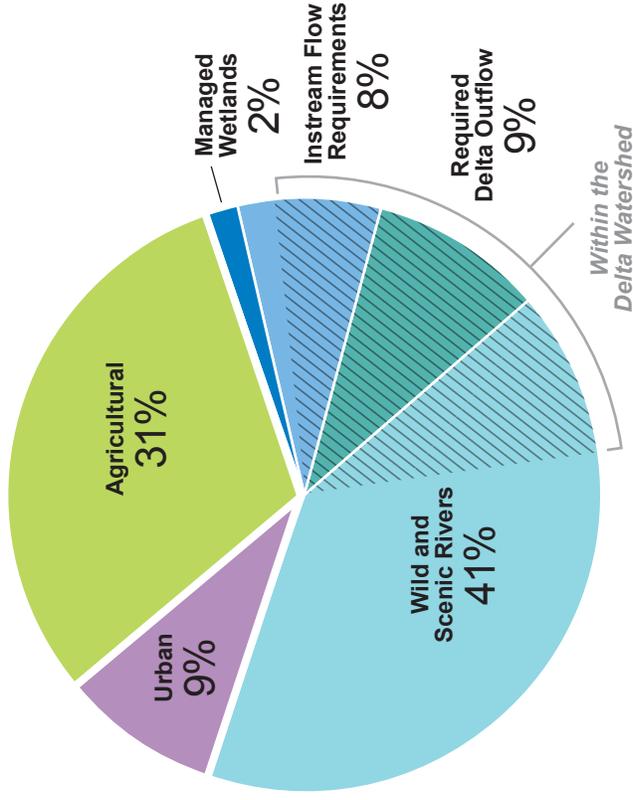




# How Water Is Used in California

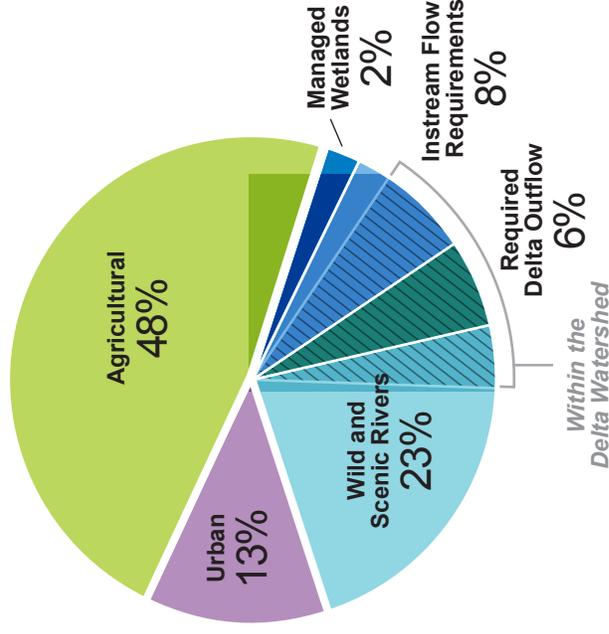
Water Year 2006 (Wet)

108 MAF



Water Year 2007 (Dry)

77 MAF



Water Use	Definition	Applied Water Use	
		2006 (Wet)	2007 (Dry)
Urban	Water for urban purposes, including residential, commercial, institutional, and industrial.	%	%
Agriculture	Water for irrigated agriculture including multi-cropping.	9%	13%
Managed Wetlands	Water for managed wetland areas.	31%	48%
Minimum Instream Flow Req'ts	Water within natural waterways as specified in an agreement, water rights permit, court order, FERC license, etc.	2%	2%
Minimum Required Delta Outflow*	Freshwater outflow from the Sacramento-San Joaquin Delta required by law to protect the beneficial uses within the Delta from the incursion of saline water.	8%	8%
Wild and Scenic Rivers	Over 2,000 miles of river systems are designated wild, scenic, and recreational under the 1968 National Wild and Scenic Rivers Act and the 1972 California Wild and Scenic Rivers Act.	9%	6%
		41%	23%
		MAF	MAF
		9.5	9.6
		33.3	36.9
		1.6	1.6
		8.5	6.5
		10.1	4.5
		44.8	18.1

\* Total Delta Outflow is higher than Required Delta Outflow: 2006=41.3 maf and 2007=6.2 maf (pie chart includes Required Delta Outflow only). Quantities reflect surface and groundwater supplies.



### Where Does California's Water Go?

- California's water supports three main sectors: cities and communities, agriculture and environment.
- On average, the proportion of water used by each sector is 10 percent cities and communities, 40 percent agriculture, and 50 percent environment.
- This statewide ratio varies widely depending upon whether a year is wet or dry.
- Water often serves double duty: Water allocated for one purpose is often reused for another purpose downstream.

