# Water Conservation Act of 2009
# SB X7-7
# Verification Forms

## Bakersfield District

## 2015 Urban Water Management Plan
## Appendix I

| SB X7-7 Table-1: Baseline Period Ranges | | | |
|---|---|---|---|
| **Baseline** | **Parameter** | **Value** | **Units** |
| 10- to 15-year baseline period | 2008 total water deliveries | 82,317 | Acre Feet |
| | 2008 total volume of delivered recycled water | - | Acre Feet |
| | 2008 recycled water as a percent of total deliveries | 0.00% | Percent |
| | Number of years in baseline period[1, 2] | 10 | Years |
| | Year beginning baseline period range | 1995 | |
| | Year ending baseline period range[3] | 2004 | |
| 5-year baseline period | Number of years in baseline period | 5 | Years |
| | Year beginning baseline period range | 2003 | |
| | Year ending baseline period range[4] | 2007 | |

*[1] If the 2008 recycled water percent is less than 10 percent, then the first baseline period is a continuous 10-year period. If the amount of recycled water delivered in 2008 is 10 percent or greater, the first baseline period is a continuous 10- to 15-year period.* *[2] The Water Code requires that the baseline period is between 10 and 15 years. However, DWR recognizes that some water suppliers may not have the minimum 10 years of baseline data.*

*[3] The ending year must be between December 31, 2004 and December 31, 2010.*

*[4] The ending year must be between December 31, 2007 and December 31, 2010.*

| SB X7-7 Table 2: Method for Population Estimates | |
|---|---|
| **Method Used to Determine Population** (may check more than one) | |
| ☐ | **1. Department of Finance** (DOF)<br>DOF Table E-8 (1990 - 2000) and (2000-2010) and<br>DOF Table E-5 (2011 - 2015) when available |
| ☐ | **2. Persons-per-Connection Method** |
| ☐ | **3. DWR Population Tool** |
| ☑ | **4. Other**<br>DWR recommends pre-review |
| NOTES: Cal Water uses a population estimation methodology based on overlaying Census Block data from the 2000 and 2010 Censuses with the District's service area. LandView 5 and MARPLOT software are used with these data to estimate population per dwelling unit for 2000 and 2010. The per dwelling unit population estimates are then combined with Cal Water data on number of dwelling units served to estimate service area population for non-Census years. Cal Water also estimated service area population using DWR's Population Tool. The estimates prepared using Cal Water's methodology and DWR's Population Tool differed by less than one percent. Cal Water is electing to use the population estimates produced by its methodology in order to maintain consistency with population projections it has prepared in other planning documents and reports. | |

| SB X7-7 Table 3: Service Area Population | | |
|---|---|---|
| Year | | Population |
| 10 to 15 Year Baseline Population | | |
| Year 1 | 1995 | 214,863 |
| Year 2 | 1996 | 213,683 |
| Year 3 | 1997 | 215,318 |
| Year 4 | 1998 | 216,301 |
| Year 5 | 1999 | 217,530 |
| Year 6 | 2000 | 220,851 |
| Year 7 | 2001 | 224,924 |
| Year 8 | 2002 | 229,212 |
| Year 9 | 2003 | 233,630 |
| Year 10 | 2004 | 240,029 |
| *Year 11* | | |
| *Year 12* | | |
| *Year 13* | | |
| *Year 14* | | |
| *Year 15* | | |
| 5 Year Baseline Population | | |
| Year 1 | 2003 | 233,630 |
| Year 2 | 2004 | 240,029 |
| Year 3 | 2005 | 246,177 |
| Year 4 | 2006 | 251,898 |
| Year 5 | 2007 | 256,127 |
| 2015 Compliance Year Population | | |
| **2015** | | 278,488 |

| SB X7-7 Table 4: Annual Gross Water Use * | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Baseline Year** *Fm SB X7-7 Table 3* | | **Volume Into Distribution System** *This column will remain blank until SB X7-7 Table 4-A is completed.* | **Deductions** | | | | | **Annual Gross Water Use** |
| | | | **Exported Water** | **Change in Dist. System Storage** (+/-) | **Indirect Recycled Water** *This column will remain blank until SB X7-7 Table 4-B is completed.* | **Water Delivered for Agricultural Use** | **Process Water** *This column will remain blank until SB X7-7 Table 4-D is completed.* | |
| 10 to 15 Year Baseline - Gross Water Use | | | | | | | | |
| Year 1 | 1995 | 69,164 | | | - | | - | 69,164 |
| Year 2 | 1996 | 73,246 | | | - | | - | 73,246 |
| Year 3 | 1997 | 73,501 | | | - | | - | 73,501 |
| Year 4 | 1998 | 62,863 | | | - | | - | 62,863 |
| Year 5 | 1999 | 72,220 | | | - | | - | 72,220 |
| Year 6 | 2000 | 75,822 | | | - | | - | 75,822 |
| Year 7 | 2001 | 74,655 | | | - | | - | 74,655 |
| Year 8 | 2002 | 77,986 | | | - | | - | 77,986 |
| Year 9 | 2003 | 79,994 | | | - | | - | 79,994 |
| Year 10 | 2004 | 79,229 | | | - | | - | 79,229 |
| *Year 11* | 0 | - | | | - | | - | - |
| *Year 12* | 0 | - | | | - | | - | - |
| *Year 13* | 0 | - | | | - | | - | - |
| *Year 14* | 0 | - | | | - | | - | - |
| *Year 15* | 0 | - | | | - | | - | - |
| **10 - 15 year baseline average gross water use** | | | | | | | | **73,868** |
| 5 Year Baseline - Gross Water Use | | | | | | | | |
| Year 1 | 2003 | 79,994 | | | - | | - | 79,994 |
| Year 2 | 2004 | 79,229 | | | - | | - | 79,229 |
| Year 3 | 2005 | 76,338 | | | - | | - | 76,338 |
| Year 4 | 2006 | 86,304 | | | - | | - | 86,304 |
| Year 5 | 2007 | 82,362 | | | - | | - | 82,362 |
| **5 year baseline average gross water use** | | | | | | | | **80,845** |
| 2015 Compliance Year - Gross Water Use | | | | | | | | |
| **2015** | | 55,033 | - | | - | | - | **55,033** |

