



Benefits of Pressure Management

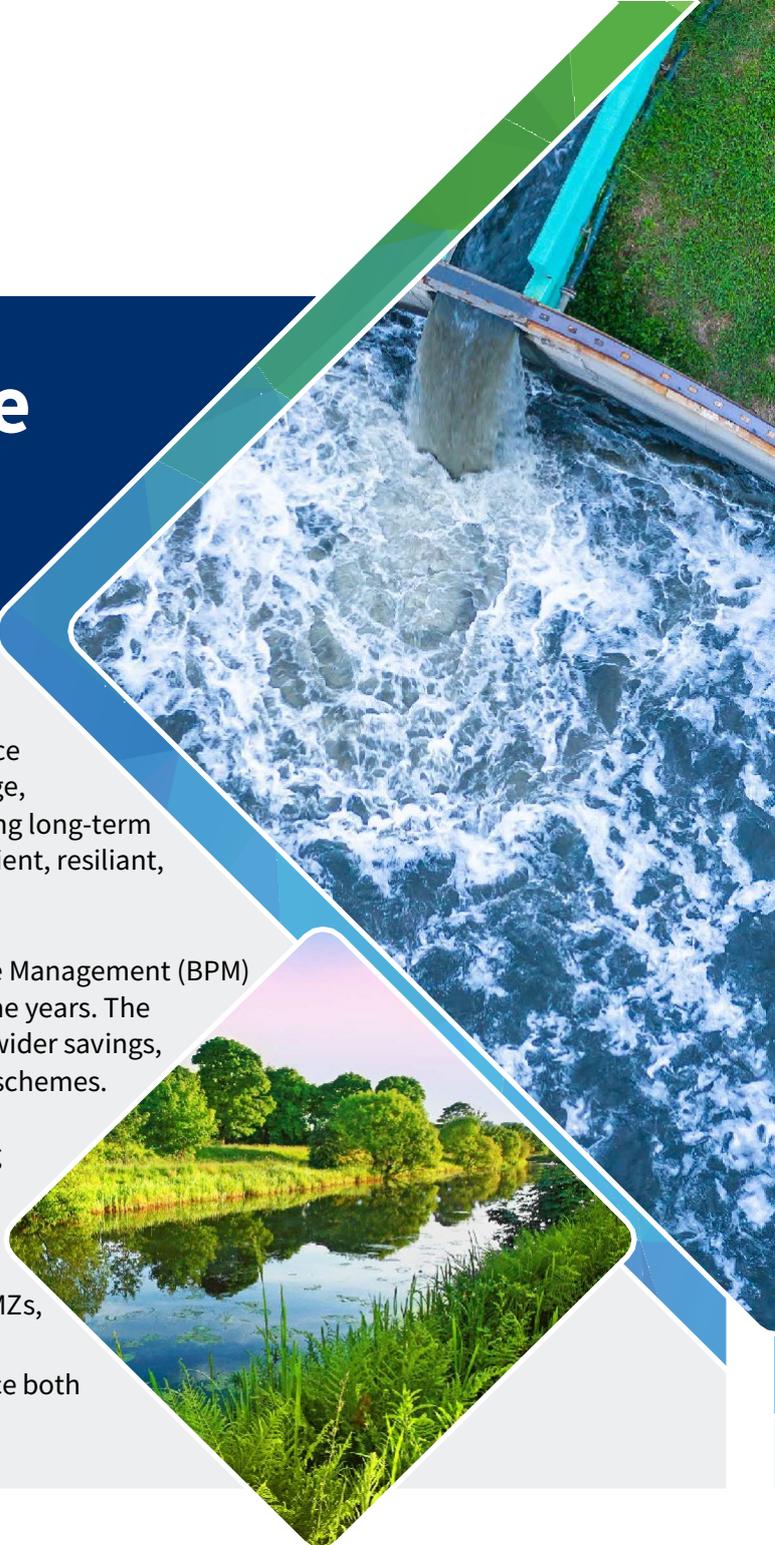
Benefits of Pressure Management Assessment

Pressure management is a well-established industry practice known for its significant benefits, including reducing leakage, lowering burst rates, creating calmer networks, and reducing long-term maintenance costs. These benefits contribute to more efficient, resilient, and sustainable water distribution networks.

Tetra Tech RPS has developed a robust Benefits of Pressure Management (BPM) assessment for a wide range of UK water companies over the years. The model calculates the predicted benefit to leakage and the wider savings, costs, and benefits associated with pressure management schemes.

