

Department of Water Resources' Mission...

To manage the water of California, in cooperation with other agencies, to benefit the state's people and protect, restore and enhance the natural and human environments.

South Bay Aqueduct

(Bethany Reservoir and Lake Del Valle)



GRAY DAVIS
Governor
State of California

MARY D. NICHOLS
Secretary for Resources
The Resources Agency

THOMAS M. HANNIGAN
Director
Department of Water Resources





Windsurfing is also allowed at Bethany Reservoir.

Bethany Reservoir

Bethany Reservoir is located 1-1/2 miles down the California Aqueduct from Banks Pumping Plant about 10 miles northwest of Tracy in Alameda County. Completed in 1967, Bethany Reservoir serves as a forebay for South Bay Pumping Plant and a conveyance facility in this reach of the California Aqueduct.

History

The Indians who lived in the Bethany Reservoir area were probably Northern Valley Yokuts. Because the reservoir area is on higher ground outside the Delta and lacks trees, the Indians apparently spent little time there. Evidence of native habitation found during project construction includes an obsidian knife, a chert core tool, and the remains of a human skeleton found near the South Bay Pumping Plant.

Recreation

Operated by the California Department of Parks and Recreation, the recreation area provides opportunities for picnicking, fishing, boating, windsurfing, hiking, and bicycling. However, overnight camping and hunting are not allowed at Bethany Reservoir.

Lake Del Valle

Lake Del Valle was created in 1968 to provide recreation and fish and wildlife enhancement, flood control for Alameda Creek, and regulatory storage for a portion of the water delivered through the South Bay Aqueduct.

History

A band of Ohlone Indians roamed the Del Valle area long before the Spanish missionaries and explorers set foot in California. Arrowheads and grinding stones recovered at Lake Del Valle reveal the existence of Ohlone settlements in the shadow of the Diablo Range.

Lake Del Valle State Recreation Area occupies part of the 1839 Mexican land grants to the families of Agustin Bernal and Antonio Sunol (the present-day city bears his name).

During the late 1800s and early 1900s, Europeans moved in and took over the lands of the original Mexican and Spanish grant holders. Foundations and rock piles from buildings from that period still stand along the old trails. Many of the early building sites are beneath the waters of Lake Del Valle.

Del Valle Dam

The 235-foot-high Del Valle Dam impounds a reservoir with a total capacity of 77,100 acre-feet. To provide a flood control reserve, it normally stores from 25,000 to 40,000 acre-feet. (An acre-foot is 325,900 gallons, enough water to cover one acre of land one foot deep.)



Del Valle Dam is the only flood control dam in the Livermore Valley.

Recreation

Operated by the East Bay Regional Park District, Lake Del Valle's 5,200-acre recreation area offers picnicking, swimming, boating, fishing, biking, hiking, windsurfing, camping, and horseback riding. For a map with Lake Del Valle's recreational opportunities or other Lake Del Valle information, call East Bay Regional Park District at (925) 373-0332.

Fishing is best during the winter, with the California Department of Fish and Game regularly planting trout from October through May. Planting of trophy-sized trout is supported by the East Bay Regional Park District's fishing permit program. A state fishing license with appropriate stamps and a Park District daily fishing access permit are required for anglers age 16 and older.

Boating and swimming are permitted in designated areas only. Alcohol is prohibited and children should be accompanied by adults at all times.

About 150 family campsites and three group sites (each accommodates 150 people) are available year-round. Picnic sites with barbecue units are provided in many park areas. No ground fires are permitted, except in personal cooking units. Picnic areas for large groups may be reserved at least two weeks in advance by calling (510) 636-1684.

Information

To reach the park, take Highway 580 to the North Livermore Avenue exit in Livermore. Drive south through Livermore. Livermore Avenue becomes Tesla Road. Turn on Mines Road to Del Valle Road (the right fork) and follow to the park entrance. For information, call (925) 373-0332.

