

Figure 1

March 12, 2012

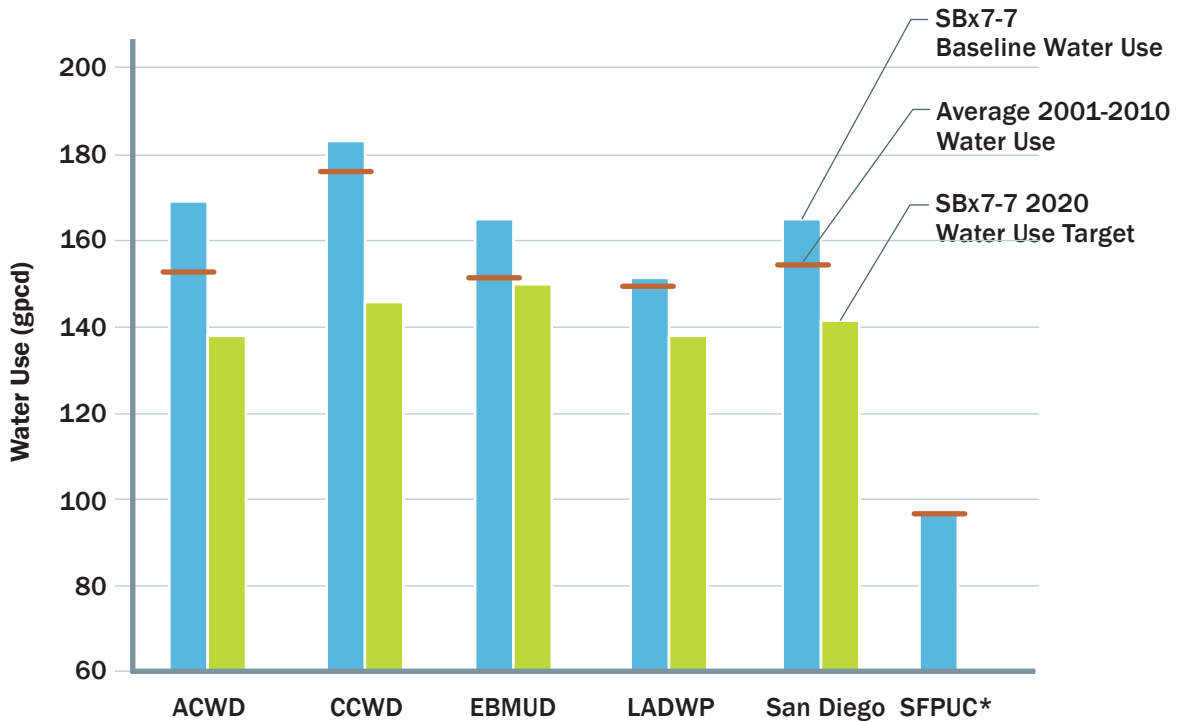
As of 2010, 64% of the state's population resides within the areas served by CUWA member agencies



- Information is taken from the 2010 Urban Water Management Plans prepared by each CUWA agency.
- Six of the 10 CUWA agencies directly serve retail water to 8.5M people. Water delivered to another 15.5M people is delivered wholesale through CUWA agencies to other retail water suppliers.

Figure 2

CUWA's Retail Agencies are **on Track** to Meet 20 x 2020, but... It's Early and There is **More Work to Do**



$$\text{gpcd} = \frac{\text{total potable water use (gallons/day)}}{\text{population served (capita)}}$$

Notes:

The CUWA agencies' SBX7-7 Baseline Water Use will vary depending on the 10-year averaging period selected from 1994 to 2010. SFPUC is not subject to SBX7-7 targets because baseline <100 gpcd.

