

Mid-Pacific Region, Solano Project

The Solano Project was authorized by the Secretary of the Interior on November 11, 1948, under the terms of the Reclamation Project Act of 1939. Most of the project is located in Solano County, Calif., northeast of the San Francisco Bay; however, Lake Berryessa, the reservoir behind Monticello Dam, is located in Napa County and the dam itself is located in Yolo County. Designed to irrigate approximately 96,000 acres of land, the project also furnishes municipal and industrial (M&I) water to cities in Solano County. Its principal features include:



Monticello Dam

Monticello Dam

Monticello Dam, begun in 1953 and completed in 1957, is located near where Putah Creek crosses the eastern boundary of Napa County. The dam regulates flows along the lower reaches of Putah Creek and stores surplus water in the reservoir it creates, Lake Berryessa. Monticello Dam is a concrete, medium-thick arch structure with a height of 304 feet and a crest length of 1,023 feet. The Monticello Dam Powerplant, built in 1983, has three generators and is owned, operated and maintained by the Solano Irrigation District.



Scenic view of Lake Berryessa includes parts of Solano, Napa and Yolo Counties.

Lake Berryessa

Located about 70 miles northeast of San Francisco and 40 miles west of Sacramento, and with 165 miles of shoreline and a storage capacity of 1,602,000 acre-feet, Lake Berryessa is a popular recreation destination. The lake offers year-round visitor programs and recreational opportunities including Park Ranger programs, a visitor center, a water education and information station, houseboat rentals, marinas, RV parks, camping, hiking, picnicking, swimming, boating, waterskiing and fishing for species such as rainbow trout, bass, catfish, crappie and bluegill.

In 2000 Reclamation began developing a Visitor Services Plan (VSP) for the management of recreation at the lake. The 2006 Record of Decision limited development of the lake's concession areas to facilities that support short-term, traditional, non-exclusive and diverse recreation opportunities. Implementation of the VSP continues to be underway.

Putah Diversion Dam

Completed in 1957, Putah Diversion Dam is located on Putah Creek, approximately 6 miles south of Monticello Dam. The principal function of the diversion dam is to divert water into Putah South Canal. The dam is a gated concrete weir structure with an earthfill embankment wing. It is 29-feet high and has a crest length of 910 feet. The dam creates Lake Solano, which is about 1.5-miles long with a capacity of 750 acre-feet. Lake Solano provides recreation in an area popular for picnicking, boating, swimming and fishing.

Putah South Canal

Putah South Canal starts at Putah Diversion Dam and runs easterly for about 3 miles, then turns southward to follow the edge of the foothills for about 30 miles, ending near the town of Cordelia, Calif. It was completed in 1959.

The irrigable lands are mainly south of the canal and receive water from the canal by means of gravity flow. Irrigable lands above the canal receive water by pumping directly from the canal. In addition to providing irrigation water, the canal conveys M&I water for the cities of Vacaville, Fairfield, Suisun and Vallejo, as well as neighboring military installations.

The canal is concrete lined, except for a 1-mile segment beginning at the Green Valley Siphon, which is precast reinforced concrete pipe and designated as the Putah South Pipeline. The canal has a diversion capacity of 956 cubic feet per second (cfs) with a terminal capacity of 116 cfs.

Terminal Dam and Reservoir

Terminal Dam is a compacted earthfill structure 24 feet high with a crest length of 870 feet. The 119-acre-foot reservoir is located at the end of Putah South Canal and serves as a terminal reservoir for the canal and a forebay from which water is delivered to the city of Vallejo. This reservoir reregulates the terminal flows in the canal and provides a small carryover supply in case of an interruption in flow.

Green Valley Conduit

Green Valley Conduit, a high-pressure concrete pipeline ranging from 18 to 27 inches in diameter, extends 8,400 feet from the Putah South Canal into Green Valley. Leading from this main pipeline, 4,000 feet of sub-conduits, 12 to 18 inches in diameter, carry water across the valley to farmlands.

Distribution Systems

Local irrigation districts have the option of building their own distribution systems. The Solano Irrigation District, pursuant to Public Law 130, built a \$15-million distribution drainage system.

