

# PIPELINE CLARITY

## *Practical Solutions*



**rjn**group  
*Engineering* infrastructure for tomorrow

WATER AND  
PRESSURE PIPE  
SERVICES

# WHAT ARE YOU DOING ABOUT YOUR ONE CRITICAL PIPE?

*"Prognosis without Diagnosis is Malpractice"*  
*Order a Health Check Today...*



Water utilities are challenged with delivering a high level of service to their communities under extremely tight budgets, with escalating water regulations and aging infrastructure. Industry studies document less than 13% of U.S. water lines have been inspected, and often reactive rather than preventive maintenance programs are the de facto approach. This is primarily due to limited resources and funding needed to operate a more ideal, predictive program.

Further complicating this dilemma is the rapid emergence of inspection techniques and constantly evolving technologies, where claims by manufacturers do not always produce promised results. RJN's engineering experts, equipped with a proven toolbox of turn-key pressure pipe assessment solutions, are helping utility owners get ahead of these challenges.

## INTRODUCING RJN'S "ONE CRITICAL PIPE" APPROACH

RJN's "One Critical Pipe" approach starts with the end in mind. It is systematic, where each step in the process whittles down the program size by eliminating pipes from further analysis.

### Targeted

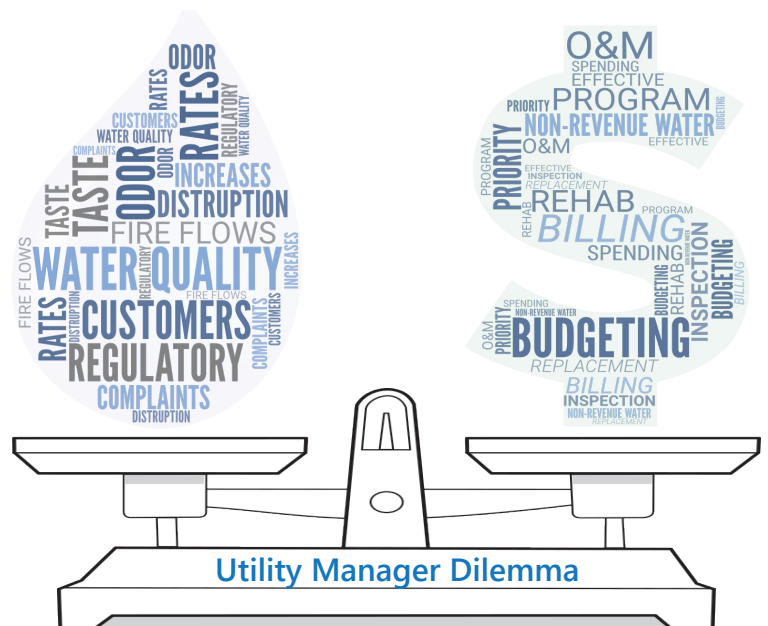
Why inspect or fix good pipe? Trim down scope by prioritizing the critical pipes.

### Validated

Select "One Critical Pipe," inspect it, and validate the technology results.

### Affordable

Incorporate proven technologies into a prioritized program playbook tailored specifically to your system. Approach your next critical pipe with confidence.



**27%** RISE IN WATER MAIN BREAKS OVER LAST 6 YEARS

**87%** WATER MAINS HAVE NOT BEEN INSPECTED

**80%** PIPES REPLACED HAVE REMAINING USEFUL LIFE



# Predictive Pipeline Assessment



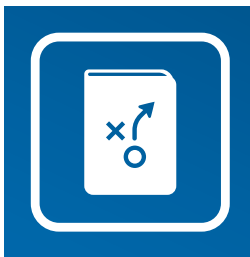
## Evaluate System Fitness

- Understand your level of service goals
- Assess maintenance history, pipe attributes, pressures, and risks
- Rationalize low risk pipes
- Prioritize critical pipes



## Target “One Critical Pipe”

- Conduct an on-site health check on your “One Critical Pipe”
- Identify access points, operational staging, and community impacts
- Weigh risk tolerance and compare total repair vs. replacement costs
- Use optimal technology to complete the inspection



## Catalog into Playbook

- Validate results against intended outcome
- Review data and deliver engineering recommendations
- Incorporate proven inspection methods into a tailored playbook
- Utilize playbook to drive prioritized capital planning strategy

## MEASURES OF SUCCESS!

***“With RJN’s multi-year large diameter leak detection services, we located and repaired a number of previously unidentified leaks, decreasing our annual water loss by six percent in the first year. RJN provided the knowhow and the guidance in a concise executive summary and engineering report.”***

*-Monty Ledbetter, Utilities Director, Hot Springs, Arkansas*



# RJN WATER SERVICES

WE COVER YOU FROM PLANNING TO CONSTRUCTION

Established in 1975, RJN blends professional engineering consulting with field inspection services, offering municipalities an affordable means to fulfill water, sewer, and storm sewer level of service goals. As a recognized leader in pipeline condition assessment, we deliver practical solutions to optimize life-cycle performance and costs.

## SYSTEM ASSESSMENT

- ✓ Asset Risk Management
- ✓ Hydraulic Modeling and GIS Mapping
- ✓ Transient Pressure Analysis
- ✓ Engineering Recommendations / Design
- ✓ Emergency Response Planning
- ✓ Priority and Capital Planning

## PIPE CONDITION ASSESSMENT

- ✓ Leak Detection
- ✓ Untethered Acoustic / CCTV
- ✓ Electromagnetic Structural Inspections
- ✓ Valve Assessment, Exercising, Repair
- ✓ Water Meter and Hydrant Assessment
- ✓ Laser / Sonar Profiling



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