WATER DISTRIBUTION SOLUTIONS POWERED BY ADVANCED HYDRAULIC MODELING

VISUALIZE BEFORE YOU BUILD. OPTIMIZE BEFORE YOU INVEST.

KU Resources, Inc. brings decades of water infrastructure expertise combined with cutting-edge hydraulic modeling technology. We've designed and delivered comprehensive solutions for water treatment, pumping, transmission, distribution, and storage—navigating complex engineering challenges and evolving regulatory requirements with precision and confidence.

THE POWER OF OPENFLOWS WATERGEMS

Making smart decisions in water distribution requires seeing the complete picture. That's why we leverage OpenFlows WaterGEMS, the industry-leading hydraulic modeling software trusted by thousands of engineers worldwide. This intuitive platform delivers powerful analysis capabilities to help us design sustainable, costeffective water systems and solve complex operational challenges.

PLAN WITH CONFIDENCE

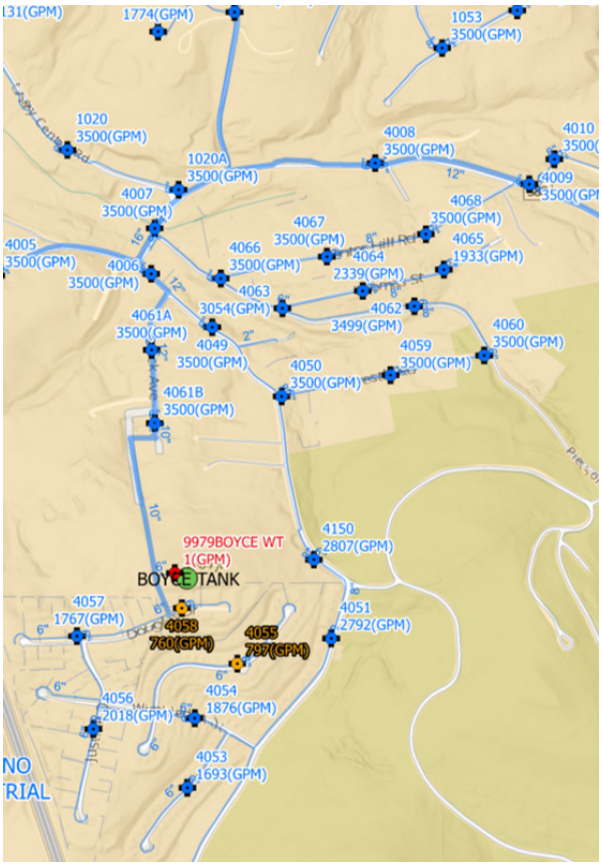
- Visualize system changes during the planning phase— before any construction begins
- Perform comprehensive Fire Flow Analysis to ensure reliability and regulatory compliance
- Conduct Water Age Analysis to maintain water quality standards throughout your distribution network
- Calibrate models to match real-world conditions including peak demands, component failures, and future growth

COMPREHENSIVE HYDRANT ANALYSIS

Model static and residual pressure at every hydrant throughout your system, providing precise fire flow assessments and identifying areas requiring improvement to meet safety and regulatory standards.

COMPREHENSIVE SCENARIO ANALYSIS

Test unlimited "what-if" scenarios to evaluate different demand patterns, operational strategies, master planning horizons, and design alternatives—ensuring your investment performs under all conditions.



AI-POWERED CALIBRATION WITH DARWIN® CALIBRATOR

Leverage artificial intelligence to automatically calibrate your network model, rapidly identifying the most accurate calibration parameters and leakage scenarios that align with actual measured flows and pressures in the field—ensuring your model reflects real-world performance.

INTELLIGENT DESIGN & ENERGY SOLUTIONS

- Automatically identify minimum-cost rehabilitation strategies within your budget constraints
- Optimize pump scheduling for fixed and variable-speed pumps to reduce energy costs
- Balance pressure requirements, velocity constraints, and cost considerations simultaneously
- Pinpoint leak locations and optimize system efficiency

TRANSIENT ANALYSIS

Protect your infrastructure by modeling transient pressure events that can damage pipes and equipment, introduce contaminants, or interrupt customer service.

SEAMLESS DATA INTEGRATION

Build and update models efficiently by synchronizing data from GIS, CAD, databases, spreadsheets, SCADA systems, and other sources—minimizing disruptions while maximizing accuracy.

BEYOND SOFTWARE—REAL-WORLD PARTNERSHIP

Technology is only as valuable as the expertise behind it. Our team doesn't just model systems—we work directly with water utilities, understanding the day-to-day operational challenges you face. This hands-on experience ensures our designs meet both technical specifications and practical operational needs, today and into the future.

COMPREHENSIVE WATER DISTRIBUTION SERVICES

We deliver practical, cost-effective solutions across every aspect of water resources management:

- Hydraulic Analysis & Modeling
- Treatment Facility Design
- Pumping Stations
- Transmission Mains
- Distribution Systems
- Reservoirs & Storage Tanks
- Backflow Prevention
- Permitting & Regulatory Compliance
- Inspections & Testing
- Rate Studies
- Technical Reports & Assessments

LET'S MODEL YOUR SUCCESS

Whether you're planning a major system expansion, optimizing existing infrastructure, or solving operational challenges, KU Resources combines proven engineering expertise with advanced hydraulic modeling to deliver solutions that perform.

Contact us to discover how OpenFlows WaterGEMS modeling can maximize the value of your next water infrastructure investment.

To learn more, please contact

CHARLIE PROKOPIK, PE
KU Resources, Inc., Senior Project Manager

cprokopik@kuresources.com
117 Sagamore Hill Road
Pittsburgh PA, 15239
Phone: 724-327-7474 x1107