

California Water Reliability Self Certification, OPUD Underlying Analysis

This narrative is intended to provide further insight and increased clarity on the approach Olivehurst Public Utility District (OPUD) exercised with the submittal of its water supply reliability certification. OPUD thoroughly reviewed the new emergency regulations as well as all relevant data having bearing on the affects of the ongoing drought on the OPUD drinking water supply, which is exclusively groundwater. The OPUD drinking water aquifer volume has not been quantified. It has been characterized as a rapidly recharged aquifer due to the geology and close proximity to the Feather River. Therefore, the OPUD approach to estimating the hypothetical shortage in drinking water supply following three more years of drought is based on a comprehensive review of the groundwater wells pumping levels (dynamic levels). We compared the dynamic levels during drought conditions in water year 2014, under drought conditions without significant conservation, to water year 2015, under drought conditions but with significant conservation (OPUD's cumulative conservation is approximately 40% since June 2015). OPUD used this basis to determine the amount of conservation OPUD would need to have no measurable impact on the pumping levels. In other words; reduce the OPUD demand to the point where pumping levels in the OPUD wells do not reflect an impact on the supply. This amount is a 5% reduction in OPUD demand. If OPUD reduces the amount of water pumped from its wells, there will be no lowering of the pumping levels in the wells. OPUD then applied a significant measure of conservatism and rounded the conservation target up to 10%, i.e. doubling the calculated conservation target.