



Water Resources

of Santa Barbara County

Santa Barbara County Water Agency

July 2000



EXHIBIT CT 68

State Water Project

History

The State Water Project (SWP), managed by the Department of Water Resources (DWR), is the largest state-built, multipurpose water project in the country. The SWP system collects, stores and distributes water from northern California, where most of the state's rainfall occurs, to southern California, where most of the state's population lives. Approximately 20 million of California's 32 million residents receive at least part of their water from the SWP, and SWP water is used to irrigate approximately 600,000 acres of farmland.

In 1951, the state legislature authorized construction of the SWP, a water storage and supply system to capture, store, and redistribute surface runoff on a massive scale. Eight years later, legislation was passed to provide the mechanism for obtaining funds necessary to construct the initial facilities. In 1960, California voters approved a \$1.75 billion bond issue to build the SWP. The initial facilities of the SWP were completed in 1972, although some parts of the Project have been delivering water to Californians since 1962.

Total entitlements to the SWP are approximately 4.2 million AFY, while the firm yield (i.e., during drought periods) of existing SWP facilities is 2.4 million AFY. The average annual yield of the project approaches 3 million AFY. It is projected that future improvements to the SWP system, both structural and operational, will increase both the firm and average yields.

Construction of the State Water Project Pipeline in Santa Barbara County began in 1994



The State Water Project in Santa Barbara County

In 1963, the Santa Barbara County Flood Control and Water Conservation District contracted with the DWR for the delivery of SWP water. At that time, the County began payments to DWR to retain an entitlement to SWP for 57,700 AFY, but funds were not allocated to construct the necessary delivery system. The contract with the DWR was handled by the SBCWA. In 1981, the contract was amended to reduce the County's State Water entitlement to 45,486 AFY.

In 1979, a bond measure was placed on the ballot to secure funds to construct the delivery system to bring SWP water into the county. Fear of growth, environmental concerns, and opposition to high water costs caused a majority of voters to vote against this measure.

In 1991, after six years of extremely dry conditions, voters throughout Santa Barbara County voted to import SWP water. This included the communities of Carpinteria, Summerland, Montecito, Santa Barbara, Hope Ranch, Goleta, Buellton, Solvang, Santa Ynez, Orcutt and Guadalupe. The Santa Maria City Council and Vandenberg Air Force Base also decided to participate in the SWP. The communities of Lompoc, Vandenberg Village, and Mission Hills voted not to participate in the SWP.

As a result of numerous favorable bond elections, the Central Coast Water Authority (CCWA) was formed to finance, construct, manage, and operate Santa Barbara County's 42 mile extension of the SWP water pipeline and a regional treatment plant to treat SWP water for both San Luis Obispo and Santa Barbara Counties. The CCWA is made up of eight member agencies, one associate member, and four additional participants. The CCWA is governed by an eight member Board of Directors, with a representative from each member agency.

The following table presents the allocated entitlement of SWP water to each project participant. Existing entitlements range from 50 AFY (Raytheon

Systems Company) to as high as 16,200 AFY (City of Santa Maria), though actual water deliveries may be less than the entitlement in any given year depending on a number of factors, primarily customer demand and weather in northern California. Factors other than drought that may cause short-term delivery reductions of SWP water include equipment failure and natural disasters such as floods and earthquakes. Other factors that affect the long-term reliability of the State Water Project include timing of additional SWP storage facility development, ongoing environmental challenges to the SWP, and eventual utilization of full SWP entitlement by other SWP water contractors.

Construction of the facilities to import SWP water to the county began in 1994, including pipelines, pumping plants and treatment costing almost \$600 million. The Coastal Branch portion of the project

brings water 117 miles from the California Aqueduct in Kern County, through San Luis Obispo County and the Santa Maria Valley, and continuing to the northerly portion of Vandenberg AFB. The DWR financed this section of the pipeline and constructed it with the CCWA's assistance.

At Vandenberg AFB, the Coastal Branch connects to the 42-mile pipeline comprising the Mission Hills and the Santa Ynez Extensions. The Santa Ynez section, which was financed and constructed by the CCWA, ends at Lake Cachuma. Water is then delivered through existing facilities to the south coast of Santa Barbara County. The CCWA also constructed and operates the Polonio Pass Water Treatment Plant, located in northern San Luis Obispo County. In addition, under a joint powers agreement with the DWR, the CCWA operates all of the Coastal Branch facilities downstream of the treatment plant.

