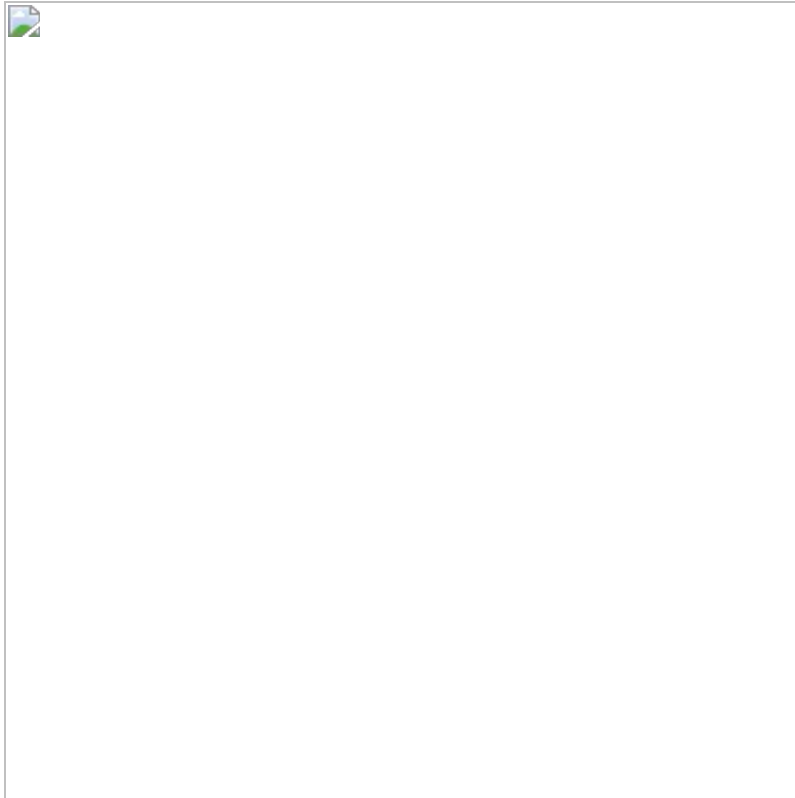


Seeing Beyond the Surface: How Telemetry Will Guide Water Stewardship at Thacker Pass

2025-10-31



Flumes, cross-sectional shaped structures, will be placed into two open channels at Thacker Pass to measure water flow rates and levels, via a sensor.

Across Thacker Pass, where sagebrush-covered hills meet wide valleys, a process improvement in environmental monitoring is taking place. Lithium Americas is implementing telemetry technology to improve real-time water monitoring, which provides data for environmental compliance and operational decision-making.

The Challenge: Monitoring Water Across a Large Landscape

For over a decade, LAC has monitored water levels and stream flows across Thacker Pass — to comply with regulations and to evaluate the potential impacts of construction and operations on groundwater. This essential process has been labor-intensive, taking days to access all monitoring sites.

When LAC brought water monitoring operations in-house in 2024, we saw an opportunity to improve how we monitor this vital resource.

Building the Foundation: From Drill Pads to Data Streams

The journey to today's sophisticated monitoring network began in September 2024, when LeGarza Exploration cleared areas and built access roads for piezometer installation— specialized instruments that measure groundwater pressure and levels in soil and rock. By October 2024, Haz-Tech Drilling had completed 11 bore holes across Quinn Valley and Burns Field. In December 2024, Piteau Associates installed the piezometer units, and by early 2025, we partnered with UES to bring water monitoring fully in-house, complete with rigorous quality assurance protocols.

The Solution: Eyes, and now Technology - on Every Drop

Following a comprehensive network audit in June 2025, we implemented a four-part upgrade, securing and upgrading each piezometer to maintain accurate environmental data collection. The upgrade consisted of:

Modernizing equipment: Replacing a variety of legacy instruments with consistent, modern pressure transducers and loggers across all 11 piezometer locations. Piezometers are geotechnical sensors that measure pore water pressure and groundwater levels, providing essential data for environmental compliance and operational decision-making.

Installing telemetry technology: Equipping each monitoring point with remote transmission capabilities—a game-changer that will provide real-time visibility into groundwater conditions.

Enhancing surface water monitoring: Installing flumes at two key surface water locations for more accurate flow measurements. In civil engineering, flumes are specially shaped structures with a known cross-section inserted into an open channel to measure the flow rate of water by using a sensor to read the water level.

Improving field procedures: Maintaining quarterly physical inspections, while leveraging remote monitoring between visits.

Real-Time Water Monitoring: Telemetry Technology at Thacker Pass

Automated recording and transmitting equipment is pictured at the Quinn 1 Well

Telemetry is the process of recording and automatically transmitting instrument readings from remote locations. Think of it as giving each monitoring point a voice that can instantly report back on groundwater levels, pressure changes and potential equipment issues—without waiting days or weeks for a field team to physically access the site. With telemetry technology at Thacker Pass, we will be able to:

- Respond quicker to changes in groundwater conditions
- Catch equipment maintenance issues faster
- Maintain continuous data records 24/7
- Make informed decisions based on real-time information

Water Stewardship in Action

With our telemetry-enabled monitoring network and a comprehensive 5-year groundwater model in development, we are improving how we measure, predict and manage water resources at Thacker Pass. This investment in telemetry also reflects LAC's broader commitment to water stewardship. As detailed in our **2024 ESG-S Report**, water conservation and protection are foundational to our operations. From our **Quinn River Pipeline project**—which demonstrates how infrastructure development can support both industrial needs and agricultural communities—to our ongoing baseline monitoring, Lithium Americas is committed to responsible lithium development and environmental stewardship.

For more information about our water stewardship initiatives, visit our latest **ESG-S Report**.