

Reservoir Underdogs:

Unlocking regulatory challenges to delivering new reservoirs

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About the PFC

The Purposeful Finance Commission (PFC) and its Advisory Board is an independent body made up of leading combined authority figures, local government leads, investors and other regeneration experts who have come together to identify, understand and overcome the barriers to the development of housing and infrastructure across the country. By addressing these barriers, the PFC aims to ensure that purposeful regeneration delivers real social value, creating lasting benefits for local economies, communities, and the environment.

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Foreword

Tracy Blackwell - CEO, Pension Insurance Corporation plc and Chair of the Purposeful Finance Commission

I'm delighted to introduce the next phase of work for the Purposeful Finance Commission. Over the past two years, the PFC has brought together leading figures from combined authorities and local government, in order to identify, understand, and help overcome the barriers that communities across the country have faced to regenerating their areas, and in accessing long-term investment to support this. Today, there is generally much better understanding of the broad issues slowing down development and there is political support for reform.

However, there are still significant blockers to infrastructure and housing development, most of which is a direct result of the overlapping remits of the hundreds of regulators and arms' length bodies which oversee our economy. These entities were established to provide technical expertise in complex sectors. However, the sheer number of them, combined with a lack of transparency and accountability, as well as their overlapping remits and lack of economic objectives, means that they continue to be a significant blocker to the development of the infrastructure and housing we so desperately need. How these entities oversee specific sectors will be the focus of this next phase of work.

So, in this, the PFC's fourth report—we look specifically at the water sector's fragmented and unaccountable regulatory landscape, which has prevented any reservoirs being built in the UK since 1992 and propose radical reform.

With recently announced plans to create a new synchronised water regulator, and a new emphasis on a new economic mandate for water infrastructure, it is clear that the government is seeking a new strategic direction. The PFC's research for this report has identified three problem areas – governance, planning, and finance/delivery.



This is based on extensive stakeholder engagement, case studies and regulatory analysis to pinpoint the structural barriers to reservoir delivery.

Ultimately our core argument is clear: the fragmented oversight system for the development of reservoirs must be rationalised, and **a single agency must be handed responsibility for championing delivery of reservoirs**. This national champion agency must be given the ability to link reservoir need with housing need. This research sets out to propose tangible, targeted recommendations on how to boost their delivery.

I very much hope that this short report provides practical action points to help unblock this critical sector, and provide lessons for other areas.



Summary Recommendations

Recommendation 1. Empower the New Water Regulator as the Statutory Reservoir Champion and Fund-Driver

The creation of a long-term champion agency for reservoirs, similar to how the Olympic Delivery Authority (ODA) was empowered to plan, fund, and deliver the infrastructure of the 2012 Olympic Games.

This new champion agency will also serve as the sector's funding engine and should utilise bespoke development-corporation vehicles to deploy patient capital for reservoirs, bridging funding gaps across price-review cycles.

Recommendation 2. A new Regionally Significant Infrastructure Project Model (RSIP)

Government should develop a new designation of Regionally Significant Infrastructure Project (RSIP) that sits under the jurisdiction of mayors through the expansion of devolution. The new RSIP designation should align reservoir consent processes with local housing targets and water resource plans.

Recommendation 3. Make Price Reviews More Flexible to Protect Customers and Investor Confidence

Reform the rigid five-year Price Review cycle by granting the new water regulator – acting as the champion agency for reservoirs – with the authority to adjust Asset Management Period (AMP) allowances mid-cycle to match demand, for example, when government-mandated reservoirs emerge, or housing pipelines accelerate.



Introduction

Infrastructure development in England is broken. As a result of decades of poor governance and planning, the current government has a tough challenge ahead: meeting its ambitious housing targets of 1.5 million homes by the end of this parliament, whilst also securing long-term water resilience. To address this, they have set up a new National Infrastructure Service Transformation Authority (NISTA, a merger of the previous National Infrastructure Commission and Infrastructure and Projects Authority). By 2050, the country is expected to fall short by 4 to 5 billion litres of water each day due to climate change and a growing population, making this challenge even harder. The former National Infrastructure Commission (now NISTA) reported the need for approximately 31 reservoirs back in 2022, and critiqued the previous government's lack of action. The current government has attempted to grasp the issue by committing to build nine new reservoirs; taking two existing reservoir projects into the 'Nationally Significant Infrastructure Project (NSIP) scheme, which transfers oversight of the project from the local authority to the civil service at the request of the Secretary of State. However, with no plans for the remaining seven reservoirs, none of the Government's projects will offer a functioning reservoir until 2036.

