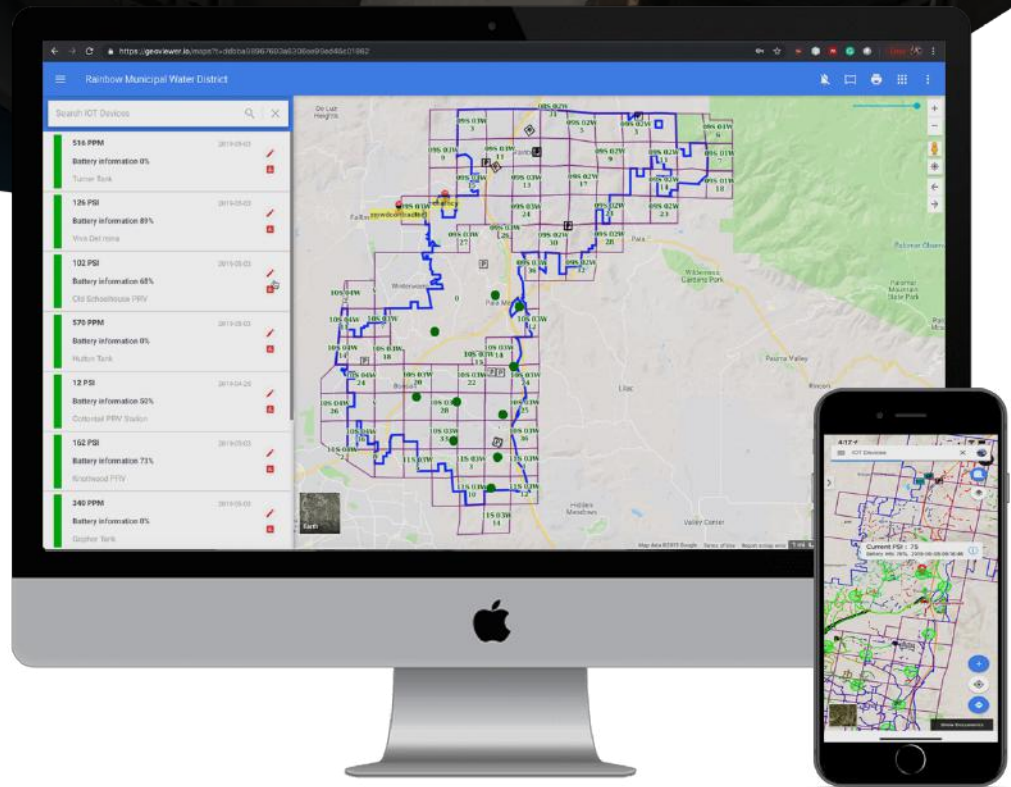


Pipeline Monitoring & Predictive Analysis



Connected IoT Devices and Machine Learning

- Nobel Systems IoT Connected Device Monitors Pressure as well as Water Quality
- Receive Notifications if Pressure Falls Below a Specified Threshold.
- Analyze Results Over Time to View Patterns.
- Compare Pressure Readings Between Specific Pipelines
- Isolate and Locate Leaks Much Faster Saving Water Loss.
- Predicts Areas to that are flagged to Watch, Based on Advanced Machine Learning.
- Variables for for Predictive Analysis Include Statistics From Pipe Type & Age, Soil Type, Slope, Pressure, and Many More.
- Make Better, More Prepared Decisions by anticipating Hot Spots That Have Been Trouble Areas.

GeoViewer Predictive Modeling



Prepare for the Future

- Assesses many variables like Leaks, Soil Type, Age, Material, and more to provide accurate probability scores.
- System Assigns a Grade to pipes that provides a probability of failure score
- Proven to provide 93% Accuracy with customers
- Machine Learning utilizes past results to adjust model and increase future accuracy.
- Color Coded Pipes based on probability of failure (POF).
- Analyze Consequences of Failure (COF) by interviewing field and management staff.
- Perform Informed Preventive Maintenance based on results
- Prepare for costs associated with pipe failure
- Utilize GIS data to provide data and display results.