

TankScan Helps Residential Community Optimize Water Management System

Silver Leaf Ranch Subdivision

Silver Leaf Ranch is located near Athol, Idaho and provides water and natural gas services to the Silver Leaf Ranch Subdivision. The Homeowner's Association strives to provide its members a steady supply of clean drinking water.



Applications:

Residential Drinking Water

Market:

Water Management

Challenge

Silver Leaf Ranch Homeowner's Association houses a 70,000-gallon water tank that supplies drinking water to its residents. The HOA monitored its water level utilizing an alarm system however, it did not accurately report the water level readings. In many instances, by the time the alarm went off, it was too late, and their water level was at a critical stage. In addition, they would use a wooden dowel to check the tanks' water supply. The HOA also shared the tank with the local fire department who would deplete the tank's supply of water, leaving the HOA unprepared and with little to no water.

"We would walk up to the tank and use a wooden dowel to measure the water level. When the fire department used up all the water we were not prepared." Said Jon, HOA President.

Key concerns are eliminating water shortages, increase efficiencies, and implement a reliable system that accurately and consistently monitors water levels.

Solution

In 2023, Silver Leaf Ranch Subdivision installed the TankScan TSM1000 tank monitoring system on their water tank in Idaho. The HOA had recently built a 40 ft. antenna to get a cellular signal. The remote monitoring system leverages 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

Silver Leaf Ranch Subdivision has seen numerous benefits from remote level monitoring including:

- Remote tank level monitoring eliminates the need for manual checks, saving labor, time, and overhead costs
- Automated alert notifications prevent the risk of water levels becoming critical
- Visibility to real-time data 24/7 increases confidence that readings are accurate and consistent
- Employee safety improved by removing the need to climb the tank

“It was an easy install process and the availability and usability on the cell phone works flawlessly. We had unknowns and now we don’t.”, said Jon.