The completion of the only reservoir currently being built, at Havant Thickett in Hampshire, is expected around 2031, making it the first reservoir built in almost 40 years in the UK. In that time, the UK population has grown by 12 million people and is conservatively forecast to rise by an additional five million people by 2032¹. Therefore, the government needs to move at pace to build the homes to accommodate this growth, and the water infrastructure that supplies the homes. However, the UK is stuck in a situation where regulation actively chokes infrastructure delivery. The previous Secretary of State for Department for Environment, Steve Reed MP, recognises this and has accepted the Cunliffe Review's recommendation to

¹ UK population projection explorer - Office for National Statistics



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scrap the current water regulator Ofwat. Under the current regulatory system, large scale housing is unable to progress without adequate water supply, while reservoirs are rejected through community and regulatory opposition, because there is no satisfactory 'realisable need'. As a result, the UK is paying the price, facing drought and hosepipe bans in the summer, flooding in the winter, and higher water bills because of the mismanaged need to pay for new infrastructure in short order, rather than smoothing it over the economic cycle. For instance, Southern Water customers are expected to face a 47% bill hike in 2025–2026 to pay for infrastructure upgrades following years of underinvestment.

One of the clearest illustrations of regulatory failure is the Fens Reservoir in Cambridge: originally proposed in 2019, its preferred site was only unveiled in October 2022, yet it didn't secure the crucial Section 35 Direction for NSIP designation until 29 May 2025, meaning there was a 31-month wait to enter the DCO regime. What should have been a 12-18-month pre application process under RAPID instead saw Gate 3 pushed back from March 2025 to August-October 2026 amid protracted objections and overlapping demands from the Environment Agency, Natural England and Historic England over survey scope and permit drafts, compounded by the late arrival of the final WRMP24 and Water Resources East plan. With DCO submission now delayed into 2027, and the statutory examination itself taking another 12–18 months, detailed design and procurement cannot begin until consent is granted. This means main works excavation won't commence until 2029, nearly a decade after the scheme was first drawn up and far beyond the accelerated timeline promised by its "nationally significant" status.

In 2021, Waterbeach New Town in Cambridge proposed a development of up to 6,500 new homes. The proposal was rejected due to opposition from the Environment Agency on water supply grounds. Despite the proposal now being approved and the homes delivered by 2035 – the homes will go an entire year before they will be supplied by Fens Reservoir, which becomes operational in 2036. As this progresses, residents across Cambridge will not



only face usage constraints, but by the time the reservoir comes into supply in 2036, residents across the area will be paying around 50% more than today's rate. Had the system of regulation worked properly, Cambridge Water would have been able to front load a purpose-built reservoir. In turn, this would have prevented these drastic bills hikes (at least for short-term fixes) and offered a more stable, resilient system with the cost of a single capex project being spread over decades.

Case studies like Cambridge should prompt government to act now. Their only two planned reservoirs are due to be completed by 2036 and 2040 respectively, despite the government having "…seized control of the planning process to build two major reservoirs for the first time since the 1990s… "and both projects being "…awarded status of 'nationally significant'. Regulation – from government, councils, to financing the industry – is failing. If the remaining seven projects continue down this path, then this puts the 1.5 million homes target at severe risk.

It hasn't always been like this. When Milton Keynes was designated a New Town in 1967, the Milton Keynes Development Corporation executed an 'infrastructure-first' masterplan that coordinated land acquisition, roads, utility mains and water management into a single programme. In 1972 it excavated Willen Lake, a balancing reservoir, alongside the first housing grid squares, eliminating the usual infrastructure bottlenecks. By the 1980s, this upfront reservoir investment had underpinned thousands of homes with stable water supply, predictable service delivery and comparatively moderate bill inflation. This precedent demonstrates that we have done it before, and therefore can do it again.



The Impact of Multiple Opportunities to Object

The planning, construction, operation, and financing of reservoirs in England is overseen by multiple bodies with little or no coordination and direction, and with multiple opportunities for entities and individuals to block development. For example, investment planning for water infrastructure is primarily with water companies and the Environment Agency, yet funding and delivery historically depend on Ofwat's decisions.

