

PT 21

*MPWMD Technical Memorandum 2006-02
Cal-Am and Non Cal-Am Existing Water Needs*

alternative production from the Laguna Seca Subarea averaged 418 AFY. For the more recent five-year period (WY 2001 through WY 2005), however, the non Cal-Am alternative production from the Laguna Seca Subarea averaged 644 AFY. Given the significant increase in production during the recent five years, it is recommended that the average annual production during the WY 2001 through 2005 period should be used to more accurately represent current pumping by the non Cal-Am alternative producers in the Laguna Seca Subarea of the Seaside Groundwater Basin. Table 7 also shows the "eventual" alternative allocation from the Laguna Seca Subarea of the Seaside Groundwater Basin that was specified in the adjudication decision. This "eventual" allocation represents the non Cal-Am producers' share of the "Natural Safe Yield" for the Laguna Seca Subarea of the Seaside Basin. Because the non Cal-Am alternative production allocation exceeds the Natural Safe Yield, the non Cal-Am alternative producers will need to reduce their water demand or develop a replacement supply. As shown, the non Cal-Am annual production from the Laguna Seca Subarea of the Seaside Basin during the shortened period of analysis averaged 644 AFY. Based on the weather-adjusted average annual production estimate for the non Cal-Am producers from the Laguna Seca Subarea for the period of analysis (694 AFY) and the non Cal-Am eventual alternative allocation to pump water from the Laguna Seca Subarea (608 AFY), the non Cal-Am producers in the Laguna Seca Subareas need to develop 86 AFY to comply with the adjudication decision.

Section 4: Summary and Recommendations

This technical memorandum provides reasonable and defensible estimates of the amount of water that is produced by Cal-Am to meet existing customer demand in Cal-Am's water distribution systems within District boundaries. The production estimates have been adjusted to account for the wetter-than-normal conditions that occurred during the 11-year period of analysis, i.e., Water Years 1996 through 2006. Specifically, based on results from a monthly analysis, the reported annual production values were increased 7.8% to reflect critically-dry conditions during the period of analysis. The decision to use critically-dry conditions was made to provide a worst-case basis for assessing the effect of weather on reported production during the period of analysis and is considered appropriate for conservative water supply planning purposes. Based on the adjustments made, Cal-Am's reported average annual production for customers in its main system during the period of analysis increased from 14,710 AFY to 15,858 AFY, an increase of 1,148 AFY. This technical memorandum also provides weather-adjusted estimates of the amount of water that is produced by non Cal-Am producers to meet existing needs in the Seaside Groundwater Basin.

These weather-adjusted production values for Cal-Am were compared to Cal-Am's recognized rights to divert water from the Carmel River and Cal-Am's adjudicated rights to produce groundwater from the Coastal Subareas and the Laguna Seca Subarea of the Seaside Groundwater Basin to quantify the water supplies that Cal-Am must develop to replace existing unlawful diversions from the Carmel River or production in excess of its eventual adjudicated rights in the Seaside Groundwater Basin. To comply with SWRCB Order 95-10 and the adjudication decision in the Coastal Subareas, Cal-Am needs to develop 10,987 AFY of replacement supplies. In addition, to continue to serve its