

California

At A Glance

CRWUA

Colorado River Profile

Basic allotment of Colorado River water:

4.4 million acre-feet

Percent of basic allocation that is developed:

100 percent

Population served by Colorado River water:

Over 16 million

Irrigated acres served by Colorado River water:

900,000

Major crops under irrigation:

Cantaloupes, dates, grapes and oranges, lemons, avocados, and other fruits; lettuce, tomatoes, onions, carrots and other vegetables; alfalfa, wheat, grasses and other forage crops

Urban areas served in considerable part by Colorado River water:

Approximately 6,000 square miles

Percentage of contribution of Colorado River water to meeting state's water needs:

14 percent

Precipitation in areas of state served by Colorado River water:

From 2.5" to 14"

Facilities that deliver Colorado River water and areas served:

Colorado River Aqueduct - MWD
All-American Canal - IID
Coachella Canal - CVWD
Main Canal - PVID



The Colorado River is a vital link in sustaining the economy of Southern California -- water for irrigation, water for cities and hydroelectric power for both. Today it supplies about 65 percent -- and by the turn of the century, still as much as 55 percent -- of the total water used south of the Tehachapi Mountains, from the Pacific Ocean to the river.

Most of the agricultural use is in the southeastern part of the state -- north and south of the Salton Sea, along the river near Blythe and across the river from Yuma, Arizona. This area

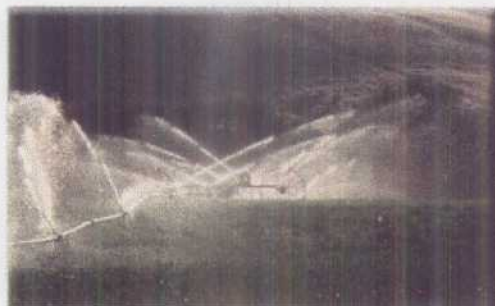
supplies the nation with a large part of its winter fruits and vegetables and many other farm products -- more than \$1 billion worth every year.

Urban use of the Colorado is primarily on Southern California's coastal plain -- from Ventura County to the Mexican border and inland as far as Riverside and San Bernardino



counties. In addition to the large cities of Los Angeles, San Diego and Riverside, some 135 others depend on the Colorado for at least part of their water supply.

In addition, the metropolitan region receives about 3 billion kilowatt-hours a year of electricity from the hydroelectric generating stations on the river.



Six large public agencies have the major rights in Southern California to the state's share of the water and power resources of the Colorado. Palo Verde

Other major water projects serving state:

Los Angeles Aqueduct -
 City of Los Angeles
 Hetch Hetchy Project -
 City of San Francisco
 Mokelumne Aqueduct -
 Oakland and other East
 Bay cities
 State Water Project -
 San Francisco Bay area,
 Central Valley and
 urban Southern
 California
 Central Valley Project -
 federal ownership and
 operation primarily
 serving agricultural
 entities

Irrigation District lies along the river about 110 miles north of the Mexican border. Imperial Irrigation District serves Imperial County south of the Salton Sea. Coachella Valley Water District serves portions of Riverside, Imperial and San Diego counties north of the Salton Sea. Metropolitan Water District of Southern California covers most of the coastal area -- 5,200 square miles extending into Ventura, Los Angeles, Orange, Riverside, San Bernardino and San Diego counties. Rounding out the list of six are the city of Los Angeles' Department of Water and Power, which provides river-generated power to that city, and the San Diego County Water Authority -- both of which are member agencies of Metropolitan and receive their water entitlements through that district.

Major works divert Colorado River water to these many users. Nearly 16 million people are dependent in one fashion or another upon a river that once was considered a wild, unpredictable adversary that could not be defeated.



Of the lower basin's 7.5 million-acre-foot (maf) share of use of the river's water, California's allotment is 4.4 maf. This allotment was meted out following an agreement reached among the

parties in 1931. Palo Verde, the Yuma area, Imperial and Coachella were in line for the first 3.85 maf; Metropolitan has the right to the remaining 550,000. Also allocated were priorities to use of water beyond the state's basic 4.4 maf: the first 662,000 acre-feet to Metropolitan and the next 300,000 acre-feet to Palo Verde, Imperial and Coachella.

As Arizona and Nevada have never taken their full apportionments and as there has been sufficient water in the Colorado for the Secretary of the Interior to declare surpluses, in recent years California has been able to make use of additional supplies. However, things are looking less rosy down the line. According to Bureau of Reclamation projections, Arizona could be taking its full 2.8 maf apportionment by 1995, while Nevada expects to take its total 300,000 acre-foot apportionment by 2006.



Being on one of the bottom rungs of California's water-use ladder, Metropolitan Water District -- serving more than 15 million urban dwellers -- is the first to take the hit when

water supplies are reduced and, in fact, had already had its dependable supply reduced from 1.2 million acre-feet a year to 550,000 acre-feet when the Central Arizona Project was placed into operation. Therefore, Metropolitan, working cooperatively with Imperial, Coachella and Palo Verde, has sought creative ways to stretch supplies -- programs that provide win-win situations.

Imperial Irrigation District and Metropolitan struck a deal that was implemented in December 1989 under which metropolitan pays for water-saving improvements in Imperial's service area in exchange for the conserved supplies. IID provides irrigation water to about 780 square miles of farmland located in the southeast corner of the state -- that's close to half a million acres, more than half of all the crop and pasture land irrigated with Colorado River water in the lower basin. With an annual use approaching 2.6 million acre-feet, Imperial is California's largest consumer of Colorado River water. When the conservation projects are completed, more than 100,000 acre-feet of Colorado River water will be saved each year and Metropolitan will divert that amount from the river for delivery to urban customers through its Colorado River Aqueduct.

Palo Verde Irrigation District holds the earliest formal appropriation of the lower river of "95,000 miners' inches" of water filed by Thomas Blythe in 1877. Today Palo Verde provides approximately 450,000 acre-feet of Colorado



River water each year to some 100,000 acres growing primarily alfalfa, cotton, wheat, melons and lettuce. In an effort to stretch California's river supplies, about 60 farmers in Palo Verde's service area have agreed to idle up to 25 percent of their irrigated land -- in the neighborhood of 20,000 previously producing acres -- for two years in a test land fallowing program with Metropolitan Water District. Over the two-year period, MWD will pay farmers for each acre laid fallow, and will reimburse Palo Verde Irrigation District for administrative costs. This program will make nearly 93,000 acre-feet of water available to urban users each year.

Though agreements were signed for Colorado River water in 1919, Coachella Valley Water District's first imports began in 1948 with the completion of the Coachella Canal branch of the All-American Canal. The All-American carries water some 80 miles west from the southernmost reaches of the river in the U.S. to irrigate fields in Imperial Valley. In a continuing effort to stretch limited water supplies as far as possible, Congress, in

1988, authorized lining portions of the All-American and Coachella canals, through which more than 70,000 acre-feet of water currently soaks into the sand each year. Water conserved by this project, which will be funded 100 percent by California's river allottees, will be available to these agencies in proportion to the funding provided.



The increasing cooperation among California agencies with interests in the Colorado is evidenced by the variety of discussions, studies and negotiations under way -- further land fallowing and a modified alfalfa

irrigation program, groundwater storage and exchange efforts, water banking, remote sensing of land use acquired via satellite imagery to project water use that could lead to further agreements. But perhaps the most far-reaching of all is the landmark proposal in which water for California cities would be stored underground in the Arizona desert -- an imaginative exchange program that provides another environmentally conscious attempt to solve California's serious long-term urban supply problems. Innovative thinking all, these programs show positive energy at work to make the most of California's share of the Colorado.

