State Water Project

The State Water Project (SWP) depends on a complex system of dams, reservoirs, power plants, pumping plants, canals, and aqueducts to deliver water. Although initial transportation facilities were essentially completed in 1973, other facilities have since been built, and still others are either under construction or are planned to be built as needed. The SWP facilities include 28 dams and reservoirs, 26 pumping and generating plants, and approximately 660 miles of aqueducts.

Courtesy of the California Department of Water Resources

Existing long-term SWP water supply contracts call for the annual delivery of 4,086,021 acre-feet of water through SWP facilities, gradually increasing to a maximum of 4,172,686 acre-feet by 2020. A number of changes have occurred since the long-term water contracts were signed in the 1960s. These changes include population growth variations, differences in local use, local water conservation programs, and conjunctive-use programs. The SWP delivered 1,546,742 acre-feet of approved water to long-term contractors' service areas in 2001. Demands for SWP water are expected to increase as the population of California continues to increase. Water from rainfall and snowmelt

runoff is stored in SWP conservation facilities and delivered via SWP transportation facilities to water agencies and districts in Southern California, Central Coastal, San Joaquin Valley, South Bay, North Bay, and Upper Feather River areas.

Santa Barbara County Involvement in the SWP

In 1963, the Santa Barbara County Flood Control and Water Conservation District contracted with DWR to deliver SWP water. At that time, the County began payments to DWR to retain a share of the SWP yield ("Table A amount"[1]) for 57,700 AFY, but funds were not allocated to construct the necessary local facilities to deliver water within the county.

In 1979, a bond measure was placed before local voters to secure funds to construct the local delivery system to distribute SWP water throughout the county. Fear of growth, environmental concerns, and opposition to high water costs caused a majority of voters to vote against this measure. In 1981, the original contract was amended to reduce the County's State Water Table A amount to 45,486 AFY.

In 1991, after four years of extremely dry conditions, voters in several service areas in 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.

After the bond elections, water purveyors participating in the SWP formed the Central Coast Water Authority (CCWA) 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. An eight-member Board of Directors that includes a representative from each member agency governs the CCWA.

The table on the following page presents the allocated Table A amount of SWP water to each project participant. Existing entitlements range from 50 AFY (Raytheon IO) 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 droughts 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.

[1]SWP contract Article 7b *Maximum Annual Entitlement of Agency. The maximum amount of project water to be made available to the Agency in any one year under this contract shall be that specified in Table A of this contract and in said table designated as the Agencies Maximum Annual Entitlement.*

State Water Allocations in Santa Barbara County		
Project Participant	**SWP Allocation (AFY)**	**Long-Term Average SWP Deliveries* (AFY)**
California Cities Water Co (Southern California Water Company).	500	375
Carpinteria Valley Water District	2,000	1,500
City of Buellton	578	434
City of Guadalupe	550	413
City of Santa Barbara	3,000	2,250
City of Santa Maria	16,200	12,150
City of Solvang	1,500	1,125
Goleta Water District**	4,500	4,500**
La Cumbre Mutual Water Co.	1,000	750
Montecito Water District	3,000	2,250
Morehart Land Company	200	150
Raytheon Infrared Operations	50	38
Santa Ynez River Water Conservation District ID#1	500	375
Vandenberg Air Force Base	5,500	4,125
Total:	**39,078**	**30,434**

Assumed to be 75 percent of Table A amount due to the 2002 reliability percentages provided by the Department of Water Resources.

** *Goleta Water District has an additional drought buffer that allows their long-term average to equal their entitlement.*

Project Reliability

Factors that affect the State Water Project's long-term reliability include timing of additional SWP storage facility construction, ongoing environmental challenges to the SWP, and eventual utilization of full SWP entitlement by other SWP water contractors. Current expectations are that some of the originally conceived SWP facilities will not be constructed so the final overall SWP yield will be reduced. In addition, since recent laws have required that more water than originally planned must be retained in the rivers to preserve aquatic and riparian habitats, the overall SWP yield will be reduced still further. In 2001, the federal government, DWR, the State Water contractors, Central Valley Project (CVP) representatives, agricultural water users and environmental interest group representatives reached an agreement known as the CALFED agreement. The agreement specifies, among other things, operating criteria for the State Water Project and Central Valley Project that provide for leaving sufficient water in the rivers to support critical wildlife habitat. According to the CALSIM I SWP yield model developed by DWR, the long-term average SWP deliveries will be about 70 percent of the SWP allocations with existing (2002) facilities and current operational constraints. Each CCWA participant has a 10% "Drought Buffer" intended to further increase SWP reliability. Therefore, for its land use planning purposes, the County assumes the long-term average annual deliveries to be 75% of each purveyor's entitlement. The table on the previous page indicates what the long-term average annual SWP deliveries will be for each Santa Barbara County State Water contractor.