### Where Does Water Devoted to Municipal and Industrial Purposes Go?

- California is the most populous state in the nation, with 38.7 million people as of January 2015. Demographers predict steady future growth, with the state's population projected to reach more than 51 million by 2060.
- Economists put the value of all goods and services produced in the state in 2014 at \$2.3 trillion, making California the 8th largest economy in the world.
- Total urban water use in California is approximately 9.5 million acre-feet a year. Of that, approximately half goes to landscaping. Roughly one-third of total urban water use goes to residential landscaping, with another 16 percent used on the landscapes of commercial and governmental institutions.
- Another third of total urban water use is used in people's homes and apartments, with an additional 9 percent used within commercial and institutional buildings.
- According to the Public Policy Institute of California, the share of water devoted to industry is shrinking. Industry now uses only 6 percent of urban water, down from 8 percent in 1990. Businesses and industry are getting more efficient, according to the PPIC, which found that water used by cities generated roughly 2.4 times more economic value per gallon in 2010 than it did in 1967.
- Water used to help generate electricity involves roughly 2 percent of total urban water use.
- Getting water to homes, parks, businesses, factories, and other enterprises within California's cities and towns is largely a local endeavor.
- Nearly 400 large water districts provide water for more than 90 percent of the state's population, while thousands of smaller utilities serve rural communities.

- Water from local aquifers and reservoirs makes up the largest share of the water that supplies California's municipal and industrial needs.
- But at least one-fourth of the water used in metropolitan Southern California and the San Francisco Bay Area comes from the Sacramento-San Joaquin Delta through the pumps and aqueducts of the State Water Project. Hundreds of billions of dollars of economic activity are tied to these water deliveries, from the tourist economy of San Diego to the manufacturing hub of Los Angeles to the technology company campuses of Silicon Valley.
- Water delivered from the Delta makes up some or all of the water supplies of two-thirds of the state's population, or 25 million people.

### Much of Our Water Has Multiple Purposes

- Protecting water supplies that are drawn from the Delta involves the control of saltwater that pushes inland from San Francisco Bay.
- Water released from upstream reservoirs to flow into the Delta to repel salt water intrusion often serves the dual purpose of also helping native fish.
- Much of the water dedicated to agriculture in California also supports environmental habitats. For example, flood-irrigated rice fields serve as critical feeding grounds for many species of migratory birds.

### Drought Diminishes Supplies to All Sectors

- This year, California communities were ordered to reduce their overall water use by an average of 25 percent compared to 2013. State regulators tailored mandatory cutback targets ranging from 4 percent to 36 percent for each community based on past conservation efforts.
- In response, local water districts have issued emergency regulations restricting outdoor water use; invested hundreds of millions of dollars in rebate programs to encourage homeowners to replace lawns and install more efficient toilets, washing machines, shower heads and other appliances and fixtures; altered rate structure to encourage conservation; boosted enforcement of water-use restrictions; and supported public awareness campaigns to help teach Californians how to save water every day.
- A recent analysis by the University of California, Davis, Center for Watershed Sciences estimates that in 2015, surface water deliveries to farmers will be reduced by 8.7 million acre-feet. Groundwater pumping will increase an estimated 6.2 million acre-feet, for a net loss of 2.5 million acre-feet to California's farms.

- Experts put the economic cost to California's farm economy at roughly \$2.7 billion and estimate that nearly 19,000 farm jobs -- most in the San Joaquin Valley -- have been lost due to drought.
- In dry years, environmental flows are naturally reduced, as are many regulatory flow and water quality requirements. Some streams have dried up entirely. Others are slack and warm enough to threaten native fish populations.
- In the past two years of severe drought, flow requirements for environmental purposes also have been reduced by state regulators struggling to balance multiple demands for water. The State Water Resources Control Board has issued 12 separate orders since January 2014 in the Delta alone, reducing flows required for environmental purposes. These reductions made over 400,000 acre-feet of water available for other purposes in 2014, and another 600,000 acre-feet that will be made available for other purposes in 2015.

### Future Growth Will Use Water Wisely

- Steadily, California's homes and businesses are becoming more water-efficient. Despite growth, overall urban water use has remained relatively flat over the past 20 years. According to the PPIC, average per capita urban daily water use has fallen nearly 23 gallons to 178 gallons since 1995, helping the state to absorb growth without additional supplies.
- Landscaping offers great potential for future water savings. The state is updating a model landscape ordinance that would reduce the water use by new homes by 30 percent and cut water use on new commercial landscapes by 40 percent. The model ordinance sets efficiency standards that each community must meet or exceed. It also encourages the capture of rainwater and gray water.
- California is expected to add 472,000 single- and multi-family housing units with an associated 20,000 acres of new landscape over the next three years, according to state demographers. New landscape standards are critical to ensure that new plantings are as efficient as possible.
- New state regulations also will boost water-use efficiency indoors. Building standards will be updated to require bathroom faucets and urinals to use less water, which will save millions of gallons of water a year in new buildings.