* NOTE that the units of measure must remain consistent throughout the UWMP, as reported in Table 2-3

**SB X7-7 Table 4-A: Volume Entering the Distribution System(s)**
Complete one table for each source.

| **Name of Source** | Wells |
|---|---|
| **This water source is:** | |
| ☑ | The supplier's own water source |
| ☐ | A purchased or imported source |

| **Baseline Year** *Fm SB X7-7 Table 3* | | Volume Entering Distribution System | Meter Error Adjustment* *Optional (+/-)* | Corrected Volume Entering Distribution System |
|---|---|---|---|---|
| 10 to 15 Year Baseline - Water into Distribution System | | | | |
| Year 1 | 1995 | 53,524 | | 53,524 |
| Year 2 | 1996 | 60,044 | | 60,044 |
| Year 3 | 1997 | 59,507 | | 59,507 |
| Year 4 | 1998 | 50,194 | | 50,194 |
| Year 5 | 1999 | 59,704 | | 59,704 |
| Year 6 | 2000 | 61,961 | | 61,961 |
| Year 7 | 2001 | 61,566 | | 61,566 |
| Year 8 | 2002 | 65,645 | | 65,645 |
| Year 9 | 2003 | 58,278 | | 58,278 |
| Year 10 | 2004 | 51,586 | | 51,586 |
| Year 11 | 0 | | | - |
| Year 12 | 0 | | | - |
| Year 13 | 0 | | | - |
| Year 14 | 0 | | | - |
| Year 15 | 0 | | | - |
| 5 Year Baseline - Water into Distribution System | | | | |
| Year 1 | 2003 | 58,278 | | 58,278 |
| Year 2 | 2004 | 51,586 | | 51,586 |
| Year 3 | 2005 | 49,856 | | 49,856 |
| Year 4 | 2006 | 52,499 | | 52,499 |
| Year 5 | 2007 | 53,889 | | 53,889 |
| 2015 Compliance Year - Water into Distribution System | | | | |
| **2015** | | 33,388 | | 33,388 |

** Meter Error Adjustment - See guidance in Methodology 1, Step 3 of Methodologies Document*

NOTES:

| SB X7-7 Table 4-A: Volume Entering the Distribution | | | | |
|---|---|---|---|---|
| **Name of Source** | KCWRA & City of Bakersfield | | | |
| **This water source is:** | | | | |
| ☐ | The supplier's own water source | | | |
| ☑ | A purchased or imported source | | | |
| **Baseline Year** *Fm SB X7-7 Table 3* | | Volume Entering Distribution System | Meter Error Adjustment* *Optional (+/-)* | Corrected Volume Entering Distribution System |
| 10 to 15 Year Baseline - Water into Distribution System | | | | |
| Year 1 | 1,995 | 15640.3535 | | 15,640 |
| Year 2 | 1,996 | 13201.8068 | | 13,202 |
| Year 3 | 1,997 | 13993.9745 | | 13,994 |
| Year 4 | 1,998 | 12669.5858 | | 12,670 |
| Year 5 | 1,999 | 12515.577 | | 12,516 |
| Year 6 | 2,000 | 13860.3891 | | 13,860 |
| Year 7 | 2,001 | 13088.7553 | | 13,089 |
| Year 8 | 2,002 | 12340.3131 | | 12,340 |
| Year 9 | 2,003 | 21715.7537 | | 21,716 |
| Year 10 | 2,004 | 27642.3192 | | 27,642 |
| Year 11 | - | | | 0 |
| Year 12 | - | | | 0 |
| Year 13 | - | | | 0 |
| Year 14 | - | | | 0 |
| Year 15 | - | | | 0 |
| 5 Year Baseline - Water into Distribution System | | | | |
| Year 1 | 2,003 | 21715.7537 | | 21,716 |
| Year 2 | 2,004 | 27642.3192 | | 27,642 |
| Year 3 | 2,005 | 26481.7996 | | 26,482 |
| Year 4 | 2,006 | 33804.4184 | | 33,804 |
| Year 5 | 2,007 | 28473.807 | | 28,474 |
| 2015 Compliance Year - Water into Distribution System | | | | |
| **2015** | | 21,645 | | 21,645 |
| ** Meter Error Adjustment - See guidance in Methodology 1, Step 3 of Methodologies Document* | | | | |

