

TODD ENGINEERS

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January 8, 2013

DRAFT MEMORANDUM

To: Jeff Cattaneo, San Benito County Water District

From: Iris Priestaf, Chad Taylor, and Maureen Reilly, Todd Engineers

Re: Revised Addendum to the 2010 Hollister Area Urban Water Management Plan (UWMP)

Introduction

The Department of Water Resources (DWR) has reviewed the 2010 Hollister Area Urban Water Management Plan (UWMP) and the staff member in charge of the review, Gwen Huff, has requested a specific revision of gross water use, baselines per capita daily use, and the per capita demand targets. In the UWMP, the Hollister Urban Area regional gross water use, baselines, and targets were calculated for Hollister and Sunnyslope separately and then the region's goals were presented as a weighted average of the two. However, DWR indicates that because the portion of Lessalt Water Treatment Plant that is delivered to Hollister and Sunnyslope was not monitored discretely for each service area, we cannot look at the two entities as separate providers but must combine their gross water use as a regional total.

Combining baseline water use

Gross water use includes all water into the system:

- groundwater -monitored at the point of production
- CVP imports to Lessalt treatment plant –total inflow metered, but Hollister and Sunnyslope individual portions are not
- unaccounted for water – losses, etc.

Total HUA water use in 2005 totaled 6.14 MGD or 6,871 AFY; total HUA water deliveries in 2005 totaled 6,791 AFY (UWMP Table 3-1). The difference between the gross water use (used in baseline calculations) and the water deliveries was 100 AFY of unaccounted for water, including system losses and leaks.

Revisions to the baseline water use and water use targets

Combining Hollister and Sunnyslope values and calculating the gross water use, baselines, and targets as a region will reduce the 10-year baseline by four gallons per person per day (gpcd) to 157 gpcd. Table 1 shows the baseline selected for the regional alliance and Table 2 shows the baseline period calculations for the Hollister Urban Area. The original UWMP reported a 10-year baseline of 161 gpcd (shown in Table 3); different baseline periods were selected for each Hollister and Sunnyslope to achieve the most favorable baseline. The 5-year range baseline remains the same as in the UWMP, because the same years were selected for Hollister and Sunnyslope (Table 4). Therefore, the minimum water use requirements remain the same, as they are based on the 5-year baseline.

The water demand targets are calculated as a percentage of baseline; purveyors must achieve 10 percent of the baseline water use by 2015 and 20 percent by 2020. The new targets are shown in Table 5 and the targets reported in the UWMP are shown in Table 6. The targets are reduced by 3.6 gpcd and 3.2 gpcd for 2015 and 2020 respectively.

Conclusion

Ms. Huff at DWR communicated that DWR will accept the numbers reported in the submitted UWMP if the new targets (based on the regional baseline rather than the weighted average of the supplier's baseline) were within a few GPCD of the reported regional gross water, baseline and target. Given that the difference in the baseline is four gpcd and the difference in the targets is less than four gpcd, it is our opinion that the UWMP does not need to be revised and the plan does not need to be re-adopted.

| Table 1 Base Period Ranges | | | |
|--|--|-------|---------|
| Base | Parameter | Value | Units |
| 10- to 15- Year Base Period | 2008 total water deliveries | 6,460 | AFY |
| | 2008 total volume of delivered recycled water | 0 | AFY |
| | 2008 recycled water as a percent of total deliveries | 0 | percent |
| | Number of years in base period ¹ | 10 | years |
| | Year beginning base period range | 1997 | |
| | Year ending base period range ² | 2006 | |
| 5-Year Base Period | Number of years in base period | 5 | years |
| | Year beginning base period range | 2003 | |
| | Year ending base period range ³ | 2007 | |
| <p>¹If the 2008 recycled water percent is less than 10 percent, then the first base period is a continuous 10-year period. If the amount of recycled water delivered in 2008 is 10 percent or greater, the first base period is a continuous 10- to 15-year period.</p> <p>²The ending year must be between December 31, 2004 and December 31, 2010.</p> <p>³The ending year must be between December 31, 2007 and December 31, 2010.</p> | | | |

| Table 2 Base Daily Per Capita Water Use Hollister Urban Area 10-Year Range | | | | |
|--|---------------|--------------------------------------|--|--|
| Base Period Year | | Distribution System Population | Daily System Gross Water Use (mgd) | Annual Daily Per Capita Water Use (gpcd) |
| Sequence Year | Calendar Year | | | |
| Year 1 | 1996 | 32,341 | 4.92 | 152 |
| Year 2 | 1997 | 35,114 | 5.79 | 165 |
| Year 3 | 1998 | 35,948 | 5.18 | 144 |
| Year 4 | 1999 | 38,157 | 5.69 | 149 |
| Year 5 | 2000 | 39,092 | 6.44 | 165 |
| Year 6 | 2001 | 40,157 | 6.37 | 159 |
| Year 7 | 2002 | 40,661 | 6.60 | 162 |
| Year 8 | 2003 | 40,464 | 6.52 | 161 |
| Year 9 | 2004 | 40,369 | 6.55 | 162 |
| Year 10 | 2005 | 40,307 | 6.14 | 152 |
| | | | Base Daily Per Capita Water Use | 157 |

| Table 3 Base Daily Per Capita Water Use Reported in the 2010 UWMP | | |
|---|-------------------------|--|
| Retailer | Population ¹ | Annual Daily Per Capita Water Use (gpcd) |
| Hollister | 23,254 | 149 |
| Sunnyslope | 15,838 | 178 |
| Regional Alliance | 39,092 | 161 |
| <i>1Population based on US Census 2000.</i> | | |

| Table 4 Base Daily Per Capita Water Use Hollister Urban Area 5-Year Range | | | | |
|---|---------------|--------------------------------|------------------------------------|--|
| Base Period Year | | Distribution System Population | Daily System Gross Water Use (mgd) | Annual Daily Per Capita Water Use (gpcd) |
| Sequence Year | Calendar Year | | | |
| Year 1 | 2003 | 40,464 | 6.52 | 161 |
| Year 2 | 2004 | 40,369 | 6.55 | 162 |
| Year 3 | 2005 | 40,307 | 6.14 | 152 |
| Year 4 | 2006 | 40,458 | 5.91 | 146 |
| Year 5 | 2007 | 40,230 | 6.17 | 153 |
| Base Daily Per Capita Water Use | | | | 155 |

| Table 5 Baseline and Target Per Capita Water Use (gpcd) | | | | | | | |
|--|------------|--------------------|--------|---|------|------------------|--------------|
| Retailer | Population | Baseline Water Use | | Minimum Water Use Reduction Requirement | | Target Water Use | |
| | | 10-year | 5-year | 2015 | 2020 | 2015 | 2020 |
| HUA | 39,092 | 157 | 155 | 152 | 147 | 141.5 | 125.7 |

| Table 6 Reported in the 2010 UWMP Baseline and Target Per Capita Water Use (gpcd) | | | | | | | |
|---|------------|--------------------|--------|---|------|------------------|--------------|
| Retailer | Population | Baseline Water Use | | Minimum Water Use Reduction Requirement | | Target Water Use | |
| | | 10-year | 5-year | 2015 | 2020 | 2015 | 2020 |
| Hollister | 23,254 | 149 | 137 | 140 | 130 | 135 | 120 |
| Sunnyslope | 15,838 | 178 | 182 | 176 | 173 | 161 | 143 |
| HUA | 39,092 | 161 | 155 | 154 | 147 | 145.1 | 129.0 |

