

SECTION 7
WATER SUPPLY VERSUS DEMAND COMPARISON

This section provides a comparison of the projected water supply and demand for the City from 2005 through 2030. Water supply to demand comparisons are also provided for single-dry year and multiple-dry year scenarios. The water demands are developed in Section 3, water supplies are defined in Section 4, and recycled water supplies are presented in Section 5 of this report. Decreased water use resulting from water conservation is accounted for in the Section 3 water demands.

7.1 Normal Water Supply vs. Demand Comparison

The analysis compares the projected normal water supply available to the City and required customer demands from 2010 to 2030, in five-year increments. The projected available normal climate year water supply and demands are presented in Tables 7-1 and 7-2, respectively.

Table 7-1. (DWR Table 40) Projected Normal Water Supply – ac-ft/yr

(from DWR Table 4)	2010	2015	2020	2025	2030
Supply	28,528	30,669	32,692	34,733	36,186
Percent of year 2005	109%	117%	125%	132%	138%

Table 7-2. (DWR Table 41) Projected Normal Water Demand – ac-ft/yr

(from DWR Table 15)	2010	2015	2020	2025	2030
Demand	28,528	30,669	32,692	34,733	36,186
Percent of year 2005	109%	117%	125%	132%	138%

Note:
 Demands assume compliance with local plumbing codes

The comparison of projected water supply and demand is presented in Table 7-3.

Table 7-3 (DWR Table 42) Projected Supply and Demand Comparison – ac-ft/yr

	2010	2015	2020	2025	2030
Supply totals	28,528	30,669	32,692	34,733	36,186
Demand totals	28,528	30,669	32,692	34,733	36,186
Difference	0	0	0	0	0
Difference as Percent of Supply	0	0	0	0	0
Difference as Percent of Demand	0	0	0	0	0

7.2 Dry Year Water Supply vs. Demand Comparison

It is not likely that a drought would reduce the volume of surface water available to the Agency, for reasons set forth in Table 5-2 and 5-3 of the Agency's UWMP 2000. There is significant water in storage upon which the Agency is entitled to withdraw. Tables 7-4 through 7-6 provide a comparison of a single dry year water supply with projected total water use over the next 25 years, in five-year increments. Dry year water supply is based on Agency modeling from the Agency's 2000 Urban Water Management Plan because the 2005 Agency Urban Water Management Plan is not yet completed.

Table 7-4. (DWR Table 43) Projected Single-Dry Year Water Supply – ac-ft/yr

	2010	2015	2020	2025	2030
Supply	28,528	30,669	32,692	N/A ^a	N/A ^a
Percent of projected normal	100%	100%	100%	N/A ^a	N/A ^a

^a N/A – Not Available. The Agency's 2000 Urban Water Management Plan only provides projections through 2020.

Table 7-5. (DWR Table 44) Projected Single-Dry Year Water Demand – ac-ft/yr

	2010	2015	2020	2025	2030
Demand	28,528	30,669	32,692	34,733	36,186
Percent of projected normal	100%	100%	100%	100%	100%

Table 7-6. (DWR Table 45) Projected Single-Dry Year Supply and Demand Comparison – ac-ft/yr

	2010	2015	2020	2025	2030
Supply totals	28,528	30,669	32,692	N/A ^a	N/A ^a
Demand totals	28,528	30,669	32,692	34,733	36,186
Difference	0	0	0	N/A ^a	N/A ^a
Difference as Percent of Supply	0 %	0%	0%	N/A ^a	N/A ^a
Difference as Percent of Demand	0 %	0%	0%	N/A ^a	N/A ^a

^a N/A – Not Available. The Agency's 2000 Urban Water Management Plan only provides projections through 2020.

Tables 7-7 through 7-18 compare the total water supply available in multiple dry water years with projected total water use over the next 20 years, in one-year increments. The Agency supply data is based on the Agency's 2000 Urban Water Management Plan because the Agency's 2005 Urban Water Management Plan is not available. Groundwater supply reliability is based on discussion in Section 4.2.5 of this report. Recycled water is assumed to be available even during multiple dry years. Individual year data is derived from the trend line of the known 5-year increments.