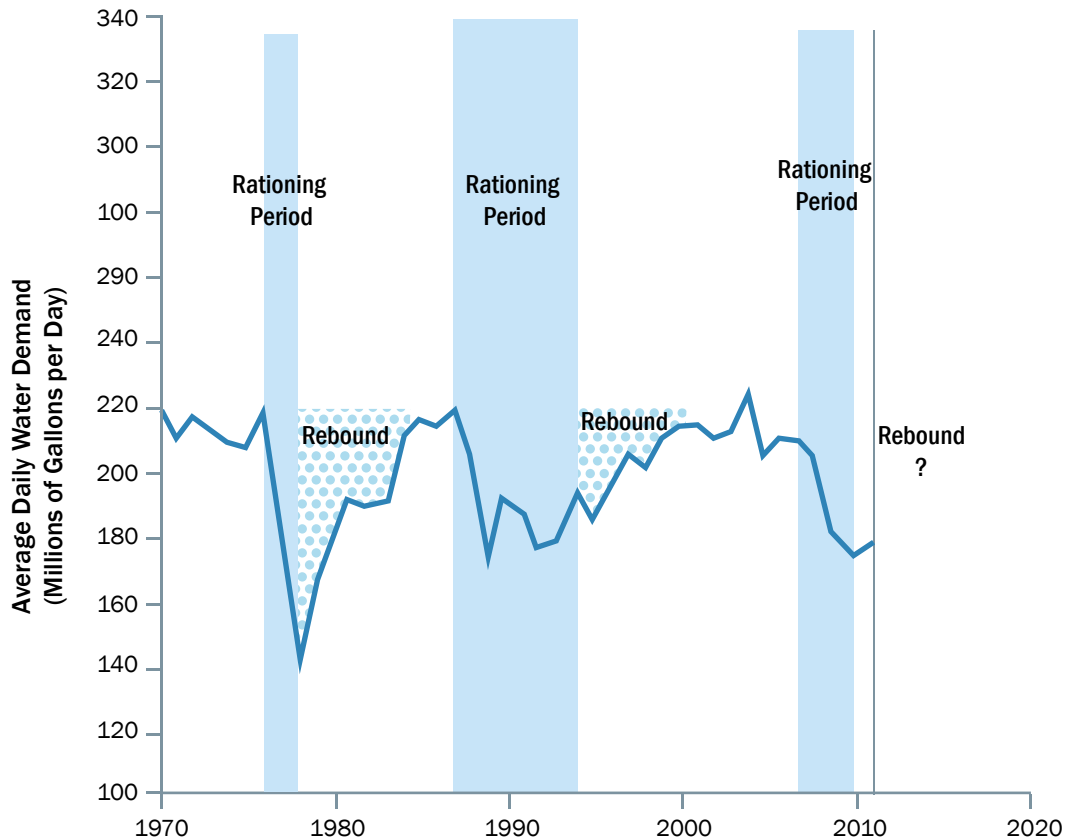


- Starting in 1990, CUWA agencies have aggressively invested in water conservation programs and pursued plumbing code changes. With these continuing efforts, CUWA agencies are on track to achieve the 20 by 2020 water use target.
- Comparisons of gpcd from one agency to another can be misleading, given differences in the degree of commercial and industrial use, demographics, and climate. Comparisons from one year to another can also be confusing, with year-to-year variation in climatic and economic conditions.
- While the CUWA agencies are encouraged by their progress on conservation, it is very early in the process. Water sales have been low in recent years due to a number of factors, which may change in the future. CUWA agencies will continue to promote water-use efficiency to sustain long-term behaviors and consistently meet the 2020 target.