This process starts with central government, whereby the Department for Environment and Rural Affairs (DEFRA) sets the nation's broad water strategy and allocates water resource planning areas. Water companies must then produce statutory WRMPs every five years, which must outline how the company will maintain secure and sustainable water supply over a 25-year period.

These plans are then subject to regulatory oversight by several different, siloed, regulators:

- Economic regulation lies with Ofwat, which approves investment and customer prices, but doesn't have regard for the long-term economic benefits of infrastructure development, which can create much more long-term price resilience for bill payers and avoid the sharp bill hikes we see across the country today.
- Environmental regulation lies with the Environment Agency, which manages water abstraction and ecological impacts, and which again doesn't have regard for the long-term economic benefits of infrastructure development or alignment with housing need.
- Water quality lies with the Drinking Water Inspectorate.
- Local authorities and the Planning Inspectorate body (for Nationally Significant Infrastructure Projects) handle land-use planning and authorisations.



None of these bodies have a duty to coordinate with any of the others. In one case with the Cheddar Reservoir in 2014, the Environment Agency confirmed no objections to Bristol Water's plan, but Ofwat refused to include the scheme in the price review due to a rejection of 'the business case'. This clear disconnect creates a fragmented and siloed development process, and responsibilities do not always align neatly with project needs. Environmental approval alone does not guarantee economic endorsement or funding from a price review; leaving vital projects stranded.

The regulators recognised this fragmentation and to address this fragmentation, RAPID (Regulators' Alliance for Progressing Infrastructure Development) was established in 2019 as a joint initiative between Ofwat, the Environment Agency, and the Drinking Water Inspectorate. Its purpose is to improve the coordination of regulators on strategic water resource schemes, and streamline the development of NSIPs.

While RAPID was a positive step towards better regulatory alignment, its remit remained limited: it lacks statutory powers to lead delivery and holds no formal authority over planning applications. The government's recent announcement to consolidate all the regulators into a single body therefore signals a significant shift – one that could provide the clearer leadership and integration the sector urgently needs.

In addition to lacking statutory powers, it is plausible to assume that regulators in the water industry also lack the skills and experience needed to deliver reservoirs. This is because, as highlighted in a recent report by the National Audit Office (NAO)², there is a significant skill and knowledge gap among water companies when it comes to delivering new reservoirs, since in the last 30 years, no new reservoir was built in the UK. The same could therefore apply to UK water regulators, which have not overseen the development of new reservoirs over the same period.

In practice, no single entity champions a strategic vision for reservoirs, and the regulation surrounding reservoirs sits between sectoral silos.

² Regulating for investment and outcomes in the water sector - National Audit Office



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Industry experts have noted that this fragmentation delays projects and obscures accountability. Ofwat's leadership has explicitly questioned whether the overlap of regulators is helpful, and policymakers have begun to act.

Past infrastructure programmes show that dedicated delivery bodies can succeed where fragmented systems fail. A clear example is the Olympic Delivery Authority (ODA), established by the London Olympic Games and Paralympic Games Act 2006 and jointly overseen by the Department for Culture, Media and Sport, the Mayor of London, and the London Development Agency. The ODA was granted full statutory planning powers, control over land assembly, and independent funding authority to deliver the London 2012 Olympic Park and associated infrastructure. With a single accountable body coordinating across government, utilities, transport, and construction, the ODA delivered one of the UK's most complex infrastructure programmes on time and within budget. This precedent shows that a similarly empowered delivery agency – adapted for the water sector – could unlock the reservoirs Britain now urgently needs, aligning regulation, investment, and housing growth under one strategic framework.

Under present arrangements, water companies may struggle to secure direction from government bodies for large projects. Governance challenge cases have included uncertainty over who should champion a scheme and how to resolve conflicts (e.g. between environmental protection zones and housing needs). Without clearer institutional leadership, reservoir decisions risk becoming drawn-out disputes.

In summary, reservoir governance in England is fragmented. Multiple agencies regulate different aspects of water supply, but none has explicit statutory authority to drive major new reservoir projects. This fragmentation hinders coherent delivery. The core challenge is to create a unified process for strategic water projects, as current bodies lack a shared mandate to coordinate water infrastructure with housing and growth. Recent policy reviews have highlighted this weakness and urged new



structures to integrate planning, regulation and investment for water resources.