Table 7-7. (DWR Table 46) Projected Supply during Multiple-Dry Year Period Ending in 2010 – ac-ft/yr

	2006	2007	2008	2009	2010
Supply	26,694	27,152	27,611	28,069	28,528
Percent of projected normal	100%	100%	100%	100%	100%

Table 7-8. (DWR Table 47) Projected Demand Multiple-Dry Year Period Ending in 2010 - ac-ft/yr

	2006	2007	2008	2009	2010
Demand	26,694	27,152	27,611	28,069	28,528
Percent of projected normal	100%	100%	100%	100%	100%

Table 7-9. (DWR Table 48) Projected Supply and Demand Comparison during Multiple-Dry Year Period Ending in 2010 – ac-ft/yr

	2006	2007	2008	2009	2010
Supply totals	26,694	27,152	27,611	28,069	28,528
Demand totals	26,694	27,152	27,611	28,069	28,528
Difference	0	0	0	0	0
Difference as Percent of Supply	0%	0%	0%	0%	0%
Difference as Percent of Demand	0%	0%	0%	0%	0%

Table 7-10. (DWR Table 49) Projected Supply during Multiple-Dry Year ending in 2015 – ac-ft/yr

	2011	2012	2013	2014	2015
Supply	28,956	29,384	29,813	30,240	30,669
Percent of projected normal	100%	100%	100%	100%	100%

Table 7-11. (DWR Table 50) Projected Demand Multiple-Dry Year Period Ending in 2015 - ac-ft/yr

	2011	2012	2013	2014	2015
Demand	28,956	29,384	29,813	30,240	30,669
Percent of projected normal	100%	100%	100%	100%	100%

Table 7-12. (DWR Table 51) Projected Supply and Demand Comparison during Multiple-Dry Year Period Ending in 2015- ac-ft/yr

	2011	2012	2013	2014	2015
Supply totals	28,956	29,384	29,813	30,240	30,669
Demand totals	28,956	29,384	29,813	30,240	30,669
Difference	0	0	0	0	0
Difference as Percent of Supply	0%	0%	0%	0%	0%
Difference as Percent of Demand	0%	0%	0%	0%	0%

Table 7-13. (DWR Table 52) Projected Supply during Multiple-Dry Year Period Ending in 2020 – ac-ft/yr

	2016	2017	2018	2019	2020
Supply	31,073	31,478	31,882	32,287	32,692
Percent of projected normal	100%	100%	100%	100%	100%

Table 7-14. (DWR Table 53) Projected Demand Multiple-Dry Year Period Ending in 2020 – ac-ft/yr

	2016	2017	2018	2019	2020
Demand	31,073	31,478	31,882	32,287	32,692
Percent of projected normal	100%	100%	100%	100%	100%

Table 7-15. (DWR Table 54) Projected Supply and Demand Comparison during Multiple-Dry Year Period Ending in 2020 – ac-ft/yr

	2016	2017	2018	2019	2020
Supply totals	31,073	31,478	31,882	32,287	32,692
Demand totals	31,073	31,478	31,882	32,287	32,692
Difference	0	0	0	0	0
Difference as Percent of Supply	0%	0%	0%	0%	0%
Difference as Percent of Demand	0%	0%	0%	0%	0%

Table 7-16. (DWR Table 55) Projected Supply during Multiple-Dry Year Period Ending in 2025 – ac-ft/yr

	2021	2022	2023	2024	2025
Supply	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a
Percent of projected normal	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a

^a N/A – Not Available. The Agency's 2000 Urban Water Management Plan only provides projections through 2020.

Table 7-17. (DWR Table 56) Projected Multiple-Dry Year Period Ending in 2025 - ac-ft/yr

	2021	2022	2023	2024	2025
Demand	33,100	33,508	33,916	34,324	34,733
Percent of projected normal	100%	100%	100%	100%	100%

Table 7-18. (DWR Table 57) Projected Supply and Demand Comparison during Multiple-Dry Year Period Ending in 2025 – ac-ft/yr

	2021	2022	2023	2024	2025
Supply totals	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a
Demand totals	33,100	33,508	33,916	34,324	34,733
Difference	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a
Difference as Percent of Supply	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a
Difference as Percent of Demand	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a

^a N/A – Not Available. The Agency's 2000 Urban Water Management Plan only provides projections through 2020.