# Water Distribution Modeling and Management

Improve Your Network Performance







# Supplying Water Effectively

To operate a water network effectively and efficiently, you need to reduce water loss, maintain water pressure, respond quickly to incidents, and maintain safe water quality – all within budget, and under the threat of fines if you fail.

A combination of hydraulic modeling software and live data analytics will enable you to:

- Understand and manage your water distribution networks better
- Add live modeling to incorporate real-time performance data
- Configure live alerts so operators can quickly see which areas need attention
- Determine geographical demand allocation to ensure the credibility of network models
- Model water quality and age
- Work from existing GIS or model data sets
- Identify critical links and assess vulnerabilities/risks





# The Easy Way

Two comprehensive modeling packages – one for Esri ArcGIS users and the other for everyone else – will model practically everything about your network and empower you to make good decisions.

Both can be supplied with live data, for greater confidence. And both can be tailored to your needs, with additional options.



Innovyze geocentric advanced smart water technology gives us the tools we need to help us better operate, manage, and sustain our water distribution system at maximum effectiveness and cost-savings. These capabilities aid in improving our water system performance and resiliency.

Supervisor Valencia Water Company Engineering Department, US





### Modeling Within ArcGIS or ArcGIS Pro: InfoWater and InfoWater Pro

**InfoWater** bridges the gap between network modeling and GIS, ensuring you get sound, cost-effective engineering solutions for designing, planning, and operating your systems. It's completely integrated within ArcGIS / ArcGIS Pro. It offers fast modeling for any size of network from 100 to 100,000+ pipes, and easy comparisons of what-if scenarios, including emergency response planning and implementation.

#### InfoWater offers:

- · Leak/burst detection and reduction
- Accurate geographic demand allocation
- · Water quality simulation (multi-species) and unidirectional flushing
- Pressure zone and DMA management
- Surge protection
- Water security planning
- Valve criticality modeling

### Modeling with any GIS: InfoWorks WS Pro

**InfoWorks WS Pro** is a standalone platform that gives fast, robust analysis and management support.

#### InfoWorks WS Pro offers:

- · Pump and valve modeling to support network design
- Leak/burst detection and reduction
- Demand management, including pressure-related demand for cost-benefit analysis
- Water quality simulation and flushing program design
- Critical asset analysis
- Fire flow analysis
- Surge protection

### Boost Confidence, with Live and Predictive Modeling: IW Live Pro

You can transform your static **InfoWater** or **InfoWorks WS Pro** model into a dynamic model, using **IWLive Pro** to add live data. So you have greater confidence in the results of your simulations.

This operational modeling tool makes the most of both your hydraulic model and your live data. The data on its own tells you only what's happened in the past, but add modeling and you get future predictions too. And if you compare your model with the latest data, you'll find out immediately how good the predictions are.

#### IWLive Pro provides:

- Demand forecasts
- Energy savings thanks to optimized pumping schedules
- · Alerts to anomalies in network behavior so you can investigate
- Proactive planning to identify disruptions and notify customers





## How to Choose the Right Solution for Water Distribution

#### Innovyze water distribution software is an ideal solution for your network challenges.

Find, reduce and resolve leaks, bursts, and other non-revenue water (NRW):

- Enhance the accuracy of your models
- Add live modeling that makes the most of your data, and can alert you to anomalies and update your model continuously
- · Alert you, for example when there's excess minimum nightly flow

Work with your existing systems:

ArcGIS or other geospatial systems

#### Meet your targets:

- Maintain water quality, including water age, chemical concentration, and source tracing
- Design pipe systems to meet performance criteria at minimum cost

#### Make your daily decision-making easier and more effective:

- Save money and energy by calculating near-optimal pumping schedules that update automatically when there's a change like a pump going offline
- Predict demand accurately so you can be ready to respond

#### Keep everyone informed:

Provide everyone who needs it with the same information – including alerts for operators

#### Mitigate incidents:

- Predict the impact of water spill
- Generate simulation and verification warnings

We can help identify the best solution for your particular needs - just get in touch.

# Training and Support



## Comprehensive Support from InfoCare Support and Maintenance from Innovyze

Our comprehensive customer support and software maintenance program offers expert assistance, accelerated learning, and timely and unlimited technical and engineering support.



## **Expert Training**

Get expert training and professional development from Innovyze's water engineering professionals.

They'll help you make the best use of your software, and share tips and use cases, in our wide range of training courses, live webinars and on-demand webinars.





# Get in Touch

Our offices in the US, Australia, and the UK, plus our global network of partners, are here to help you get the most from your water systems.

#### **EMEA**

+44 (0) 1635 582 555 sales-emea@innovyze.com

#### **AMERICAS**

+1 888 554 5022 sales-americas@innovyze.com

#### APAC

+61 (0) 7 5506 5700 sales-asiapac@innovyze.com



Empowering water experts

Innovyze empowers water professionals around the world to create, manage, and maintain water services. We are the global leader in water infrastructure data analytics software, providing enduring support for customer success.