs (Briones, Chabot, Lafayette, San Pablo and Upper San Leandro) with a combined storage capacity of 155,150 acre feet.	<i>Path:</i> The system begins at O'Shaughnessy Dam, located on the Tuolumne River in Yosemite National Park, which forms Hetch Hetchy Reservoir; from there, the water travels 160 miles by gravity through a series of aqueducts, tunnels, hydroelectric plants, and eight other storage dams to the Bay Area. Near the city of Fremont, the aqueduct splits into four pipelines, two of which cross the Bay to the south of the Dumbarton Bridge, while the other two pipelines run to the north, terminating at the Pulgas Water Temple.
<i>Facilities:</i> 18 dams and reservoirs, 11 power plants, three fish hatcheries, and 500 miles of canals and aqueducts.	<i>Facilities:</i> 34 storage facilities, 20 pumping plants, four pumping-generating plants, 5 hydroelectric power plants, and about 700 miles of canals, tunnels and pipelines.	<i>Facilities:</i> Over 3000 miles of canals and drains, and ten reservoirs, with a total storage capacity of more than 3,300 acre-feet.	<i>Facilities:</i> 5 pumping plants, 63 miles of canals, 92 miles of tunnels, 55 miles of conduit, and 144 underground siphons	<i>Facilities:</i> 14 hydropower facilities, 5 storage reservoirs, 142 tunnels totaling 52 miles in length, 12 miles of inverted steel siphons, 24 miles of unlined conduit, 37 miles of open, cement-lined conduit, and 97 miles of covered conduit	<i>Facilities:</i> Mokelumne River water is collected in the Pardee Reservoir and flows 90 miles from Pardee to the Bay Area via the Mokelumne aqueduct system consisting of three large diameter steel pipelines.	<i>Facilities:</i> 280 miles of pipelines, over 60 miles of tunnels, 11 reservoirs, five pump stations and two water treatment plants