

# Abstract for 25th ALERT Users Group Symposium Reno, NV, May 6-9, 2014

**Symposium Topic:** Flood Warning System Design, Operations, Maintenance and Repair

**Title of Abstract:** Maintenance Management Best Practices for Data Collection Networks

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Highlights and discussion of maintenance activities required to ensure a highly reliable and robust data collection network. Going beyond time based and reactionary maintenance, this talk highlights the tools and process required to get the best data out of your ALERT and ALERT2™ gauges:

## **Understanding the differences and goals of maintenance types**

- Breakdown, Preventative, Predictive and Project maintenance

## **Tools and capabilities required**

- Standard tools
- Diagnostic tools and processes to identify marginal equipment performance
- Calibration
- New Tools Needed for ALERT2

## **Using data analysis tools to spot trends in data and system performance**

- Sensor data analysis
- Sensor availability
- Nearest neighbor comparisons
- System/network level analysis

## **Maintenance efficiency through inventory tracking**

- Knowledge of equipment, firmware, components at each site

## **Best practices in tracking maintenance activities**

- Standardizing maintenance activities
- Maintenance prioritization
- Activity logs

## **Using automated alarms in your data collection software to enhance maintenance activities**

## **ALERT2 time slot management**

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As Director of Operations at OneRain, Mike Zucosky brings valuable experience in Program and Project Management. Mike has managed installation and maintenance operations of flood alert systems for many government municipalities and districts at a local and national level to ensure high-quality operational hydrologic gauge instrumentation for functionality and public safety. He brings a unique blend of technical and business knowledge and is skilled in job costing, cash flow analysis and critical path scheduling.

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Mr. Logan has a broad based background in information systems management and software development across multiple industries. James is an expert in systems integration and software development and deployment, customer care, billing, core business (finance), supply chain management, and field support. Prior to joining OneRain, James served as a senior executive for System Surgeons, Great West Life Assurance and Annuity Company, Convergent Communications, CSG Systems International, and Tele-Communications, Inc. James holds a M.S. in Computer Science from the University of Colorado and a B.S. in Geophysical Engineering from Colorado School of Mines.