State Water Entitlements in Santa Barbara County

<u>Project Participant</u>	<u>SWP Allocation</u> (AFY)	<u>1999 Delivery</u>
California Cities Water Co. (<i>Orcutt area</i>)	500	215
Carpinteria Valley Water District (<i>Includes Summerland</i>)	2,000	00*
City of Buellton	578	583
City of Guadalupe	550	484
City of Santa Barbara	3,000	0
City of Santa Maria	16,200	11,380
Goleta Water District	4,500	32*(+)
La Cumbre Mutual Water Co.	1,000	366
Montecito Water District	3,000	51*
Morehart Land Company	200	1
Raytheon Systems Company	50	55
Santa Ynez River WCD, I.D. #1 (<i>Includes City of Solvang</i>)	2,000	3505*
Vandenberg Air Force Base	5,500	3,438
TOTAL	39,078	23,853
Drought buffer**	3,908	

* Note: Santa Ynez River WCD, I.D. #1 exchanged 2,989 AF of their delivery. Exchange recipients were Goleta (2,444 AF), Montecito (99 AF) and Carpinteria (446 AF)

**The drought buffer entitlement of 3,908 AFY increases the reliability of each project participant's entitlement. This entitlement can be stored for future use and/or requested in dry years when cutbacks are expected to SWP allocations. By storing this water and/or increasing the CCWA's water request in dry years, even after a percentage cutback by the DWR, the CCWA project participants will reduce shortages in their entitlement deliveries.

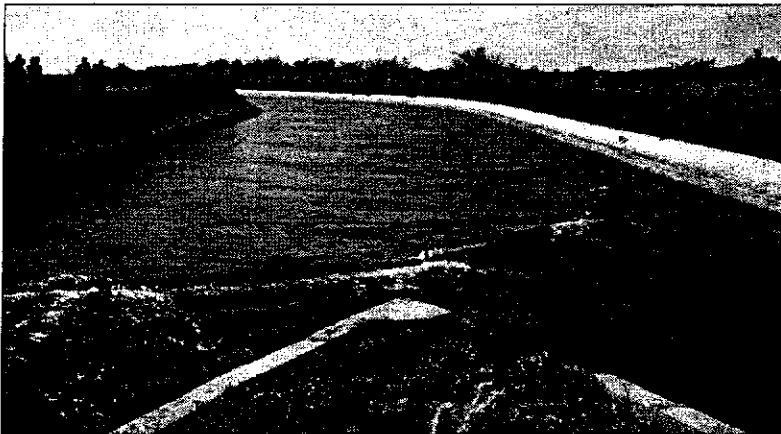
+ Goleta Water District has an additional 2,500 AF drought buffer.

Unit Cost

The cost per AF for SWP water varies depending on the location of each project participant along the pipeline. All participants pay their share of the costs for the water treatment plant located at Polonio Pass based on (1) SWP water entitlement for capital and fixed operating costs and (2) entitlement deliveries for variable costs. Each participant also pays for its share of the Coastal Branch and CCWA Extension fixed and variable costs essentially to the point where it takes delivery of water. Therefore, costs for participants in the northern part of the county are less than for those on the South Coast.

The unit cost of SWP water ranges from about \$900 per AF in Santa Maria to about \$1,500 per AF in the Santa Ynez Valley and South Coast of Santa Barbara County. The unit cost differs for each project participant for a number of reasons including, but not limited to: (1) location along the pipeline (e.g., participants that are located in the north county do not share in the cost of facilities downstream of their turnouts), (2) financing of the CCWA project facilities (certain participants paid cash for their share of the CCWA facilities instead of financing them through the CCWA revenue bond issue), (3) financing of local project facilities using the CCWA revenue bond funds, and (4) capitalizing revenue bond interest during the first three to six years of the bond issue.

*State Water Project
California Aqueduct bringing
Northern California water to
the Coastal Branch pipeline*



