



Water Supply Reliability Certification: Supply & Demand Analysis

Projected Annual Supply

Turlock’s current supplies include groundwater, and a small amount of recycled water. Turlock has a total of 20 active groundwater wells that are connected to the potable water system. Total maximum well capacity is 30,750 gpm (44.28 mgd, 136 AFD). Since Turlock’s water supply is 100% groundwater, city staff has estimated the groundwater basin can sustain a supply that meets the projected demand over the next three years.

Projected water supply was determined by using historical pumping data. Staff looked at the maximum amount of groundwater pumping that would be sustainable; this is different from the maximum possible single day yield. City staff considered the point at which groundwater pumping is not sustainable where groundwater pumping by the City may have an adverse impact on the aquifer. Based on historic data, the existing active wells can sustainably pump approximately 18,000 AFY. Below is a table reflecting the supply projection for years 2017, 2018, and 2019.

Supply Projection	
2017	18,000 AFY
2018	18,000 AFY
2019	18,000 AFY

Since the City supplies are 100% groundwater, determining available supply is not straightforward as there is no certainty that groundwater will be available at the quantity or quality needed by the City. The method the City used to determine available supply is based on historic data and calculations derived from the City’s actual pumping abilities.

Water Table Depth

The City of Turlock is using its largest potable supply well to determine an approximation of the water table depth. This particular well is drilled to a depth of 590’ with a pumping capacity of 3,000 gpm. DWR requires the City to report the well depths of June 2013 and June 2016; however, static levels were not recorded in June of 2013 or 2016. Therefore, March 2013 and March 2016 are being reported. Below is a table reflecting the well depths for March 2013 and March 2016. The depths reflect the water table decreasing by five feet.

Well Depth (Well #37)	
March 2013	-63’
March 2016	-68’

Conservation Standard

The City of Turlock will strive for a 20% water conservation standard, despite the newly calculated conservation target being 16%. Turlock accomplished an overall 25% reduction in 2015, falling short of the State of California water conservation target of 29%.