Water Here, Water There

Fact Sheet

The Problem: In California, about 75% of the rain and snow falls in the northern third of the state. But about 75% of the people live in the southern two-thirds of the state, below Sacramento. The highest demand for water is during the summer months when it rains very little. So getting the water to where it is needed, when it is needed, is a problem.

The Solution: To solve the problem, water must be moved. People have been moving water since they came to California. In the late 1700s, the Spanish missionaries dug ditches to carry water from nearby streams to their crops. In the 1850s, gold miners used miles and miles of ditches to get the water where they needed it for mining. Today water is moved to where it is needed through aqueducts, and it is stored in reservoirs so that it is available when it is needed.

Aqueducts are canals, pipelines, and tunnels that carry water across land and over or through mountains. The system of aqueducts in California moves more water farther than anywhere else in the world.

Aqueducts bring water to the farms and cities that need it. For example:
*   The Tehama-Colusa Canal is almost 11 miles long, supplying Tehama, Glenn, Colusa, and Yolo Counties with water.
*   The Mokelumne Aqueduct—about 100 miles long—supplies water to the city of Oakland and surrounding areas.
*   The Hetch Hetchy Aqueduct was built to bring water 156 miles from the Tuolumne River to the San Francisco area.
*   The Delta-Mendota Canal, about 117 miles long, carries water for irrigation along the west side of the San Joaquin Valley.
*   The Los Angeles aqueduct delivers water 233 miles from the Owens River in the southern Sierra Nevada Mountains to Los Angeles.
*   The Friant-Kern Canal runs 152 miles through the Central Valley, providing irrigation water for farms in the south San Joaquin Valley.
*   The Colorado River Aqueduct, 242 miles long, transports water to farmers in the Imperial and Coachella Valleys and to many people across southern California.
*   The California Aqueduct is the longest aqueduct in California. It begins at the Delta, where the Sacramento and San Joaquin Rivers come together and flow into the San Francisco Bay. This aqueduct stretches 444 miles to southern California. It provides water to cities in southern California and in the San Francisco Bay area. And it provides water to farms in the central and southern parts of the state.

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Fact Sheet (continued)

Reservoirs are used to store water. They are at the beginning and end of rivers and aqueducts and at several points along the way. Reservoirs are usually lakes formed by dams. We have more than 1,300 reservoirs in California.

Reservoirs do more than store water. Many have power plants. The force of the water as it flows out from behind the dam is used to turn generators that produce electricity. This electricity, called hydroelectricity, is a clean, inexpensive source of energy. The power from hydroelectric plants is often used at pumping plants along the aqueducts to pump water over mountains.

The dams on many reservoirs also keep large amounts of water from rushing down rivers all at once and causing a flood. Most reservoirs are used for recreations—like fishing, boating, and swimming. But mainly, our reservoirs supply billions of gallons of water a day to farms, homes, and businesses—when and where it is needed.

While reservoirs and aqueducts provide much water to Californians, in much of the state, people get their water from right beneath their feet! Wells are drilled into the ground to collect the water that seeps into the spaces between underground rocks and soil particles. Some wells are hundreds of feet deep and can provide thousands of gallons of water per minute.

About 15,000 public drinking water systems use groundwater. Many homeowners in rural areas use groundwater right below their property to meet their water needs.

Both surface and groundwater are moved around California in aqueducts. Aqueducts can be pipes or ditches or concrete-lined canals.