The model makes use of extensive data sets, encompassing detailed information on:

- Pressure management schemes.
- Records of any boundary change to PMAs, DMAs, FMZs, and WRZs over the years.
- Key performance indicators to network performance both before and after a pressure management scheme.



A typical project can include:

Task	Description
Data collection and integrity checks	Collect comprehensive records of pressure-management schemes, all boundary modifications, and multiple year DMA KPI data (tailored to suit client needs).
Review of boundary changes over time	Analyse annual historical boundary changes and adjust repair job data to current boundaries to ensure valid pre/post comparisons.
Refresh KPIs	Organise KPI data by scheme and period; set baselines from conception to completion, and define variables to measures pre and post implementation.
Quality assurance	Perform thorough QA of outputs, review results collaboratively with client, and produce a final report with key insights and recommendations.

Data Capture

A **detailed review of historic boundary changes** ensures accurate analysis of subdivided and previously managed areas. Accurate calibration and updating of KPI data, especially **leakage and repair metrics**, such as repair numbers and the natural rate of rise of leakage (NRR) against comparable control groups without pressure management, is crucial. This method enables robust calculation of the true benefits of pressure management initiatives.

Furthermore, our methodology has transitioned from fixed financial-year evaluations to **rolling year analyses** for most KPIs. This dynamic approach yields a more precise understanding of the benefits of pressure management as they evolve over time.

The primary project deliverables will be accompanied by the technical report of pre and post analysis, with the option to also provide new PMA scheme designs.

Supporting the industry

The Five Pillars of Delivery provides a framework for successful project execution.

Within frameworks there are structured training and technical development tools which are utilised throughout the programme periods. Fundamentals are taken from week one of the onboarding process, which continue through the lifecycle of the programme. Technical training methods used are adapted with the introductions of new technology and working directives.

Tools to enhance the scoping delivery:

- Network Overviews
- Geographic Information Systems
- Graph interpretation
- Logging/Scoping overview & Creation
- PMA Identification
- Best Practice Workbooks – Covering full lifecycle of delivery
- WaterNet and related software specialist training

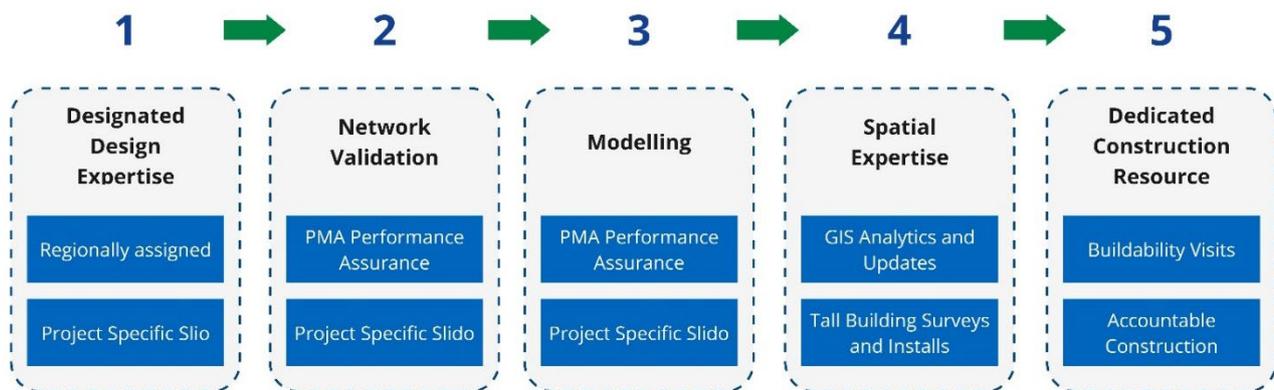
All PMA schemes identified go through a robust process to ensure we move forward to the design and construction phase with confidence the MI/d savings will be captured.

Maximising Benefits

- Provides a robust, evidence based evaluation of how pressure management improves water network performance.
- Presents results in a clear, user friendly dashboard that lets stakeholders compare retrospective scheme benefits across multiple levels.
- Delivers individual scheme performance assessments and, where sufficient data exists, evaluates the impact of different KPIs supporting informed decisions for future network optimisation.

Summary

The BPM assessment predicts MI/d savings and quantifies benefits using UK sector experience, delivering an interactive dashboard and technical report to support evidence-based business cases and ROI for pressure-management investment.



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