

Increased Visibility and Consistent Water Supply for Residential Neighborhood

Residential Water Management

After repeated incidents of the neighborhood water supply tank running dry, David Graham decided to monitor the water level of the tank. A constant supply of water is necessary for the residents to live a healthy lifestyle in their California neighborhood.



Applications:
Drinking Water
Management

Market:
Water

Challenge

Like many water tanks, these community tanks went unmonitored until occasionally they would discover their water supply was depleted and they would scramble to fix the problem. The run-outs were unpredictable and would happen in the day or night, weekdays or weekends. An empty water tank left the community without basic living accommodations, including drinking water, the ability to shower, use the restroom, and water their landscaping. The key concerns were reducing unwanted hiccups that interrupt their normal routines. The community wanted to improve the reliability of their water supply.

Physically walking to the tank on a regular basis can be a tremendous nuisance, thus it was frequently skipped. Additionally, daily checks were insufficient because the tank level could fluctuate quickly, particularly during the hot summer months.

“With remote cellular level monitoring and full-service support, TankScan has been a great benefit and has allowed us to reduce stress, while increasing our visibility and reliability of our water supply said David Graham.

Solution

Since 2021 the neighborhood has used the TankScan TSU1000 monitoring system at their water supply tank in Vacaville, California. The remote monitoring system leverages existing wireless cellular infrastructure and a cloud software application to eliminate large startup and setup costs associated with other Wi-Fi or other wireless solutions. The installation was completed by using a self aligning bulkhead in their dome topped tank. Next, screwing the monitor into the 1-1/2" port on the top of tank and plugging in the battery. The cloud application was set up remotely and offers unlimited users, historical trending, and email/text notifications.

The tank levels are viewed from a cell phone or from a PC at any remote location. The system is cost effective due to its use of existing infrastructure of the internet connectivity, internet browser, email, text message and cloud compute. The user is provided with accurate readings to the digital devices already owned, understood and paid for!

Results

The community has realized numerous benefits from wireless level monitoring including:

- Reduced time associated with trips to the tank
- Improved reliability of their water supply with remote tank level visibility
- Improved confidence and reduced risk of runout with automated notifications
- Improved safety by having a consistent supply of water for the residents

"The remote tank monitoring provides us with the ability to ration our water consumption so we never run out of water, we check it every day in the summer.", said David.