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Planning - A Hostage to Fortune

To build a reservoir in England as a Nationally Significant Infrastructure Project (NSIPs), a Development Consent Order (DCO) must be obtained under the Planning Act 2008. During this process, applicants prepare detailed plans and Environmental Impact Assessments, consult the public and stakeholders, and submit an application to the Planning Inspectorate. Inspectors then hold an examination and make a recommendation to the Secretary of State for Environment, Food and Rural Affairs for a final decision. In principle, this provides a clear statutory pathway for a big reservoir, bypassing many local planning hurdles. However, it is lengthy, resource-intensive and highly uncertain. Applicants must meet high arbitrary thresholds to qualify as NSIPs (for example, storing over a certain volume of water), and even once classed as a NSIP, the consenting process takes many years. For example, industry regulators note that it has historically been "a challenge" to win planning consent for major reservoirs.

As in the case of the Abingdon reservoir, plans to construct reservoirs can be derailed by local opposition or environmental concerns, even after significant investment in planning and consultation. Despite being one of the most advanced schemes in the Southeast and now a designated NSIP, the Abingdon proposal has faced repeated delays due to relentless local resistance and environmental objections. As a result, areas across the region are scheduled to face hosepipe bans over Summer 2025. Despite the mounting evidence of water scarcity and public cost, the local planning bodies continue to oppose reservoirs without fully accounting for their regional economic value and essential role in supporting housing affordability quoting that the plans will "devastate livelihoods"³.

Current policy offers few guarantees; local planning policy documents typically mention water infrastructure only in passing, and no dedicated national policy statement singularly endorses reservoir development. As a

³ Abingdon: Council against reservoir plan despite ruling - Oxford Mail



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result, water companies often find themselves making the economic case for each scheme anew, without any formal presumption in favour of new reservoirs. Regulators and the industry have acknowledged this shortfall. In recent parliamentary testimony, the Chief Executive of the regulator Ofwat observed that the existing planning process "has not delivered the kinds of outcomes that have kept pace with changing need and climate issues".

In practice, this means reservoir proposals must navigate a high-risk national planning route, while concurrently meeting strict water sector planning requirements (e.g. in WRMPs). Companies often consult early with communities, but exhaustive pre-application work does not guarantee success. If consent is refused or delayed, the project stalls entirely. In short, while a formal NSIP process exists for reservoirs, the process has yet to prove that it can deliver major reservoir projects at pace.

A core challenge is aligning this process with broader infrastructure and housing plans. Without integration – for example, by linking housing development approvals to demonstrated water supply projects – planning law continues to act as a bottleneck. The combination of rigorous environmental assessment and potential local resistance makes reservoir planning an uncertain bet.

Stakeholders report that the lack of clear national policy direction, demonstrating the need in that area, makes it hard to counter NIMBY objections. These local objections are underpinned by information failure caused by the existing regulators, water companies, and local authorities. As with the Cambridge case study, if existing residents are unaware their water supply will be limited and that their bills will surge without new infrastructure; then the planning system has failed. Asymmetric information between governing/planning bodies and communities makes it easier to object to both housing and infrastructure developments. Ultimately, the planning system does not presently create a smooth pipeline for reservoir projects, and its limitations are a significant challenge.



How to Avoid Huge – and Inflation Driving – Increases in Water Bills

Financing new reservoirs in England today largely falls to water companies, and ultimately on household bills, under Ofwat's five-year price review regime. Water companies include reservoir capital in their Water Resources Management Plans, with Ofwat setting funding allowances. The 2024 review recognised the scale of these costs, carving out £2 billion in dedicated "development funding" to advance major supply projects. Complementary mechanisms allow exceptionally large schemes to be procured via competitive tender outside the standard price control, aiming to balance risk and return by engaging specialist contractors. However, these arrangements remain piecemeal and carry significant drawbacks.

Reservoirs require multi-billion-pound upfront investment and often span more than one regulatory price review period, before delivering any supply benefit. Yet unlike roads or hospitals, no direct Treasury funding is available, forcing water companies to commit capital far in advance – without certainty of cost recovery. This creates risk and volatility: if a project is delayed or fails to gain consent, early-stage costs may be written off or lead to sharp, sudden increases in customer bills. The sector urgently needs mechanisms to bridge these funding gaps – smoothing costs over the economic cycle and making investment more predictable for both consumers and investors. The proposed economic growth duty for the new water regulator, as recommended in the Cunliffe Review, provides a mandate to enable this: by supporting pro-growth financing models and facilitating earlier, regulated capital deployment, the regulator can help unlock long-term investment in strategic assets like reservoirs, while maintaining public confidence in pricing and fairness.