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Figure 3

2010 Water Demands were Unique, Given Climatic and Economic Conditions Some **Rebound** Could Occur in the **Future**



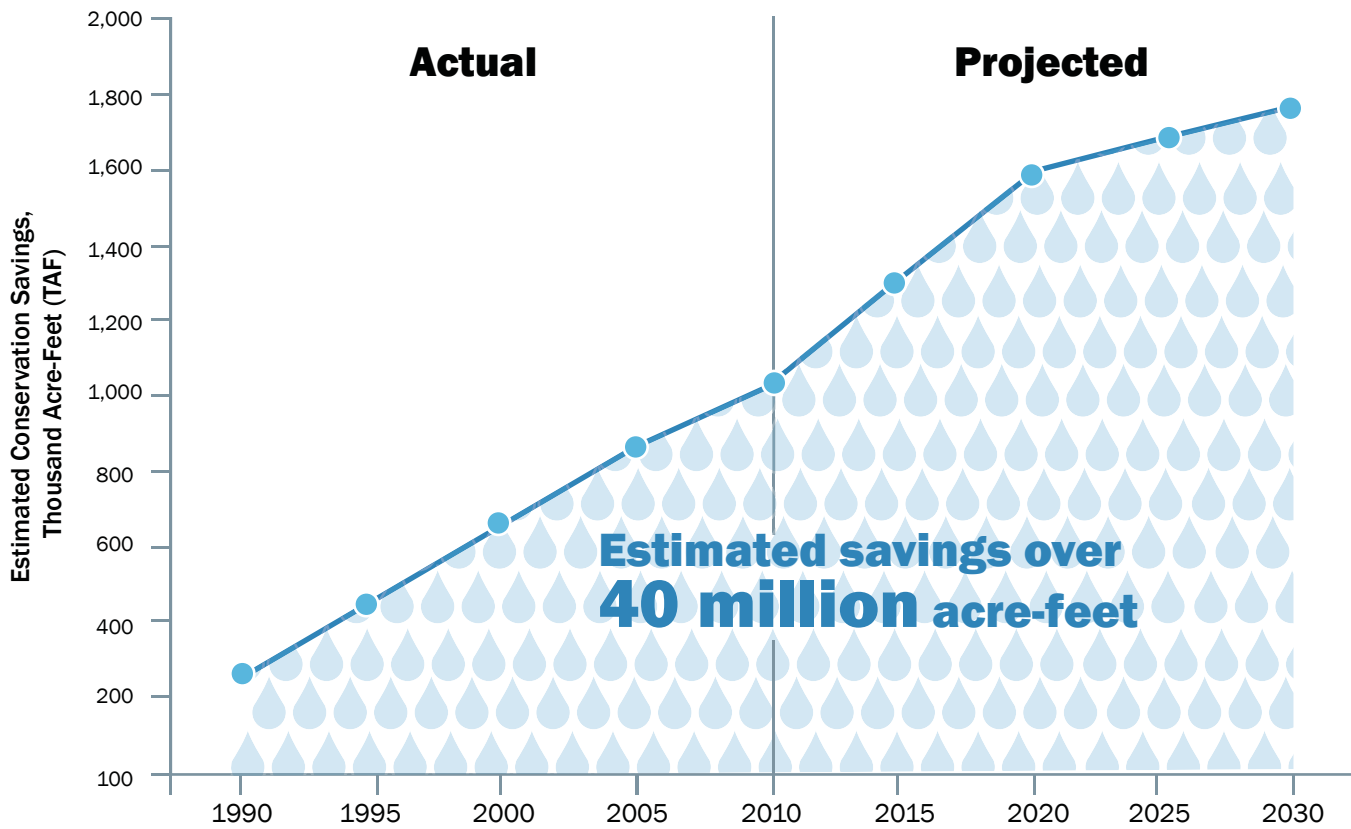
Illustrative Example



- 2010 was a unique year, with very low water use, as a result of numerous factors (end of a 3-year drought, ongoing Delta pumping restrictions, and an economic downturn)
- Historic water demand data have shown a characteristic rebound in water demand after previous droughts and water rationing.