For more information about the State Water Project and accessibility, call the California Department of Water Resources' Office of Water Education at 1-800-272-8869.

Visit DWR's Web site at
<http://wwwdwr.water.ca.gov/>

For TTY phone service, call (916) 653-6226.

If you need this publication in an alternate form, contact the Office of Water Education at 1-800-272-8869.



Lake Del Valle is a popular Bay area recreation spot.

Lake Del Valle and Dam Statistics

Max. Normal Storage.....	40,000 acre-feet
Lake Gross Capacity.....	77,100 acre-feet
Surface Area.....	708 acres
Elevation.....	703 feet MSL
Shoreline.....	16 miles max. flood control storage
Maximum Depth (normal).....	153 feet
Water Surface Elevation.....	703 feet MSL (normal maximum)
Dam Structural Height.....	235 feet
Crest Elevation.....	773 feet
Crest Length.....	880 feet
Volume.....	4,150,000 cubic yards of earthfill

Bethany Lake and Forebay Dam Statistics

Lake Gross Capacity.....	4,804 acre-feet
Surface Area.....	161 acres
Shoreline.....	6 miles
Maximum Depth.....	30 feet
Surface Elevation.....	243 feet
Dam Structural Height.....	121 feet*
Crest Elevation.....	250 feet
Crest Length.....	3,940 feet
Volume.....	1,400,000 cubic yards of earthfill

*Bethany Lake is impounded by five dams, but this statistic shows only the Forebay Dam feet.

The State Water Project

Planned, designed, constructed, operated and maintained by the California Department of Water Resources (DWR), the State Water Project (SWP) is the largest state-built, multipurpose water project in the United States.

The SWP, spanning more than 600 miles from Northern California to Southern California, includes 32 storage facilities, 17 pumping plants, 3 pumping-generating plants, 5 hydroelectric power plants, and approximately 660 miles of canals, pipelines, and tunnels.

The main purpose of the SWP is water supply - that is, to divert and store water during wet periods and distribute it to areas of need in Northern California, the San Francisco Bay area, the San Joaquin Valley, the Central Coast, and Southern California. Other SWP purposes include flood control, power generation, recreation, fish and wildlife enhancement, and water quality improvement in the Sacramento-San Joaquin Delta.

Public agencies that have long-term contracts for SWP water deliveries are repaying the cost, plus interest, of financing, building, operating and maintaining the SWP water storage and delivery system.



Bethany Reservoir allows fishing.

The South Bay Aqueduct

Construction on the South Bay Aqueduct began in 1960. The Aqueduct was the first delivery system completed under the SWP and has been conveying water to Alameda County since 1962 and to Santa Clara County since 1965.

The South Bay Aqueduct begins at Bethany Reservoir near Tracy, with the South Bay Pumping Plant lifting water 566 feet into the first reach of the Aqueduct.

The South Bay's Pumping Plant's nine pumping units, with a combined capacity of 330 cubic feet per second, discharge water through two parallel buried pipelines to the eastern ridge of the Diablo Range.

From there, water flows by gravity for nine miles to the 100 acre-foot Patterson Reservoir, where some water is released for delivery to Livermore Valley. Water flow then continues about nine miles to a junction point where a portion is diverted into a 1 1/2-mile branch line and pumped into Lake Del Valle.

Beyond the Del Valle junction, the water flows by pipeline to La Costa Tunnel, proceeds southwest past Sunol, through the Mission Tunnel, then south through the hills overlooking San Francisco Bay. South Bay Aqueduct terminates in a 160-foot diameter steel tank on a hillside five miles east of downtown San Jose.

Water agencies served by the South Bay Aqueduct — the Alameda County Flood Control and Water Conservation District (Zone 7), Alameda County Water District, and Santa Clara Valley Water District — can receive up to 188,000 acre-feet a year. Maximum annual entitlement for each contractor is: Zone 7, 46,000 acre-feet; Alameda County Water District, 42,000 acre-feet; and Santa Clara Valley Water District, 100,000 acre-feet.