Santa Barbara County Deliveries

Santa Barbara County SWP deliveries began in 1997. These deliveries have had a significant impact on groundwater conditions in some Santa Barbara County groundwater basins by helping to reduce overdraft and improving groundwater quality. In some areas, State Water has partially replaced groundwater production and, because the quality of State Water is better than that of most local groundwater sources, return flows to groundwater basins will help improve basin water quality over time.

Annual State Water deliveries vary based on local demand, availability due to snow-pack and runoff in the State Water Project watersheds, and *environmental* factors. Total statewide requests for delivery may exceed the systems ability to deliver in certain years. See reliability section above. Therefore, deliveries listed on the following page may not accurately reflect delivery capability in all years, but drought buffer programs, exchanges, transfers, off site storage and conjunctive use programs do increase the reliability of State Water deliveries.

For the above mentioned reasons the amount of State Water offsetting groundwater consumption and the amount returning to groundwater basins is not fully known and thus in the short term it is difficult to determine to what extent any existing overdraft of groundwater supplies may be alleviated. However, for basins in which the use of State Water supplies is substantial compared to the use of groundwater, the benefit is likely to be significant.

The table on the following page shows the deliveries of State Water to which local entities have received during the 2002-2005 period:

State Water Project Deliveries[1] 2002-2005 (Acre-Feet)				
Project Participant	Calendar Year 2002	Calendar Year 2003	Calendar Year 2004	Calendar Year 2005
City of Santa Maria	12,871	12,317	12,427	13,268
California Cities Water Company	223	205	204	194
City of Guadalupe	441	329	386	404
Vandenberg Air Force Base	4,084	4,062	3,855	3,436
City of Buellton	571	557	446	605
City of Solvang[2]	459	1,103	1,042	1,225
Santa Ynez River WCD ID#1[3]	310	674	455	630
Santa Barbara Research Center	55	50	36	50
Morehart Land Company	0	0	84	84
La Cumbre Mutual Water Company	797	990	665	330
Goleta Water District	4,678	2,425	3,406	1,129
City of Santa Barbara	1,352	1,537	1,651	748
Montecito Water District	1,525	1,617	1,893	748
Carpinteria Valley Water District	270	1,104	1,101	493
TOTALS	27,636	26,970	27,651	23,344

1 This table reflects requested deliveries which are less than Table A amounts in many cases.

2 The City of Solvang gets its state water through a contractual arrangement with SYRWCD ID#1; it does not hold a direct allocation to the state water project.

3 The Santa Ynez River Water Conservation District ID #1 (SYRWCD ID#1) actually receives more water than is listed, in exchange for Cachuma Project Water. The Goleta Water District, the City of Santa Barbara, Montecito Water District and Carpinteria Valley Water District get the Cachuma Project Water allotted to SYRWCD ID#1 as part of the "exchange program". **This table reflects actual amounts delivered to the system and then to individual agencies from the State Water Project**.

Groundwater Basin Management Plans

Several cities and water districts are working to prepare groundwater management plans in accordance with local ordinances and agreements as well as Assembly Bill AB 3030. Enacted in 1992, the Bill allows local agencies, with public involvement, to prepare, adopt, and enforce groundwater management plans for the protection of groundwater. These plans are in various stages of completion and there have been few changes since last year. Montecito Water District has adopted a plan. The Carpinteria Valley Water District has approved and adopted a plan for the Carpinteria Basin. The following table summarizes the status of groundwater management plans for the major county basins.

GROUNDWATER MANAGEMENT PLAN STATUS

BASIN	PUBLIC AGENCY PARTICIPANTS[1]	STATUS
Carpinteria	Carpinteria Valley WD	Plan Adopted
Montecito	Montecito WD	Plan Adopted
Santa Barbara	City of Santa Barbara	Plan Adopted
Foothill	City of Santa Barbara	Plan Adopted
Goleta	Goleta WD	Court Action[2]
Santa Ynez Uplands	Santa Ynez River WCD Santa Ynez River WCD ID#1 City of Solvang	In Progress
Buellton Uplands	Santa Ynez River WCD, City of Buellton	Plan Adopted
Lompoc Uplands	City of Lompoc, Mission Hills CSD, Vandenberg Village CSD	No Current Plan
Lompoc Plain	City of Lompoc, Santa Ynez River WCD	In Progress
San Antonio	Los Alamos CSD	No Current Plan
Santa Maria Valley	City of Santa Maria, Santa Maria Valley WCD, Cal Cities	Court Action (Pending)
Cuyama	Cuyama CSD	No Current Plan

[1]Other participants include private water companies and overlying property owners.

[2]The "Wright Suit" Settlement stipulates management actions in the North and Central sub-basins.