Figure 4

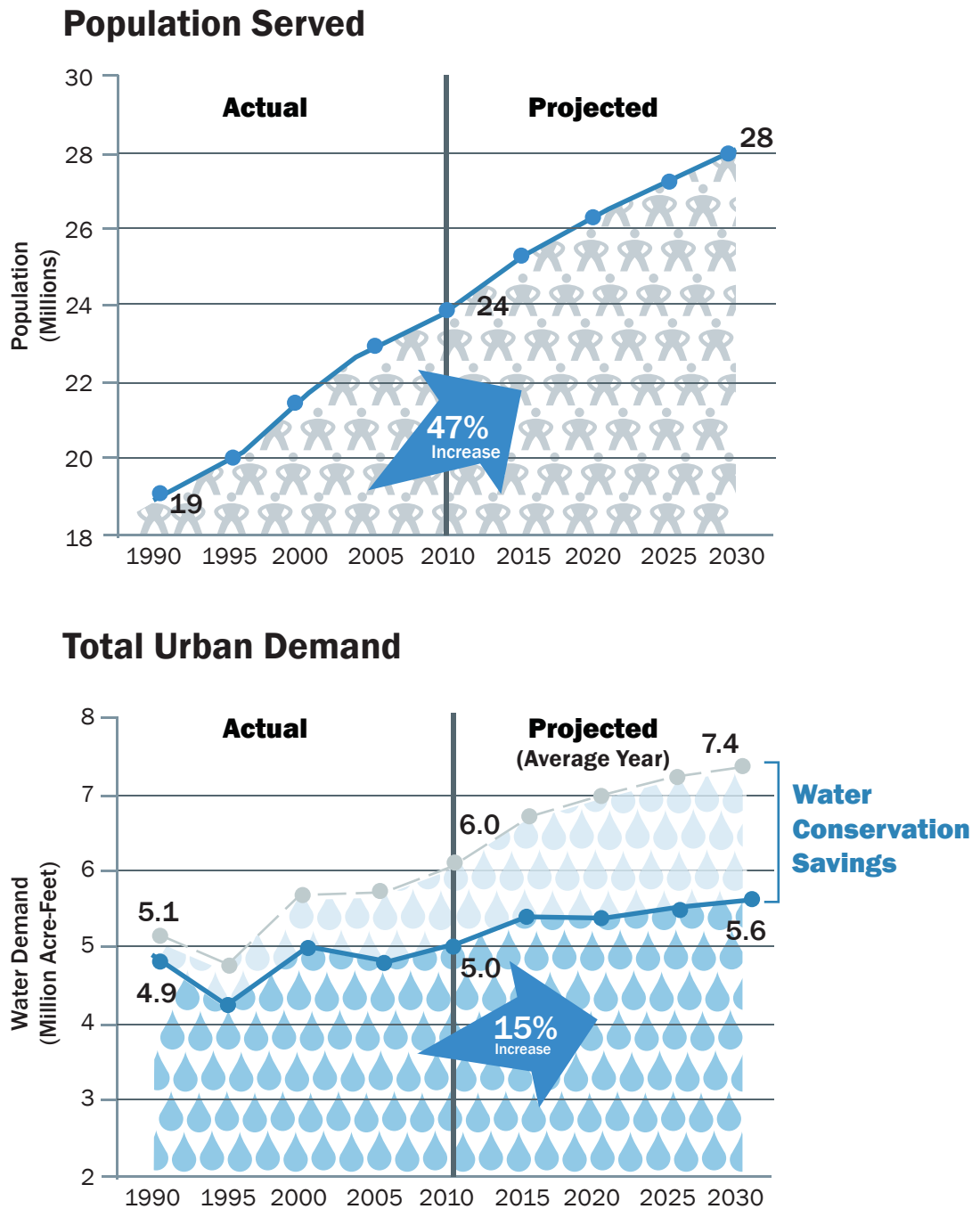
All CUWA Agencies are Making **Steady Progress** on **Total Water Savings**



- Estimated conservation savings is a measure of progress due to long-lasting changes in behavior and infrastructure
- CUWA agency conservation programs have already achieved significant savings estimated at about 1 million acre-feet/year in 2010 (a 4-fold increase since 1990). Annual savings are expected to grow to 1.6 million acre-feet/year by 2020.

Figure 5

Even with steady population growth, CUWA Agencies are effectively **Managing Water Demands**