Environmental Effects and Mitigation

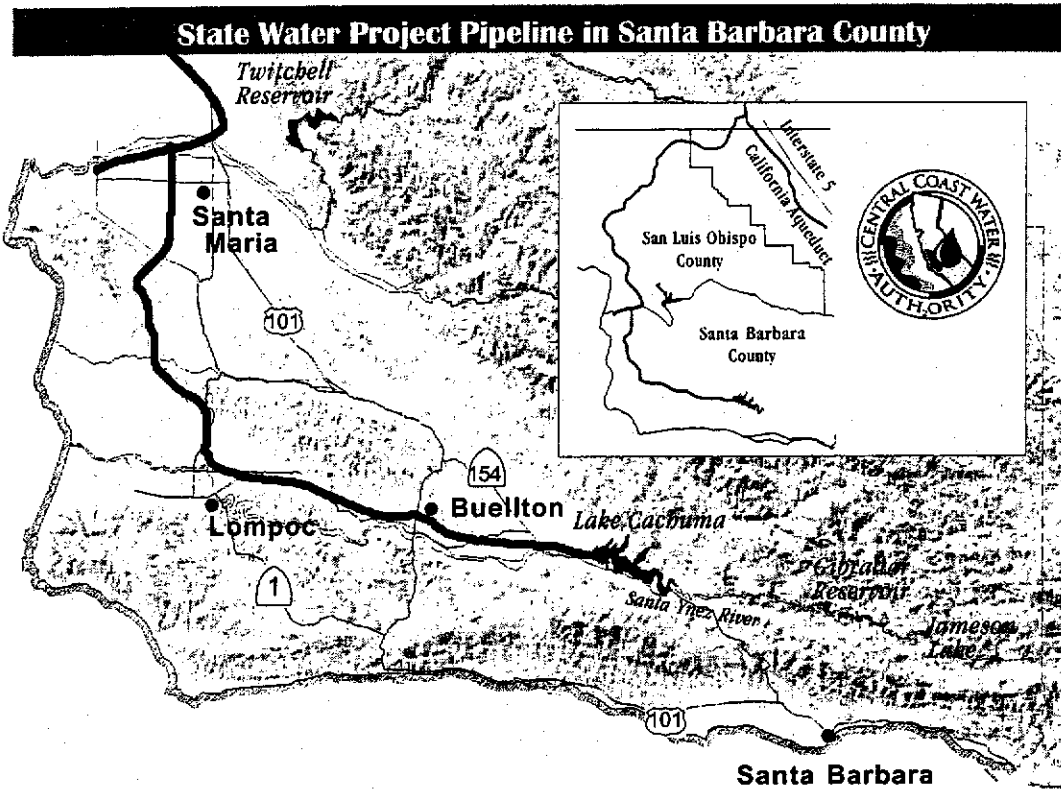
Environmental Impact Reports (EIRs) were completed prior to constructing each segment of the pipeline and associated facilities. These reports documented potential environmental impacts of the project and identified ways to lessen or avoid those impacts. Identified mitigation methods included using existing facilities and avoiding new construction where possible, and locating the pipeline away from environmentally sensitive areas. Changes in the pipeline's location were made to protect sensitive habitats, animal species and cultural resources.

Where it was necessary to remove sensitive native vegetation such as oak trees and Burton Mesa Chaparral, replacement trees and chaparral were planted along the pipeline right-of-way and in other "offsite" areas. During construction of the project, environmental experts were hired to observe and monitor construction activity, and to assist construction teams in avoiding or mitigating impacts to wildlife, biological and cultural resources.

Reliability

The SWP, as with many other sources of water, is not 100% reliable. This is particularly true during droughts or when operational problems occur within the SWP system. Another major factor affecting the reliability of SWP water is the fact that the SWP is not complete. The total complement of facilities needed for the SWP to deliver all of its entitlements is not yet constructed. This is, of course, the subject of much discussion and planning among engineers and planners for the SWP and SWP water contractors. In the meantime, when shortages occur along the system, all contractors must take a proportionate reduction in their entitlement deliveries during the shortage.

The Sacramento-San Joaquin Delta is part of the system that supplies water to SWP water contractors south of the Delta. Since 1995, a group of state and federal resource agencies known as CALFED



has been developing an unprecedented program to restore the Delta's ecosystem and reliability as a water source. In the summer of 1996, after an exhaustive year-long public process, CALFED's Bay-Delta Program identified three alternative solutions that involve different Delta water conveyance facilities and varying levels and locations of water storage. Formal environmental review of these alternatives is ongoing.

Each conveyance system would have an optimal amount of storage to meet overall CALFED goals of an improved ecosystem, improved water quality and more reliable supplies. Implementation of the selected alternative will enhance the reliability of SWP water supplies and reduce shortage reductions.

Benefits

State Water Project water helps:

- Reduce the overdraft in all major groundwater basins in the county except the Cuyama Basin, which does not have a water purveyor that receives SWP water;
- Improve water quality in areas that directly receive SWP water (i.e., participants from San Luis Obispo County in the north and Santa Ynez in the south);
- Increase overall water supply in Santa Barbara County.

For More Information

California Department of Water Resources, 1999. *California State Water Project Atlas*.

Central Coast Water Authority: (805) 688-2292 or CCWA's web site: <http://www.ccwa.com/>