

Optimizing Risk Mitigation & Operational Efficiencies for Dams

Real-Time Sensor Data Management

Risk mitigation, safety and operational efficiencies are becoming top priorities when designing monitoring programs for dams. With increasing regulatory and operational efficiency demands, dam operators are looking to better monitor, protect, and improve dam safety by adopting sensor technologies and automation.

Current market solutions are costly and complicated to manage and lack real-time visibility and analytics. With the sensemetrics end-to-end solution, we are providing dam operators with complete sensor automation. From data capture and standardization to real-time data visualization and intelligence. Differentiated by a unified technology stack, a true cloud design and API-driven architecture, the platform reduces the cost and complexity of introducing IIoT technologies into geotechnical, structural, environmental and spatial monitoring applications. It removes the need for lengthy and costly installation, services, and customization and gives dam operators the fastest path to realize the benefits of industrial IoT.



Risk Mitigation

Immediate access to real-time sensor data, analytics, and state-of-the-art visualization tools substantially reduces risk.

Improved Operational Efficiency

Easy to implement market ready solution streamlines workflows, allowing you to do more with less.

Reduces Cost

sensemetrics provides a plug-and-play solution that collapses the complexity of data capture, drastically reducing cost.



Safety & Compliance

Proactively manage assets and their ongoing compliance with identified risk management practices



Emergency Response

Provide immediate event notices to on and off-site personnel, and to partner agencies via EMS integration



Geohazards

Application of monitoring, early warning and stabilization verification technologies



Leak Detection

Monitor ground and surface water flows to identify the early signs of leak and seepage problems

Comprehensive Dam Monitoring ROI

sensemetrics end-to-end automated monitoring solution (Connectivity Platform and Base Software Package) was installed 5x quicker than alternative “semi-automated” approach.

Risk Management that Pays for Itself Rapidly:
The automation program provided a return on investment in only 4 months while simultaneously providing an opportunity to reduce risk and increase safety by achieving a 90% (+/-5%) higher chance of detecting a change in condition within 6 hours of onset. Ongoing savings for automation are in excess of \$1,200,000 over a 5 year period.

Automated Geotechnical Monitoring ROI

sensemetrics end-to-end automated monitoring solution was installed 5x quicker than alternative “semi-automated” approach.

Actively Managing Risk:
The automation program generated savings of 50% vs the semi-automated solution. sensemetrics’ automated approach provides a 87% higher chance of detecting a change in geotechnical-conditions within 6 hours of onset, significantly enhancing risk management and improving disaster prevention.