

Residential Drinking Water Won't Run Dry with Remote Tank Monitoring

Little Butte Property Owner's Water Association

Thirty single-family homes on the shore of Lake Chelan, Washington, make up the Little Butte Property Owner's Water Association, a residential community founded in the 1960's that supplies drinking water to its residents.



Applications:
Water Inventory
Management

Market:
Water Management

Challenge

Situated on 50 acres, the Association owns a partial underground water reservoir with a capacity of 96,000 gallons. In order to guarantee that residents have a steady supply of water, the Little Butte Property Owner's Association have been visually monitoring its water supply numerous times a week for more than half a century. This method of tank monitoring was inefficient and could likely provide inaccurate water measurements.

Little Butte Property Owner's Water Association recognized they needed to implement a system that would improve the reliability of their community operations, lower labor and overhead costs, and provide early warning alerts before water levels reached critical levels. They also wanted the capability to monitor their tank remotely.

“We used to rely on a visual check to determine the water inventory. Having the ability to get an accurate reading remotely reduces the stress involved with residential water management”, said Grant, Board of Director for Little Butte Property Owner's Association.

Solution

In 2023, Little Butte Property Owner's Water Association installed the TankScan TSR1000 non-contact radar tank monitoring system on an underground 96,000-gallon reservoir near Lake Chelan, Washington. The remote monitoring system leverages existing wireless cellular infrastructure and a cloud software application to eliminate large startup and setup costs associated with typical SCADA systems. The install requires screwing the monitor into a 2" port on the top of tank and plugging in the battery. The cloud application is setup remotely and offers unlimited users, historical trending, and email/text notifications.

The tank levels are viewed from field operator's cell phone or from a PC at a remote office. The system is cost effective due to its use of existing infrastructures through internet connectivity, internet browser, email, text message and cloud compute. The user is provided with accurate readings to devices he already owns, understands and supports.



Results

Little Butte Property Owner's Water Association has seen numerous benefits from remote level monitoring including:

- Reduced labor and overhead associated with trips to the tank location
- Improved reliability of community operations with remote tank level visibility
- Improved confidence and reduced environmental risk with automated notifications
- Improved accuracy by removing the need to travel to the reservoir to estimate the amount of water remaining