



TUD Water Treatment Plants

In order to meet increasing, drinking water quality regulations, all of TUD's employees are required to be certified by California Department of Public Health (CDPH).

The raw water from open ditches is exposed to direct wet weather runoff and to the atmosphere, therefore it is more easily contaminated. Consequently, water needs to be treated in order to meet federal and state regulations for safe drinking water. TUD currently owns and operates 14 water treatment plants, scattered throughout the county, that are essential to achieve high standards of water. Accordingly, the average daily miles driven by the department is 480 miles.



Nine of those water treatment plants intake water directly from the ditch system and the remaining draw raw water from small reservoirs. Once the raw water reaches these treatment plants, pre chemicals such as polymer and aluminum sulfate are added to take the dirt particles from the water, followed by mixing, coagulation, flocculation, and sedimentation prior to being filtered. This water then enters into one of TUD's 89 clearwell storage tanks that store water and allow time for water to be in contact with chlorine for disinfection before it's released to any customer.

Additionally, four of TUD's 31 active wells have treatment systems with alternative technology. This technology combines mixing, coagulation, clarification, sludge removal, and filtration. Moreover, it is more cost effective and efficient than conventional water plants.

Due to the fact that some of TUD's storage tanks are old, the condition of 61% of these tanks currently is fair or below standards. In order to maintain your water quality, these tanks require increasing cleaning, inspections, and upgrades or replacements.

The need for a budget increase in order to upgrade or replace your storage tanks is indisputable. The cost to maintain your water treatment plants is around \$167,929 per year. Similarly, the

costs of testing the water for contaminants and state permits have quadrupled in the last two years to nearly \$300,000 per year (\$2.00 per month for every customer).