

## California State Water Project Overview

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Have you ever wondered where the water you drink and use comes from? To reach many of us, water must travel long distances through complex delivery systems such as the California State Water Project. The SWP is the nation's largest state-built water and power development and conveyance system.

Planned, designed, constructed and now operated and maintained by the California Department of Water Resources, this unique facility provides water supplies for 25 million Californians and 750,000 acres of irrigated farmland.

### Scope

The California State Water Project is a water storage and delivery system of reservoirs, aqueducts, powerplants and pumping plants. Its main purpose is to store water and distribute it to 29 urban and agricultural water suppliers in Northern California, the San Francisco Bay Area, the San Joaquin Valley, the Central Coast, and Southern California. Of the contracted water supply, 70 percent goes to urban users and 30 percent goes to agricultural users.

The Project makes deliveries to two-thirds of California's population. It is maintained and operated by the California Department of Water Resources.

The Project is also operated to improve water quality in the Delta, control Feather River flood waters, provide recreation, and enhance fish and wildlife.

### Size

Today, the Project includes 34 storage facilities, reservoirs and lakes; 20 pumping plants; 4 pumping-generating plants; 5 hydroelectric power plants; and about 701 miles of open canals and pipelines.

The Project provides supplemental water to approximately 25 million Californians and about 750,000 acres of irrigated farmland.

### Financing

Funds from the sale of general obligation and revenue bonds have provided about 78 percent of financing for construction of the State Water Project. Full repayment of these bond funds is being made by Project beneficiaries, rather than by the general taxpayer.

Other funding sources have included tideland oil revenues, investment earnings, legislative appropriations for recreation, federal flood control payments, and water contractor advances.

Currently, short-term financing is obtained by commercial paper notes which are replaced periodically by long-term revenue bonds.

### Annual Costs

Annual costs include the salaries of a diversified team of engineers, biologists, specialists in water development and power generation, hydroelectric plant technicians, and civil maintenance workers, as well as expenses (equipment, supplies etc.) required to operate and maintain SWP facilities. Annual costs also include power purchases, exchanges and sales.

Annual payments by SWP contractors total about \$600 million per year (1996). Of that amount, operation and maintenance (O&M) costs for labor and equipment account for 25 percent. The cost for power (purchases minus sales) amounts to 32 percent. Bond service payments of principal and interest and repayments for other capital financing are about 37 percent. The remaining 6 percent includes deposits for replacement reserves, insurance and other miscellaneous costs.

**Repayment of SWP Costs**

The 29 water contractors repay all water supply related costs of the SWP. These represent about 94 percent of the annual costs for operation and maintenance of SWP facilities. The remaining costs are funded by the federal government for joint operation of San Luis facilities (3 percent) and State general funds for recreation and fish and wildlife enhancement (3 percent).

Contractors also repay with interest about 89 percent of SWP capital expenditures made through 1995. Repayment of the remaining 11 percent comes from the federal government for flood control (2 percent) , the State general funds for recreation and fish and wildlife enhancement (5 percent), and the rest from miscellaneous sources.

All contractors pay the same rate per acre-foot for the cost of constructing and operating facilities which store and convey the SWP water supply. In addition, each contractor pays a transportation charge which covers the cost of facilities required to deliver water to its service area. Thus, the contractors more distant from the Delta pay higher transportation charges than those near the Delta.

Full payments are made each year for fixed SWP costs regardless of the variations in water deliveries that occur from year to year. Fixed costs include those for operation, maintenance and debt service. Contractors also pay costs which do vary depending on the amount of water delivered during the year. These include the costs for energy used to pump water to their aqueduct turnout locations.