| SB X7-7 Table 5: Gallons Per Capita Per Day (GPCD) | | | | |
|---|---|---|---|---|
| **Baseline Year** *Fm SB X7-7 Table 3* | | Service Area Population *Fm SB X7-7 Table 3* | Annual Gross Water Use *Fm SB X7-7 Table 4* | Daily Per Capita Water Use (GPCD) |
| 10 to 15 Year Baseline GPCD | | | | |
| Year 1 | 1995 | 214,863 | 69,164 | 287 |
| Year 2 | 1996 | 213,683 | 73,246 | 306 |
| Year 3 | 1997 | 215,318 | 73,501 | 305 |
| Year 4 | 1998 | 216,301 | 62,863 | 259 |
| Year 5 | 1999 | 217,530 | 72,220 | 296 |
| Year 6 | 2000 | 220,851 | 75,822 | 306 |
| Year 7 | 2001 | 224,924 | 74,655 | 296 |
| Year 8 | 2002 | 229,212 | 77,986 | 304 |
| Year 9 | 2003 | 233,630 | 79,994 | 306 |
| Year 10 | 2004 | 240,029 | 79,229 | 295 |
| *Year 11* | 0 | - | - | |
| *Year 12* | 0 | - | - | |
| *Year 13* | 0 | - | - | |
| *Year 14* | 0 | - | - | |
| *Year 15* | 0 | - | - | |
| **10-15 Year Average Baseline GPCD** | | | | **296** |
| 5 Year Baseline GPCD | | | | |
| **Baseline Year** *Fm SB X7-7 Table 3* | | Service Area Population *Fm SB X7-7 Table 3* | Gross Water Use *Fm SB X7-7 Table 4* | Daily Per Capita Water Use |
| Year 1 | 2003 | 233,630 | 79,994 | 306 |
| Year 2 | 2004 | 240,029 | 79,229 | 295 |
| Year 3 | 2005 | 246,177 | 76,338 | 277 |
| Year 4 | 2006 | 251,898 | 86,304 | 306 |
| Year 5 | 2007 | 256,127 | 82,362 | 287 |
| **5 Year Average Baseline GPCD** | | | | **294** |
| 2015 Compliance Year GPCD | | | | |
| **2015** | | 278,488 | 55,033 | **176** |

| **SB X7-7 Table 6**: Gallons per Capita per Day<br>*Summary From Table SB X7-7 Table 5* | |
|---|---|
| 10-15 Year Baseline GPCD | 296 |
| 5 Year Baseline GPCD | 294 |
| 2015 Compliance Year GPCD | 176 |

| **SB X7-7 Table 7: 2020 Target Method**<br>*Select Only One* | | |
|---|---|---|
| Target Method | | Supporting Documentation |
| ☑ | Method 1 | SB X7-7 Table 7A |
| ☐ | Method 2 | SB X7-7 Tables 7B, 7C, and 7D<br>*Contact DWR for these tables* |
| ☐ | Method 3 | SB X7-7 Table 7-E |
| ☐ | Method 4 | Method 4 Calculator |

| **SB X7-7 Table 7-A: Target Method 1**<br>20% Reduction | |
|---|---|
| 10-15 Year Baseline<br>GPCD | **2020 Target<br>GPCD** |
| 296 | **237** |

| SB X7-7 Table 7-F: Confirm Minimum Reduction for 2020 Target | | | |
|---|---|---|---|
| 5 Year Baseline GPCD *From SB X7-7 Table 5* | Maximum 2020 Target[1] | Calculated 2020 Target[2] | **Confirmed 2020 Target** |
| 294 | 279 | 237 | **237** |

*[1] Maximum 2020 Target is 95% of the 5 Year Baseline GPCD* *[2] 2020 Target is calculated based on the selected Target Method, see SB X7-7 Table 7 and corresponding tables for agency's calculated target.*

| SB X7-7 Table 8: 2015 Interim Target GPCD | | |
|---|---|---|
| Confirmed 2020 Target *Fm SB X7-7 Table 7-F* | 10-15 year Baseline GPCD *Fm SB X7-7 Table 5* | **2015 Interim Target GPCD** |
| 237 | 296 | **266** |

| SB X7-7 Table 9: 2015 Compliance | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Optional Adjustments *(in GPCD)* | | | | | | |
| | | Enter "0" if Adjustment Not Used | | | | | | |
| Actual 2015 GPCD | 2015 Interim Target GPCD | Extraordinary Events | Weather Normalization | Economic Adjustment | TOTAL Adjustments | Adjusted 2015 GPCD | 2015 GPCD *(Adjusted if applicable)* | **Did Supplier Achieve Targeted Reduction for 2015?** |
| 176 | 266 | - | - | - | - | 176 | 176 | **YES** |