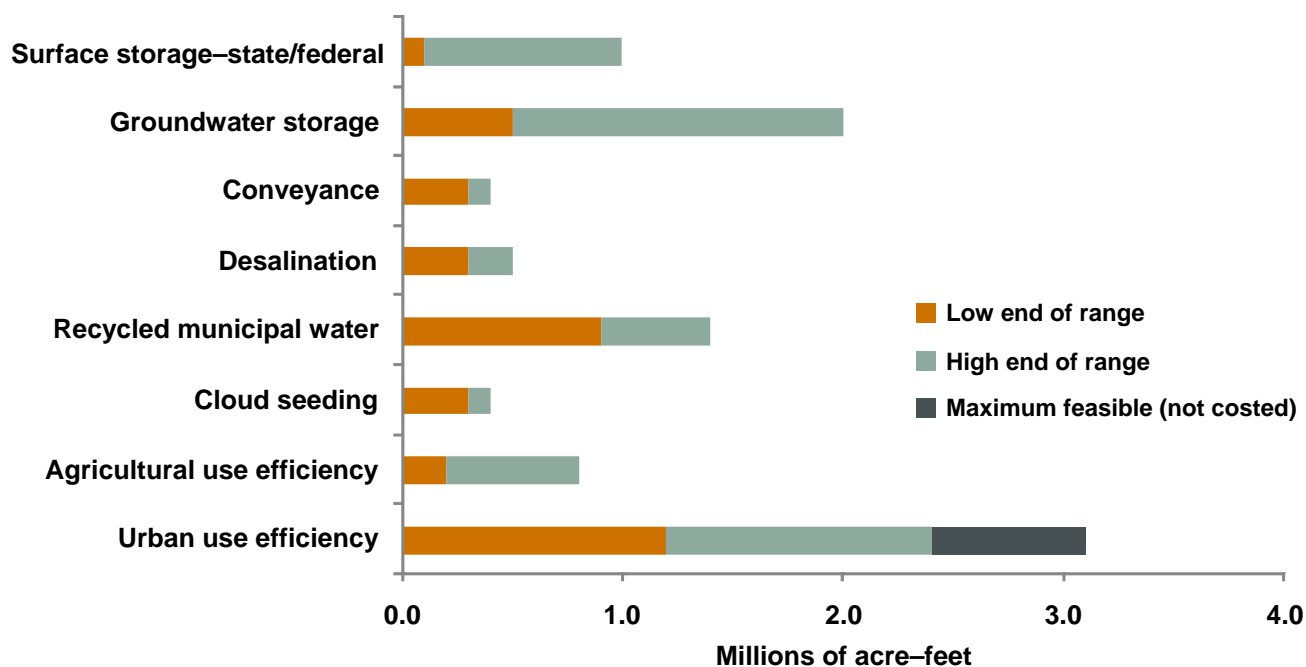


- **WATER MANAGEMENT IS PRIMARILY A LOCAL RESPONSIBILITY IN CALIFORNIA.**  
Although state and federal agencies play a role in all aspects of water management, local utilities and governments are the frontline institutions. Some 400 large water utilities supply most California homes and businesses. Nearly 600 wastewater utilities are responsible for meeting the clean water standards for municipal wastewater discharge. Hundreds of agricultural water districts manage water resources for California's farmers. Agricultural districts and city and county governments have become responsible for managing runoff – a major source of water pollution.
- **AGRICULTURE IS STILL CALIFORNIA'S LARGEST WATER USER, BUT URBAN DEMANDS ARE GROWING.**  
In 2000, a year of normal rainfall, California's farmers used 34.3 million acre-feet (maf) of water, roughly four times as much as California's residential, commercial, and industrial users combined. (An acre-foot, enough to cover one acre of land with one foot of water, equals 325,851 gallons). Although agricultural use is expected to decline 5 to 10 percent by 2030 due to various market forces, California's population is expected to increase by 14 million (40%) from 2000 to 2030. This implies a 3.6 maf increase in urban demand at current levels of per capita use (232 gallons per day). However, conservation measures could lower demand growth considerably.
- **NUMEROUS SUPPLY OPTIONS ARE AVAILABLE TO MEET WATER DEMAND GROWTH.**  
California has a large portfolio of cost-effective options for expanding supplies by 2030. These include underground storage in groundwater basins (up to 2 maf), recycled municipal water (up to 1.4 maf), and desalination (up to 0.5 maf). Urban conservation by current residents could generate the most savings, making more than 2 maf available to support new demands cost-effectively. New surface storage options may also play a role, although financial and environmental considerations make them more debatable.
- **FINDING A LONG-TERM SOLUTION TO PROBLEMS IN THE DELTA IS A MAJOR CHALLENGE.**  
The Sacramento-San Joaquin Delta's 1,100 miles of levees face high risks of catastrophic failure by mid-century because of seismic risk, sea level rise, and increased flood flows due to global warming. Such a failure could cut back water supplies for the San Joaquin Valley, Southern California, and the Bay Area. Since late 2007, water supplies moving through the Delta have been reduced to help meet the needs of endangered fish species whose populations are declining.
- **CALIFORNIA'S RATEPAYERS CAN COVER MOST INVESTMENT NEEDS.**  
Utilities fund most investments with water and wastewater charges, and these charges are still fairly low, leaving room for rate increases as new investments are needed. The state faces greater challenges in paying for environmental water needs, which do not have a reliable revenue stream. Over the last decade, state bonds have been the major source of funding for ecosystem restoration.

## Annual Production Potential from New Water Supply Sources and Conservation, 2000–2030



## Water and Wastewater Charges as a Share of Median Household Income, 2004–2006

	Average yearly water use (af)	Average yearly water bill (\$)	Water bill as share of median income (%)	Average yearly wastewater bill (\$)	Wastewater bill as share of median income (%)
<b>San Francisco Bay Area</b>	0.37	412	0.58	326	0.49
<b>Southern Coast</b>	0.58	535	0.97	239	0.49
<b>Central Coast</b>	0.38	661	1.14	305	0.54
<b>Inland Empire</b>	0.59	413	0.87	192	0.41
<b>San Joaquin Valley</b>	0.63	321	0.74	206	0.52
<b>Sacramento Metro Area</b>	0.49	362	0.69	281	0.54
<b>Rest of State</b>	0.47	390	1.06	263	0.72
<b>California</b>	0.52	467	0.86	253	0.50

**Note:** Water rates are for 2006; wastewater rates are for 2004. Sample includes 443 water service areas and 560 wastewater service areas. For 96% of households, total fees are 2% or less of household income.

**Sources:** PPIC calculations using data from Black & Veatch and U.S. Census. *California Water Plan Update*, Department of Water Resources, 2005.

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