

Risk intelligence for small utilities

How utilities serving fewer than 50,000 connections extend asset life, reduce risk, and plan capital with the same analytics large systems use.

UNDER 50,000 CONNECTIONS

NO ANALYTICS TEAM REQUIRED

BOARD-READY OUTPUT

97%

of U.S. water systems are small utilities

60%+

of infrastructure predates 1980

200+

average annual pipe failures per utility

THE CHALLENGE FACING SMALL UTILITIES

Small water utilities form the backbone of America's water infrastructure, yet they face an outsized set of challenges. With aging pipe networks, tightening budgets, and limited engineering staff, deciding where to invest limited capital improvement dollars can feel more like guesswork than science.

Without access to advanced analytics, small utilities often fall back on break-fix maintenance, replacing pipes only after they fail. **That approach is costly, disruptive to the community, and ultimately unsustainable.** What small utilities need is the same intelligence large utilities have, at a scale and price point that works for them.

THE FRACTA SOLUTION

Fracta uses machine learning and geospatial analytics to assess the likelihood of pipe failure across an entire distribution network. By combining a utility's existing asset data with soil conditions, environmental factors, break history, and dozens of additional variables, Fracta produces a risk map that shows operators and leadership exactly where the highest-risk infrastructure is, and what to do about it.

For a small utility this means smarter capital improvement planning, more confident board conversations, and a defensible path to long-term infrastructure sustainability, with no internal analytics team required.

WHY IT WORKS FOR SMALL UTILITIES

01

No Analytics Team Required

Enterprise-grade intelligence through an interface built for operators. No in-house data scientists or GIS specialists needed.

02

Data You Already Have

Fracta works with the asset records you already maintain, enriching pipe material, age, diameter, and break history with environmental and geospatial data.

03

Board-Ready Output

Clear risk maps and quantitative projections translate infrastructure data into a format that lands with board members, elected officials, and community leaders.

TWO UTILITIES, TWO OUTCOMES

Guntersville Water Board

GUNTERSVILLE, ALABAMA

A small but growing community whose distribution infrastructure had aged significantly. With limited engineering resources and a network of mixed materials and ages, the Board needed a data-driven way to identify which segments posed the greatest risk, and to turn that into a prioritized, fundable rehabilitation plan.

Fracta analyzed the entire pipe network and produced a risk assessment identifying high-priority candidates for rehabilitation and replacement. The mapping interface let management pinpoint problem areas quickly, while the quantitative output gave board members the financial projections they needed to plan capital budgets years in advance.

“Fracta provides the Guntersville Water Board the ability to quickly, efficiently and intelligently select areas of our water distribution that need rehabilitation and repair. Fracta provides qualitative and quantitative data that allows management and board members the ability to predict needed capital contributions for years to come.”

ROBERT CHANDLER · GENERAL MANAGER

- Highest-risk segments identified across the full network
- Less time spent on manual assessment
- Quantitative capital projections for multi-year planning
- Improved board-level transparency and confidence

West Slope Water District

OREGON

West Slope needed to structure an eight-year capital improvement plan balancing project urgency, infrastructure risk, and available funding. Leadership wanted a credible, visual tool to support data-driven conversations with staff and board members, particularly when weighing competing priorities for limited capital dollars.

Fracta gave the district a dynamic risk map of its distribution network, letting staff visualize infrastructure risk alongside project need and funding availability. The result was a defensible basis for CIP prioritization and a communication tool that helped leadership align around one evidence-based strategy.

“We are prioritizing our capital improvement projects by need, risk, and available funds across an eight-year horizon. Fracta's risk mapping has become an essential component of that process, providing the visual and analytical foundation our staff and board members need to make confident, data-driven decisions about infrastructure investment.”

WEST SLOPE WATER DISTRICT LEADERSHIP

- Eight-year CIP structured on objective, risk-based criteria
- Risk maps used directly in staff and board meetings
- Field staff priorities aligned with board-level planning
- A foundation the district can revisit as conditions change

BUILT TO FIT HOW A SMALL UTILITY ACTUALLY BUYS

- Pricing and implementation suited to small and mid-sized systems
- No lengthy implementation cycle
- Scales as the utility's needs grow
- Value from the first risk assessment

READY TO SEE WHAT FRACTA CAN DO FOR YOUR UTILITY?

Fracta offers a complimentary demo built around your own network. See how AI-driven risk intelligence changes your capital planning before you commit a dollar to it. contact@fracta.ai · (650) 865-9922 · fracta.ai