

Infrastructure health in the water sector

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Summary from Water UK

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- The current regulatory approach to maintaining our water and wastewater infrastructure is not working. As widely recognised by a range of organisations in recent years, the rates of replacement and renewals of our networks in England and Wales have been too low, the levels of funding provided by regulators has not been high enough, and the current and future risks this creates for customers and the environment have been underappreciated.
- In January 2024, four water companies launched a collaborative project to consider potential reforms to the regulatory framework in relation to capital maintenance and asset health, aimed at the next price review, expected in 2029. The project included representation from Water UK, Defra and Ofwat.
- Supported by consultants Reckon and Jacobs in this initial phase, it explored different highlevel approaches to funding and monitoring, with a range of policy packages discussed through a series of workshops and at a conference in May 2024, which included water companies, regulators, government officials, consumer representatives and industry experts.
- The next stage of the project will require a greater role for regulators to ensure that necessary
 reforms are developed and implemented in time for the next price review. Without a
 framework that supports sufficient maintenance, we will see more leaks, more sewage
 discharges and more service failures than otherwise we therefore need to ensure that the
 framework is reformed to avoid these poor outcomes.

This paper summarises issues with the current regulatory framework and sets out a potential way forward from Water UK.

Background

Concerns with the regulatory framework

As early as 2021, Ofwat identified the need to create new asset health measures and reflect the fact that its base expenditure models may not provide sufficient allowances for capital maintenance in the future. Reflecting on the impact of its PR14 price review, Ofwat acknowledged that its regulatory approach creates short-term incentives and conceded that "there could have been greater focus on asset health and its role in delivering resilient services in the long-term during the 2015-20 period".

However, in May 2023 the National Infrastructure Commission publicly wrote to Ofwat expressing continued concern about its approach to asset health monitoring and funding. They noted that

¹ 'Assessing base costs at PR24', Ofwat, December 2021.

² 'PR14 Review', Ofwat, January 2022, pp. 23-24.

Ofwat's approach seemed to "imply asset lives of 180 years" for water mains, and asked Ofwat to tackle that by developing forward-looking measures.³

Despite this widespread and now longstanding recognition of the drawbacks of the current regulatory approach, Ofwat's PR24 methodology included no new metrics and made no explicit changes to its base expenditure models to tackle asset health concerns.

Preparing for PR29

In January 2024, four water companies (Affinity Water, Anglian Water, Northumbrian Water and Wessex Water) initiated a project to consider potential reforms to the regulatory framework for water companies, in relation to the treatment of capital maintenance and asset health. They were joined on the steering group by representatives from Water UK, Defra and Ofwat.

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Issues with the framework

In reports finalised in June 2024, Reckon identified key issues with the regulatory framework currently applied by Ofwat, based on its understanding prior to the publication of the draft determinations in July 2024. Reckon identified the following four concerns:

- Informational: there is not enough useful information available about the risks of service disruption and adverse environmental outcomes in the future that may arise from asset deterioration or poor asset health, and how these risks are being managed by water companies.
- **Behavioural and decision-making**: the decision-making of water companies, which is heavily influenced by the regulatory framework, may not be well-aligned with the achievement of good outcomes for customers and the environment over the long term, in terms of the adequacy of investment in asset health to manage risks to future outcomes in an efficient way over time.
- **Funding**: the funding available to water companies from customer bills, as governed by the regulatory framework, would not be sufficient to properly remunerate efficient companies who adopt the best long-term decisions about asset health and the management of future risks.
- **Responsibilities**: the regulator may not take enough responsibility for understanding and mitigating, through its own actions and decisions, the long-term risks to customers and the environment that may arise from asset deterioration or poor asset health.

All of these issues are exacerbated by the lack of separate assessments for capital maintenance, unlike other key areas. Ofwat includes the entirety of capital maintenance in its base expenditure models, despite companies proposing to spend more than £22bn in their October 2023 business plans for this important area of investment.

This means that that the known limitations of Ofwat's base expenditure models are felt particularly acutely for capital maintenance. They use historical expenditure data, which may not adequately reflect future risks and challenges. And because the models cannot tell the difference between genuine efficiency and underinvestment, using the lowest spenders as benchmarks for the rest of the sector simply embeds historic underinvestment.

³ 'Letter to Ofwat on water company asset management', National Infrastructure Commission, May 2023.

While companies can request additional funding over and above their base expenditure allowances, Ofwat has a record of refusing or underfunding such requests.

Ofwat's approach contrasts those of other regulators, such as in the water sector in Scotland and the energy sector in Great Britain. The Water Industry Commission for Scotland (WICS) uses expected asset lives when setting funding allowances, while the energy regulator Ofgem uses risk-based metrics to monitor and incentivise performance. In its report, Reckon reviewed these and other regulatory approaches and assessed them against the current approach.

Asset health metrics

All of these limitations with Ofwat's framework are heightened by the lack of asset health metrics in the sector. With no measures of asset health performance, and by providing insufficient funding, companies are heavily incentivised by the regulatory framework to cut back on capital maintenance. Outcomes performance commitments financially incentivise companies to focus on above[1]ground or customer-facing measures of performance. This has the risk of perpetuating the cycle of underinvestment.

While there are 'asset health' performance commitments, they do not adequately measure the state of assets or risks to future performance and can create unintended and perverse consequences. For example, companies must pay a financial penalty every time they repair a water main above a certain threshold, disincentivising them from acting to reduce leaks.

In its report as part of this project, Jacobs has reviewed over 400 potential metrics that could be used to better measure and monitor asset health in the sector, drawing on experience both within the water sector and elsewhere.

Next steps

Following the initial phase of this project, Water UK commissioned Reckon to examine how the proposed policy changes could be applied to the current price review. It has found numerous improvements that could and should be implemented in time to affect the final determinations for PR24. We have included Reckon's report in our response to Ofwat's draft determinations.

But longer-term reforms are still required to address fundamental issues with the framework, as well as the immediate improvements suggested by Reckon for PR24. Some of the proposals identified in the project are likely to require greater monitoring and reporting, as well as trials and shadow reporting. The next phase is likely to require a greater role for Ofwat, working openly with Water UK and water companies, and should include other organisations such as Defra and CCW to develop reforms that can be implemented for the next price review, expected in 2029.