A deeper concern is the erosion of investor and community confidence. Water firms must navigate shifting policy landscapes, as government



reservoir mandates can emerge mid-AMP, leaving funding gaps and undermining price review assumptions. Investors demand certainty of regulatory support yet face opaque decision-making and evolving definitions of "need." Meanwhile, developers have no obligation to contribute to water storage costs; growth funds derive solely from customer charges, diluting incentives for integrated infrastructure planning. The lack of alignment between financing instruments and the broader economic uplift reservoirs generate (by unlocking homes and wider infrastructure) demonstrates a persistent confidence gap. Without clear, stable funding frameworks and mechanisms to match development benefits with reservoir costs, major supply projects risk stalling at the feasibility stage, undermining England's long-term water security.



Full Recommendations

Recommendation 1. Empower the New Water Regulator as the Statutory Reservoir Champion and Fund-Driver

The forthcoming consolidation of Ofwat, the Environment Agency's water functions, and other specialist bodies into a single, independent water regulator must be coupled with direct reporting lines into the government's new National Infrastructure Service and Transformation Authority (NISTA) for the delivery of reservoirs. Embedding the new regulator within NISTA's statutory remit would create a long-term champion agency for reservoirs, like how the Olympic Delivery Authority (ODA) was empowered to plan, fund, and deliver the 2012 Olympic Games infrastructure. This champion would help align housing growth with productivity-enhancing investment in strategic water assets. Early engagement under a unified framework would overcome siloed decision-making, accelerating project lifecycles from site selection through to delivery, just as the ODA did.

This new champion agency will also serve as the sector's funding engine and should utilise bespoke development-corporation vehicles to deploy patient capital for reservoirs, bridging funding gaps across price-review cycles. By borrowing against future regulated revenues, it will ensure the predictable, inflation-linked cashflows investors need, while smoothing short-term pressure on consumer bills. Once assets are commissioned and enter the regulated asset base, these investments are repaid through water bills aligned with local housing growth. This unified funding mechanism bridges capital gaps, accelerates reservoir lifecycles, and tightly aligns housing and water infrastructure planning under a single, accountable body.

Recommendation 2. A new Regionally Significant Infrastructure Project Model (RSIP)

Government should develop a new designation of Regionally Significant Infrastructure Project (RSIP) that sits under the jurisdiction of mayors through



the expansion of devolution. The new RSIP designation should align reservoir consent processes with local housing targets, and water resource plans where projects don't meet the requirements from an NSIP (30 Mm³) but are vital for ensuring new water supply large scale housing developments. Bolstered local plans intertwined with more housing conscious Water Resources Management Plans (WRMP) will work in tandem, triggering streamlined DCO procedures when defined housing pipelines indicate urgent water-supply needs.

This model will preserve community engagement as both local plans and WRMP's will be mandated to demonstrate the unequivocal need for this infrastructure locally. This will also highlight the social value of the project and the potential consequences of drought, hosepipe bans, and higher bills (through the need to implement costly emergency measures) if not completed. However, to safeguard progress, the DCO would balance persistent local objections against the demonstrable public interest in delivering essential regional infrastructure, that enables sustainable housing growth. This would ensure that essential new water infrastructure in high-growth areas is timely and delivered in line with large scale housing developments.

Recommendation 3. Make Price Reviews More Flexible to Protect Customers and Investor Confidence

Reform the rigid five-year Price Review cycle by granting the new water regulator – acting as the champion agency for reservoirs – authority to adjust AMP allowances mid-cycle, when government-mandated reservoirs emerge or housing pipelines accelerate. This flexibility will prevent the build-up of unrecoverable development costs and avoid sudden bill hikes by spreading extra investment across subsequent review periods.

Such reform restores investor certainty by clarifying that regulated revenues will cover strategic assets commissioned between reviews, while safeguarding customers from short-term price shocks. Aligning financial regulation with the long lead-times and scale of reservoir projects ensures



water infrastructure keeps pace with housing growth and climate pressures.