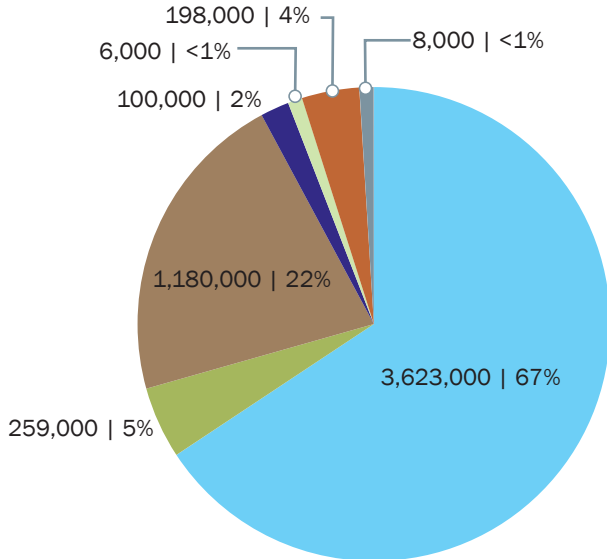
- Even with a 47% predicted population growth from 1990 to 2030, CUWA agencies are working to manage the increase in demand to 15% over the same time frame.
- By nature, water agencies tend to have high fixed costs, which remain constant even though revenues are reduced by lower demand. All agencies are facing a challenge related to funding projects and programs (including conservation) while revenues are dropping.

Figure 6

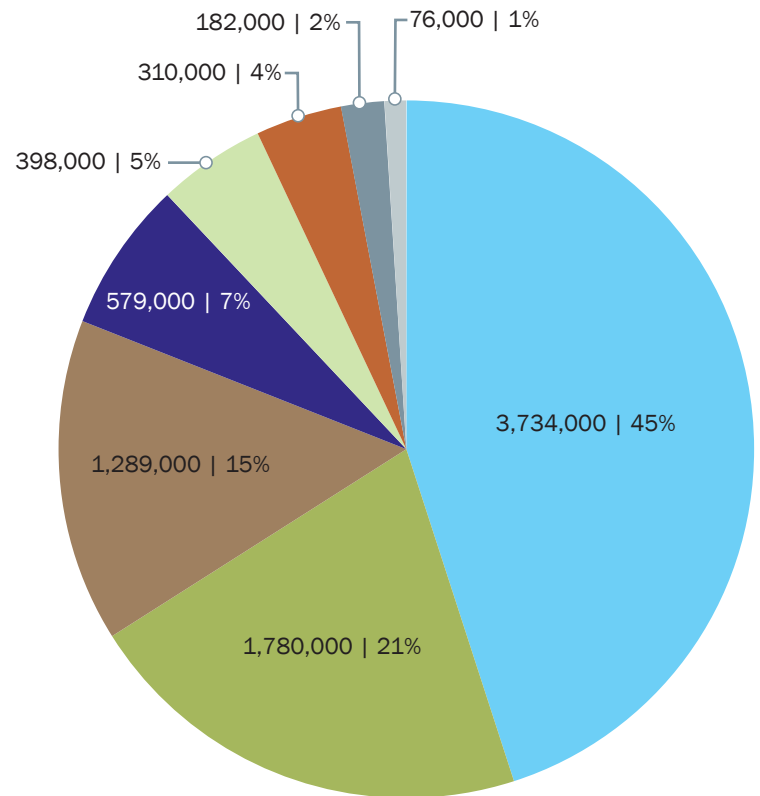
Beyond 20 x 2020

CUWA Agencies are **Diversifying Water Supplies to Improve Long-term Water Reliability**

1990 Total Supply 5.4 MAF



2030 Total Supply 8.3 MAF (Average year)



- Water Banks & Transfers
- Ocean/Brackish Desalination
- Other Local Supplies
- Ag Efficiency Transfer to Urban
- Recycled Water
- Groundwater
- Conservation Savings*
- Imported Water

* For the purposes of this plot, we broadly define water supplies to include conservation savings, though this is technically not a new source of supply.



- **Even with conservation savings growing 6-fold from 1990 to 2030, agencies will still need to diversify their water portfolios and develop new supplies to meet future demands of a growing population.**
- **Significant new sources of supply since 1990 include:**
 - Recycled water – increasing from 100,000 to 600,000 acre-feet
 - Desalination – increasing from about 8,000 to 182,000 acre-feet
 - Ag Efficiency Transfer to Urban (i.e., transfer of conserved agricultural water to urban use) – increasing from 6,000 to nearly 400,000 acre-feet
- **CUWA agencies are taking their own initiative to develop local supplies to improve self-sufficiency and future water supply reliability.**