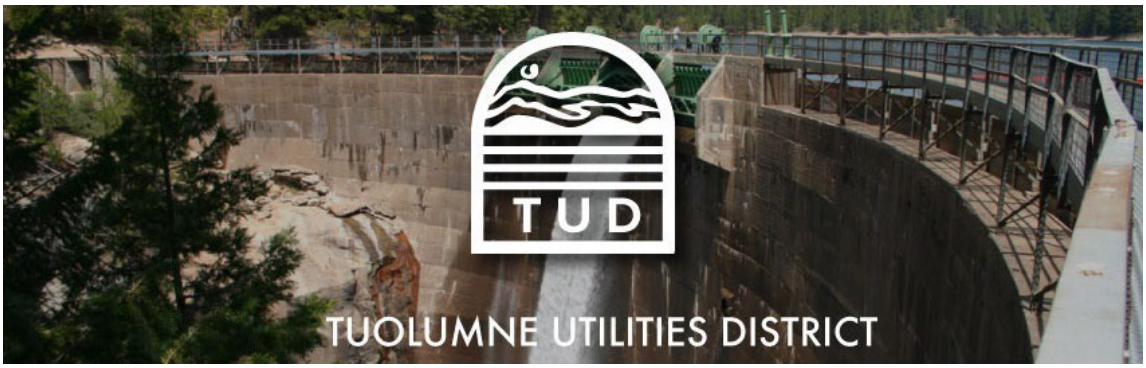

Water Treatment Plant Process

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 to meet federal and state regulations for safe drinking water. TUD currently owns and operates 10 water treatment plants, scattered throughout the county, that are essential to achieve high standards of water. Accordingly, the average daily miles driven by the water department for inspection purposes, is nearly 500 miles.

It takes a skilled certified water treatment operator to operate each water treatment plant. A certified operator is an individual that works to ensure safe water. Water treatment operator responsibilities include: operating and maintain a variety of automatic and manually controlled equipment, motors, and pumps used in the treatment, purification, and disinfection of water. Operators make regular assessments of water flow, turbidity, pressure, chemical use, residuals, and other pertinent data to maintain proper plant operating conditions. Each operator must possess a minimum of a Grade 1 Water Treatment Plant Operator's Certificate issued by the State Water Resources Control Board (SWRCB) and a Grade 2 Distribution Certification.

Monte Grande Water Treatment Plant - Sonora

Five 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, 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 a clearwell storage tank that stores the water and allows time for water to be in contact with liquid chlorine for disinfection before it's released to customers.