Urban Transfer

Most of California's precipitation does not reach the Pacific Ocean or interior lake basins. Instead, the rivers and streams are diverted to thirsty cities and farmlands along the way. Californians everywhere rely on transferred water for drinking, bathing, growing lawns, and producing food.

The map on the left shows aqueducts bringing water to major California cities. While these are the largest artificial "rivers," many others not shown on this map connect all Californians to distant and mostly mountainous water sources (blue features).

In Northern California water from the western Sierra Nevada transported in the Hetch Hetchy Aqueduct sustains 2.3 million people in San Francisco. Just east of San Francisco, the Mokelumne Aqueduct also brings water from the Sierra to other Bay Area cities.

In Southern California three large aqueducts nourish the many densely populated yet arid cities. Water from the eastern Sierra Nevada transported in the Los Angeles Aqueduct sustains over 3 million people in the city of Los Angeles. Melting snow from the Rocky Mountains flows across six other states before entering the Colorado River Aqueduct in southeastern California. From there it supplies water for Southern California, San Diego, and the Mojave Desert. The California Aqueduct also transports water 600 miles from the rivers of northern California to the southern end of the state. Along the entire way many farmlands and two out of every three Californians receive water from this project.

Irrigated Lands

The cities and industries serviced by these and other aqueducts (shown above) consume 20 percent of California's total water supply. The other 80 percent nourishes crops and livestock. These maps show the rapid increase in water used to irrigate agricultural fields during the last century. They also confirm the competing demands for our limited water resources.

Farms in 1912 dominate the eastern Sierra Nevada and Los Angeles. A century later water diversion into the Los Angeles Aqueduct propelled the growth of that city. The farms disappeared at both ends of the water transfer: those in Los Angeles gave way to urbanization while crops at the foot of the eastern Sierra wilted without adequate water. Farms south of San Francisco also disappeared as transported water supported the growth of cities. In contrast, irrigation expanded new farmlands in the Central Valley and Mojave Desert. More recent irrigation also supports the world famous Napa-Sonoma wine region north of the Bay Area.